A CONTRASTIVE STUDY ON KANDAYAN AND ENGLISH CONSONANTS FOR THE PREDICTION OF PRONUNCIATION DIFFICULTIES

A Thesis
Presented to
The Department of English
Language and Literature
Faculty of Arts and Letters
Teacher Training Institute

A Partial Fulfilment
of the Requirements for the
Sarjana Degree

By :

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YOGYAKARTA, JANUARY 1988

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Lord, make me an instrument of your peace !

where there is hatred, let me sow love;
where there is injury, pardon;
where there is doubt, faith;
where there is despair, hope;
where there is darkness, light;
where there is sadness, joy...

(St. Francis of Assisi)

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I dedicate my thesis to my Capuchin Order and my Diocese, especially Fr. Franx Xavier Cap. my Superior in Capuchin Order in Pontianak Region and Drs. Hieronimus Bumbun Cap. the Archbishop of the Diocese of Pontianak who gave me the opportunity to study at IKIP Sanata Dharma and who were very much concerned with my personal progress.

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Chapter I

INTRODUCTION

A. Background of Study

Learning to speak a foreign language always demand a serious attention to the sound system of the language. Recognizing and actual producing the sound is the activity of learning to speak[1]. They should occur in continuant process so that the leaners are able to recognize and produce the foreign language automatically.

Actually, a continuant process in learning to speak a foreign language is not easy for the learners because it is hard for them to leave their mother-tongue sound habit at all. They always transfer their mother tongue-sound system habit to the target language unconsciously.[2]

Furthermore' Charles Fries says:

> In learning a new language, then, the chief problem is not the first that of learning vocabulary items. It is, first, the mastery of the sound system - to understand the stream of speech, to hear the distinctive sounds features and to approximate their production.[3]

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[1]Fries, 1945: 1-9.

[2]Lado, 1957: 11.

[3]Fries, 1945: 3

In other words, pronunciation that involves the process of hearing and producing the sounds plays an important role in teaching learning to speak English as a foreign language. Good pronunciation makes the communication well and frank.

Conversely, unrecognizing and mis-pronouncing the sound may disturb the communication because the intelligible ideas that should be conveyed are cut down by the mispronunciation. Linguistically, then, unclear and incorrect pronunciation may increase a new meaning or no meaning at all to a certain word or sentence. Thus, teaching pronunciation is a hard work because it needs patience and neatness behaviour.

Realizing the important role of the pronunciation in learning to speak English and the difficulty of learning to speak that is caused by the mother-tongue habit, I have been motivated to study them. I focus the study in the Kandayan and English consonants, especially those which make the Kandayan learners difficult to learn to speak English.

The word "Kandayan" is derived from "Kanayatn". It represents the Daya' sub-tribe name in Kalimantan island and the language

which is used. So, we may say "suku Daya' Kanayatn" or Kandayan people, and "Bahasa Kanayatn" or the Kandayan language.

In 1980, the Kandayan language has about three hundred and fifty thousand native speakers and thousands who use it as a second language because of their relation with Kandayan people through marriage, trade, education, job and other communications[4]. Most Kandayan people live in Pontianak and Sambas regency West Kalimantan, the rest live in Sanggau (West Kalimantan) and Serawak regency (North Kalimantan)[5].

Thus, in this study I attempt to predict the difficulties of the Kandayan in learning to speak English and the learners' treatment in transfering their mother tongue habit to the English sound-system. I would like, then, to identify the learning difficulties by contrasting the English consonants, especially those which are difficult for the Kandayan learners, to those of dayan. Thus, pronunciation items seem to be the main subject of this study.

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[4]Lansau, et al., 1981: 1-16.

[5]Lansau, et al., 1981: 1-16.

B. Aim of study

This study aims to find out the differences between English and Kandayan consonant phonemes. The reasons of doing this is to find out a base to predict difficulties which Kandayan learners will likely encounter when they learn English.

C. Scope of Study

Due to the limited time, the study is focused on the following questions :

1. What diferences are there between English and Kandayan consonants?
2. What differences are there between English and Kandayan sylables, especially in terms of the use of initial and final clusters?
3. What differences are there between the way the consonants are represented in the English and Kandayan writing system?

D. Method of Study

To arrive at the goal I apply a constrative analysis method as suggested by James, namely: First, drawing up a phonemic inventory of the Kandayan and English language which is preceded by the principle of analysis of sound systems; second, considering phonemes

interlingually; third, listing the phonemic variants (allophones) of the Kandayan and English languages: Are they similar or different?; fourth , stating the distributional restrictions on the consonants and allophones of the Kandayan and English languages[6]; at last I draw a conclusion and suggest a pronunciation material for the Kandayan learners learning to speak English who have problem or difficulty to recognize and produce the English sound systems.

I choose the contrastive analysis method because by doing so I think I have restricted my observations on the segmental phonologicies of the Kandayan and English consonants.

For the Kandayan consonants, I use, first of all, Lansau et al's analysis[7]. Since I found mistakes in his analysis, I venture to correct the analysis on the consonants. The correction can be seen in chapter II. I also base this study on an observation on the Kandayan learners learning to speak English, some Kandayan native speaker's informants and me myself as the Kandayan native speaker learning to speak English. I also read books, magazines,

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[6]James, 1980: 71-83.

[7]Lansau, 1981: 31-37.

and issues that concern phonemes, especially consonants, of the English and Kandayan languages.

E. Procedure

In the procedure I present the Kandayan consonants analysis firstly, and then followed by the English consonants analysis because I would like to recognize the source of the problem and difficulty. As we know, the mother-tongue is the main source that makes the learners learning to speak English have problem and difficulty to recognize and produce the English sounds. As walter Ripman says:[8] "It is possible to derive benefit from a study of the phonetics of the foreign language alone; but it is far better to start from the firm basis of a knowledge of the sound of the mother tongue. The foreigner, then, who wishes to learn English is advised first to analyse, as far as possible, the sounds of his language; just as the English man will find it much easier to pass on to the study of a foreign language if he has first studied the pronunciation of his mother tongue".

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[8]Ripman, 1931: 2.

In chapter II, I classify the Kandayan and English consonants generally by presenting the principle of analysis of sound systems. In the end of the chapter, the Kandayan and English consonant charts are presented. I take the Kandayan consonant chart from Struktur Bahasa Kandayan by Donatus Lansau and his colleagues that was published by Pusat Pembinaan Pengembangan Bahaṣa, Departemen Pendidikan dan Kebudayaan in 1980. I make some corrections so that the Kandayan consonant chart presented in this study is quite different from that written by Donatus Lansau and his colleagues. However, I appreciate their hard work. Their work, actually, has motivated and stimulated me to make this study. The English consonant chart, then, is taken from An Introduction to Descriptive Linguistics written by A.H Gleason JR.

The linguistic analysis of the Kandayan consonant in detail is presented in chapter III. The analysis consists of spelling, description of articulation, allophonic variants and distribution. Struktur Bahasa Kendayan written by Donatus Lansau and his colleagues, Linguistic material in semester V, VI and VII given by Dr. Gloria Soepomo, A

Course In Phonetics by Peter Ladefoged, Phonemics: A Technique For Reducing Languages to Writing by Kenneth L. Pike, etc. support the analysis.

In chapter IV I present the linguistic analysis of the English consonants based on An Introduction to the Pronunciation of English written by A.C. Gimson. The ideas of some linguists such as Daniel Jones, Claude Merton Wise, Walter Ripman, etc. also support the analysis. The analysis consists of spelling, description of articulation, allophonic variants, and distribution.

In chapter V, then, I constrast some English and Kandayan consonants individually to predict the problem and difficulty that the Kandayan learners face when they learn to speak English. The consonants consist of phonemes /p, t, k/, /b, d, g/, and /w/ which represent the English and Kandayan similar consonants, and the phonemes /f, v/, /θ, ð/, /z/, /ʃ/, /ʒ/, and /ʧ, ʤ/ which do not exist in the Kandayan language.

Chapter VI deals with the differences in syllable formation, and Chapter VII deals with the differences in spelling between English and Kandayan consonants.

In the last chapter, I draw a conclusion and suggest a pronunciation material that can be applied by the English teacher for the classroom practice. The conclusion and suggestion are based on the predicted problems and difficulties I have found out through the constrative analysis.

Chapter II

THE CLASSIFICATION OF KANDAYAN AND ENGLISH CONSONANTS

A language is a system of conventional signal used for communication by a whole community. Speech sounds make the communication occur, and those sounds are known commonly as consonants and vowels. Kandayan and English also have consonants and vowels.

Consonant is a speech sound which is articulated with constriction or closure at some point in the mouth, while vowel is a voiced sound formed by the air which comes out in a continuous stream through the pharynx and mouth without obstruction and no narrowing that will cause audible friction.

In this study I concentrate my subject in Kandayan and English consonants rather than vowels.

A. The Principle for Analysis

Before we deal with the consonants, we have to know that the production of a speech sound may involve the action of a source of energy, a vibration, and the movement of

certain supra-glottal organs. Therefore, as Gimson said, in the case of consonant articulation, a description must provide answers to the following questions:

1. Is the air stream set in motion by the lungs or by some other means? (pulmonic or non-pulmonic)
2. Is the air-stream forced outwards or sucked inwards? (egressive or ingressive)
3. Do the vocal cords vibrate or not? (voiced or voiceless)
4. Is the soft palate raised, directing the air-stream through the mouth, or lowered, allowing passage of air through the nose? (oral or nasal or nasalized)
5. At what point or points and between what organs does the closure or narrowing take place? (place of articulation)
6. What is the type of closure or narrowing at the point of articulation? (manner of articulation)

The answer for the questions above provide a concise phonetic label for the sounds. However, a voiced may not different from its voiceless pair in the presence or absence of voicing only, but also in the degree of exhalation of breath and the muscular effort

involved in the articulation.[1] Since this aspect can become the significant factor in comparing the sound system of the Kandayan and English languages it deserves consideration in the analysis.

B. The-Classification-of Kandayan Consonants

1. Pulmonic and Egressive Consonants

The basic source for our vocal activity is provided by an air which is pumped from the lungs. All essensial and normal sounds in the Kandayan need the lung air for the production.

2. Voiced and Voiceless Consonants

All Kandayan consonants are either voiced or voiceless. Kandayan have fifteen consonants that are produced with vibration of the vocal cords (voiced). They are /b, d, g, y, l, m, $\tilde{p}$, n, $\tilde{t}$, ŋ, $\tilde{k}$, r, w, $\tilde{n}$, j/. Kandayan have seven consonants that are produced without vibration of the vocal cords (voiceless), namely /p, k, t, s, c, ?, and h/

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[1]Gimson, 1970: 29-30.

3. The Place of Articulation

Articulators and resonators shape the air that is pumped outwards by the lungs. The articulators consist of vocal cords, lips, teeth, tongue, hard palate, soft palate, uvula and its parts, while resonators consist of pharynx, oral cavity and nasal cavity. The air-stream comes out through the resonators.

According to the place of articulation Kandayan consonants can be categorized into six types, namely:

a. Bilabial: It is made by the two lips that come together. They are /b, p, m, p̃, and w/.

b. Dental: It is made by the tongue tip or blade that is put against the upper front and edge of the teeth. They are /t, and t̃/.

c. Alveolar: It is made by the tongue tip or blade that is put against the alveolar ridge. They are /s, r, n, d, and l/.

d. Alveo-palatal: It is made by the tongue blade that is put against the back of the alveolar ridge. They are /c, j, ñ, and y/

e. Velar: It is made by the back of the tongue that is put against the soft

palate. They are /k, g, k̃, and ŋ/.

f. Glottal: It is made by the glottis. There are two glottal consonants in Kandayan. They are / h and ?/.

4. Manner of Articulation

The position of the articulators and resonators determines the shape of the outward flow of air from the lungs. It may completely close off the oral tract for an instant on a relatively long period, they may narrow the space considerably, or they may simply modify the shape of the tract by approaching each other.[2]

So, according to the manner of articulation, Kandayan consonants can be categorized into seven types :

a. Plosive

It is formed by a complete closure of the air passage, behind which the air pressure builds up and can be released explosively. The Kandayan language have nine plosive consonants. They are /p, b, t, d, c, j, k, g, and ?/.

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[2]Ladefoged, 1975: 8.

b. Fricative

It is produced by narrowing the air passage to such an extent that the air-stream escaping makes friction sound. The Kandayan language has two fricative consonants. They are /s, and h /.

c. Trill

It is produced by a series of rapid intermittent closures or taps made by a flexible organ on a firmer surface. In our case, the tongue tip taps against the alveolar ridge. The Kandayan language has only one trill consonant, that is /r/.

d. Nasalized Stop

This sound is produced by a complete closure of the air passage, behind which the air pressure builds up and then the soft palate is lowered simultaneously so that the air-stream is released explosively through the nose. They are /p̃, t̃, k̃/.

e. Nasal

It is produced by a complete closure at some point in the mouth, with the soft palate being lowered so that the air is released freely through the nose.

The Kandayan language has four nasal consonants. They are /m, n, ñ, and ŋ/.

f. Lateral

It is produced by a partial closure that is formed at some point in the mouth, while the air-stream is released through one or both sides of the contact. The Kandayan language has one lateral consonant, that is /l/.

g. Semi-vowel

It is a sound produced by the speech organs that start at or near a close vowel and immediately move away to some other vowel. Kandayan language has two semi-vowel consonants, namely /w, and y/.

5. Oral and Nasal

The Consonants consist of two kinds of escaping sound. They are oral and nasal consonants. Oral consonants occur when the soft palate can be held in its raised position so that the air-stream escape through the mouth. They include plosive, fricative, trill, nasalized stop, lateral and semi-vowels. While nasal consonants occur when the soft palate is lowered so that the air-stream escapes through the nasal cavity. They include /m, n, ñ, and ŋ/.

6. Fortis and Lenis

Voiced Kandayan consonants tend to be articulated with relatively weak energy. We call it fortis, for example /k/, whereas voiceless Kandayan consonants tend to be articulated relatively strong energy. We call it lenis, for example /g/.

In brief, Kandayan consonant classification can be seen in the diagram below.[3]

Kandayan Consonants

		Bilabial	Dental	Alveolar	Alveo-palatal	Palatal	Velar	Glottal
Stops	vs	p	t		c		k	?
	vd	b		d	j		g	
Fricatives	vs			s				h
	vd							
Trill	vd			r				
Nasalized Stops	vd	$\tilde{p}$	$\tilde{t}$				$\tilde{k}$	
Nasals	vd	m		n	$\tilde{n}$		ŋ	
Lateral	vd			l				
Semi-vowels	vd	w			y			

[3]Lansau, et al., 1981: 25-38.

C. The Classification of English Consonants

In analyzing the English consonants we use the same principle as that which is used in analyzing the Kandayan consonants. Therefore, we say that all normal and essential consonants of the English language are produced by the egressive lung air, and they may belong to voiced consonants or voiceless consonants.

According to the place and manner of articulation as well as the presence of voice, English consonants can be classified as below.[4]

English Consonants

		Bilabial	Labio dental	Dental	Alveolar	Alveo-palatal	Velar	Glottal
Stops	vs	p			t		k	
	vd	b			d		g	
Africatives	vs					ʧ		
	vd					ʤ		
Fricatives Slit	vs		f	θ				h
	vd		v	ð				
groove	vs				s	ʃ		
	vd				z	ʒ		
Lateral	vd				l			
Nasals	vd	m			n		ŋ	
Semi-vowels	vd	w			r	y		

[4] Gleason, 1961: 24.

Chapter III

THE LINGUISTIC ANALYSIS OF THE KANDAYAN CONSONANTS

In chapter one I have classified the Kandayan consonants. In brief, a consonant is a speech sound which is articulated with constriction or closure at some points in the mouth.[1]

They are twenty two consonants in the Kandayan language, namely /p, b, k, g, t, d, s, h, c, y, p̃, m, n, t̃, r, ñ, ŋ, k̃, j, l, ?, w/. They are either voiced or voiceless.

According to the place of articulation the Kandayan language has six types of consonants, namely bilabial, dental, alveolar, palato-alveolar, velar and glottal, and in manner of articulation Kandayan has seven types of consonants, namely, plosive (stop), fricative, trill, nasalized stop, nasal, lateral, and semi vowel.[2]

However, the Kandayan, language, does not have clusters at all. /pm/, /tn/, and /kŋ/ are Kandayan full consonants that just occur in final position. This phenomenon is known as nasal

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[1]Cf.: 7. [2]Cf.: 10-11

plosion in which a bilabial, dental and velar stop followed by homorganic nasal, namely: /m/ for /p/, /n/ for /t/, and /ŋ/ for /k/.[3]

However, the Kandayan language has some consonant sequences that just occur in the medial position of the word e.g. /nt/ as in anti?atn (wait), /mp/ as in ampaqi (tomorrow), /ŋk/ as in angkulukng (banana), /nd/ as in kanda?nya (supposing), /nc/ as in cancikng (energetic), and /ns/ as in ransi (odor of fish), /ng/ as in manggala (cassava) etc.[4] They are not clusters because in syllable they should be separated from each other, e.g. anti?atn -----> an-ti?-atn, angkulukng -----> ang-ku-lukng, manggala -----> mang-ga-la, cancikng -----> can-cikng, etc.

In this chapter I am going to analyze the consonants one by one according to the spelling, articulation, allophonic variants and distribution, except clusters.

A. Voiceless Bilabial Stop /p/

1. Spelling

The phoneme /p/ is regularly spelt with p, e.g. ponok (short), apa? (father), kasap (taste of smoke) etc.

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[3]Ladefoged, 1975:47-48. [4]Lansau, 1981:43-44

2. Description of Articulation

The phoneme /p/ is formed by raising the soft palate, shutting-off the nasal resonator so that the air stream escapes through the mouth. The primary obstacle to the air stream is made by the closure of the lips. Then, lung air is compressed behind this closure, during which stage the vocal cords are held wide apart.

3. Allophonic Variants

In initial and medial position, /p/ sound has no allophonic variants. Usually, the lip-position is required by the adjacent vowel. In final position there is a weakened form of /p /, especially if it is preceded by the vowel /i:/ and /e /, e.g. [ni:dIp)]: (to press below the surface), and [ka:te̞p] (bitten by insect).

The differences of the lip-position, actually, consist of a single sound only, therefore they cannot be counted as its significant subsidiary member.

In final position it is easy for the /p/ sound to be assimilated to the /b/ sound in a single word, e.g. [a:rap] (to hope) is assimilated to [a:rab] (Arab). This tendency originates from the new vocabularies that

come from Indonesian and foreign language. Actually, the Kandayan Language does not have /b/ in final position.

4. Distribution

The phoneme /p/ occurs in initial, medial and final position.

a. Initially : pene (bed), papuk (wetfield), pasuk (perforated), papas (to abuse), pempekng (wart).

b. Medially : ampago$^{?}$ (doll), ampus (to go), lapa$^{?}$ (palm of the hand, sole of foot), ngalimpakngi (to block), papak (to chew), saput (cloth), pipil (to gather, pick).

c. Finally : kakap (dark), tuhap (bite), ngareap (to crawl), katep (bitten by two teeth).

B. Voiced Bilabial Stop /b/

1. Spelling

The phoneme /b/ is regularly spelt with b, e.g. [bu$^{?}$uk] --> (hair), [la:bak̃] (toothless), bantang (yard).

2. Description of Articulation

The Phoneme /b/ is produced by the same articulation activity with the /p/ sound,

except in the presence of voice and the weaker exhalation of breath as well as the laxer tension of muscle.

The position of the tongue depends on the adjacent vowel.

3. Allophonic Variants

Actually, the Kandayan language has two allophones: A fully voiced [b] and a partially voiced [b]. The first occurs in initial, e.g. babotn (pig), and the other occurs in medial, e.g. raba? (rubbish).

Since Indonesian as well as foreign languages also influence the Kandayan language, now we can say that Kandayan gets one more allophone, e.g. the voiceless /b/ in the final position, for instance: Arab (Arab), bab (chapter) etc.

The position of the lips during the production of /b/ depends on the adjacent vowel. It may be spread, neutral, and rounded.

4. Distribution

The phoneme /b/ occurs in initial and medial positions, but because of the Indonesian and foreign languages influence it also occurs in final position as in Arab bab, etc.

a. Initially : bera (angry), baba (to invite, to ask), bamatn (a kind of tree), bari? (spoiled, rotten), babariknq (stretched out), bobok (a kind of termite).

b. Medially : babah (low), rabas (torn), tabok (to make a hole), tabaknq (to cut down), tabah (to sound), labaknq (toothless).

c. (Finally) : Arab (Arab), bab (chapter)

C. Voiceless Dental Stop /t/

1. Spelling

The phoneme /t/ is regularly spelt with t, e.g. tumare? (yesterday), kalat (puckering), tele? (to see), kates (cutting with fingers).

2. Description of Articulation

In articulating the /t/ sound the soft palate should be raised, so that the nasal resonator shut-off. The main obstacle to the air-stream is made by a closure formed between the tip and the rim of the tongue and the edge of the upper teeth. The air-stream is compressed behind this closure,

during which stage the vocal cords are wide apart.

The position of the lips depends on the adjacent vowel which precede or/and follow it. It may be neutral as in natak (to cut), spread as in mebet (to pick off), and rounded as in notok (to go toward).

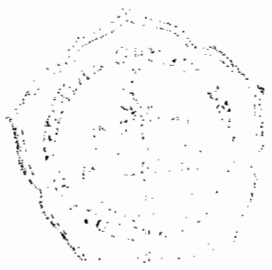
3. Allophonic Variants

The variants of phoneme /t/ are situated around the dental articulatory, but all can be considered as one sound, that is why it is not important for us to discuss it.

In an accented situation the initial /t/ sound is usually sounded in strongly dentalized, e.g. Tele$^{?}$ doho$^{?}$ (Look at it first, please!); and in a normal situation an initial /t/ is sounded stronger than the medial, and is weakly voiceless in the final position. Sometimes the tendency to become voiceless alveolar also occurs if the speakers speak rapidly.

4. Distribution

The phoneme /t/ occurs in initial, medial and final positions.



a. Initially : tamoe (guest), tajur (fishhook), tingi (high), tamperikng (to snap), teneng (a plaiting bag for bringing sth), tage? (neck), teget (hate, dislike), tampoak (kind of fruit), tarenyekng (ear).

b. Medially : atakng (to come), itapm (black), titi (bridge), natak (to cut), gatah (rubber), ati (heart), keto (a kind of bird), antilikng (a tool for catching fish), antiku? (quail).

c. Finally : barat (heavy), jukut (something), sabebet (a bit), sapet (to squeeze; tweezers), kancit (frivolous and naughty female), ngarebet (stricky attacked; intimate), rapot (annihilated; once and for all), rogot (damage caused by nibbling or firing).

D. Voiced Alveolar Stop /d/

1. Spelling

The phoneme /d/ is usually spelt with d, e.g. de?e (used to; formerly; ago), uda? (uncle, aunt), sidi (true), dau (a little gong), darakng (sun shine).

2. Description of Articulation

In articulating the /d/ sound, the soft palate should be raised so that the nasal resonator shut-off and the air-stream passes through the mouth. The main obstruction to the air-stream is made by a closure made between the tip and rims of the tongue and the upper alveolar ridge. Then, the air-stream is pumped out from the lung behind the closure, a voice vibration from the vocal cords can be heard in accordance with the adjacent vowel.

3. Allophonic Variants

There is no important allophonic variant occuring in the Kandayan language. The places of the articulatory phoneme /d/ are determined by the adjacent vowel whether those are in initial or medial position. Those situations are considered as a comprising of one sound.

4. Distribution

The phoneme /d/ occurs in initial and medial positions.

a. Initially : dano (lake), dago? (chin), dangan (they; the other people), dinikng (wall), diri? (we), dudi (since; later), dango (hut), dulakng (a food place for pig; to pan for gold), duduk (to sit).

b. Medially : udas (forest), nadakng (to bake), padakng (a tall grass like seed), nangdara (maiden), idas (to hit with rattan), badakah (in abundance), lamidakng (beetle), adoh (a female pig), dedel (to light).

c. Finally : -

E. Voiceless Velar Stop /k/

1. Spelling

The phoneme /k/ is usually spelt with k, e.g. kita? (you), koa (that), keba? (left), kalampe (a kind of tree/fruit), kamaru? (family), karokot (a kind of spinach).

2. Description of Articulation

The phoneme /k/ is produced by raising the soft palate to shut off the nasal cavity, and the main obstruction is made by a closure between the back of the tongue and the soft palate. The vocal cords are wide apart when the air-stream is compressed behind the closure.

The lip-position is decided by the adjacent vowel. It may be spread as in [ki:daoh] (moan), neutral as in [ka:ladat̃] (a kind of tree), and rounded as in [ko:kot] (hand).

3. Allophonic Variants

The situation of velar articulatory depends on the characteristic of the vowel which precedes or/and follows the /k/ sound. If it is followed by the vowel /i:/ the situation of velar tends to turn near palatal, because the back of the tongue is raised near the back of the hard palate, e.g. [ki:lamu] (mosquito net).

The situation, however, does not make any subsidiary members that is different from the principle sound.

4. Distribution

The phoneme /k/ occurs in initial, medial and final positions.

a. Initially : kulat (mushroom), kalar (finish), kisaratn (miller), karake? (betel), kalamun (provided), karakap (a kind of grass; climbing plant), kubu? (blanket), kade? (if).

b. Medially : paku? (fern), pakul (nail), raka (hinge), rangka? (greedy), songko? (hat), kukup (shut up), saka (intersection) rakah (cracked, split).

c. Finally : arak (arrack), enek (little), samak (near), galak (laugh), rangok (a kind of bird), ratak (bean), antik (to jerk esp. for hair), aruk (to stab, to stick).

The phoneme /k/ tends to sound /q/ in final position if the vowel /a(a:)/ occurs before /k/, for example, [pa:pak] -----> [pa:paq]. The same sound will also be heard in the medial position if the vowel /I(i:)/ occurs after /k/, e.g. ngaraki? -----> =

-nqaraqi? (to make tired). Therefore, some writers include phoneme /q/ in Kandayan consonants.[5] I, however, do not include the phoneme /q/ in Kandayan consonants because the area of the articulation is still in the phoneme /k/ area. The phoneme /k/ will sound like /q/ if the elevating of the back of the tongue towards the velar is higher and tensier.

F. Voiced Velar Stop /g/

1. Spelling

The phoneme /g/ is usually spelt with g, e.g. gagas (beautiful), baga (stupid), agas (mosquito), gurikng (to lie down), uga? (also, too), pogo? (barren).

2. Description of Articulation

In articulating the phoneme /g/ the same articulatory activity occurs as in /k/, except in the presence of voice and the weaker exhalation of breath as well as the laxer tension of muscle, as it is in lenis sounds.

The position of the tongue in exposing the phoneme /g/ is situated by the adjacent vowel.

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[5] Thomas et al, 1985: 10.

3. Allophonic Variants

The phoneme /g/ does not have the important allophonic variants, except in referring with the amount of voicing in initial position. Some speakers tend to make full voicing in initial positions than those in the medial positions, e.g. gigis (stubborn, serious), qaqas (beautiful).

However, all are regarded as belonging to a single phoneme /g/.

The Kandayan language does not have the phoneme /g/ in final positions.

4. Distribution

/g/ occurs in initial and medial position.

a. Initially : galah (to run after), gutu (louse), galar (to spread out), gamang (a kind of pumpkin), gantakng (stripped), goneng (hang), gare? (salt), gali? (afraid), ganggokng (throat).

b. Medially : agi? (again), page (family), barage (together), maraga (street), ngago (to look for), tage? (neck), tagot (to swallow), manggala (cassava),

saqa (a kind of rattan), taqah (to be in the process of), teqet (to hate), raqa (cost).

c. Finally : -

G. Voiceless Glottal Stop /?/

1. Spelling

The phoneme /?/ usually is spelt with ?,[6] e.g. bobo? (to peep at), aba? (up to), ene? (grandfather, grandmother), uwe? (mother), ma?an (just), asa? (one), de?e (ago). Daya? (Daya ?tribe), mano? (fat).

2. Description of Articulation

In articulating the phoneme /?/, the obstruction to the air-stream is made by the closure of the vocal cords, so that it interrupt the passage of air in the supra-glottal organs, then the air compressed below the glottis is released by the sudden separation of the vocal cords.

The /?/ sound is neither breathed nor voiced naturally.

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[6] Pike, 1947: 215 "If the glottal stop is strickly parallel to a full consonants and acts in distribution like them, the larger sign may be preferable".

3. Allophonic Variants

The phoneme /?/ has no important allophonic variants, except in referring with the strong or weak voiceless in the final positions, e.g. rangka? (greedy), laka? (finish) etc..

Some speakers replace /?/ with the phoneme /k/ in the certain words, e.g. Daya? becomes Dayak, but actually there is no any convention at all. Therefore, in the situation where there is no any convention among the speakers, the rule should be applied. The rule for classifying sounds is that it must be complete, consistent and simple.[7] Based on the rule, it is acceptable to pronounce [Da:ya?] = (Daya?) than [Da:ya?] = (Dayak).[8] Daya' is also correcty because an apostrophy {'} is usually used in writing phonemically.[9] The others tend to ommit /?/ if it occurs after a prefix, e.g. ka?mae -----> kamae (where), na?un -----> naun (there), ka?daya -----> kadaya (in upper course of the river), etc.

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[7]Hill, 1958: 47-61.

[8]Cf.: 25.

[9]Pike, 1947: 216.

Some speaker who come from certain Kandayan areas make also the presence or absence of phoneme /?/ in the final position, or replace it with /l/ sound, e.g. ngago? ----> ngago (to look for), tuku ----> tukul (hammer), etc.

4. Distribution

The phoneme /?/ occurs in the medial and final positions.

a. Initially : -

b. Medially : ta?ap (to take, to catch), bu?uk (hair), sa?nya (possible), nu?uda? (aunt), na?un (there), ma?an (just), tama?an (to put into, to enter), ne?ida? (they), ngo?opm (to suck by letting sth in our mouth), tu?ut (knee), tu?up (to wrap), ga?e (an idiom for asking sth), ra?akng (jaw), to?okng (all, ra'ut (hideous).

c. Finally : gare? (salt), tabo? (to visit), nape? (not yet), tele? (to see), paca? (cloth), kamuda? (young people), saru? (to call),

asa? (one), aya? (big), roko? (cigarette), labe? (to cry), roro? (collapse), iso? (big knife), soso? (to scrape), ulu? (handle). tono? (veil, cover), kono? (knot of hair), dono? (God forgive me!), nqasa? (to hope), ase? (to mind), care). sala? (burnt)

H. Voiceless Alveolar Fricative /s/

1. Spelling

The phoneme /s/ is regularly spelt with s, e.g. sidi (true), sarikatn (a kind of fruit), nyosok (to hide), asa (glad), baras (rice), samak (near), tariqas (energetic esp. for girl), lasukng (rice mortal), singkara (story), linsode (a kind of fish).

2. Descriptive Articulation

In articulating this sound, the soft palate should be raised and the nasal resonator shut-off so that the air-stream passes through the mouth. As the main agent of articulation, the tongue determines the formation of the characteristic friction of the /s/ sound. So, in articulating this sound the tip and blade of the tongue makes

a light contact with the upper side teeth. Then, the air stream passes through the narrow groove in the centre of the tongue and it causes friction between the tongue and the alveolar ridge.

The position of the lips depends on the adjacent vowel. The lips may be neutral as in sidi (true) and sisi (edge), spread as in sete? (one) and sasah (to wash), and rounded as in suluh (torch) and soso? (to scrape).

3. Allophone Variants

In pronouncing /s/ some speakers tend to make it weaker so that it fairly approaches /z/ sound, e.g. asa (glad) becomes a̬sa. The situation occurs usually when /s/ is in the medial position. In final position /s/ tends to be pronounced longer and stronger. It makes a full friction sound, e.g. gagaš (beautiful), mepeš (thin).

All different position of the tongue above as well as the way of pronouncing the sound can be regarded as the main principle sound /s/.

4. Distribution

The phoneme /s/ occurs in initial, medial and final position.

a. Initially : satatak (a part), saseat (a piece), susu? (milk), sisi (side), sala? (burnt) sipak (to kick), sansakng (to clog up; a kind of leaf), suman (to cook), satol (a kind of fruit), sabul (unappetizing)

b. Medially : ransi? (odor of fish), asu? (dog), basa? (wet), kasa? (a kind of ant), gesek (to cut by sew), karasik (sand), usik (preserved fish), gasikng (atop), basi (iron), ngasi?atn (to obey), ansit (to inhale); sipped by nose), kasui (a kind of panther), tasik (to jerk esp. with fishhook), basal (illness caused by inadequate diet).

c. Finally : daras (quick), riris (to collect), ampus (to go), sabalas (eleven), udas (forest), tampiras (sprinkling esp. for rain), timpas (to pass each other).

I. Voiceless Glottal Fricative /h/

1. Spelling

The phoneme /h/ is regularly spelt with h, e.g. babah (low), rabah (to fall down), agah (to make a fuss, a bother), parahu (cano, small boat), sahakng (pepper), pahoatn (baby sitter), roah (a kind of feast), ruah (to take outside esp. for little things; unload).

2. Description of Articulation

The phoneme /h/ is formed by raising the soft palate and shutting off the nasal resonator, so that the air stream passes through the mouth. The mouth should be held in the position of vowel. Then, the air is expelled from the lungs with considerable pressure, it causes some friction throughout the vocal tract, but there is no vibration.

The position of the tongue and the lips is in readiness for the adjacent vowel.

3. Allophone Variants

The adjacent vowel decides what articulatory variants will be for this phoneme. The different types of friction will be heard in the sequences, e.g. /hi:/ dahi (forehead), /ha:/ as in tuha (old)., and /ho/ as in doho? (first, prior).

The Kandayan language does not have /h/ sound in initial position. It has some quite similar words with the Indonesian language, but the words do not have /h/ in its initial position, e.g. aus (Ind: haus) = thirsty, angat (Ind: hangat) = hot, idup (Ind:hidup) = life, abis (Ind: habis) = finished, ari (Ind: hari) = day, arap (Ind: harap) = hope, etc.

Most Kandayan speakers tend to pronounce /h/ weaker in the final position than in the medial position, e.g. rabah (to fall down), barasih (clean), teleh (to run after).

In medial position /h/ tends to be pronounced voicing, especially if it is between two voiced sounds e.g. reho (fond of), daha? doho? (wait a moment), rehatn (light in weight).

4. Distribution

a. Initially : -

b. Medially : bahu (shoulder), rahu? (cloud; rubbish), rahakng (jaw), tihakng (pole), nyangahatn (to pray esp. to gods), tagahatn (many/much), ampahatn (vegetable / a

vegetable soup), buhikng (a kind of fish), sahatn (to shoulder), tahutn (year), rahit (to hook), ngohapm (to yawn)

c. Finally : tagah (while; at the time being), ruruh (drop off), sumpalah (many; much), barah (serious wound), tabah (to sound), legoh (bear), magah (to block), calah (red), lijah (tongue), tapah (a kind of big fish in river), sangeh (breathing trouble because of bronchitis), sigah (a traditional Kandayan food).

J. Voiceless Alveo-palatal Stop /c/

1. Spelling

The phoneme /c/ is regularly spelt with c, e.g. nyacapi? (to taste), cega? (energetic), cincitn (ring), kacoer (dragon fly), calah (red), canteng (tin).

2. Descripti on of Articulation

In articulating the phoneme /c/ the soft palate is raised and the nasal resonator shut off, so that the air-stream

passes through the mouth. The blade and the rim of the tongue make a light contact with the alveolar ridge and the front part of the hard palate. If the air behind is compressed by pressure from the lungs, the contact is released so that plosive can be heard, but the vocal cords vibrate do not vibrate.

The position of the lips is decided by the adjacent vowel.

3. Allophonic Variants

There is no allophonic variants which is important for our learning purposes. Nevertheless, there are some variation of the tongue placements that are caused by the adjacent vowel, but they belong to the main principle sound /c/, for instance, some speakers tend to pronounce /c/ stronger in initial position than that of in the medial position.

4. Distribution

The /c/ sound occurs in initial and medial position.

a. Initially : cawan (cup), caqat (to stand straightly), cancikng (lively), calitn (bright esp. for water), cancalo? (preserve shrimp), conekng (a

very little bottle), cacah (to pick up), caradik (smart, clever).

b. Medially : caca? (dirty), cocoratn (a place in which the water drop), locor (straight), kecoh (disturb; tease; joke), icaknq (to bring), picara (mediator esp. in proposing to), balacatn (an ingredient made of shrimp or fish), baca (to read), iconq (breasts), aciknq (odor of urine), uciknq (cat).

K. Voiced Alveo-palatal Stop /j/

1. Spelling

The phoneme /j/ is regularly spelt with j, e.g. jolo? (to pay out), jangka?nva (may be, possible), nojok (to point at), jantok (spadix), tajar (to eat), ijo (green).

2. Descriptive Articulation

The phoneme /j/ is formed by raising the soft palate and shutting off the nasal cavity so that the air stream passes through the mouth. The blade and the tip of the tongue make a light contact with the

alveolar ridge, while at the same time the front of the tongue being raised to the hard palate. Then, the air compressed by lungs escapes between the area of the tongue and the roof of the mouth.

The lips-position depends on the adjacent vowel. It may be spread as in je? (Come on!), neutral as in pajajaknq (waitress, waiter esp. in feast), rounded as in nyojol (pay out; prominent).

3. Allophonic Variants

The position of the lips as well as the tongue depend on the adjacent vowel. The differences, however, that are caused by the situation do not make any subsidiary members of the phoneme. All are counted as one sound.

4. Distribution

The phoneme /j/ occurs in initial and medial positions.

a. Initially : jarikng (edible but malodorous fruit) jantong (heart), jalunukng (a kind of grass; grassy), Jubata (God), jantu? (to fall), jaruk (preserved fish), jara (unlucky).

b. Medially : kijakng (small deer), nyujut (to chaw; pull up), dirajatn (to eat greedily), majuh (to eat), rojek (torn), sajurus (then, for a moment), rajaki (luck), jejekng (to lead someone by the hand).

L. Voiced Alveolar Trill /r/

1. Spelling

The pheneme /r/ is usually spelt with r, e.g. rabukng (sprout), redo (sleepy), rere? (to sleep soundly), rarak (to crack), karak (curst), ngansar (to chase away), takar (lazy).

2. Descriptive Articulation

The phoneme /r/ is formed by raising the soft palate and shutting off the nasal resonator so that the air-stream passes through the mouth. The blade, the tip and the rim of the tongue are raised to the alveolar ridge. They make a slight contact, then the air which is compressed from the lungs escapes between all area of the tongue with the alveolar ridge. The position of the tongue is in readiness for the adjacent vowel, so that the rapid tap or trill will be heard.

The position of the lips is determined by the adjacent vowel. It may be spread as in rere? (to sleep soundly), neutral as in raqa? (a basketry plait made of bamboo or grass), and rounded as in roro? (collapse).

3. Allophonic Variants

The Kandayan language has two important allophonic variants in the phoneme /r/. The area of the Kandayan decides the variations:

a. A clear /r/ is pronounced by most Kandayan people. The position of articulatory organs have been described above.

b. A dark /r/ is pronounced by a part of the Kandayan people . Dark /r/ is formed by raising the back of the tongue up to the velum. Then, the air from the lungs is compressed, so that it escapes between the back of the tongue and the velar. Friction can be heard because of those continuant taps.

Therefore, babaro (alone), jarakng (rare) etc. can be pronounced by most Kandayan people with clear [r], and they are also pronounced with dark [ɾ] by some Kandayan speakers.

Most Kandayan people tend to make a silent /t/ after the /r/ sound, if the /r/ sound is in final position, e.g. takar (lazy): [ta:kar^{t}]. The tendency, however, does not occur to those Kandayan people who use the dark /r/.

4. Distribution

The phoneme /r/ occurs in initial, medial and final positions:

a. Initially : rasa? (to cut by pieces), rongko? (ill), rorokng (to spill), rabak (to make sth hastily), rega (frog), roko-roko (weak and unenergetic), rara? (to reduce, divide), rantak (torn), riris (to collect).

b. Medially : tarekng (a kind of bamboo), ngirik (to thresh), arekng (termite), lereng (bicycle), urat (root), kiripm (to send), tarap (a kind of tree), taruk (provisional house or tent), karama? (crab), karo? (stiff), timpurukng (part of coconut shell), raruk (full of mud esp. for street or ricefield).

c. Finally : ngalar (to spread out), balajar (to learn) papar (scatter), ngalakar (to converse), salepar (sandal), langir (shampoo), lagar (floor made of bamboo), ilir (lower course), banir (a big root of tree).

M. Voiced Bilabial Nasalized Stop /$\tilde{p}$/

1. Spelling

The phoneme /$\tilde{p}$/ is usually spelt with pm, e.g. alapm (morning), arapm (direction), tajapm (blade), pampapm (to clog), tingalapm (to sink).

2. Descriptive Articulation

In articulating phoneme /$\tilde{p}$/ the soft palate is raised, and the nasal resonator is shut - off. The closure of the lips is the main obstruction for the air-stream. Lung air is compressed behind the closure, while the vocal cords are held wide apart . Then simultaneously the soft palate is lowered so that the air-stream escapes through the nasal cavity for /m/ sound.

3. Allophonic Variants

Some speakers tend to pronounce /p/ fuller than /m/, but the others tend to pronounce /p/ weaker than /m/. The areas from which the Kandayan people comes and the speed in speaking make the tendencies above. Those differences, however, do not cause any subsidiary members of the phoneme /p̃/. All are comprised by only /p̃/ sound.

The phoneme /p̃/ occurs in final position only. The position of the tongue is influenced by the vowels that precede /p̃/.

4. Distribution

Phoneme /p̃/ only occurs in final position.

a. Initially : -

b. Medially : -

c. Finally : asapm (acid), ranapm (soak), kiripm (send), dalapm (deep), alapm (morning), tikapm (a kind of massage), itapm (black).

N. Voiced Bilabial Nasal /m/

1. Spelling

The phoneme /m/ is regularly spelt with m, e.g. mani? (bath), rimong (tiger), kamae (where), anam (six), somet (mustache), emang (turtle), kampokng (village).

2. Description of Articulation

In articulating the phoneme /m/, the lips form a closure as for /p, b/, then the soft palate is lowered, adding the resonance of the nasal cavity to those of the pharynx, and the mouth chamber is closed by the lips.

The tongue position is in readiness for the adjacent vowel.

3. Allphone Variants

The Kandayan language does not have any important variants /m/.

The situation of the lips is decided by the adjacent vowel. It may be spread as in lamidakng (beetle), neutral as in manta? (raw), and rounded as in tomokng (buttock). All, however, are considered as one sound.

4. Distribution

The phoneme /m/ occurs in initial, medial and final positions.

a. Initially : maraqa (street), milakng (every; to count) munsakng (civet cat), mulih (to get; may), mabu? (swallow), mangkakng (naughty), mangap (confused) moro? (remote; isolated), mumuh (very tired), mudik (to go upstream).

b. Medially : tampang (seed), amakng (sprout), kamakng (stand one's hair on end; swollen; finished), amo? (supply), ame (no) ame? (to give), kalamue (a kind of snail) lumut (smooth, soft), qilamut (to be in motion), amulukng (sagu), amalakng (a kind of grass), amalatn (desire).

c. Finally : nyangkam (to hold), jam (hour /watch) katem (a kind of way to cook sth), balam (a kind of pigeon), tumalam (last night), talam (tray), ngucum (to chew betel), malam (night).

0. Voiced Alveolar Nasal /n/

1. Spelling

The phoneme /n/ is regularly spelt with n, e.g. naun (there), nanas (pine-apple), nape? (not yet) danangan (cauldron, kettle), garanan (to put, to place).

2. Descriptive Articulation

The phoneme /n/ is formed by lowering the soft palate, adding the resonance of the nasal cavity to those of the pharynx and of that part of the mouth chamber behind the alveolar closure; the tongue should make a closure with the teeth ridge and upper side teeth as for /t, d/.

The lips position is decided by the adjacent vowel. It may be spread as in nele? (to see), neutral as in kanakng (a kind of morning bird), and rounded as in sinunuh (neat, polite).

3. Allophonic Variants

The Kandayan language does not have any important variants /n/.

4. Distribution

The phoneme /n/ occurs in initial, medial and final positions.

a. Initially : nang (that, which), nana$^{?}$ (no), nibukng (a kind of palm), nangka$^{?}$ (jack fruit), nunu (to fire), nu$^{?}$ku (mine), nu$^{?}$nyu (yours), niyan (this), nabo (dragon), nape$^{?}$ (not yet)

b. Medially : tanah (land), tandur (to plant), ponok (short), binaul (eagle), manok (hen), antajapm/panajapm (hedgehog), insupm (a kind of fruit), bini (wife), pancah (always).

c. Finally : teken (signature, to sign), man (with), pahayaman (cattle), raban (cage), batangan (river), dakan (nephew or niece), ngarabanan (to take care of), Sanen (Monday), amin (to bring sth on the back using head), kalimpanan (eye trouble because of sth enters it accidentally).

P. Voiced Dental Nasalized Stop /t̃/

1. Spelling

The phoneme /t̃/ is regularly spelt with tn, e.g. amutn (dew), namutn (to leave), calitn (clear), turutn (descend), tataratn (handle).

2. Descriptive of Articulation

In articulating the phoneme /t̃/ the position of the articulators should be similar with the /t/ sound, but then it turns to the /n/ sound immediately by lowering the soft palate so that the air escapes through the nasal cavity.

3. Allophonic Variants

Some speakers tend to make full voicing for /t/ than /n/, but the others tend to pronounce /t/ weaker than /n/. It depends on their area they come from and on the speed of their talking. Actually, the differences do not make any subsidiary members for the phoneme /p̃/.

4. Distribution

The phoneme /t̃/ occurs only in final positions:

Finally : talatn (to devour), papatn (board), kaladatn (a kind of tree), salitn (to put on), urutn

(a kind of skin desease), bararatn (a kind of rattan), ampahatn (vegetables), tukang pantatn (blacksmith), tinqa?atn (window).

Q. Voiced Alveo-palatal Nasal /ñ/

1. Spelling

The phoneme /ñ/ is spelt with ny, e.g. tanyap (to enter in), tinyak (to trample on), nyocok (to drink), nyangkit (to climb), panyakng (long).

2. Description of Articulation

In articulating the phoneme /ñ/, the soft palate is raised partly so that the air stream passes through the nasal cavity and the mouth. The blade, the rim and the tip of the tongue should be raised to the alveolar ridge.

The lip-position depends on the adjacent vowel. It may be rounded as in nyoso? (to scrape), spread as in bahanyi (to harvest), and neutral as in panyakng (long).

3. Allophonic Variants

The Kandayan people tend to pronounce the vowel /ɪ/ silent before the /ñ/ sound, especially if /ñ/ is in medial position. e.g. [bata:ˈñaʔ] (to ask,) [kama:ˈñaʔ] (where).

Actually, the difference is not counted as subsidiary members of the /ñ/ sound, because it does not change the /ñ/ sound.

4. Distribution

The phoneme /ñ/ occurs in initial and medial positions:

a. Initially : nyarekng (loud), nyonyong (strong desire), nyalipatn (centipede), nyiro? (winnow), nyingkubakng (to run) nyosok (to hide), nyilu? (to pain, hurt)

b. Medially : ganyil (fond of), kuranyi (a kind of fruit), ganye (dear), barenyah (to play; to make a joke), tarenyekng (ear), wanyi? (bee), tinya (to let it by), sa?nya (may be).

R. Voiced Velar Nasal /ŋ/

1. Spelling

The phoneme /ŋ/ is usually spelt with ng, e.g. kanyang (satisfied), mincarang (to open eyes), garang (cruel), singah (to drop in), pangoang (a long stick).

2. Description of Articulation

In articulating the phoneme (ŋ) the soft palate should be lowered, adding the resonance of nasal cavity to that of the pharynx and that small part of mouth between the back of the tongue and the velum as for /k, g/.

The lip-position depends on the adjacent vowel.

3. Allophonic Variants

There is no important variant that occurs in the Kandayan language that refers to the phoneme /ŋ/.

4. Distribution

The phoneme /ŋ/ occurs in initial, media and final positions:

a. Initially : ngangal (tired), ngampak (to scream), ngolesatn (to mock), ngalukng (headache), ngingis (strong desire to).

b. Medially : Tangilikng (anteater), pangakng (hungry), tangal (falling out, stripping), langar (tall), tongko? (fireplace), tingi (high), pingakng (waist).

c. Finally : kamonong (abscess), timonong (a kind of fruit), saepang (pocket), lingkonnong (a kind of millipede), jaranang (red banana), rimong (tiger), gamboeng (tadpoles), teneng (a little bag made of bamboo).

S. Voiced Velar Nasalized Stop /k̃/

1. Spelling

The phoneme /k̃/ is usually spelt with kng, e.g. mangkakng (naughty), tingkalakng (a bag made of bamboo or rattan), kapakng (to embrace), kancekng (button).

2. Description of Articulation

In articulating the (k̃) sound, the situation of the articulator organs is similar with that of the /k/ sound, but then in a rapid reaction the soft palate is lowered so that the air stream passes through the nasal cavity for the /ŋ/ sound. In this situation we hear /k̃/ sound.

3. Allophonic Variants

Some speakers tend to pronounce /k/ fuller than /ŋ/, and the others tend to pronounce /k/ weaker than /ŋ/. Usually the

certain areas and the speed in speaking can cause these situations. The differences, however, cannot be considered as subsidiary members of the phoneme because they belong to the /k̃/ sound.

Since /k̃/ occurs in the final position only, the position of the tongue is influenced by the vowel that precedes /k̃/, and the lip-position is determined by the /k̃/ sound.

4. Distribution

The phoneme /k̃/, as we said, occurs only in positions:

Finally : galakng (bracelet), bujakn (unmarried man), arakng (charcoal), acikng (odor of urine), lantokng (worm), tontokng (to spill), Garantukng (the name of region), ganteknq (thin), batukng (a kind of bamboo), ampeknq (to carry on waist), tamukng (to dig), takakng (a kind of tree), pakatikng (a kind of fruit) burukng (bird), atakng (to come), gangokng (throat), tabikng (edge).

T. Voiced Alveolar Lateral /l/

1. Spelling

The phoneme /l/ is usually spelt with l, e.g. laka? (finished), kalar (finished, ready), laki (male; husband), nanglaki (man), samilikatn (wife, husband), babalak (circumsission), babalc? (a kind of fish).

2. Description of Articulation

In articulating the phoneme /l/, the soft palate should be raised, and the nasal resonator is shut off so that the air stream passes through the mouth. The tip of the tongue is raised to the upper teeth ridge, allowing the air stream escape through the both sides of the tongue. Then, we hear /l/ sound.

The lip-position is determined by the adjacent vowel. It may be spread as in kale? (catfish), balek (tin), and rounded as in molot (mouth), and neutral as in galah (to run after).

3. Allophonic Variants

Some Kandayan speakers do not pronounce /l/ at all if /l/ occurs in medial position, e.g. silawar (pants) becomes siawar; the others do not pronounce /l/ at all if /l/ occurs in final position, and replacing /a/

that precedes /l/ with /o/, e.g. [paŋa:kal] (deceiver) becomes [paŋa:ko], or they do not replace it at all, e.g. ka:il (fishhook)---> [ka:i]. Some speakers tend to ommit /l/ if /l/ occurs in initial position, e.g. [la:ki] (husband, man) ---> [a:ki].

The origin of the native speakers make the situations above.

4. Distribution

The phoneme /l/ occurs in initial, medial and final positions:

a. Initially : lalakng (going for a walk), layo (to tour), limo (orange), lumpat (to wake up, from), lapakng (a kind of cucumberr), ledoh (mucus), lamak (fat), lea (like, similar), lamanq (rice in bamboo), lasap (to lose), longkot (fire wood).

b. Medially : talah (give a name), talu (three), lala (remnant), salamar (a piece) talo? (egg), talobokng (door), balale? (mutual cooperation), galea? (if, supposing), balala? (abstinence, prohibition), kala?) (ever).

c. Finally : satol (a kind of fruit), tabal (thick) antol (nude), saqal (mercy), jajal (to enter in by force), mipil (to pick the fruit), ngokol (to cough repeatedly), kabal (unvenar-able, immune).

U. Voiced Bilabial Semi-vowel /w/

1. Spelling

The phoneme /w/ is regularly spelt with w, e.g. uwe? (mother), gawe (feast), balawakng (married).

2. Descripti on of Articulation

In articulating the phoneme /w/ the position of the tongue is being in readiness for a back halfclose (depending upon the degree of openness of the following sound), and then it moves away immediately to the position of the following sound.

The lip-position depends on the adjacent vowel. It may be spread as in gawe (feast), neutral as in silawar (pants), and half-rounded as in ngawah (to look about).

3. Allophonic Variants

Although the position of the tongue is influenced by the adjacent vowel, there is

no important variant occuring in the /w/ sound in the Kandayan language.

4. Distribution

The phoneme /w/ occurs in initial and medial positions:

a. Initially : warong (shop), wawa (uncle), wanyi? (honeybee), we?nya (his/her mother), wantek (colour for cloth),

b. Medially : sawe/sawe? (calm), karowak (a kind of bird), tawak (a big gong), tawakng (swamp), bowak (owl), awa? (dumb), luwatn (special area for field, plants, around the house), ngaluwatni (to pass through).

V. Voiced Alveo-palatal Semi Vowel /y/

1. Spelling

The phoneme /y/ is regularly spelt with y, e.g. paya? (mud), daya (upper course of the river, sourse) tuyut (cradle), aya? (big).

2. Description of Articulation

In articulating the phoneme /y/ the position of the tongue should be in readiness for a front half close to close vowel (depending on the degree of openness

of the following sound) and then it moves away rapidly to the position of the following sound.

The lip-position is situated by the adjacent vowel. It may be half-rounded as in ayutn (to sway), neutral as in sabaya (similar), and rounded as in kayo (enemy).

3. Allophonic Variants

The Kandayan language does not have any variants in pronouncing /y/ sound.

4. Distribution

Actually in the Kandayan language the phoneme /y/ just occurs in medial position, but because of the Indonesian and foreign language interference the Kandayan gets some new words that have /y/ as its initial sound.

a. Initially : Yesus (Jesus), Yakobus (Jacob), Yosep (Joseph), Yayasan (foundation), Yuliana (Juliana) etc.

b. Medially : baya (suitable), ayap (missing), pahayaman (cattle), ayukng (friend), sakayu? (a stalk of; a bar of; a stem of), picaya? (to believe).

c. Finally : -

Chapter IV

THE LINGUISTIC ANALYSIS OF THE ENGLISH CONSONANTS

English consonants have been analyzed by many linguists. The following is the essence of Gimson's analysis.[1]

A. Voiceless Bilabial Stop /p/

1. Spelling

The phoneme /p/ is spelt with p, e.g. pin, pp as in apportunity, and gh as in hiccough. Silent p is in words such as cupboard, pnemumonia and receipt.

2. Description of Articulation

The phoneme /p/ is formed by closing the lips and blocking the nasal passage with the soft palate, and forcing unvocalized air upward from the lungs to build up considerable air pressure in the mouth Then, opening the lips to explode the air over the top of tongue.

The lip-position depends on the adjacent vowel.

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[1]Gimson, 1970: 149-219.

3. Allophonic Variants

The /p/ sound can be aspirated [p^h] as in pain, impatient and play, and unaspirated especially if it is preceded by /s/ as in spin, spear, spew etc.

It is also relatively unaspirated if it is in weakly accented situation as in Gospel, champion, capable, etc.

If there are two /p/'s in the spelling of the word, there is only one in the normal pronunciation, viz. the long sound /p:/ or /pp/, as in appear.

4. Distribution

The phoneme /p/ occurs in initial, medial and final positions.

a. Initially : palate, pain, purser, planograph.

b. Medially : apple, topple, shape, captain, appear.

c. Finally : lap, lip, pump, cheap, camp.

d. Clusters :

1) Initial clusters:

- /pr/ : pray
- /pl/ : play
- /sp/ : spot
- /spj/ : spume
- /spl/ : splash
- /spr/ : spring

2) Final clusters

- /ps/ : collapse	- /sps/ : wasps
- /psd/ : lapsed	- /spd/ : gasped
- /pts/ : crypts	- /lps/ : helps
- /dθs/ : depths	- /mps/ : camps
- /lp/ : help	- /mpt/ : prompt
- /sp/ : wasp	- /lpd/ : helped
- /mp/ : ramp	

B. Voiced Bilabial Stop /b/

1. Spelling

The phoneme /b/ is regualrly spelt with b, e.g. beach, symbol, cub, robe. Silent b as in limb.

2. Description of Articulation

The phoneme /b/ is formed by the same articulation activity as that of the /p/ sound, except for the presence of voice and weaker exhalation of the breath as well as the laxer tension of the muscle.

3. Allophonic Variants

There are four main variants occurring in the /b/ sound. They are: no audible release in final position as in lamb, bulb; no audible release in stop clusters as in rubbed, object; nasal release, when it is followed by the homorganic nasal consonant

as in submerge, ribbon; and voicing [b] in initial and final position as in bend, rut.

4. Distribution

This phoneme occurs in initial, medial and final positions.

a. Initially : banana, boast, brain, beauty, bicycle

b. Medially : harbour, husband, symbol, rubber

c. Finally : bulb, ebb, rib, sob, cub

d. Clusters :

1) Initial clusters:

- /br/ : brace - /bl/ : blade

2) Final Clusters:

- /bd/ : rubbed - /bs/ : tubs

C. Voiceless Alveolar Stop /t/

1. Spelling

The phoneme /t/ is usually spelt with t, tt, th, pt, and d, e.g. time, letter, Thomas, ptarmigan and walked. Silent t as in castle, Christmas, etc.

2. Description of Articulation

It is formed by closing the velum and placing the tip of the tongue against the alveolar ridge a short distance back of the upper teeth, filling the mouth with

compressed air from the lungs, and, then especially allowing the air to escape suddenly over the tip of the tongue.

3. Allophonic Variants

The phoneme /t/ can be aspirated especially in initial position, and unaspirated in medial position after /s/ sound, for example, take, tone, tall, and stake, steak, stone.

It also can be relatively unaspirated as in butter, letter, after, and entry.

The other variants are: no audible release in final position as in bat, mat; no audible release in stop clusters as in white post, great joke; glottal reinforcement of final /t/ as in shot, nasal release as in cotton, and lateral release as in cattle, battle.

4. Distribution

The phoneme /t/ occurs in initial, medial and final positions.

a. Initially : temperament, taste, tourist, test

b. Medially : otter, nasty, rotation, lantern

c. Finally : test, act, halt, past, beat, right

d. Clusters

1) Initial clusters:

- /tr/ : train
- /tw/ : twice
- /str/ : string
- /st/ : stop

2) Final clusters:

- /ft/ : soft
- /kt/ : pact
- /lt/ : belt
- /nt/ : tent
- /pt/ : apt
- /st/ : test
- /st/ : washed
- /fts/: lifts
- /kst/: text
- /nts/: wants
- /ŋkt/: banked
- /kts/ : acts
- /pst/ : lapsed
- /pts/ : crypts
- /skt/ : asked
- /lft/ : engulfed
- /lkt/ : milked
- /lpt/ : helped
- /tzd/ : waltzed
- /lts/ : belts
- /mpt/ : prompt
- /pst/ : glimpsed
- /nst/ : against

D. Voiced Alveolar Stop /d/

1. Spelling

The phoneme / d / is usually spelt with d, dd, e.g. down, middle.

2. Description of Articulation

In articulating the sound /d/, the articulation activity is similar as that of the /t/ sound, except for the presence of voice and weaker exhalation of the breath as

well as the laxer tension on the muscle because /d/ is lenis.

3. Allophonic Variants

There are some variants we get from /d/. They are: no audible release in final position as in road; no audible release in stop clusters as in good boy; nasal release as in madness, sudden, and lateral release as in medal.

4. Distribution

The phoneme /d/ occurs in initial, medial, and final positions.

a. Initially : down, dolls, debatalbe, dough, day

b. Medially : faded, udder, ridden, ladder, side.

c. Finally : breed, good, bed, red, tread.

d. Clusters

1) Initial clusters:

- /dr/ : dry
- /dw/ : dwindle

2) Final clusters:

- /bd/ : rubbed
- /gd/ : begged
- /ld/ : hold
- /md/ : climbed
- /nd/ : mend
- /vd/ : lived
- /d8/ : width
- /d8s/: widths
- /ldz/: builds
- /ndz/: hands
- /lmd/: filmed
- /lvd/: shelved

- /zd/ : pleased - /nzd/: bronzed
- /ŋd/ : hanged - /dzd/: adzed
- /dd/ : bathed - /nʸd/: changed

E. Voiceless Velar Stop /k/

1. Spelling

The phoneme / k / is usually spelt with k; c; cc + a, o, u, nu; ch, e.g. keen, care, accord, conquer, Christ, stomach, banquet, etc.

2. Description of Articulation

The /k/ sound is formed by closing the nasal cavity with the velum and blocking the oral cavity with the back of the tongue situated against the velum; forming the air pressure in the pharynx and exploding the air passes through the mouth.

3. Allophonic Variants

In initial position /k/ is usually aspirated strongest than in final position, and it is usually weakest in medial position.

There are some allophones in the phoneme /k/, they are: the velar [k] exploded over the tongue as in can; a nasally exploded [k] as in I can go {aɪ kn gəu}; the bilaterally exploded [k] before /l/ as in clean; unreleased [k] as in lack;

and the adjacent vowel from the front and the back [k] as in kiss, coal.[2]

4. Distribution

It occurs in initial, medial and final positions.

a. Initially : cut, crackle, kind, kidnap, crocodile

b. Medially : pigne, escape, liquor, fickle, account

c. Finally : kick, ask, back, desk, leak

d. Clusters

1) Initial clusters:

- /kr/ : credible - /kl/ : clear

2) Final clusters:

- /kt/ : pact - /sks/ : asks
- /ks/ : box - /skt/ : masked
- /nk/ : drink - /ŋks/ : thinks
- /sk/ : ask - /ŋkt/ : banked
- /lk/ : milk - /lks/ : silks
- /kst/: text - /ksts/: contexts
- /kts/: acts - /ksθs/: sixths
- /ksθ/: sixth

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[2]Wise, 1957: 125.

F. Voiced Velar Stop /g/

1. Spelling

The phoneme / g / is spelt with g, gg, gh, gu and g silent, e.g. gain, egg, ghost, gue, and gnaw.

2. Description of Articulation

In articulating this phoneme, the articulation activity is the same as that of the /k/ sound, except for the presence of voice and weaker exhalation of the breath as well as the laxer tension of the muscle, because /g/ is lenis.

3. Allophonic Variants

There are some allophones that can be got from the /g/ phoneme, they are: [g] nasally exploded as in dig and gain, [g] with a bilateral explosion as in glare {glear}, [g] without plosion as in dig, and the last is the adjacent vowels that make the front [g] as in geese and the back [g] as in gold.[3]

4. Distribution

The phoneme /g/ occurs in initial, medial and final positions.

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[3]Wise, 1957: 126.

a. Initially : go, guilty, guest, game, gadget

b. Medially : aggregation, regulate, integration, ago

c. Finally : catalog, pig, bag, big, blackleg

d. Clusters

1) Initial clusters:

- /gr/: grow - /gl/: glim

- /gw/: guava

2) Final clusters:

- /gd/: begged - /gz/: digs

G. Voiceless Alveo-Palatal Affricative /č/

1. Spelling

The phoneme /č/ is regularly spelt with ch, tch, t + ure, eous, and t + ion when t is preceded by s, e.g. church, catch, nature, righteous, question.

2. Description of Articulation

In articulating this phoneme the soft palate should be raised and the nasal resonator shut - off so that the air-stream escapes through the mouth. The obstruction is made by the contact between the tip, blade and rims of tongue and the upper alveolar ridge and side teeth. At the same

time, the front of the tongue is raised to the hard palate in readiness for the fricative release, then the obstruction is released slowly, we can hear the air escapes in friction through between the blade of the tongue and the alveolar. During both stop and fricative stages, the vocal cords are wide apart for /č/.

3. Allophonic Variants

There is no allophonic variants occuring in this phoneme.

The lip-position is determined by the adjacent vowel.

4. Distribution

The phoneme /č/ occurs in initial, medial and final positions.

a. Initially : children, chalice, choke, cheese, chin

b. Medially : lecture, feature, juncture

c. Finally : watch, much, porch, scratch, coach

d. There are no pre-vocalic cluster and post vocalic cluster occuring in this phoneme.

H. Voiced Alveo-palatal Affricative /ǰ/

1. Spelling

The phoneme /ǰ/ is regularly spelt with

j, g, dg, gg, dj, de, di, ch, e.g. jaw, gem, ridges, exaggeration, adjunct, grandeur, cordial, Norwich.

2. Description of Articulation

In articulating this phoneme the articulation activity is the same as that of /ɣ/ sound, except for the pressence of voice and weaker exhalation of the breath as well as the laxer tension of the muscle, because /ɣ/ is a lenis.

3. Allophonic Variants

There is no allophonic variants occurs in phoneme /ɣ/, except for the lip-position that is determinedby the adjacent vowel. It may be spread, rounded and neutral.

4. Distribution

It occurs in initial, medial and final positions.

a. Initially : gem, generalization, July, jewels

b. Medially : major, agitate, adjure, tragical

c. Finally : liege, large, age, judge, edge

d. There are no pre-vocalic clusters and post-vocalic clusters occuring in this phoneme.

I. Voiceless Labio-dental Fricative /f/

1. Spelling

Phoneme /f/ is regularly spelt with f, ff, ph, gh, as in fail, off, phonetic, laugh.

2. Description of Articulation

In articulating this phoneme the soft palate is raised and the nasal resonator shut-off. The inner surface of the lower lip makes a light contact with the edge of the upper teeth, so that the escaping air produces friction. The actual point of the contact varies according to the adjacent vowel, e.g. if the adjacent vowel is a back rounded, the contact of the lower lip and upper incissors tend to be more retracted than when the adjacent vowel is a front spread vowel.

3. Allophonic Variants

We do not have any variants in the phoneme /f/. The different positions of the lips that are caused by the adjacent vowel cannot be counted as the subsidiary members differing appreciable from its principle member.

4. Distribution

The phoneme /f/ occurs in initial, medial and final positions.

a. Initially : father, photo, fit, food, fince

b. Medially : defend, suffer, tougher, camphor

c. Finally : leaf, tough, deaf, proof, enough

d. Clusters

1) Initial clusters:

- /fl/ : fly
- /fj/ : few
- /fr/ : fresh

2) Final clusters:

- /ft/ : soft
- /fts/ : lifts
- /fθ/ : fifth
- /fθs/ : fifths
- /fs/ : roofs
- /mfs/ : triumphs
- /mf/ : lymph
- /lfθ/ : twelfth
- /lf/ : golf
- /lfs/ : gulfs

J. Voiced Labio-dental Fricative /v/

1. Spelling

The phoneme /v/ is regularly spelt with v, f, and ph, e.g. vein, of, nephew.

2. Description of Articulation

Since /v/ is the voiced cognate of /f/, the articulation activity is the same as

that of /f/, except for the vibration of the vocal cords, and the weaker breath that is accompanied with a laxer tension of the muscle.

It tends to be fully voiced when this phoneme occurs between voiced sounds as in cover.

3. Allophonic Variants

When the phoneme /v/ is in initial and final positions in isolated words it has a voiceless variant as in vine [vaɪn] and love [lʌv], and when it occurs initially before a fortis consonants in the following words /v/ assimilates easily to /f/ as in move forward [mu:f fɔ:wʔd]

Then, the position of the lips during the production of /v/ is approximate to the adjacent vowel.

4. Distribution

The phoneme /v/ occurs in initial, medial and final positions.

a. Initially : vase, variety, voice, vast, veal

b. Medially : event, give, nephew, grovel, cover

c. Finally : move, love, live, leave, have

d. Clusters

1) Initial cluster:

- /vj/ : view

2) Final clusters:

- /vd/ : lived
- /vz/ : hives
- /lv/ : solve
- /lvz/ : shelves
- /lvd/ : solved

K. Voiceless Dental Fricative /θ/

1. Spelling

Phoneme /θ/ is regularly spelt with th, e.g. thumb, method, path.

2. Description of Articulation

In producing this phoneme, the soft palate should be raised, and the nasal resonator shut-off, then the tip and rims of the tongue make a light contact with the upper side teeth. While in this position, the air is pumped out by the lungs through the tongue tip and the teeth, so that continuant friction will be heard for /θ/.

3. Allophonic Variants

The adjacent vowel makes the different position of the lips. They may be spread as in teeth, rounded as in thought, and neutral as in thumb.

When /θ/ is followedby /s, z/, it is sometime elided as in <u>months</u> [mʌns], and clothes [klɔvz].

However, all variants above are comprised as only one sound, that is the /θ/ sound.

4. Distribution

The phoneme /θ/ occurs in initial, medial and final positions.

a. Initially : <u>thigh, thank, thin, thought, thief</u>

b. Medially : <u>anything, Catholic, method, author</u>

c. Finally : <u>truth, mouth, faith, booth, cloth</u>

d. Clusters

1) Initial clusters:

- /θr/ : thriel
- /θw/ : thwart
- /θj/ : thew

2) Final clusters:

- /θt/ : earthed
- /nθs/ : tenths
- /θs/ : breaths
- /lθs/ : healths
- /lθ/ : health
- /dθs/ : widths
- /nθ/ : month
- /fθs/ : fifths
- /fθ/ : fifth
- /ksθ/ : sixth
- /ŋθ/ : strength
- /lfθ/ : twelfth
- /mθ/ : warmth
- /ndθ/: thousandth
- /pθ/ : depth
- /tθ/ : eighth

M. Voiceless Alveolar Fricative /s/

1. Spelling

The phoneme /s/ is regularly spelt with s, ss, c, sc, ps, z, and x, e.g. see, grass, finesse, city, psychology, waltz, six

2. Description of Articulation

In articulating this phoneme the soft palate should be raised and the nasal resonator shut off, the tip and blade of the tongue make a light contact with with the upper alveolar ridge, and the side rims of the tongue a close contact with the upper side teeth. Then, the air stream pumped by the lungs passes through the narrow groove in the centre of the tongue and causes friction between the tongue and the alveolar ridge. There is a very little opening between the lower and the upper incisors.

For some speakers, the tongue-tip is in contact with the lower teeth so that friction is produced between the blade of the tongue and the alveolar ridge. For /s/ the friction is voiceless.

The lip-position depends on the adjacent vowel. They may be spread as in seed, neutral as in sink, and rounded as in soothe.

3. Allophonic Variants

/s/ is pronounced after /l, n, p, r/, -se as in collapse, else, dense, course except parse, but it is not pronounced in words such as corps, charsis, debris, aisle, isle, island, demesne, vicount, and apropes.

Some speakers maintain the distinction between /ns/ and /nts/, e.g. distinguishing the final clusters in mince-mints, tense-tents, assistance-assistants. They tend to use /nts/ in all cases. The other speakers, however, keep distinction between /nz/ and /ndz/ as in wins - winds, fines - finds, tens - tends but in the most rapid speech /d/ is elided.

When /s/ is preceded by a voiceless consonant we get a weakened form of /s/ in the end of the word, e.g. mats [mæts].

The adjacent vowel influences the lip-position, they may be spread, neutral, and rounded.

4. Distribution

The phoneme /s/ occurs in initial, medial and final positions.

a. Initially : soon, ceiling, soap, since, saint

b. Medially : concept, escape, mercy, whisper

c. Finally : mass, confess, ice, blitz, goose

d. Clusters

1) Initial clusters:

- /sl/	: slide	/spl/	: splash
- /sy/	: sue	/spr/	: spring
- /sp/	: spy	/spj/	: spure
- /sk/	: score, skin	/str/	: string
		/stj/	: stew
- /sm/	: smash	/skl/	: sclerotic
- /sn/	: snore	/skr/	: script
- /sv/	: svelve	/skj/	: skew
- /sf/	: sphere	/skw/	: squat
- /st/	: stone		
- /sw/	: swan		

2) Final clusters:

- /ps/	: lips	/fs/	: false, laughs
- /ts/	: bits		
- /ks/	: box	/θs/	: breaths
		/ns/	: tense
- /sts/	: tests	/sps/	: rasps
- /fts/	: lifts	/lps/	: helps
- /lts/	: faults	/mps/	: limps
- /pts/	: scripts	/sks/	: asks
- /kts/	: acts	/lks/	: milks

- /nts/ : dents /ŋks/ : ranks
- /fθs/ : fifths /lfs/ : gulfs
- /lθs/ : healths /mfs/ : lymphs
- /pθs/ : depths /lst/ : pulsed
- /tθs/ : eights /nst/ : danced
- /kst/ : next /pst/ : lapsed
- /dst/ : midst /ksθ/ : sixth
- /tst/ : blitzed /ksts/: texts
- /ksθs/: sixths /ŋθs/: lengths
- /lfθs/: twelfths /ndθs/: thousandths

M. Voiced Dental Fricative /ð/

1. Spelling

The phoneme /ð/ is regularly spelt with th, e.g. there, brother, bath

2. Description of Articulation

Since The /ð/ phoneme is cognate with /θ/, the articulation activity is the same as that of the /θ/ sound, except for the presence of voice and the weaker exhalation of breath as well as the laxer tension of the muscle, because /ð/ is a lenis.

3. Allophonic Variants

There are two allophones occuring in /ð/ they are: fully voiced [ð̬] and partially voiced [ð]. Fully voiced [ð̬] occurs in final position. When it occurs between two voiced

sound, it is always fully sounded, e.g. here with [hīɔwīð], other [ʌðɔ].

4. Distribution

The phoneme /ð/ occurs in initial, medial and final positions. a. Initially : thy, this, the, they, though

b. Medially : gather, father, leather

c. Finally : with, soothe, seethe, lathe

d. Clusters

1) Initial cluster: -

2) Final clusters:

- /ðd/ : soothed, breathed

- /ðz/ : wreathes

N. Voiced Alveolar Fricative /z/

1. Spelling

The phoneme /z/ is spelt with s, z, ss, zz, x, e.g. roses, scissors, dizzy, desert, exact.

2. Description of Articulation

The /z/ sound is produced by the same articulation activity as that of the /s/ sound, except for the presence of voiced sound and the weaker exhalation of the breath as well as the laxer tension of the muscle, because /z/ is a lenis.

3. Allophone Variants

In initial position /z/ may become partially voiced /z̬/ as in zero [z̬ɪərəʊ], and when it occurs before a consonant in final position it also tends to become partially voiced [z̬] as in sounds [saundz̬].

Sometimes /z/ assimilates to the adjoining voiceless sound as in news [nju:z] and used [ju:zd] and becomes /s/ in newspaper [nju:speɪpə] and I used to go there [aɪ ju:s tə gəv ðeər].

The adjacent vowel makes the lips-position neutral as in zero, rounded as in zoo, and spread as in Zachary.

4. Distribution

The phoneme /z/ occurs in initial, medial, and final positions.

a. Initially : zeal, zinc, zone, zest, zebra

b. Medially : desease, razor, lazy, bazaar, dizzy

c. Finally : is, lose, eyes, pens, gaze

d. Clusters

1) Initial clusters:

- /zl/ : zloty
- /zw/ : zwiback
- /zj/ : Zeus

2) Final clusters:

- /bz/ : robes
- /ðz/ : bathes
- /dz/ : bads
- /zd/ : raised
- /gz/ : bags
- /ndz/: hands
- /mz/ : rooms
- /lbz/: bulbs
- /nz/ : lens
- /ldz/: holds
- /ŋz/ : sings
- /lmz/: films
- /lz/ : tells
- /lvz/: solves
- /vz/ : lives
- /lnz/: kilns

D. Voiceless Alveo-palatal Fricative /ʃ/

1. Spelling

The phoneme /ʃ/ is regularly spelt with sh, ch, sch, s or ss before u, -ti, -si, -xi, -ci, -ce, x, e.g. she, cherry, schedule, sure, assure, action, mansion, conscience, special, ocean, luxury.

2. Description of Articulation

The phoneme /ʃ/ is produced by raising the soft palate and by shutting-off the nasal resonator. At the same time the tip and blade of the tongue make a light contact with the alveolar ridge, and the front of the tongue is raised toward the hard palate and the side rims of the tongue are elevated to make a contact with the upper side teeth. Then, the unvocalized breath stream is

pumped through the close stricture between the blade of the tongue and the roof of the mouth, and we get the /ʸš/ sound.

Some speakers use slight lip-rounding for /ʸš/ in all position, but for the others, the adjacent vowel decides their lip-position.

3. Allophonic Variants

The adjacent vowel influences the placement of the tongue and the lips, e.g. when /ʸš/ occurs in medial position before /u:/ or /u/ there is often variation between /ʸš/ and /ʸš/ + /j/ as in casual, assure; the same variation between /ʸš/ or /ʸš/ + /i/ + vowel as in ratio, negotiate; between /ʸš/ or /ʸž/ as in Asia, transition, Persia and version; the sequence /ʸš, ʸž/ + /i/ (or /j/) is kept as in hosier, axiom, gymnasium.

The variations, however, cannot be counted as subsidiary member of the /ʸš/ sound.

4. Distribution

The phoneme /ʸš/ occurs in initial, medial and final positions.

a. Initially : shop, shoe, sheet, shed, shout

b. Medially : Bishop, mission, machine, cushion

c. Finally : wash, rush, dish, finish, cash

d. Clusters

1) Intial cluster:

- /$\overset{v}{s}$r/ : shrink

2) Final clusters:

- /l$\overset{v}{s}$/ : walsh - /$\overset{v}{s}$t/ : pushed

- /$\overset{v}{s}$n/ : fashion - /$\overset{v}{s}$nt/: patient

P. Voiced Alveo-palatal Fricative /$\overset{v}{z}$/

1. Spelling

The phoneme /$\overset{v}{z}$/ is spelt with s, z before u, -si-, e.g. vision, seizure, measure; and -ge in French loanwords such as beige.

2. Description of Articulation

Since /$\overset{v}{z}$/ is cognate with the /$\overset{v}{s}$/ sound, its articulation activity is the same as that of/$\overset{v}{s}$/, except for the presence of voice and the weaker exhalation of the breath as well as the laxer tension of the muscle, because /$\overset{v}{z}$/ is a lenis.

3. Allophonic Variants

The adjacent vowel makes variations in either the absence or presence of the /$\overset{v}{z}$/

sound. For example, when /ʒ/ occurs medially before /u/ or /u:/ in a single word, there are variations between /ʒ/ and /ʒ/ + /j/ as in azure, seizure, and before / / as in lazier and alternative between /ʃ/ and /ʒ/ as in Asia, Persia, transition and version. In final position, /ʒ/ tends to be pronounced as /dʒ/ especially in some loan French words as in prestige, beige, rouge.

All these variations, however, are not counted as subsidiary members for the principle member, that is the /ʒ/ sound.

4. Distribution

The phoneme /ʒ/ occurs in initial, medial and final positions.

a. Initially : (in loan French words) gigolo, gigue

b. Medially : usual, confusion, decision, grandeur

c. Finally : beige, prestige, garage, menage, rouge

d. Clusters

1) Intial cluster: -

2) Final clusters:

- /ʒd/ : camouflaged
- /ʒn/ : vision

Q. Voiceless Glottal Fricative /h/

1. Spelling

The phoneme /h/ is spelt with h, wh, as in high, who.

2. Description of Articulation

In articulating this phoneme, the soft palate is raised and the nasal cavity shut-off. At the same time, the mouth is held in readiness for the adjacent vowel, then the air stream is forced by the lungs with a considerable pressure so that it causes friction in the glottis, but there is no vibration of the vocal cords. The vocal cords in the glottis are elevated in such position that the air stream is obstructed to produce the friction. Whereas, the position of the tongue and lips depends on the adjacent vowel.

3. Allophonic Variants

Some speakers use a voiced allophone medially between the voiced sound as in perhaps, anyhow, behind, the others omit /h/ in initial position as in hill, hair, especially when it is preceded by the last vowel of the preceded word, e.g. a hill [ɔn ˈɪɪl], the house [ðɪ ˈaʊs]. In this situation, the strong air-stream of /h/ is

accompanied by the vocal cords vibration, so the result is the voiced glottal fricative [ɦ].

Since the vowels decide the tongue and the lip position, we may say that this phoneme can be regarded as having many articulatory variants as there are in vowels such as /ha:/, /hī/, and /hu:/.

4. Distribution

The phoneme /h/ occurs in initial and medial positions.

a. Initially: hear, heaven, habit, who, whom

b. Medially : behave, ahead, perhaps, behind

In certain words such as honor, hour we have a silent /h/ so they become /'ɔnɔ] and [auɔ]; in a compound word the /h/ sound in the beginning is dropped, e.g. exhausted [īgza:stīd], exhibit [īgībīt], between a strong and a weak vowel, /h/ is regularly omitted, e.g. vehemence ['vī:ī.mens], rehabilitate ['rī:ə,bīlīteīt] as well as in some final suffixes such as shepherd [ʃepɔd], Durham [dʌrɔm], etc.

c. Pre-vocalic cluster:

English has only one /h/ cluster, that is /hyV-/ as in huge.

R. Voiced Alveolar Lateral /l/

1. Spelling

The phoneme /l/ is regularly spelt with l, ll, e.g. loan, fill, royal, solve, elbow, pistol, allow, etc.

2. Description of Articulation

The phoneme /l/ is produced by raising the soft palate and by shuting-off the nasal resonator, whereas the tip of the tongue is raised to the upper teeth ridge, or the tongue-rim make a closure on the upper side teeth, so that the air stream is allowed to escape on both sides or on one side.

For clear [l], the front of the tongue is elevated toward the hard palate, at the same time as the tip contact is made, so that it lets a front vowel resonance to the consonant. For dark [ɫ], however, the tip contact is again made on the teeth ridge, the front of the tongue being somewhat depressed and the back raised in the direction of the soft palate. It lets a back vowel resonance.

3. Allophonic Variants

/l/ consists of three main allophones, they are: the clear [l], voiceless [l̥], and dark [ɫ].

First, clear [l], with a relatively front vowel resonance, occurs before vowel and /j/ such as look, late, glad, silly, inlay, etc; second, the voiceless [l̥] occurs when it follows the accented (aspirated) /p, k/ as in play, clear, and the less considerable devoicing [l] occurs when it occurs after /s, f, θ, ʃ/ as in butler, bachelor, simplest, hopeless, ghastly, sprinkler, etc, or the weakly accented /p, t, k/ as in apple, little, buckle; third, the dark [ɫ], with a relatively back vowel resonance, occurs in final position after a vowel as in fell, fill, royal, oil, etc, after vowel before consonant as in help, cold, solve, elbow, although, etc, and the syllabic [l̩] as in table, simple, sinful, pistol, etc.

The position of the tongue and lips depend upon the adjacent vowel.

4. Distribution

The phoneme /l/ occurs in initial, medial, and final positions.

a. Initially : look, lie, last, lock, loud

b. Medially : allow, alloy, foolish, gimlet, halter

c. Finally : fall, cancel, canal, pile, cruel

d. Clusters

1) Initial cluster: -

2) Final clusters:

- /lp/ : help	- /lb/ : bulb
- /ld/ : hold	- /lk/ : silk
- /lt/ : salt	- /lm/ : calm
- /lz/ : bells	- /ln/ : kiln
- /ls/ : else	- /lv/ : shelve
- /lθ/ : wealth	- /lʧ/ : Welsh
- /lf/ : self	- /lps/: helps
- /ldz/: builds	- /lpt/: helped
- /lfs/: wolfs	- /ltst/: waltzed
- /lft/: engulfed	- /lts/: belts
- /lfθ/: twelfth	- /lvd/: shelved
- /lks/: silks	- /lvz/: shelves
- /lkt/: milked	- /lmd/: calmed

S. Voiced Nasal Bilabial /m/

1. Spelling

The phoneme /m/ is regularly spelt with m, mm, mb, mn, e.g. mental, summer, comb, autumn.

2. Description of Articulation

The phoneme /m/ is produced by lowering the soft palate, making a lip-closure as for /p,b/, then adding the resonance of the nasal cavity to those of the pharynx and the mouth chamber is closed by the lips. The position of the tongue depends on the adjacent vowel or in readiness for the /l/ sound.

We get a partially devoiced [m̥] if /m/ is preceded by the voiceless consonants, e.g. <u>smoke,</u> <u>topmost,</u> <u>happen</u>. When it is followed by labio-dental sounds /f,v/, the front closure may be labio-dental [ɱ] rather than bilabial, e.g. in <u>comfort,</u> <u>warm vest,</u> <u>nymph,</u> <u>triumph</u>. Then we get the /m/ sound from a context of final /n/ of the isolate word form before a following bilabial, e.g. <u>one mile</u> /wʌm 'maɪl/, <u>more and more</u> /mɔ:r em 'mɔ:/.

Furthermore, /m/ also becomes a realization of word final /ŋ/ or /n/ following /p/ or /b/, e.g. <u>happen</u> /'hæpm/, <u>ribbon</u> /'rɪbm/, or if it is in a context as in <u>cap and gown</u> /'kæpm 'gaʊn/[2].

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[2]Gimson, 1970: 195.

3. Allophonic Variants

There is no important regional or social variants of the /m/ articulations. All the variations above cannot be caunted as the subsidiary members that differentiate them with its principle member.

4. Distribution

The phoneme /m/ occurs in initial, medial and final positions.

a. Intially : Mobility, make, map, meal, mouse

b. Medially : glimmer, comfort, camel, hamlet

c. Finally : game, warm, seem, dam, calm

d. Clusters

1) Initial clusters: -

2) Final clusters:

- /md/ : climbed
- /mθ/ : warmth
- /mf/ : triumph
- /mp/ : camp
- /mz/ : comes
- /mps/: camps
- /mpt/ : prompt
- /mpst/ : glimpsed
- /lmd/ : filmed
- /lmz/ : films
- /mpts/: tempts

T. Voiced Alveolar Nasal /n/

1. Spelling

The phoneme /n/ is regularly spelt with n, nn, kn, gn, and pn, e.g. nine, funny, know, gnaw, and pneumonia.

2. Description of Articulation

In articulating this phoneme, the tongue should make a closure with the teeth ridge and the upper teeth as for /t, d/, the soft palate should be lowered so that the air stream escapes through the nose, then adding the resonance of a nasal cavity to those of the pharynx and of the part of the mouth chamber behind the alveolar closure.

The position of the lips depends on the adjacent vowel. They may be spread as in neatly, neutrally open as in barn, and rounded as in noon.

3. Allophonic Variants

English has no important variants of the /n/ articulations. The adjacent vowel influences the position of the tongue and lips, but it cannot be counted as the subsidiary members of the /n/ sound that differentiate them with the principle member.

4. Distribution

The phoneme /n/ occurs in initial, medial and final positions.

a. Initially : gnat, nurse, name, know, know

b. Medially : answer, amnesty, candidate, dinner

c. Finally : explain, learn, melon, kitten, down

d. Clusters

1) Initial clusters: -

2) Final clusters:

- /nd/ : send	- /ndz/ : hands
- /nθ/ : month	- /nst/ : against
- /nt/ : rent	- /nts/ : wants
- /ns/ : tense	- /nzd/ : bronzed
- /nz/ : bronze	- /mθs/ : months
- /ln/ : kiln	- /lnz/ : kilns
- /gn/ : impugn	- /nʒd/ : changed
- /nʧt/: bunched	

U. Voiced Velar Nasal /ŋ/

1. Spelling

The phoneme /ŋ/ is regularly spelt with ng, n, e.g. sing, bang, uncle, anxious: and also /ŋg/ as in realization of French /ɑ̃/, e.g. restaurant.

2. Description of Articulation

The phoneme /ŋ/ is produced by making a closure in the mouth between the back of the tongue and the velum as for /k, g/, then, the soft palate is lowered, adding the resonance of the nasal cavity to that of the pharynx and to that small part of the mouth chamber behind the velar closure. Whereas the position of the lips depends upon the adjacent vowel.

3. Allophonic Variants

Some regional speakers pronounce the termination -ing as /ɪn/ such as in meeting, nothing. The others pronounce singing --> [sɪŋgɪŋ]/ instead of the RP [sɪŋɪŋ].

In popular London speech, when the word -thing is a compound it is usually pronounced /-fiŋk/ as in something, anything, etc, but the verbal termination -ing is pronounced /ŋ/ without /k/, e.g.

All the regional and social variations above, however, are included in the /ŋ/ sound.

4. Distribution

The phoneme /ŋ/ occurs in medial and final positions.

a. Initially : -

b. Medially : single, jingle, banquet, donkey, tinker

c. Finally : among, tongue, wrong, strong, bring

d. Clusters

1) Initial cluster: -

2) Final cluster:

- /ŋd/ : banged
- /ŋks/ : banks
- /ŋθ/ : strength
- /ŋkt/ : banked
- /ŋθs/ : lengths

V. Voiced Alveolar Semivowel /r/

1. Spelling

The phoneme /r/ is spelt with, r, rr, wr, rh, e.g. read, cherry, write, rhythm.

2. Description of Articulation

The phoneme /r/ is formed by elevating the tongue-tip toward the roof of the mouth at about the point where the palatal arch joins the gum ridge, and escaping the vocalized breath through the aperture between the tongue and the hard palate. The velum should be closed, then we have the /r/ sound.

The position of the lips depends on the adjacent vowel.

3. Allophonic Variants

The phoneme /r/ has three allophones. They are: /ɹ/, fricative r,[3] that usually occurs automatically after /t/ or /d/ as in tree, draw, etc.; /r̃/ is the trilled r that has variants dialect and usually occurs in standard English after /θ/ as in three, throw, etc. and the last /r/ is one-tap trill, that is used usually intervocally in British English as in very /veri/, or at the end of a word followed by another word in the same breath grouping which begins with a vowel as in far away /farə 'weɪ/.

4. Distribution

The phoneme /r/ occurs in initial, medial, and final positions.

a. Initially : rain, race, risk, rude, reed

b. Medially : arrow, hurry, diary, fury, mirror

c. Finally : poor, pure, rear, gear, bar

There is no clusters occuring in this phoneme.

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[3]Wise, 1957: 132-133.

W. Voiced Bilabial Semivowel /w/

1. Spelling

The phoneme /w/ is spelt with w, wh, or u after g, g, e.g. wood, where, quick, language.

2. Description of Articulation

In articulating this phoneme the position of the tongue is being readiness for a back half-close to the close vowel (depending upon the degree of openess of the following sound), and then it moves away immediately to the position of the following sound. The soft palate should be raised and the vocal cords vibrate.

The lip-position depends on the adjacent vowel. They may be rounded when it is followed by /u:, u/ or /ɔ:/ as in wood, war, etc. spread as in we, where, etc., and half-rounded as in what.

3. Allophonic Variants

The main variant of /w/ is wh /ʍ/ that can be interpreted into two status, they are: first [ʍ] as a full phoneme, e.g. in wine /wain/, and second, [m] as an opposition to /w/ such as in whale, when, why, etc.

When the first vowel is /u:/ or a diphthong ending in /u/ (especially /au/) we heard the [w] sound as a glide at a point of vowel hiatus such as doing /duwiŋ/, following /folɔwiŋ/, etc.

Some speakers omit /w/ in the context /k- :/ as in quart, quarter, etc.

4. Distribution

The phoneme /w/ occurs in initial and medial positions.

a. Initially : wire, wake, wet, one, wear

b. Medially : acquintance, thwart, queen, swim, quick

c. Finally : -

X. Voiced Palatal Semivowel /j/

1. Spelling

The phoneme /j/ is regularly spelt with y, i, e.g. yes, spaniel, and /ju/ spelt with u, ew, eu, eau, ui, e.g. muse, new, feud, beauty, suit.

2. Description of Articulation

In articulating this phoneme the tongue is being in readiness for a front half-close to a close vowel (depending upon the degree of openess of the following sound), and then it mowes away immediately

to the position of the following sound. The soft palate should be raised and the vocal cords vibrate.

The lips-position depends on the adjacent vowel. It may be rounded as in you, yawn, etc., or spread as in yes, and neutral as in year.

3. Allophonic Variants

Devoicing /j/ occurs when /j/ follows a fortis consonant such as pew /pjuə /.
In final element of accented clusters, /j/ may be followed by /u:/ or /u/ such as pew, cure, etc, but in unaccented clusters it may be followed by /u:, u, uə/ or /ə / as in senior, argue, tenues, opulent.

/j/ + /u:/ is an alternative pronunciation without /j/ as in usual /ju:ʒʊəl/.

. Some variations also occur among /u:/, /ju:/, and /ĭu/, e.g. in lute, evolution, enthusiasm, tune, argue, beauty, suitable, presume, etc.

In the unaccented syllables as in immediate, India, audience, idiot, righteous, hideous, Australia, morphia, heavier, easier, etc. we can hear the variations among /j /, ĭ-ə/, /ĭə/, and /ə /, and in the unaccented syllabes as in statue,

residue, Christian, educate, gratitude, usual, visual, etc. The variation among /tj/, /dj/, /sj/, and /zj/ can be heard especially in rapid speech.

In the first vowel /i:/ or a diphthong ending in /ɪ̄/, especially /aɪ̄, ɔɪ̄/ a /j/ glide can be heard at a point of a front vowel hiatus, e.g. fire, /fajɚ /, seeing /sɪjɪŋ/, dear /dɪjɚ/.

4. Distribution

The phoneme /j/ occurs in initial and medial positions.

a. Initially : union, young, yard, year, Europe

b. Medially : tune, peculiar, pursue, music

There is no cluster occurs in this phoneme.

Chapter V

DIFFERENCE OF INDIVIDUAL CONSONANTS

In this chapter I am going to contrast English consonants to the Kandayan's. By contrasting the English and Kandayan consonants, the similarities and the differences can be known. The similarities may make the Kandayan learners easy to pronounce English consonants as a foreign language, the differences, however, may cause problems or difficulties. As Robert Lado says:

> "Those elements that are similar to his native language will be simple for him, and those elements that are different will be difficult"[1]

First of all, tables of Kandayan and English consonant inventory will be presented. They are presented to see which consonants become problem for the Kandayan learners learning to speak English.

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[1]Lado, 1957: 2.

Kandayan Consonant table:[2]

		Bilabial	Dental	Alveolar	Alveo-palatal	Palatal	Velar	Glottal
Stops	vs	p	t		c		k	?
	vd	b		d	j		g	
Fricatives	vs			s				h
	vd							
Trill	vd			r				
Nasalized Stops	vd	p̃	t̃				k̃	
Nasals	vd	m		n	ñ		ŋ	
Lateral	vd			l				
Semi-vowels	vd	w			y			

English Consonant Table: [3]

		Bilabial	Labio-dental	Dental	Alveolar	Alveo-palatal	Velar	Glottal
Stops	vs	p			t		k	
	vd	b			d		g	
Africatives	vs					ʧ		
	vd					ʤ		
Fricatives Split	vs		f	θ				h
	vd		v	ð				
groove	vs				s	ʃ		
	vd				z	ʒ		
Lateral	vd				l			
Nasals	vd	m			n		ŋ	
Semivowels	vd	w			r	y		

[2] Cf.: 12. [3] Cf.: 13.

From the above tables, it is clear that the problems aroused in any situation are in the following consonants, namely /f, v/, /θ, ð/, /ž/, /š, ž/, /č, ǰ/.
They do not exist in the Kandayan language.

Besides, there are Kandayan consonants that are similar with English consonants, but they are also the problems for the Kandayan learners learning to speak English because of their way of pronouncing and distribution. They are /p, t, k/, /b, d, g/, and /w/.

The others do not seem to constitute problems. For example, the English /m/ is very similar to the Kandayan /m/. Let us see the table below!

	English /m/[4]	Kandayan /m/
Sound	mail	maraga (street
Voicing	voiced	voiced
Duration	continuant	continuant
Passage	nasal	nasal
Articulator	lower lip	lower lip
Point of Articulation	upper lip	upper lip

[4]Nilsen, et al., 1973: 34.

Thus, based on the facts above, I do not contrast all English and Kandayan consonants to each other, but I limit my contrastive analysis on the phonemes /p, t, k/, /b, d, g/ and /w/ that represent the way of pronouncing and distribution problems among English and Kandayan similar consonants, and the phonemes /f,v/, /θ, ð/, /z/, /š, ž/, and /č, ǰ/ which are not available in the Kandayan language.

In contrasting both English and Kandayan consonants, then, I apply the main criteria that cover most problems. The criteria can be posed in the following questions: First, does the Kandayan language have a phonetically similar phoneme? Second, are the variants of the phonemes similar in the two languages? Third, are the phonemes and their variants distributed in the similar situation?[5]

A. Phonemes /p, t, k/

1. /p/

	English	Kandayan
	Bilabial	Bilabial
Stop Voiceless	/p/ [p^h] [p] pen, spear, lip	/p/ page kapa? (family) (tired) kakap (dark)

[5]Lado, 1957: 13.

Since the Kandayan /p/ has the same manner and place of articulation as that of the English /p/, there is no problem for the Kandayan learners to hear and produce the English /p/. However, the difference in tension may make them apply the laxer tension and weaker exhalation to the English /p/ which occurs in final position.

Furthermore, the Kandayan language does not have the aspirated /p/. Therefore, the Kandayan learners may find difficulty to produce the /p^h/, e.g. pen [p^hen]. They will pronounce [pen] instead of [p^hen]. In this case the Kandayan learners are in danger because the native English listeners may understand <u>ben</u> instead of <u>pen</u>. They interpret lack of aspiration as a mark of the lenis /b/.[6]

Similar to the variant of the English /p/, the Kandayan variants /p/ are also decided by the adjacent vowel that makes the tongue and lip-position different. These variants, however, will not be constituted as a reasonable reason to reduce the ability of the Kandayan learners to produce the English /p/.

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[6]Gimson, 1970: 153.

2. /t/

	English	Kandayan
	Alveolar	Alveolar
Stop Voiceless	/t/	-
	[t^h] [t]	
	time, stone, bat	

	English	Kandayan
	Dental	Dental
Stop Voiceless	-	/t/
		talu ati jukut
		(three) (heart) (something)

The English /t^h / is a problem for the Kandayan learners because the different way of pronouncing it and the different place of articulation, i.e. the English /t / is aspirated and is a voiceless alveolar stop, while the Kandayan /t/ is unaspirated and is a voiceless dental stop.

The learners may pronounce [taim] instead of [t^haɪm], so that the native English listeners may hear [daim] instead of [t^haɪm]. They interpret lack of aspiration as a mark of the lenis /d/.[7]

[7]Gimson, 1970: 153.

3. /k/

	English	Kandayan
	Velar	Velar
Stop Voiceless	/k/	/k/
	[k^h] [k]	[k]
	kind, escape, ask	kade? (if) laka? (finish) jejek (squirrel)

There is no problem for the Kandayan learners to hear and produce the English /k/, because the Kandayan language has the /k/ sound. However, they have a problem to pronounce the aspirated /k/ because the aspirated /k/ is not available in the Kandayan language. They may produce [kaind] instead of [k^haind].

In the case above, the native English listeners may understand [gaind] instead of [k^haind] because they interpret lack of aspiration as a mark of the lenis /g/.[8]

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[8]Gimson, 1970: 153.

B. Phonemes /b, d, g/

1. /b/

	English	Kandayan
	Bilabial	Bilabial
Stop Voiced	/b/	/b/
	brain husband bulb	baba (to invite) bobo? (to peep at)

The Kandayan language has an equivalent phoneme /b/, therefore it is not a problem for the Kandayan learners to hear and produce it. However, it is difficult for them to pronounce the English /b/ in final position, because the Kandayan language does not have /b/ in final position.

They may transfer the closest Kandayan phoneme in manner and place of articulation to the English final /b/. According to the manner and place of articulation the Kandayan /p/ is the closest phoneme to the English /b/. They are different just because of the quality of the voice, namely voiceless and voiced.

Thus, the Kandayan learners may substitute the English /b/ in final position with the Kandayan final /p/, e.g. rub [rʌb]

will be heard and produced as [rʌp], sob [sob] will be heard and produced as [sɒp], etc.

b. /d/

	English	Kandayan
	Bilabial	Bilabial
Stop Voiced	/d/	/d/
	down ladder red	de?e (used to) sidi (true)

The Kandayan language has the equivalent phoneme /d/, so it is not a problem for the Kandayan learners to produce it. Both the English and Kandayan /d/ sound occur in the same manner and place of articulation.

The Kandayan learners, however, face a problem to hear and produce /d/ in final position, because in the Kandayan language /d/ does not exist in final position. Therefore, they may transfer the Kandayan closest phoneme in manner and place of articulation to the English /d/. According to the manner and place of articulation the Kandayan final /t/ is the closest phoneme to the English /d/.

Thus, the Kandayan learners may substitute the English /d/ in final position with the Kandayan final /t/, e.g. bad [bæd] will be heard and produced as [bæt], breed [bri:d] will be heard and produced as [bri:t], etc..

c. /g/

	English			Kandayan	
	Velar			Velar	
Stop Voiced	/g/			/g/	
	game	ago	big	gangokng (throat)	teget (to hate)

The Kandayan learners have no problem to hear and produce the English /g/ in medial and final positions. However, they face difficulty, to hear and produce /g/ in final position because in the Kandayan Language /g/ does not exist in final position.

They may substitute it with the Kandayan closest phoneme in manner and place of articulation. According to the manner and place of articulation, the Kandayan /k/ is the closest phoneme to the English /g/. The Kandayan /k/ is a voiced velar stop, while

the English /b/ is a voiceless velar stop, so the difference is only in the quality of the sound produced by the lungs, i.e. voiced and voiceless.

Thus, the word bag [bæg] will be heard and produced as [bæk], pig [pīg] will be heard and produced as [pīk].

C. Phoneme /w/

	English			Kandayan	
	Bilabial			Bilabial	
Semi vowel Voiced	/w/			/w/	
	[w]		[ʍ]	[w]	
	wire	thwart	whine	wanyi? (bee)	sawe? (slow)

The Kandayan language has the equivalent phoneme /w/, so the Kandayan learners do not have in general a serious problem to hear and produce the English /w/. They, however, have a problem to pronounce whine [hwain] because the Kandayan language does not have /hw/. Theymay pronounce [wuhuaīn] or [waīn] instead of [hwaīn].

D. Phonemes / f, v/

1. /f/

	English	Kandayan
	Labio-dental	-
Fricative Voiceless	/f/	-
	fail off laugh	
	phonetics	

The Kandayan language does not have the equivalent phoneme /f/. Therefore, Kandayan learners have difficulty to hear and pronounce it. They usually transfer the phoneme that has same the manner, place of articulation, and the voicing as the one in English. We may get the phoneme by looking at the Kandayan and English consonant diagrams.[9]

According to the manner and place of articulation the Kandayan /p/ is the closest phoneme to the English /f/. The Kandayan /p/ is a voiceless bilabial stop, while English /f/ is a voiceless labio-dental fricative. It means that the lips are the main agent of articulation. Although there are some differences between the Kandayan /p/ and the

[9]Cf.: 12-13.

English /f/, the lips still function as the active primary agent.

Thus, Kandayan learners transfer their phoneme /p/ to the English /f/ in any position. Examples:

<u>fine</u> [faɪn] will be produced as [paɪn]

<u>defend</u> [dɪfend] will be produced as [dɪpend]

<u>deaf</u> [def] will be produced as [dep]

<u>tougher</u> [tʌfɚ] will be produced as [tʌpɚ]

2. /v/

	English	Kandayan
	Labio-dental	-
Fricative Voiced	/v/ <u>very</u> <u>cover</u> <u>active</u>	-

The Kandayan language does not have the equivalent phoneme /v/. Therrefore, Kandayan learners have difficulty to hear and pronounce it. They may transfer the phoneme that has the same manner, place of articulation, and the voicing as the one we find in English. We may get the phoneme by looking at the Kandayan and English consonant diagram.[10]

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[10]Cf.: 12-13.

According to the manner and place of articulation, the Kandayan /p/ is the closest phoneme to the English /v/. The Kandayan /p/ is a voiceless bilabial stop while English /v/ is a voiced labio-dental fricative. It means that the lips are the main agent of articulation. Although there are differences between the Kandayan /p/ and the English /v/, the lips still function as the active primary agent.

Thus, Kandayan learners transfer their phoneme /p/ to the English /v/ in any position.

Examples:

vast [vast] will be produced as [past]

cover [kʌve] will be produced as [kʌpɚ]

love [lʌv] will be produced as [lʌp]

nephew [nevju:] will be produced as [nepju:]

E. Phoneme /θ, ð/

1. /θ/

	English	Kandayan
	Dental	Dental
Fricative Voiceless	/θ/	-
	thin author cloth	

The Kandayan language does not have the equivalent /θ/ sound. Therefore, the Kandayan learners may find difficulty to hear and produce it.

Furthermore, they may transfer the Kandayan closest phoneme to the English /θ/ sound. According to the manner and place of articulation, we may say that the Kandayan /t/ is the closest phoneme to the English /θ/. The Kandayan /t/ is a voiceless dental stop, whereas the English /θ/ is a voiceless fricative dental. It means that the main agent for both is the teeth.

Thus, Kandayan learners may transfer the /t/ sound to the English /θ/ sound in any position.

Examples:

thumb [θʌm] will be heard and produced as [tʌm]

method [meθəd] will be heard and produced as [metəd]

path [pa:θ] will be heard and produced as [pa:t]

2. /ð/

	English	Kandayan
	Dental	Dental
Fricative Voiced (slit)	/ð/ <u>there</u> <u>brother</u> <u>bathe</u>	

The Kandayan language does not have the equivalent phoneme /ð/. Therefore, it is very difficult for Kandayan learners to hear and produce it. They may transfer the closest sound they have to the English /ð/.

According to the manner and place of articulation, we may say that the Kandayan /d/ sound is the closest phoneme to the English /ð/. The Kandayan /d/ is a voiced alveolar stop, whereas the English /ð/ is a voiced dental fricative. The main agent of articulation is the area around the gums and the upper side teeth.

Thus, Kandayan learners may substitute the English /ð/with the Kandayan /d/ in any position.

Examples:

<u>they</u> [ðeɪ] will be heard and produced as [deɪ]

father [fa:ðɚ] will be heard and produced as [fædɚ]

with [wɪð] will be heard and produced as [wɪd]

F. Phoneme /z/

	English	Kandayan
	Alveolar	Alveolar
Fricative Voiced (groove)	/z/	-
	zero dessert gaze	

The Kandayan language does not have an equivalent phoneme /z/, so it is difficult for the Kandayan learners to hear and produce it. They may transfer their closest phoneme in manner and place of articulation to the English /z/.

According to the manner and place of articulation the Kandayan /s/ is the closest phoneme to the English /z/. The Kandayan /s/ is a voiceless alveolar fricative, while the English /z/ is a voiced alveolar fricative. It means that the main agent of articulation for the Kandayan /s/ and the English /z/ is the alveolar ridge. They are different because of the quality of the sound, namely voiced and voiceless.

Thus, the Kandayan learners substitute the English /z/ with the Kandayan /s/ in any position.

Examples:

<u>zeal</u> [zi:l] will be heard and produced as [si:l]

<u>razor</u> [reɪzɚ] will be heard and produced as [reɪsɚ]

<u>eyes</u> [aɪz] will be heard and produced as [aɪs]

6. /ʧ, ʤ/

1. /ʧ/

	English	Kandayan
	Alveo-palatal	Alveo-palatal
Fricative Voiceless (groove)	/ʧ/ <u>she</u> <u>action</u> <u>rush</u>	-

The Kandayan language does not have an equivalent phoneme /ʧ/. Therefore it is difficult for Kandayan learners to hear and produce it. They may transfer their closest phoneme in manner and place of articulation to the English /ʧ/.

According to the manner and place of articulation, the Kandayan /s/ sound is the closest phoneme to the English /ʧ/. The English /ʧ/ a voiceless alveo-palatal

fricative and the Kandayan /s/ is a voiceless alveolar fricative. The main agent of articulation for both is the alveolar ridge. The position of the tongue on the alveolar ridge make them different. In the Kandayan /s/ the tip and rim of the tongue make a contact with the alveolar ridge, while in the English /s̻/ the tip and rim of the tongue make a contact between the alveolar ridge and the hard palate.

Thus, the Kandayan learners substitute the English /s̻/ with the Kandayan /s/ in any position.

Examples:

<u>sure</u> [ʃʊə] will be heard and produced as [sʊə]

<u>action</u> [ækʃn] will be heard and produced as [æksn]

<u>finish</u> [fīnīʃ] will be heard and produced as [ɸīnīs]

b. /ʒ̻/

	English	Kandayan
	Alveo-palatal	Alveo-palatal
Fricative Voiced (groove)	/ʒ̻/ <u>gigue</u> <u>usual</u> <u>rouge</u>	-

The Kandayan language does not have an equivalent phoneme /ʒ/. Therefore, the Kandayan learners have a problem to hear and produce the /ʒ/ sound. They usually transfer their closest phoneme in manner and place of articulation to the English /ʒ/.

According to the manner and place of articulation, the Kandayan /s/ and /j/ are the closest phoneme to the English /ʒ/. The English /ʒ/ is a voiced alveo-palatal, while the Kandayan /s/ is a voiceless alveolar fricative, and the Kandayan /j/ is a voiced alveo-palatal stop. It means that the main agent of articulation for them is the alveolar ridge. The position of the tongue and the quality of the voice make them quite different.

Thus, Kandayan learners substitute the English /ʒ/ with the Kandayan /s/ in any position, and very rare with the Kandayan /j/ in initial position.

Examples:

decision [dɪsɪʒn] becomes [dɪsɪsn]

prestige [presti:ʒ] becomes [presti:s]

vision [vɪʒn] becomes [vɪsn]

gigolo [zɪgələʊ] becomes [jɪgələʊ]

H. Phonemes /č, ǰ/

1. /č/

	English	Kandayan
	Alveo-palatal	Alveo-palatal
Fricative Voiceless (groove)	/č/ chin mention much	-

The Kandayan language does not have an equivalent phoneme /č/, so it is difficult for the Kandayan learners to hear and produce the /č/ sound. They may transfer the closest Kandayan phoneme in manner and place of articulation to the English /č/.

According to the manner and place of articulation, the Kandayan /c/ is the closest phoneme to the English /č/. The Kandayan /c/ is a voiceless alveo-palatal stop, while the English /č/is a voiceless alveo-palatal affricative. A tongue-contact with the alveolar ridge is the main agent of articulation for them.

Thus, the Kandayan learners may substitute the English /č/ with the Kandayan /c/ in any position.

Examples:

<u>choke</u> [čɔuk] becomes [cɔuk]

<u>lecture</u> [lekčɔ] becomes [lekcɔ]

<u>watch</u> [woč] becomes [woc]

2. /ǰ/

	English	Kandayan
	Alveo-palatal	Alveo-palatal
Fricative Voiceless (groove)	/ǰ/	-
	<u>July</u> <u>adjure</u> <u>age</u>	

The Kandayan language does not have an equivalent phoneme /ǰ/. Therefore, Kandayan learners have a difficulty to hear and produce it. They may transfer their closest phoneme in manner and place of articulation to the English /ǰ/.

According to the manner and place of articulation the Kandayan /j/ is the closest phoneme to the English /ǰ/. the Kandayan /j/ is a voiced alveo-palatal stop, while the English /ǰ/ is a voiced alveo-palatal affricative. The main agent of articulation for the Kandayan /j/ and the English /ǰ/ is a tongue-contact with the alveolar ridge.

Thus, Kandayan learners may substitute the English /ǰ/ with the Kandayan /j/ in any position.

Examples:

<u>jewel</u> [ʲju:əl] will be heard and produced as [ju:əl]

<u>major</u> [meɪʲjə] will be heard and produced as [meɪjə]

<u>large</u> [la:ʲj] will be heard and produced as [la:j]

Chapter VI

DIFFERENCES IN SYLLABLE FORMATION

In this chapter, syllable formation is dealt with. Since our attention is on the consonant phonemes, our main concern in this regard will be the use of clusters in English which is not usual in the Kandayan language.

Kandayan words usually consist of two or three syllables. However, the syllable structure is usually of the type of /VCV-/ as in amakng (sprout), /VCCV-/ as in ampaqi (tomorrow), /CVCV-/ as in kamuda? (youth), and /CVCCV-/ as in tampirikng (to slap) in initial position, and /-VC/ as in rajek (torn), /-VCC/ as in alapm (morning), and /-VCCC/ as in lalakng (going for a walk) in final position.[1]

English syllables, on the other hand, make use of a lot of clusters, either in initial position or in the final position. The cluster structures are usually of the type of /CCV-/ as in pray, /CCCV-/ as in spring, /-VCC/ as in breaths, /-VCCC/ as in solved, and /-VCCCC/ as in thousandths.[2]

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[1]Lansau et al., 1981: 48.

[2]Bloomfield, 1933: 131-138; Gimson, 1970: 242-255.

The details are discussed as follows:

A. Phonemes /p, t, k/

1. /p/

a) Initial clusters /pr-/ and /pl-/

The Kandayan language does not have the initial clusters /pr-/ and /pl-/. Therefore, it is difficult for Kandayan learners to hear and produce them. They usually transfer the Kandayan initial sequence /CVCV-/[3] as in parokng (hut) to the English initial clusters /pr-/ and /pl-/ by inserting a vowel between the clusters.

Kandayan learners usually use the phoneme /a/ between the clusters because there are many Kandayan words inserted by the vowel /a/. Sometimes /e/, /u/, /ī (i:)/, and /a/ are also used to insert the initial clusters. In this regard, the speech-organ positions in starting to pronounce a phoneme decide the vowels that may be used to insert the initial clusters, e.g. the /i (i:)/ sound occurs before /j/; the /u/ sound occurs before /w/, the /e/ sound before /m/, etc.

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[3]Lansau et al., 1981: 47.

Thus, Kandayan learners will produce:

[parɔ̄ī] instead of [prəī]: pray

[palɔ̄ĭs] instead of [pləīs]: place

[paleīn] instead of [plein]: plain

- Initial clusters /spr-/, /spj/, /spl/, and /sp/.

The Kandayan language also does not have the initial clusters /spr-/, /spj-/, /spl-/, and /sp-/. Therefore, the Kandayan learners have a difficulty to hear and produce them. They usually transfer the Kandayan initial sequence /CVCVCV-/ as in pangalok (liar) to the initial clusters above by inserting one or two vowels between the clusters.

For examples:

spring [sprīŋ becomes [saparīŋ - kaparikng

spume [spju:m] becomes [sapaju:m] - sapayukng

splay [spleī] becomes [sapaleī] - bapulai?

spot [spot] becomes [sapat] - saput

b) Final clusters:

- /-ps/ : collapse
- /-pst/ : lapsed

- /-pts/ : crypts
- /-pθs/ : depths
- /-lp/ : help
- /-sp/ : wasp
- /-mp/ : ramp
- /-sps/ : wasps
- /-spt/ : gasped
- /-lps/ : helps
- /-mps/ : camps
- /-mpt/ : prompt
- /-lpt/ : helped

The Kandayan language does not have the final clusters above. Therefore, it is difficult for the Kandayan learners to hear and produce them. It is easy for Kandayan learners to hear and produce the first phoneme or one phoneme of the clusters because the Kandayan language just has one consonant sound in final position, e.g. ampus (go), darakng (sun shine), etc.

Besides, they may transfer the Kandayan final sequences /-VCV/ and /-VCVC/ to the English final clusters above by inserting one or two vowels between the clusters.[4]

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[4]Lansau, 1981: 48.

For example:

lapsed [læpst] becomes [læp] or [læpeset] - bapeset

gasped [ga:spt] becomes [ga:s] or [ga:sepet] - ngarebet

camps [kæmps] becomes [kæm] or [kæmepes] - ngarepes

help [help] becomes [hel] or [helep] - selep

ramp [ræmp] becomes [ræm] or [ræmep] - ramekng

depths [depθs] becomes [dep] or [depetehes] - diparehetn

The Kandayan learners usually use the vowel /e/ to insert the English final clusters because the Kandayan language does not have the/ə/ sound.[5] The /ə/ sound is usually heard when we pronounce most consonants. In the Kandayan language, /e/ substitutes the /ə/ sound in any position.

2. /t/

a) Initial clusters:

- /tr-/ : train
- /tw-/ : twin
- /st-/ : stop
- /str-/ : string

[5]Thomas et al., 1985: 8.

The Kandayan language does not have the initial clusters above. The learners only know / tr- / from Indonesian loan words such as tradisi, transaksi, etc., but in the Kandayan language the Indonesian loan words are usually pronounced [taradīsī] and [taransaksī].

Therefore, it is difficult for Kandayan learners to hear and produce them. They may apply the Kandayan initial sequence /CVCV-/ to the English initial clusters by inserting one or two vowel(s) between the clusters.

Examples:

train [treīn] becomes [tareīn] - tarenyekng

twin [twīn] becomes [tuwīn] - gurikng

stop [stop] becomes [satop] - satol

string [strɪŋ] becomes [satarɪŋ - batarekng

b) Final clusters:

- /-ft/ : soft
- /-skt/ : asked
- /-kt/ : pact
- /-lft/ : engulfed
- /-lt/ : belt
- /-lkt/ : milked
- /-nt/ : tent
- /-lpt/ : helped
- /-pt/ : apt
- /-tst/ : waltzed
- /-st/ : test
- /-lts/ : belts

- /-$\overset{\vee}{s}$t/ : washed - /-mpt/ : prompt
- /-fts/: lifts - /-pst/ : glimpsed
- /-kst/: text - /-nst/ : against
- /-kts/: acts - /-nts/ : wants
- /-pst/: lapsed - /-ŋkt/ : banked
- /-pts/: crypts

The Kandayan language does not have the final clusters above. Therefore, it is difficult for the Kandayan learners to hear and produce them. They may hear and produce the first phoneme of the clusters and drop the other(s). When the clusters consist of three phoneme or more, the middle one is very difficult to hear and produce.

Besides, Kandayan learners may transfer the Kandayan final sequences /-VCVCV/ or /-CVCVC/ to the English final clusters by inserting one or more vowels between the clusters.

pact [pækt] becomes [pæk] or [pæket]: seket

test [test] becomes [tes] or [teset]: peset

acts [ækts] becomes [æk] or [æketes]: angates

belts [belts] becomes [bel] or

[beletes]: ngalepes

banked [bæŋkt] becomes [bæŋ or [baŋeket]: ngarehet

lapsed [læpst] becomes [læp] or [læpeset]:lapasatn

3. /k/

a) Initial clusters:

- / kr- / : create
- / kl- / : clean

Initial clusters /kr-/ and /kl-/ do not exist in the Kandayan language. Therefore, Kandayan learners have a difficulty to hear and produce them. They may transfer the Kandayan initial sequence /CVC-/ to the English initial clusters by inserting a vowel between the clusters.

Examples:

create [kri:eɪt] becomes [kari:eɪt] - baliatn

clean [kli:n] becomes [kali:n] - calitn

clear [klie] becomes [kalĭe] - kasia

b) Final clusters:

- /-kt/ : pact
- /-ks/ : box
- /-ŋk/ : drink
- /-sk/ : ask
- /-sks/ : asks
- /-skt/ : masked
- /-ŋks/ : thinks
- /-ŋkt/ : banked

- /-lk/ : milk
- /-lks/ : silks
- /-kst/: text
- /-ksts/: contexts
- /-kts/: acts
- /-ksθs/: sixths
- /-ksθ/: sixth

All the English final clusters above do not exist in the Kandayan language. Therefore, Kandayan learners face a difficulty to hear and produce them.

It is easy for them to hear and produce the first phoneme of the clusters and drop the others. Then, when the clusters consist of three or more phonemes, the middle phoneme(s) is more difficult than the other(s).

Besides, Kandayan learners may transfer the Kandayan final sequences /-VCVCV/ or /-CVCVC/ to the English final clusters by inserting one or more vowel between the clusters.

Examples:

box [baks] becomes [bak] or [bakes]: buras

milk [mɪlk] becomes [mɪl] or [mɪlek]: milakng

silks [sɪlks] becomes [sɪl] or [sɪlekes]: dilepes

texts [teksts] becomes [tek] or [tekesetes]: takasatah

B. Phonemes /b, d, g/

1. /b/

a) Initial clusters:

- /br-/: brace - /bl-/ : blade

The initial clusters /br-/ and /bl-/ do not occur in the Kandayan language. Therefore, Kandayan learners have a difficulty to hear and produce them.

They may transfer the Kandayan initial sequence /CVC-/ to the English initial clusters above by inserting a vowel between the clusters.

Thus, <u>brace</u> [breɪs] becomes [bareɪs]: baras

<u>blade</u> [bleɪd] become [baleɪd]: balut

b) Final clusters:

- /-bd/ : sobbed - /-bz/ : rubs

The final clusters /-bd/ and /-bz/ do not exist in the Kandayan language. Therefore, Kandayan learners have difficulty to hear and produce them.

The first phoneme of the clusters is easy to hear and produce than the second, because the Kandayan language has only one consonant sound in final position.

Besides, they may transfer the Kandayan final sequence /-CVC/ or /-VCVC/ to the English final clusters /-bd/ and /-bz/ by inserting a vowel between the clusters.

Examples:

sobbed [sɒbd] becomes [sɒb] or [sɒbed] - sapat

robs [rɒbz] becomes [rɒb] or [rɒbez] - rabas

2. /d/

a) Initial clusters:

- /dr-/ : dry - /dw-/ : dwindle

The Kandayan language does not have the initial clusters /dr-/ and /dw-/. Therefore, it is difficult for Kandayan learners to hear and produce them.

They may transfer the Kandayan initial sequence /CVC-/ to the English initial clusters /dr-/ and /dw-/ by inserting a vowel between the clusters.

Thus, dry [draɪ] becomes [daraɪ] - (nang)darae, dwindle [dwɪndl] becomes [duwɪndel] - kuwintal. The /u/ sound occurs between /d/ and /w/ in [duwindel] because the /u/ sound is the starting sound to pronounce /w/.

b) Final clusters:

- /-bd/ : rubbed
- /-gd/ : begged
- /-ld/ : hold
- /-md/ : climbed
- /-nd/ : mend
- /-vd/ : lived
- /-nd/ : hanged
- /-ðd/ : bathed
- /-dθ/ : width
- /-dθs/: widths
- /-ldz/: builds
- /-ndz/: hands
- /-lmd/: filmed
- /-nzd/: bronzed
- /-dzd/: adzed
- /-nʒd/: changed

All the final clusters above do not exist in the Kandayan language. Therefore, it is difficult for Kandayan learners to hear and produce them.

It is easy for Kandayan learners to hear and produce the first phoneme of the clusters and drop the others, because the Kandayan language has only one consonant sound in any final position.

Besides, they may transfer the Kandayan final sequences /-CVC/ and /-VCVCV/ to the English final clusters above by inserting one or more vowels between the clusters.

Examples:

<u>begged</u> [begd] becomes [beg] or [beged] - bebet

mend [mend] becomes [men] or [mened] - Pehetn

hands [hændz] becomes [hæn] or [hænedez] - nyanedel

filmed [fɪlmd] becomes [fɪl] or [fɪlemed] - Sidomet

3. /g/

a) Initial clusters:

- /gr-/ : grow
- /gl-/ : glim
- /gw/ : guava

The initial clusters /gr-/, /gl-/, and /gw-/ do not exist in the Kandayan language. Therefore, Kandayan learners have a difficulty to hear and produce them.

The learners may transfer the Kandayan initial sequence /CVC-/ to the English initial clusters above by inserting a vowel between the clusters.

Examples:

grow [grəu] becomes [garəu] - garo(u)

glim [glɪm] becomes [galɪm] - galis

quava [gwa:vɔ] becomes [guwa:və] - gawenya

b) Final clusters:

- /-gd/ : begged - /-gz/ : digs

The final clusters /-gd/ and /-gz/ do not exist in the Kandayan language. Therefore, it is difficult for Kandayan learners to hear and produce them.

It is easy for the learners to hear and produce the first phoneme of the clusters, because the Kandayan language only has one consonant sound in any final position.

Besides, they may transfer the Kandayan final sequence /-VCVC/ to the English /-gd/ and /-gz/ by inserting a vowel between the clusters.

Examples:

<u>begged</u> [begd] becomes [beg] or [beged] - teget

<u>digs</u> [dīgz] becomes [dīg] or dīgez] - gigis

C. Phoneme /w/

There is no cluster that occurs in the phoneme /w/.

D. Phonemes /f, v/

1. /f/

a) Initial clusters:

- /fl-/ : fly
- /fj-/ : few
- /fr-/ : fresh
- /sf-/ : sphere

The Kandayan language does not have the initial clusters above. Therefore, it is difficult for thr Kandayan learners to hear and produce them.

They may transfer the Kandayan sequence /CVC-/ to the English initial clusters by inserting a vowel between the clusters.

Examples:

fly [flaɪ] becomes [falaɪ] - pulai?

fresh [freʃ] becomes [fareʃ] - parikng

few [fju:] becomes [fɪju:] - payukng

b) Final clusters:

- /-ft/ : soft
- /-fts/ : lifts
- /-fθ/ : fifth
- /-fθs/ : fifths
- /-fs/ : roofs
- /-mfs/ : triumphs
- /-mf/ : lymph
- /-lfθ/ : twelfth
- /-lf/ : golf
- /-lfs/ : gulfs

All the final clusters above do not exist in the Kandayan language. Therefore, Kandayan learners have a difficulty to hear and produce them.

It is easy for the learners to hear and produce the first phoneme of the clusters, because the Kandayan language has only one consonant sound in any final position.

Furthermore, they usually transfer the Kandayan final sequences/-VCVC/ and /-VCVCVC/ to the English final clusters by inserting one or more vowels between the clusters.

Examples:

soft [soft] becomes [sof] or [sofet] - supatn

lifts [lɪfts] becomes [lɪf] or [lɪfetes] - lipatatn

fifths [fɪfθs] becomes [fɪf] or [fɪfeθes] - dipapas

gulfs [gulfs] becomes [gul] or [gulefes] - kulepes

2. /v/

a) Initial cluster:

- /vj-/ : view

The initial cluster /vj-/ does not exist in the Kandayan language. Therefore, Kandayan learners have a difficulty to hear and produce it.

The learners may transfer the Kandayan initial cluster /CVC-/ to the English initial clusters by inserting a vowel between the cluster.

Thus, <u>view</u> [vju:] becomes [vīju] - biyuku?

b) Final clusters:

- /-vd/ : lived
- /-vs/ : hives
- /-lv/ : solve
- /-lvz/ : shelves
- /-lvd/ : solved

The Kandayan language does not have the final clusterrs above. Therefore it is difficult for the Kandayan learners to hear and produce them.

Since the Kandayan language has only one consonant sound in any final position, it is easy for the learners to hear and produce the first phoneme of the final clusters.

Furthermore, they may transfer the Kandayan final sequences /-VCVC/ and /-VCVCV/ to the English final clusters above by inserting one or more vowel between the clusters.

Examples:

<u>hives</u> [haɪvz] becomes [haɪp] or [haɪvep]: mepes

solve [solv] becomes [sol] or [soleve]: solope

shelves [ʸšelvz] becomes [ʸšel] or [ʸšelevez]: salepet

E. Phonemes [θ, ð]

1. /θ/

a) Initial clusters:

- /θr-/ : thrill
- /θj-/ : thew
- /θw-/ : thwart

The Kandayan language does not have the initial clusters above. Therefore, Kandayan learners face a difficulty to hear and produce them.

The Kandayan learners may transfer the Kandayan initial sequence /CVC-/ to the initial clusters by inserting a vowel between them.

Thus, thrill [θrīl] becomes [θarīl] or [tarīl] - tarekng; thew [θju:] becomes [θʧju:] or [tʧju:] - siyup; thwart [θwɔ:t] becomes [θuwɔ:t] or [tuwɔ:t] - luwatn.

b) Final clusters:

- /-θd/ : earthed
- /-θs/ : breaths
- /-lθ/ : health
- /-nθs/ : tenths
- /-lθs/ : healths
- /-dθs/ : widths

- /-ŋθ/ : month
- /-fθ/ : fifth
- /-nθ/ : strength
- /-mθ/ : warmth
- /-pθ/ : depth
- /-tθ/ : eighth
- /-fθs/ : fifths
- /-tθs/ : eights
- /-ksθ/ : sixth
- /-lfθ/ : twelfth
- /-ntθ/ :thousandth

The final clusters above also never occur in the Kandayan language, so that the Kandayan learners have a serious problem to hear and produce them.

Since the kandayan learners just know one consonant sound in any final position, it is easy for them to hear and produce the first phoneme of the clusters.

Besides, they may also apply the Kandayan final sequences /-VCVC/ and /-VCVCV/ to the English final clusters above by inserting one or more vowel between the clusters.

Examples:

<u>breaths</u> [breθs] becomes [breθ] or [bret] or [bretehes]

<u>health</u> [helθ] becomes [hel] or [heleθ] or [helet]

<u>warmth</u> [wɔ:mθ] becomes [wɔ:m] or wɔ:meθ] or [wɔ:met]

widths [wīdθs] becomes [wīd] or [wīdeθes] or [wīdetehes]

sixth [sīksθ] becomes [sīk] or [sīkeseθ] or [sīkeset]

tenths [tenθs] becomes [ten] or [teneθes] or [tenetehes]

2. /ð̄/

a) Initial cluster:

/ð̄/ does not occur in initial cluster.

b) Final clusters:

- / ð̄/ : soothed - / ð̄z/ : seethes

The final clusters /-ð̄d/ and /-ð̄z/ do not exist in the Kandayan language. Therefore, it is difficult for the Kandayan learners to hear and produce them.

It is easy for Kandayan learners to hear and produce the first phoneme of the clusters, because the Kandayan language only has one consonant sound in any final position.

Furthermore, they may transfer the Kandayan final sequences /-VCV/ and /-VCVC/ to the English final clusters by inserting one or more vowels between the clusters.

Examples:

soothed [su:ð̞d] becomes [su:ð̞] or [su:t] or [su:tehed]

seethes [si:ð̞z] becomes [si:ð̞] or [si:t] or [si:tehes]

F. Phoneme /z/

1. /z/

a) Initial clusters:

- /zl-/ : zloty
- /zj-/ : Zeus
- /zw-/ : zwibach

The Kandayan language does not have the initial clusters /zl-/, /zj-/, and /zw-/. Therefore, the Kandayan learners have a difficulty to hear and produce them.

They may transfer the Kandayan sequence /CVC-/ to the English initial cluster by inserting a vowel between the clusters.

Thus, /zl-/: zloty [zlotī] becomes [zalotī] - sarati; /zj-/: Zeus [zju:s] becomes [zĭju:s] - si(y)akng; /zw-/: zwibach [zwɪbæk] becomes [zawi:bæk] - karebakng.

b) Final clusters:

- /-bz/ : robes
- /-dz/ : beds
- /-gz/ : bags
- /-mz/ : rooms
- /-nz/ : lens
- /-ŋz/ : sings
- /-lz/ : tells
- /-vz/ : lives
- /-ðz/ : bathes
- /-zd/ : raised
- /-ndz/: hands
- /-lbz/: bulbs
- /-ldz/: holds
- /-lmz/: films
- /-lvz/: solves
- /-lnz/: kilns

The Kandayan language does not have the final clusters above. Therefore, the Kandayan leaners face a difficulty to hearr and produce them.

It is easy for the learners to hear and produce the first phoneme of the clusters, because the Kandayan language has only one consonant sound in any final position.

Furthermore, they may transfer the Kandayan final sequences /-VCV/ and /-VCVC/ to the English final clusters by inserting one or more vowels between the clusters.

Examples:

<u>beds</u> [bedz] becomes [bed] or [bedez]: badas

sings [sɪŋz] becomes [sɪŋ] or [sɪŋez]: sanget

raised [reɪzd] becomes [reɪz] or [reɪzed]: raisatn

kilns [kɪlnz] becomes [kɪl] or [kɪlenez]: dikenes

G. Phonemes /š, ž/

1. /š/

a) Initial cluster:

- /šr-/ : shrink

The Kandayan language does not have the initial cluster /šr-/. Therefore, it is difficult for Kandayan learners to hear and produce it.

The Kandayan learners may transfer the Kandayan initial sequence /CVC-/ to the English initial cluster /sr-/.

Thus, shrink [srɪŋk] becomes [sarīŋek] - saringakng - (ringaknya).

b) Final clusters:

- /-lš/ : welsh
- /-šn/ : fashion
- /-št/ : pushed
- /-šnt/: patient

All the final clusters above do not exist in the Kandayan language.

Therefore, the Kandayan learners have a difficulty to hear and produce them.

Since the Kandayan language has only one consonant sound in any final position, it is easy for Kandayan learners to hear and produce the first phoneme of the clusters.

Furthermore, they may transfer the Kandayan final sequences /-VCV/ and /-VCVC/ to the English final clusters by inserting one or more vowel(s) between the clusters.

Examples:

welsh [welš] becomes [wel] or [weleseh]: malasah

pushed [pušt] becomes [pus] or [pusehet] - pasahatn

patient [peɪšnt] becomes [peɪs] or [peɪsenet] - pasanakng

2. /ž/

a) Initial cluster:

English does not have the initial cluster /ž/.

b) Final clusters:

- /-zd/ : camouflaged
- /-zn/ : vision

The final clusters /-zd/ and /-zn/ do not exist in the Kandayan language. Therefore, it is difficult for Kandayan learners to hear and produce them.

Since the Kandayan language has only one consonant sound in any final position, such as lonyekng (a kind of fish), miah (too), it is easy for Kandayan learners to hear and produce the first phoneme of the clusters.

Furthermore, they may transfer the Kandayan final sequences /-VCV/ and /-VCVC/ to the English final clusters by inserting one or more vowels between the clusters.

Examples:

camouflaged [kæmufla:ɣ̌d] becomes [kæmufela:ɣ̌] or [kæmufela:ɣ̌ed]

vision [vɪɣ̌n] becomes [vɪɣ̌] or [vɪɣ̌ɪen] - pasien

H. Phonemes /č̣, ǰ/

The phonemes /č̣, ǰ/ do not occur in clusters.

Conclusion

To conclude the discussions of the constructional of syllables, we can state that most constructional cluster forms in English tend to become problems for Kandayan learners. If we should order the difficulties, they may be as follows:

Initial clusters (sequence of two consonants):

pr - price	dw - dwindle	st - stop
pl - place	gr - green	sp - spot
br - bring	gl - glow	sk - skill, scold
bl - blow	gw - guava	sf - sphere
tr - try	fr - free	sn - snow
tw - twice	fl - fly	sm - smell
kl - clean	θr - three	sw - swing
kr - cream	θw - thwack	
kw - quick	ʃr - shrink	
dr - drive	sl - slow	

Initial clusters (sequence of three consonants):

spr - spring	spl - splash	spy - spume
str - string	skl - sclerosis	sky - skew
skr - scream	skw - squeeze	

Final clusters (sequence of two consonants):

pt - apt	dz - seeds	ft - soft
pθ - depth	dʒ - judge	fs - laughs

ps - collapse dθ - width fθ - fifth

bd - rubbed kt - pact vd - lived

bz - rubs ks - box vz - lives

ts - cats gd - begged θs - baths

tʧ - watch gz - begs ðd - bathed

ðz - bathes lθ - wealth lv - shelve

ʃt - washed lf - self lʃ - Welsh

st - test lz - bells ls - else

sk -ask lb - bulb md - climbed

sp - wasp lk - milk mf - triumph

zd - pleased lm - film mp - camp

ld - hold ln - kiln mθ - warmth

pt - apt lp - help nz - bronze

nd - bend nθ - month nt - tent

ns - tense ŋd - hanged ŋk - drink

ŋθ strength ŋz - rings

Final clusters (sequence of three consonants):

dzd - adzed dʒd - judged mps - camps

dθz - widths ldz - builds mpt - prompt

fts - lifts lfs - wolf's mst - glimpsed

fθs - fifths lft - engulfed mts - prompts

kst - text lfθ - twelfth ndz - hands

ksθ - sixth lks - milks nst - against

kts - acts lkt - milked nts - wants

pst - lapsed lmd - filmed nzd - bronzed

pts - crypts lmz - films nθs - months

pθs - depths lnz - kilns ŋks - banks

sks - asks lps - helps ŋkt - banked

skt - asked lpt - helped ŋθs - lengths

sps - wasps ltst- waltzed lθs - healths

spt - gasped lts - belts lt͡ʃ - belch

sts - masts lvd - shelved lj͡ʒ - bulge

t͡ʃst - watched lvz - shelves

Final clusters (sequence of four consonants):

ksts - texts mpts - tempts

ksθs - sixths ntθs - thousandths

lfθs - twelfths lkts - mulcts

lpts - sculpts mpst - glimpsed

Chapter VII

DIFFERENCES IN SPELLING

In this chapter, spelling will be dealt with. Differences in spelling may cause problems of (spelling) pronunciation. In this regard, Robert Lado says:

> When both the foreign language and the native language use the same alphabet the problem may be traceable to one of two causes. One possibility is that the same symbol might represent two different sounds in the two languages ... The other possibility of spelling interference with pronunciation arises with inconsistencies in the spelling of the foreign language.[1]

Referring to the English language, we know that spelling is often not consistent with the sound produced by the speech organs. English sounds are usually represented either by the same single alphabet or (a) different alphabet(s), e.g. the English /f/ sound is represented by f, ff, ph, and gh.

Kandayan spellings, however, are usually consistent with the sound. An alphabet represents one sound. For examples, the Kandayan /p/ sound is represented by p, the Kandayan /t̃/ sound is represented by tn, etc.

Thus, the details can be seen as follows.

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[1]Lado, 1957: 19-20.

A. Phonemes /p, t, k/

1. /p/

English /p/	Kandayan /p/
p : pain, gap	p : parokng (hut)
pp : approach	alap (fetch)
gh : hiccough	kapakng (embrace)
silent p: psalm	

Since Kandayan learners only know the spelling p for the /p/ sound, there is a possibility of pronunciation problem that is caused by their not knowing the spelling gh and silent p that represent the /p/ sound.[2]

Therefore, they may treat and say gh as /gVh/ silent p as full /p/, and pp as a lengthened /p/.

2. /t/

English /t/	Kandayan /t/
t : time, rat	t : tongkokng (pile)
tt : letter	lumpat (wake up)
th : Thomas	sete? (one)
pt : ptarmigan	
d : walked	

[2]Lado, 1957: 19-20.

Kandayan learners may get a pronunciation problem when they find that the /t/ sound is represented by the spelling tt, th, pt, and d, because in the Kandayan language they only know the /t/ sound that is spelt t.

Therefore, they may treat and say the lengthened /t/ for tt, /tVh/ for th, /pVt/ for pt, and /d/ for d.

3. /k/

English /k/	Kandayan /k/
k : keep	k : kokot (hand)
c, cc + a,o,u: cake accord, conquer	longak (spray) kako (a kind of wood pigeon)
qu : bouquet	
ch : stomach	
qu (kw) : quiet	

Kandayan learrners may get a pronunciation problem when they find that the /k/ sound is represented by the spelling c, cc, qu, ch, q (kw), because in the Kandayan language they know that the /k/ sound is regularly spelt k only.

Therefore, they may treat and say /c/ for c, the lengthened /c/ for cc, /kuw/ for qu, /cVh/ for ch, and /ku/ for q.

B. Phonemes /b, d, g/

1. /b/

English /b/			Kandayan /b/	
b			b	
bike	symbol	cub	baroh (lowland)	aba? (until)

There is no problem for the Kandayan learners to know the spelling b that represents the /b/ sound, because they have the same spelling b that represents the /b/ sound in the Kandayan language.

It means that there is no pronunciation problem that can be caused by the spelling b that represents the /b/ sound.

2. /d/

English /d/			Kandayan /d/	
d			d	
dime	ladder	bread	nangdara (maiden)	dago? (chin)

There is no problem for the Kandayan learners to know the spelling d that represents the English /d/ sound, because they have the same spelling d that represents the Kandayan /d/ sound.

It means that there is no pronunciation problem that can be caused by the spelling d that represents the English /d/.

3. /g/

English /g/	Kandayan /g/
g : grasp	g : ganyil (longing)
gg : egg	regokng (burn)
gh : ghoat	
gu : gue	
silent g : gnaw	

Kandayan learners may get a pronunciation problem when they find that the /g/ sound is represented by the spelling gh, gu, and silent g, because in the Kandayan language they know that the /g/ sound is regularly spelt g only.

Therefore, they may treat and say /gVh/ for gh, the lengthened /g/ for gg, full /g/ for silent g, and /gu/ for gu.

C. Phoneme /w/

English /w/	Kandayan /w/
w : wood	w : wanyi$^{?}$ (bee)
wh : where	awa$^{?}$ (dumb)
u after q : quick	
u after g : language	

There is no problem for Kandayan learners to pronounce the English /w/ because the Kandayan language and the English language have the same spelling for the /w/ sound.

Wh and u after g, q, however, may make a problem for Kandayan learners because they do not have those for the /w/ sound.

Therefore, they may treat and say /wVh/ for wh, /u/ for u.

D. Phonemes /f, v/

1. /f/

English /f/	Kandayan /f/
f : fine, fork	-
ff : affair	
ph : photo	
gh : enough	

Kandayan learners may get a pronunciation problem when they find that /f/ sound is represented by the spelling ff, ph, and gh, because a combination of two phonemes that represents another phoneme. never occurs in the Kandayan language.

Therefore, they may treat and say /pVh/ for ph, /gVh/ for gh, and a long /p/ for ff.

2. /v/

English /v/	Kandayan /v/
v : voice, silver	
f : of	-
ph : nephew	

Kandayan learners may get a pronunciation problem when they find that the /v/ sound is represented by the spelling f, v, and ph. They never get in the Kandayan language one phoneme that is represented by another phoneme or a combination of two different phonemes.

Therefore, they may treat and say /pVh/ for ph, and /p/ for f.

E. Phonemes /θ, ð/

English /θ/	English /ð/	Kandayan /-/
th	th	
thank	there	
author	father	-
faith	soothe	

Since the Kandayan language does not have the phonemes /θ/ and /ð/, it is difficult for Kandayan learners to interpret th as a spelling for /θ/ and /ð/.

They also never get in the Kandayan language that one phoneme is represented by a combination of two different phoneme.

Referring to the phonemes /θ/ and /ð/that are represented by the same spelling, Kandayan learners also face a serious difficulty. They do not know whether a certain th represents the /θ/ sound or the /ð/ sound. In this regard, mispronouncing will happen, e.g. they may pronounce [fa:θə] instead of [fa:ðə], [feɪð] instead of [feɪθ], etc.

Furthermore, they may treat and say /tVh/ for th.

F. Phoneme /z/

English /z/	Kandayan /-/
z : zeal	
s : roses	
ss : scissors	-
zz : dizzy	
x : exact	

Since the Kandayan language does not have the phoneme /z/, it is difficult for Kandayan learners to interpret s, ss, x, and zz as the spellings for the /z/ sound.

In the Kandayan language it never happens that a phoneme is represented by another phoneme.

Therefore, they may treat and say /s/ for s, a long /s/ for ss, /ks/ for x, and a long /s/ for zz.

6. Phoneme /$\overset{\vee}{s}$, $\overset{\vee}{z}$/

1. /$\overset{\vee}{s}$/

English /$\overset{\vee}{s}$/	Kandayan /-/
sh : she	
ch : Charlotte	
sch : schedule	
s or ss before -u, -si, -ti, -csi, -ce, -ci: sure, assure, action, conscience, mansion, special,	
x : luxury	

Since the Kandayan language does not have the phoneme /$\overset{\vee}{s}$/, it is difficult for Kandayan learners to interpret sh, ch, sch, s, or ss (before -u, -si, -ti, -xi, -sci, -ce) and x as the spellings for the /$\overset{\vee}{s}$/ sound.

In the Kandayan language it never happens that a phoneme is represented by another phoneme, a combination of two similar phonemes or a combination of two different phonemes.

Therefore, Kandayan learners may treat and pronounce /sVh/ for sh, /cVh/ for ch, /sVcVh/ for sch, /s/ for s, a long /s/ for ss, and /ks/ for x.

2. /$\overset{v}{z}$/

English /$\overset{v}{z}$/	Kandayan /-/
s : vision z before u: seizure -si-: measure final -ge: beige (French)	-

Kandayan learners may get a pronunciation problem when they find that the /z$\overset{v}{v}$/ sound is represented by s and z (before u, -su, -ge), because in the Kandayan language it never happens that a phoneme is represented by a different phoneme.

Therefore, they may treat and say /s/ for s, and /s/ for z, namely [vɪsn] instead of [vɪ$\overset{v}{z}$n], etc.

H. Phonemes /č, ǰ/

1. /č/

English /č/	Kandayan /-/
ch : church	
tch : catch	
t + ure, eous: nature, righteous	
t + ion when t is preceded by s: question	

Kandayan learners may get a pronunciation problem when they find that /č/ is represented by the spellings ch, tch, t (+ure, eous), and t (+ion when t is preceded by s), because in the Kandayan language a phoneme is usually spelt with the same and single phoneme, e.g. the /p/ sound is spelt p.

Therefore, they may treat and say /cVh/ for ch, /tVcVh/ for tch, and /t/ for t, e.g. they pronounce [neɪcə] instead of [neɪčə], etc.

2. /ǰ/

English /ǰ/	Kandayan /-/
j : jaw	-
g : gem	
dg : ridges	
gg : exaggeration	
dj : adjunct	
de : grandeur	
di : cordial	
ch : Norwich	

Kandayan learners may get a pronunciation problem when they find that /ǰ/ is represented by the spelling j, g, dg, gg, dj, de, di, and ch, because in the Kandayan language a phoneme is usually spelt using the same and single phoneme, e.g., thg Kandayan /t/ is spelt t, etc.

Therefore, they may treat and say /j/ for j, /g/ for g, dVg/ for dg, a long /g/ for gg, /dj/ for dj, /de/ for de, /dī/ for di, and /cVh/ for ch, e.g. [kɔ:dʃəl] instead of [kɔ:ǰəl], [rīdeges] instead of [rīǰ], etc.

Conclusion

To conclude our discussion about differences in spelling between English and Kandayan consonants, we may say that spelling may interfere with the pronunciation because of the inconsistencies in the spelling of English. Kandayan learners may mispronounce the word by assuming that the symbol represents the same sound in both cases.[3]

In other words, the problems for the Kandayan learners, in these cases, then are not in recognizing and producing the sounds, but in their ability to discriminate phonemic system from writing system, and the ability to recognize the symbols that represent the certain phoneme[4], for example, the English /v/ is represented by v, f, and ph.

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[3]Lado, 1957: 20. - Cf. p.159.

[4]Suprihantanta, 1983: 112.

Chapter VIII

CONCLUSION AND SUGGESTION

A. Conclusion

After having constrasted some English consonants which are difficult for Kandayan learners to the Kandayan consonants, I would like to say that the Kandayan learners face difficulties or problems in learning to speak English because , first, the Kandayan language does not have some English consonants in any position ; second, the Kandayan language does not have some consonants as those of English in a final position; and third, the Kandayan language does not have the same consonants in manner of articulation like those of English .

The English consonants which are not available in the Kandayan language are /f, v/, /θ, ð/, /z/, /š, ž/, and /č, ǰ/. Those which do not exist in the Kandayan final position are /b, d, g/. In initial position, those which are different in allophic variants are /p, t, k/ and /w/, and which is different in place of articulation is /d/. The English /d/ is an alveolar, while the Kandayan /d/ is dental.

The quality of difficulty is also different. We may say that the Kandayan learners face a serious difficulty or problem to hear and produce the English /θ, ð/ sound, because the English /θ, ð/ are thoroughly new phonemes for the Kandayan learners. Referring to the English /f, v/ sound, they face difficulty but not serious difficulty because the Indonesian language which is a second language for the Kandayan people, has introduced them to the Kandayan people .[1] In hearing and producing /s̻, z̻/ and /c̻, j̻/ the Kandayan leaners face a quite difficult problem, because the Kandayan language has quite the same phonemes namely the /s/ , /c/, and /j/ sounds. It is not so difficult for the Kandayan leaners to hear and produce the English /z/ because it exists in the Indonesian language [2], and actually the English /z/ can be resulted by voicing the Kandayan /s/ because the Kandayan /s/ has the same quality as the English /s/.[3]

In pronouncing the English consonants presented above, Kandayan learners may transfer the closest Kandayan phoneme in manner and

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[1]Keraf, 1984: 179-180.

[2]Keraf, 1984: 179-180.

[3]Cf.: 20, 52.

place of articulation to the English phoneme, namely: the Kandayan /t/ substitutes the English /θ/, the Kandayan /d/ substitutes the English /ð/, the Kandayan /p/ substitutes the English /f/ and /v/, the Kandayan /s/ or /j/ substitutes the English /ž/, the Kandayan /s/ substitutes the English /š/ and /z/, the Kandayan /c/ substitutes the English /č/, and the Kandayan /j/ substitutes the English /ǰ/.

Initial and final clusters, then, do not exist in the Kandayan language. Therefore, the Kandayan learners face a serious difficulty in hearing and producing most English initial and final clusters. Referring to the initial clusters, they may transfer the Kandayan initial sequence /CVC-/ to the English initial cluster by inserting a vowel between the cluster. However, some initial clusters such as /pr/, /dw/, /tr/, and /gr/, do not make a serious difficulty because the Indonesian language also introduces them to the Kandayan learners, e.g. pramuka, dwikora, trisakti, gram, etc.. In the Kandayan language the Indonesian loan words are pronounced [para:muka], [duwi:kora], [tari:sakti] and [ga:ram]. Referring to the English final clusters, then, the Kandayan learners usually

transfer the Kandayan final sequence /-CVC/ or /-CVCV/ to the English final clusters by inserting a vowel(s) between the clusters. It is easy for them to hear and produce the first phoneme of the cluster because the Kandayan language just has one consonant sound in the end of each word, e.g. gagas (beautiful), alapm (morning), etc..

The English spelling may also make problems of (spelling) pronunciation for the Kandayan learners, because most English consonants presented in this thesis are represented by the same single phoneme, another phoneme or a combination of two or more phonemes, e.g. the /f/ sound is represented by f, ff, ph, and gh. The inconsistency of the English spelling may cause Kandayan learners mispronounce the word because assuming the symbol represents the same sound in both cases. In the Kandayan language, however, one sound is only represented by one alphabet, e.g. the Kandayan /t/ is represented by t, the Kandayan /c/ is represented by c, etc.. Therefore, they may treat and say /pVh/ for ph, and /gVh/ for gh.

Consequently, the English teacher who teaches Kandayan learners to speak English may take into serious consideration in his/her teaching pronunciation the consonants that are not available in the Kandayan language and those which are different in manner and place of articulation as they are the sources of difficulties for the Kandayan learners.

In brief, he or she may pay attention to the Kandayan learners' mispronunciations that are caused by their mother tongue habit. Making them realize their mispronunciation may improve their effort to avoid their misunderstanding and mispronunciation.

B. Suggestion

Eventually, knowing and realizing the difficulties, the source of difficulties, and the errors the Kandayan learners make because of their mother tongue's influence should make the English teachers improve their pronunciation material for the Kandayan learners learning to speak English in class.

In order to get the goal some principle ideas in teaching pronunciation which are suggested by some experts should be taken into consideration, especially in referring to what to teach and how to teach.

Robert Lado says that teaching pronunciation is a matter of patience and continuous work because the acquisition of habit to use foreign sounds does not take place automatically by itself. Besides, the personal pronouns in English have to be taught early.[4]

In his teaching the teacher should pay much attention to the problems and difficulties that the students face.[5] It is not necessary, for example, that the teacher spends much time to teach the English /z/ to the Kandayan learners than the English /ð/.

The difficulties, then, should be taught in the graded way. In other words, the easiest problems will be taught first.[6]

Referring to the system of teaching pronunciation Charles Fries says that "because of the fundamental importance of the covering patterns of intonation and rhythm for both understanding the stream of speach and to be understood by the ordinary English speaking person, these covering patterns should be matters of drill and practice from the very first lessons".[7]

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[4]Lado, 1974: 78.

[5]Lado, 1974: 75.

[6]Lado, 1974: 77.

[7]Fries, 1945: 24-26.

Charles Fries' statement above is supported by Jerris E. Strain who says that "spoken language habits can be most effectively developed by drilling, and the conscious drilling of a learning point during an exercise should gradually become unconscious drilling by shifting the learners' attention to a point that is related but irrelevant to the learning point, such that the point being learned comes to be produced automatically". It means, then, he says "that classroom procedure should consist of a minimum of explanation and a maximum of practice".[8]

Therefore, Wilga M. Rivers says, "the classroom atmosphere is very important when dealing with pronunciation"[9], because it is hard for the students to manage the unfamiliar sounds if they have no good relation with the teacher and their classmates. They have to concentrate their recognition to the unfamiliar sounds and after that produce the sounds, so they need a relax and tranquil atmosphere.

Referring to the English teacher, I would like to suggest that it is better for the beginners to have only one certain English

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[8]Strain, 1962: 231-240. [9]Rivers, 1970:120

teacher, because keeping on changing the English teachers for the beginners (in the beginning classes) may make them confused of the pronunciation. As Daniel Jones says:[10]

> "No two people pronounce exactly alike. The differences arise from a variety of causes, such as locality, early influences and social surroundings; there are also individual peculiarities for which it is difficult or impossible to account".

After having taken into account all the ideas above, I would like to suggest an example of how to teach a problem sound for the Kandayan learning to speak English.

Problem: Kandayan learners have a difficulty to hear and pronounce the English /θ/. They may transfer the Kandayan closest sound /t/ in manner and place of articulation to the English /θ/.

Step 1: Explain the description of articulation of the English /θ/, while introducing the picture of the speech organs which shows the position and situation of speech in pronouncing the English /θ/. The explanation goes like the following:

"In producing the phoneme /θ/, the soft palate should be raised, and the nasal

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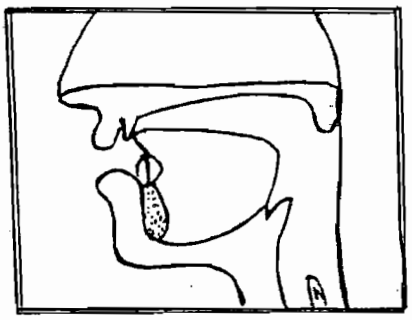
[10]Jones, 1973: 3.

resonator shut-off, then the tip and rims of the tongue make a light contact with the upperside teeth. While in the position, the air is pumped by the lungs through the tongue-tip and the teeth, so that continuant friction will be heard for /θ/."



The English /θ/

Step 2: The teacher gives a model in pronouncing the English /θ/ in words and the students listen and repeat after the teacher.

thin	method	both
thick	author	death
thing	wealthy	earth
Thursday	pathetic	growth
thank	something	health
theatre	birthday	breath

Step 3: The teacher gives a model in pronouncing the English /θ/, /t/ and /s/ in contrast. The students listen and repeat after the teacher.

1. thin - tin thick - tick
   thank - tank thought - taught
   death - debt thigh - tie
2. thin - sin thing - sing
   thank - sank thumb - some
   thick - sick myth - miss
3. thin - tin - sin
   thank - tank - sank
   thick - tick - sick
   thought - taught - sought
   think - tinge - sing

Step 4: The teacher gives a model in pronouncing /θ/ in sentences and the students listen and repeat after the teacher.

1. Ethel's birthday comes this month.
2. The three thieves were caught on the third of this month.
3. I am throught with the thread and the thimble now.
4. Ethel makes thrift and truth the themes of her life.
5. Arthur was an enthusiastic athlete in his youth.
6. They are both enthusiastic about the theatre.

7. The others thought this was a thrifty method.
8. Ruth and Beth have been good friends through thick and thin.
9. She thought she was through with theoretical themes.
10. Our theatre tickets were for Thursday, the thirtieth.

Step 5: The teacher repeats step 2 and step 3, and asks the students to repeat after her/him in chorus and, if possible, individually.[11]

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[11]Clarey & Dixson, 1947: 16. Indriani Arief,-: 30

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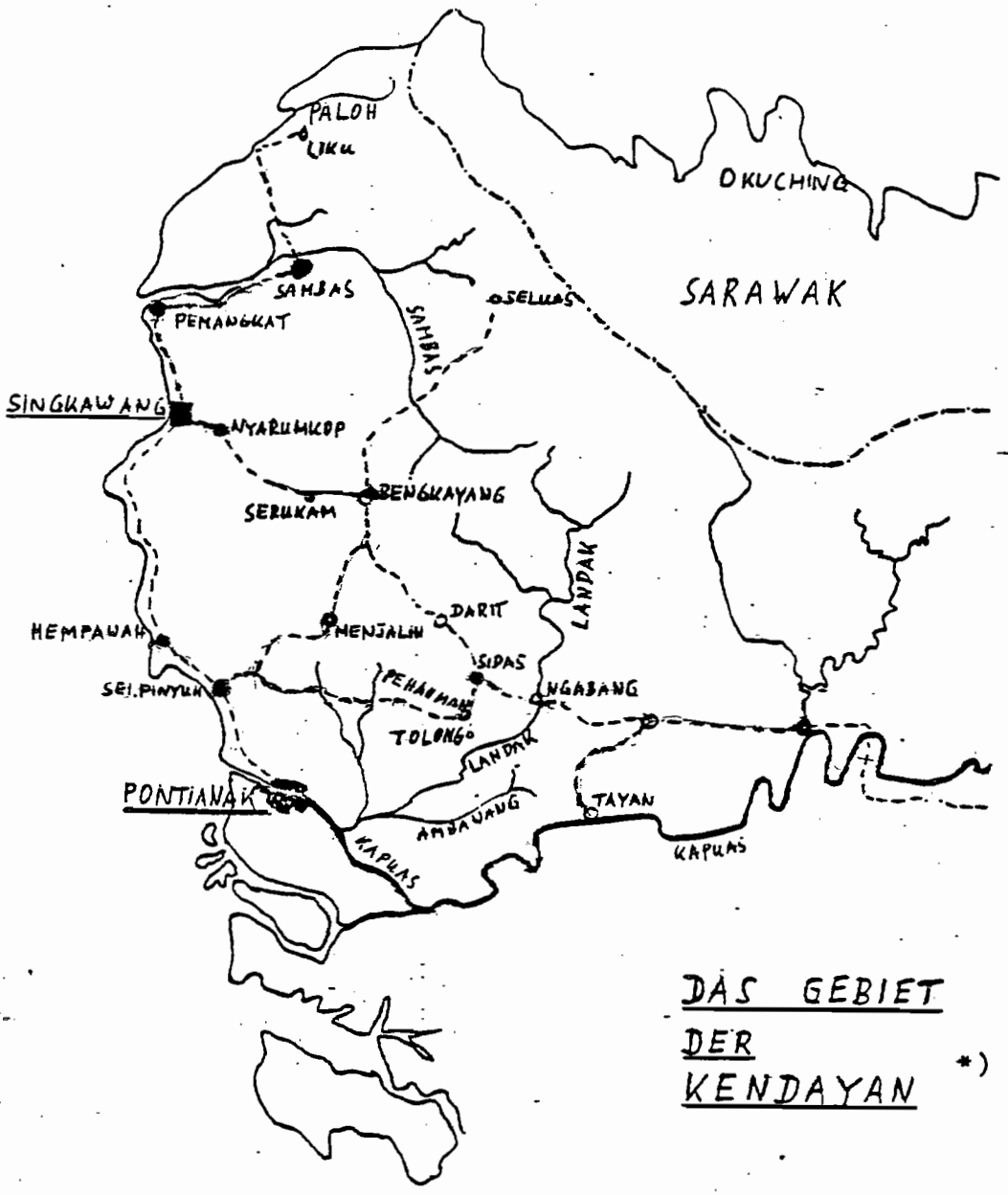

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