

A TAXONOMIC PHONOLOGICAL ANALYSIS OF
TAGALOG AND PAMPANGO

by

Pablo Evangelista Natividad
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April, 1967

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Department of CLASSICS

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Vancouver 8, Canada

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ABSTRACT

This study is a discussion of the phonology of Tagalog and Pampango, two of the major Philippine languages. The contrastive analytical description deals both with the segmental and the suprasegmental phonemes. They are analyzed as to their form, structure, and distribution. Tagalog and Pampango phonemes are described using conventional taxonomic phonemes and allophones. The extent of the differences between the two languages with regard to phonology is discussed to point out the problems and the places where they will occur for Pampango learners of Tagalog.

The chief difficulty for the Pampango learning Tagalog segmental phonemes is that he may confuse /'/' and /h/. There are cases where he seems to substitute /'/' for /h/, although actually he does not produce the glottal sound but a "breathy glottal stop." He finds final /o/ and /u/ difficult because he makes no distinction between these two sounds. He uses them interchangeably favoring the higher vowel /u/.

All Tagalog diphthongs are missing from Pampango and they constitute a really tremendous problem for the Pampango learner. The problem is so great that he should

be taught as a top priority the diphthongs /iw/, /ey/, /ay/, /aw/, and /uy/ which are to be classed as new categories for a Pampango learner of Tagalog. Extensive drill should be given on these items.

The rising-falling pitch pattern /231 / of Tagalog will probably be a serious problem for Pampangos because of the tendency to replace it by /213 / or at best /212 /. Much drill should be given to Pampango students in this area because they are likely to carry over their intonation patterns in speaking Tagalog.

In general, the pronunciation difficulty of Pampangos learning Tagalog will arise from the systematic differences in phonological structure between the two languages, such as differences between the phonemic inventories, differences in the phonetic realization of phonemes which are being learned by the students, and differences in the distribution of the phonemes which occur in both languages.

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SYMBOLS USED IN THE ANALYSIS

SYMBOL	EXPLANATION
[ʔ]	Glottal Stop
[vd]	Voiced
[vl]	Voiceless
[ˈ]	Primary Stress
[*]	Tense Vowel
[˘]	Lax Vowel
[ː]	Length
[.]	Syllable Boundary
[↑]	Rising Juncture
[↓]	Falling Juncture
[]	Sustained Juncture
[a]	Low Front Tense Unrounded
[C]	Consonant
[v]	Vowel

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

One of the basic considerations in teaching Tagalog pronunciation to students should be exhaustive comparison of the sound system of Tagalog with the sound system of the language of the learner. This means that before a teacher attempts to teach Tagalog pronunciation to students in, say, the Pangasinan region, or the Visayan islands, or the Bicol peninsula, she must first familiarize herself with the sound system of that particular vernacular area and compare it with that of Tagalog. The reason for this is obvious. Such a comparison will reveal what sounds of Tagalog are different from, or are not found in, the learner's own language, and as a consequence, will prove difficult for this learner. The teacher can then concentrate on these difficult sounds and base her drill material on them. In this way she saves precious time which she otherwise would have used in teaching sounds already known and mastered.

Most programs for training teachers in second language techniques make rather specific provision for acquainting the teacher-to-be with the methods of comparing languages, even to the point of requiring her to do a

certain amount of contrastive analysis on her own. Unfortunately, however, the analysis is not done in sufficient detail nor is it pursued far enough to provide information about the distribution problems. Hence the resulting analysis cannot be used as a basis for judging the phonological problems of her students.

This study, therefore, is an attempt to make a phonological analysis of Tagalog and Pampango, two of the major Philippine languages. Both languages belong to the Indonesian or Western branch of the Malayo-Polynesian (or Austronesian) family of languages. Spoken by 4,068,565 people,¹ Tagalog was chosen as the basis of the Filipino National Language, now being taught in the schools. As in the case with all languages, Tagalog and Pampango are spoken in a variety of dialects in different localities, each dialect having its own peculiar and distinctive characteristics.

The analysis of Tagalog described here is mainly based on Tagalog as spoken in Manila, Quezon City, and Pasay City. These cities constitute one single speech community of Tagalog, the dialect with which the writer is most conversant. The sound system is approximately

¹Census of the Philippines, 1939, Vol. II, (Manila: Bureau of Printing), p. 333.

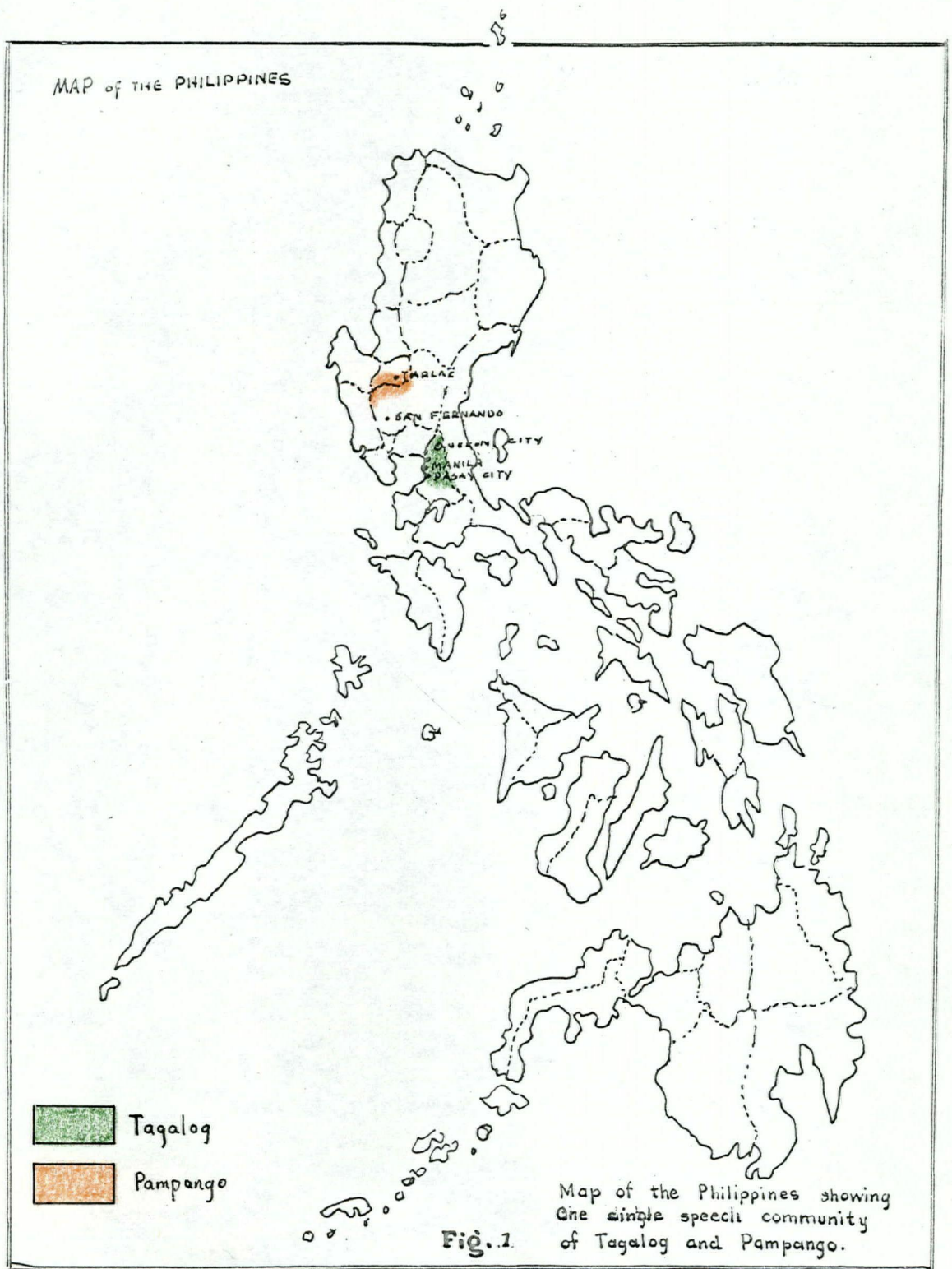
identical with that taught in the schools.

Pampango, on the other hand, is spoken in Pampanga and in Tarlac, two adjacent provinces in Central Luzon. The people who speak it in Tarlac are found mostly in the southern, eastern, and central towns which are near the province of Pampanga. The dialect chosen as the basis of the present study is that of Pampango spoken in the capital town of Tarlac, in the central section of the province, Figure 1.

This study will try to analyze the phonetic elements of the two languages as to their similarity and difference, that is, the segmental and suprasegmental phonemes will be described as to their form, structure, and distribution.

I. THE PROBLEM

Statement of the Problem. Students studying Tagalog, native or non-native to the language, have complained of its difficulty as a subject. There must be many causes relative to this complaint. The investigator is of the opinion that two of the principal causes are (1) that the mistakes of the learner result from his tendency to transfer the sounds and patterns of his own language over to the target language; and (2) that when a mistake occurs



no attempt is made to examine the structures of the two languages in order to find the point of conflict that accounts for the mistake. This study is therefore designed with three purposes in mind:

1. To describe and analyze the phonology of Tagalog and Pampango.
2. To determine the extent of the differences between the two languages with regard to phonology.
3. On the basis of these analyses, to point out the problems and the places where they will occur for Pampango learners of Tagalog.

Importance of the Study. This study is intended to help those skeptical about the theory of applied linguistics to understand and appreciate the points of emphasis in the teaching of Tagalog as part of the language arts program in Philippine schools; to provide textbook writers with a sound theory on which to base materials and series of lessons aimed at enabling the student to overcome his difficulties in learning Tagalog. The hierarchical arrangement revealed in this phonological analysis will further provide an understanding of how much effort will be needed to overcome the said difficulties.

II. DEFINITIONS OF TERMS USED

For purposes of this study the following terms are used with the meanings hereby defined:

Phonological analysis is the identification of the phonic elements and the classification according to their function in the language.²

Contrastive analysis is the method of utilizing the processes of comparison, differentiation, and selection of the elements under examination with an eye to placing them together in such a way that their differences are obvious. It is the contrast between the student's language and the target language (that is, the one he sets out to learn), determined by analysis.³

Phonology is a cover term embracing phonetics and phonemics. It shall be interpreted as a study which sets out to determine the phonetic distinctions in a given language and establish the system of phonemes.⁴

²André Martinet, Elements of General Linguistics (London: Faber and Faber Ltd. 1964), p.54.

³Carter V. Good and Douglas E. Scates, Methods of Research: Educational, Psychological, Sociological (New York: Appleton-Century-Crofts, Inc., 1954), p. 277.

⁴Wilson Francis, The Structures of American English (New York: The Ronald Press Company, 1958), p. 244.

Phonetics is the study which deals with sound features or qualities and their organization into speech sounds, or phones.⁵

Phonemics is the study which deals with the organization of the phones into groups or families, called phonemes, whose members are the minimal significant sounds of speech.⁶

Morphophonemics is the alternation of phonemes within a given morpheme. It bridges the gap between the morphological and the phonemic levels of a language.⁷

Distribution refers to the whole set of environments in which a linguistic form, including a speech sound, appears.⁸

A native speaker of a language is a person who has spoken the language since birth.

In this thesis an informant is the native speaker of a language who supplies information on the language being studied.

⁵Ibid.

⁶Ibid.

⁷Robert A. Hall Jr., Introductory Linguistics (New York: A Division of Chilton Company, 1964), p. 138.

⁸H. A. Gleason Jr., An Introduction to Descriptive Linguistics (New York: Henry Holt and Company, 1955), p. 56.

The major languages⁹ among the eighty-nine spoken in the Philippines are Tagalog, Sugbuhanon (Cebuano), Samar-Leyte, Bikol, Iloko, Pangasinan, Pampango, and Hili-gaynon, Figure 2.

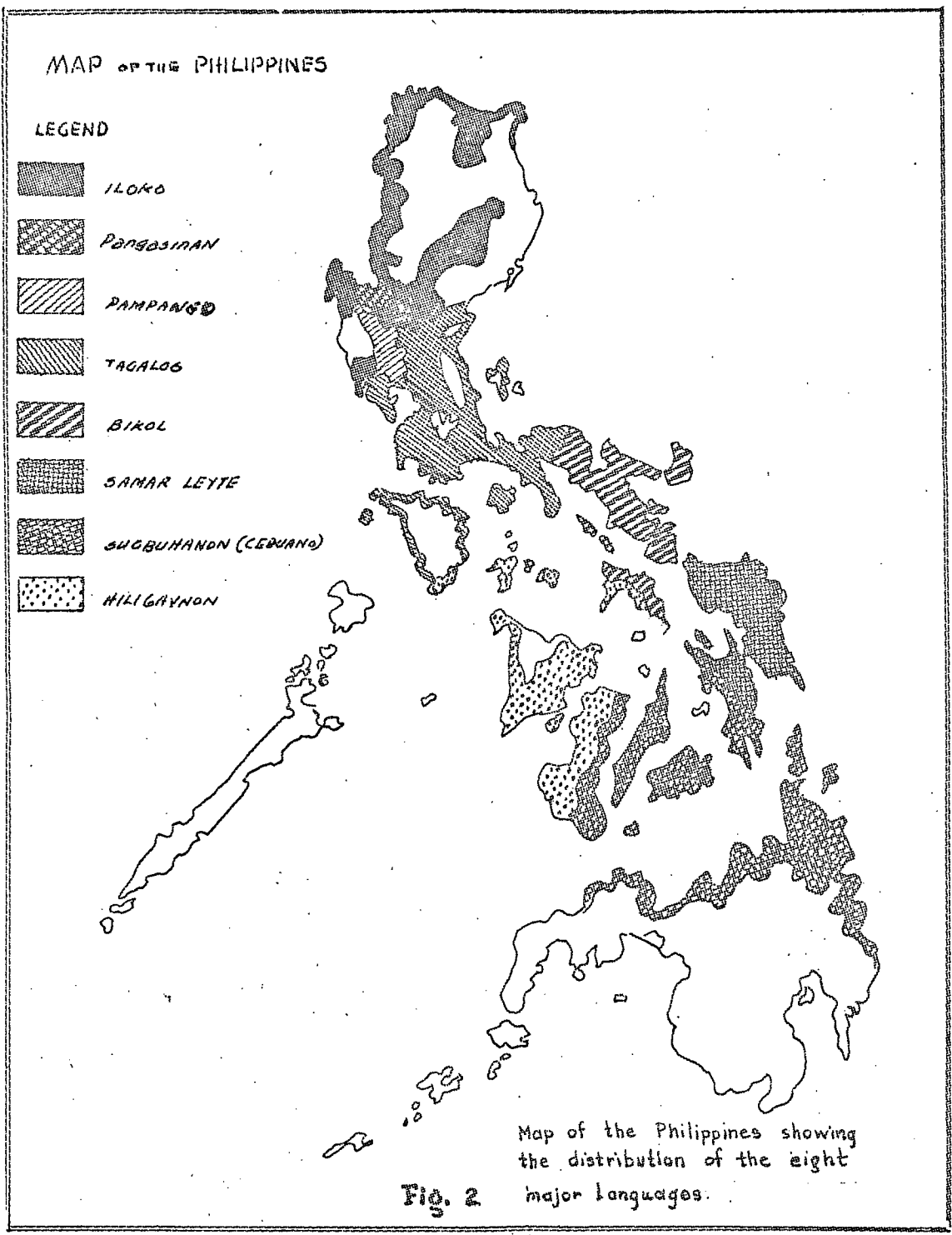
Sources of Data. The corpus for the investigation of Tagalog and Pampango was obtained from the following native speakers (the informants) who have uttered the items found in the text, and a number of speakers on tape recordings:

1. Tagalog - Mrs. Candida N. Protacio, Pilipino Supervisor, Division of Quezon City.
2. Pampango - Mrs. Librada Limjoco-Coquia, Teacher, Eulogio Rodriguez Jr. High School, Quezon City.
Mrs. Corona Simbul, Teacher, Eulogio Rodriguez Jr. High School, Quezon City.

Other sources of information include the articles by Cayari, Reyes and Paterno, and studies conducted by R. P. Stockwell, T. Anderson and I. Tabasondra.

Method of Study. The method used in this study is contrastive analytical description. Samples of utterances in both Tagalog and Pampango were examined and described

⁹Philippine Bureau of Census, Handbook of Philippine Statistics, 1903-1959 (Manila, Bureau of Printing, 1960), Table 13, p. 13.



to determine the similarities and differences of the phonology. For this procedure, there were two checks made: every cited utterance was checked with at least one native speaker to determine whether he would accept it as a possible utterance or whether it could be elicited from him or not. The significant sounds and sound features of the language were listed and all possible variants of each phoneme were described. The sounds observed were classified and represented with a set of graphic symbols having a one-to-one correspondence with the sound it represents. The Tagalog and Pampango segmental and suprasegmental phonemes were classified on the basis of form, distribution, and arrangement. Then Tagalog was compared with Pampango from the standpoint of phonology.

Organization of Remainder of the Thesis. The data gathered are presented, described, and summarized in Chapters II and III of this work. The contrastive analysis is described in Chapter IV, and the fifth and last chapter gives the summary and conclusions based on the analysis of the problem and the data presented.

CHAPTER II

TAGALOG PHONOLOGY

Tagalog has the following phonemes: twenty-one segmental phonemes, sixteen consonant sounds and five vowel sounds, /p, b, t, d, k, g, ' (glottal stop), h, s, m, n, ŋ, l, r, w, y; i, e, a, o, u/; two phonemes of stress, primary /'/, and weak (unmarked); three phonemes of pitch, low /1/, mid /2/, and high /3/; three terminal junctures: rising juncture /↑/, falling juncture /↓/, and sustained juncture /|/; a phoneme of length, represented by /·/, and a phoneme of internal open juncture, transcribed by a space.

The symbols chosen to represent the vowels and consonants of Tagalog are all drawn from the writing tradition of Philippine languages with the exception of the glottal stop. This consonant is represented in Tagalog in a variety of ways: (1) at the beginning of words and between vowels it may be presented by implication; (2) within a word when it follows a consonant, it is represented by a hyphen; (3) at the end of a word it may not be represented at all, or it may be signalled by some kind of accent mark on the last vowel, depending on the style of writing. The glottal stop is represented consistently by one symbol in all positions, a raised comma.

Vowel length is represented by a dot after the vowel.

Examples of the glottal stop in various positions are:

- | | | | |
|-----|----------|-------------|-----------------|
| (1) | ako | /ˈa ˈkoh/ | ˈI |
| | oo | /ˈoːoh/ | ˈyes |
| | aalis | /ˈaːaˈlis/ | ˈwill leave |
| (2) | nag-aral | /nagˈˈaral/ | ˈstudied |
| | pag-uho | /pagˈuˈhoː/ | ˈpouring grains |
| | pag-ibig | /pagˈˈibig/ | ˈlove |
| (3) | luha | /ˈluhaː/ | ˈtears |
| | bata | /ˈbataː/ | ˈchild |
| | baga | /ˈbagaː/ | ˈlung |
| | baga | /baˈgaː/ | ˈtumor |
| | bali | /baˈliː/ | ˈbroken |

It will be noticed that final /h/ is written in the transcription, reflecting the actual structure of Tagalog. This is illustrated by the following pairs of words:

- | | | |
|----------|-------------|-----------|
| ganda | /ganˈdah/ | ˈbeauty |
| gandahan | /gandaˈhan/ | ˈbeautify |
| luha | /ˈluhaː/ | ˈtears |
| luhaan | /luhaˈˈan/ | ˈtearful |
| balik | /baˈlik/ | ˈreturn |

balikan /bali'kan/ 'to return'

The suffix /-an/ is added to the stem, and an alternate suffix form /-han/ is unnecessary in the case of words like gandahan, because the /h/ is actually present in final position on the base form. The analysis which includes initial and final occurrences of the glottal stop and /h/ makes possible a very simple and consistent statement of Tagalog syllable structure, i.e., /CVC/. This is discussed in detail under the section syllable structure.

THE TAGALOG VOWELS

Historically Tagalog had a three-vowel set /i/, /a/, /u/ with lower allophones of the two high vowels distributed so that the lower allophone occurred in any syllable immediately preceding a juncture, and with the lowering extending back to the next syllable if it was separated from the last one only by a /'/.

According to Bloomfield¹ Tagalog has a three-vowel set, allowing each phoneme a range all the way from positions of high vowels to positions of lower mid vowels. Cayari states that the phoneme /i/ has two submembers

¹Leonard Bloomfield, Language, (New York: Holt, Rinehart and Winston, 1964), p. 105.

/i/ and /e/. /i/ high front close unrounded alternate with /e/ mid front close unrounded vowel in word-final position - (lalaki - lalake) 'man', (bibí - bibe) 'duck', (ubí - ube) 'yam', (gabi - gabe) 'taro tuber plant'. /u/ has two submembers: /u/ and /o/. /u/ alternates with /o/ in word-final syllables - (putul-putol) 'cutting'; (baku-bako) 'rugged'; (sapul-sapol) 'since'.² But in a great many Tagalog words, /i/ and /u/ do not alternate with /e/ and /o/. Informant-opinions for the present work would not allow such variations and alternations in all cases, so it was necessary to conclude that there are now five vowel phonemes, /e/ and /o/ along with the original three, Figure 3. There are, it would appear, dialects with only three vowels in some provinces. Apparently the speech-community on which this study is based does not belong in this category. Since the present description of Tagalog phonology is aimed toward a comparison with the phonology of Pampango, it is obvious that the basis of comparison should be those of Tagalog speakers who make five vocalic distinctions.

Tagalog vowels are generally of uniform length.

²Remedios M. Cayari, "The Phonemes of Tagalog", The Philippine Journal of Science, (June, 1956), pp. 249-255.

STRESSED

	<u>Front</u>	<u>Central</u>	<u>Back</u>
	<u>Unrounded</u>	<u>Unrounded</u>	<u>Rounded</u>
High	i		u
Mid	e		o
Low		a	

UNSTRESSED

	<u>Front</u>	<u>Central</u>	<u>Back</u>
	<u>Unrounded</u>	<u>Unrounded</u>	<u>Rounded</u>
High	I		u
Mid	e		o
Low		a	

FIGURE 3

Tagalog Vowel Chart

Lengthened variants, however, may occur under strong stress. All vowels take on nasal coloration before a nasal consonant. Regardless of quality or segmental environment, Tagalog vowels are tense under strong stress, lax under weak. They are pronounced with the tongue, jaw, and lips in practically the same position from the beginning to the end of the vowel. In the following description of individual vowels, therefore, no special diacritics will be used to indicate degree of tenseness.

The description of the five vowels, with examples, follows:

/i/. This front vowel of Tagalog in the present corpus shows the following allophonic variants: $\left[i \right]$, $\left[i^* \right]$, $\left[I \right]$, and $\left[i_{\frac{1}{2}} \right]$.

(a) $\left[i \right]$ is high front tense unrounded under stress except in a final syllable and end of a word, and after a glottal stop.

isa	$\left[i'sah \right]$	/ 'i'sah/	'one'
pilas	$\left[p'ilas \right]$	/ 'pilas/	'rip'
pito	$\left[p'itoh \right]$	/ 'pitoh/	'whistle'
tibagan	$\left[t'ibagan \right]$	/ 'tibagan/	'place of excavation'
kilos	$\left[k'ilos \right]$	/ 'kilos/	'movement'

bihis	⟦ ^h bihis⟧	/ˈbihis/	'the dress one wears'
bilang	⟦ ^h bilan̩⟧	/ˈbilan̩/	'number'
bisa	⟦ ^h bisa'⟧	/ˈbisa'/	'efficacy'
dila	⟦ ^h dila'⟧	/ˈdila'/	'tongue'
giting	⟦ ^h gitiŋ⟧	/ˈgitiŋ/	'heroic quality'
sibol	⟦ ^h sibol⟧	/ˈsibol/	'bud'
higing	⟦ ^h higiŋ⟧	/ˈhigiŋ/	'tone'
hilig	⟦ ^h hilig⟧	/ˈhilig/	'inclination'
minimo	⟦ ^h minimoh̩⟧	/ˈminimoh̩/	'minimum'
libangan	⟦ ^h libaŋan̩⟧	/ˈlibaŋan̩/	'recreation'
libingan	⟦ ^h libiŋan̩⟧	/ˈlibiŋan̩/	'burial ground'
limi	⟦ ^h limi'⟧	/ˈlimi'/	'attend to reflectively'
libot	⟦ ^h libot⟧	/ˈlibot/	'environment'
ripa	⟦ ^h ripah̩⟧	/ˈripah̩/	'lottery'

(b) ⟦i*⟧ is lower high front unrounded slightly raised under stress in a final syllable and before a glottal stop.

imbi	⟦ ^h im'bi*h̩⟧	/ˈim'bih̩/	'mean'
impis	⟦ ^h im'pi*s̩⟧	/ˈimpis̩/	'deflated'
isis	⟦ ^h i'si*s̩⟧	/ˈi'sis̩/	'scrubbing'
aligi	⟦ ^h ali'gi*h̩⟧	/ˈali'gih̩/	'fat'

piit	[pi'i*t]	/pi'it/	'cornered'
takip	[ta'ki*p]	/ta'kip/	'cover'
tiim	[ti'i*m]	/ti'im/	'gritting' the teeth'
kasi	[ka'si*h]	/ka'sih/	'because'
kulig	[ku'li*g]	/ku'lig/	'young pig'
bait	[ba'i*t]	/ba'it/	'goodness'
balik	[ba'li*k]	/ba'lik/	'return'
biik	[bi'i*k]	/bi'ik/	'young pig'
bilbil	[bil'bi*l]	/bil'bil/	'dropsy'
said	[sa'i*d]	/sa'id/	'exhausted'
sungkit	[suŋ'ki*t]	/suŋ'kit/	'hook for picking fruits'
mandin	[man'di*n]	/man'din/	'apparently'
ligpit	[lig'pi*t]	/lig'pit/	'put away'
liit	[li'i*t]	/li'it/	'smallness'
laing	[la'i*ŋ]	/la'in/	'dried'
lasing	[la'si*ŋ]	/la'sin/	'drunk'
lawit	[la'wi*t]	/la'wit/	'sticking out'

(c) Lower high front lax unrounded [ɪ] varies freely with high front lax unround [i̥] under weak stress except before /y/ and /n/ where [i̥] occurs, and except in final syllables where only [ɪ] occurs.

ilalim	[i'laɫɪm]	/i'laɫɪm/	'bottom'
anim	[ʔ'anɪm]	/ʔ'anɪm/	'six'
atin	[ʔ'atɪn]	/ʔ'atɪn/	'ours'
panig	[ʔ'panɪg]	/ʔ'panɪg/	'panel'
tubig	[ʔ'tubɪg]	/ʔ'tubɪg/	'water'
tulin	[ʔ'tulɪn]	/ʔ'tulɪn/	'speed'
kanin	[ʔ'kanɪn]	/ʔ'kanɪn/	'cooked rice'
kapit	[ʔ'kapɪt]	/ʔ'kapɪt/	'hold'
kati	[ʔ'katɪh]	/ʔ'katɪh/	'low tide'
kikil	[ʔ'kɪkɪɫ]	/ʔ'kɪkɪɫ/	'file'
bibi	[ʔ'bɪbɪh]	/ʔ'bɪbɪh/	'duck'
bahid	[ʔ'baɦɪd]	/ʔ'baɦɪd/	'stain'
batis	[ʔ'batis]	/ʔ'batis/	'spring of water'
dapit	[ʔ'dapɪt]	/ʔ'dapɪt/	'solemn religious ceremony'
galit	[ʔ'galɪt]	/ʔ'galɪt/	'anger'
sigasig	[si'gasɪg]	/si'gasɪg/	'persistence'
siping	[ʔ'sɪpɪŋ]	/ʔ'sɪpɪŋ/	'seated next to each other'
labis	[ʔ'labɪs]	/ʔ'labɪs/	'excessive'
istupado	[ɪstu'padoh]	/ɪstu'padoh/	'a dish'
kaniya	[kani'jah]	/kani'jah/	'his or her'
baling	[ʔ'balɪŋ]	/ʔ'balɪŋ/	'turn'
daing	[ʔ'daɪŋ]	/ʔ'daɪŋ/	'dried fish'

dormitoryana $\left[\text{dormitor}'\text{yanah} \right] / \text{dormitor}'\text{yanah} /$ 'female
 resident of a dormitory'
 mahiya $\left[\text{'mahiyah} \right] / \text{'mahiyah} /$ 'magic'

The four allophones of /i/ are in completely non-contrastive distribution, partially in free variation and partially in complementary distribution.

/u/. The phoneme /u/ is best considered next because of the similarity of its allophonic alignment to that of /i/. /u/ shows three allophonic variants: $\left[\text{u} \right]$, $\left[\text{u}^* \right]$, and $\left[\text{u}_\epsilon \right]$. These allophones have distributions similar with those of /i/.

(a) $\left[\text{u} \right]$ is a high tense rounded vowel under stress, except in a final syllable.

pugad	$\left[\text{'pugad} \right]$	$/ \text{'pugad} /$	'nest'
pula	$\left[\text{'pula}' \right]$	$/ \text{'pula}' /$	'adverse criticism'
puri	$\left[\text{'purih} \right]$	$/ \text{'purih} /$	'honor'
tunay	$\left[\text{'tunay} \right]$	$/ \text{'tunay} /$	'true'
kunat	$\left[\text{'kunat} \right]$	$/ \text{'kunat} /$	'resiliency'
kupi	$\left[\text{ku}'\text{pi}' \right]$	$/ \text{ku}'\text{pi}' /$	'folded'
buhawi	$\left[\text{'buhawih} \right]$	$/ \text{'buhawih} /$	'waterspout'
buho	$\left[\text{'buho}' \right]$	$/ \text{'buho}' /$	'a species of bamboo'

bunot	⟦bunot⟧	/'bunot/	'uprooting'
dukot	⟦dukot⟧	/'dukot/	'kidnapping'
dulang	⟦dulaŋ⟧	/'dulaŋ/	'low table'
gulok	⟦gulok⟧	/'gulok/	'bolo'
sugo	⟦sugo'⟧	/'sugo'/	'delegate'
sulat	⟦sulat⟧	/'sulat/	'letter'
hugis	⟦hugis⟧	/'hugis/	'shape'
mulawin	⟦mulawin⟧	/'mulawin/	'molave tree'
musika	⟦musikah⟧	/'musikah/	'music'
numero	⟦numeroh⟧	/'numeroh/	'number'
nguso	⟦ŋuso'⟧	/'ŋuso'/	'the labial circle'
lugay	⟦lugay⟧	/'lugay/	'fallen off'
ruta	⟦rutah⟧	/'rutah/	'route'
yumi	⟦yumɪ'⟧	/'yumi'/	'tenderness'

(b) ⟦u*⟧ is a lower high back tense rounded vowel, slightly raised under stress in a final syllable. It is in free variation with ⟦u⟧ after a labial consonant.

uguk	⟦u'gu*k⟧	/'uguk/	'stupid'
puso	⟦pu*so'⟧	/'puso'/	'heart'
putik	⟦putɪk⟧ or ⟦pu*tik⟧	/'putik/	'mud'
tugun	⟦tu'gu*n⟧	/'tu'gun/	'reply'
tayud	⟦ta'yu*d⟧	/'ta'yud/	'fabric'
krus	⟦kru*s⟧	/'krus/	'cross'

kuyum	⟦ku'yu*m⟧	/ku'yum/	'closed'
balun	⟦ba'lu*n⟧	/ba'lun/	'balloon'
bambu	⟦bam'bu*h⟧	/bam'buh/	'club or cudgel'
baul	⟦ba''u*1⟧	/ba''ul/	'chest'
bukas	⟦'bu*kas⟧	/'bukas/	'tomorrow'
bukud	⟦bu'ku*d⟧	/bu'kud/	'separate'
gulgul	⟦gul'gu*1⟧	/gul'gul/	'by-product'
suksok	⟦suk'su*k⟧	/suk'suk/	'inserted in a scabbard'
sumpong	⟦sum'pu*ŋ⟧	/sum'puŋ/	'whim'

(c) ⟦u̠⟧ a high back lax rounded vowel varies freely with lower high back lax rounded ⟦u̠̠⟧ under weak stress except in final syllables.

puntas	⟦p̠un'tas⟧	/pun'tas/	'lace'
pusakal	⟦p̠usa'kal⟧	/pusa'kal/	'completely addict- ed'
puthaw	⟦p̠ut'haw⟧	/put'haw/	'small axe'
tugnas	⟦t̠ug'nas⟧	/tug'nas/	'melted'
tundo	⟦t̠un'do'⟧	/tun'do'/	'prick'
kutob	⟦k̠u'tob⟧ or ⟦ku'tob⟧	/ku'tob/	'pulsation'
bubong	⟦b̠u'boŋ⟧	/bu'boŋ/	'roof'
bugnos	⟦b̠ug'nos⟧ or ⟦bug'nos⟧	/bug'nos/	'disen- tangle'

bukal	[b̄u'kal]	/bu'kal/	'spring'
durog	[d̄u'rog] or [du'rog]	/du'rog/	'crushed to pieces'
gukgok	[ḡuk'gok] or [guk'gok]	/guk'gok/	'grunt of pigs'
gulugod	[ḡulu'god] or [gulu'god]	/gulu'god/	'spine'
gunting	[ḡun'tiŋ]	/gun'tiŋ/	'scissors'
gupit	[ḡu'pit]	/gu'pit/	'cut'
subyang	[s̄ub'yaŋ]	/sub'yaŋ/	'splinter'
sumbat	[s̄um'bat]	/sum'bat/	'reproof'
supling	[s̄up'liŋ]	/sup'liŋ/	'progeny'
suson	[s̄u'son]	/su'son/	'second layer'
hungkoy	[h̄uŋ'koy]	/huŋ'koy/	'winnowing bellows'
muntik	[m̄un'tik]	/mun'tik/	'almost'
musmos	[m̄us'mos]	/mus'mos/	'immature of mind'
lumpiya	[l̄umpi'ya]	/lumpi'ya'/	'meat and vegetables packed in starch wrapper'
lunot	[l̄u'not]	/lu'not/	'overripe'
lupig	[l̄u'pig]	/lu'pig/	'vanquished'

In final syllables /u/ alternates morphophonemically with /o/ more frequently and regularly than does /i/ with /e/.

/a/. The phoneme /a/, the most common of Tagalog vowels, shows three allophonic variants: low central tense unrounded [a]; low front tense unrounded [a̠]; and higher low central lax unrounded [a*].

(a) Low central unround [a] occurs under stress except before /y/ and /w/ in the same syllable. It is the same under weak stress except when the weak stressed syllable is flanked on both sides by syllables of stronger stress, either [i] or [i].

iyak	[i'yak]	/i'yak/	'cry'
abala	[aba'lah]	/aba'lah/	'busy'
aklas	[ak'las]	/ak'las/	'strike'
agahas	[aga'has]	/aga'has/	'sound or noise'
paniki	[paniki']	/paniki'/	'bat'
parang	[paran]	/paran/	'meadow'
kasal	[ka'sal]	/ka'sal/	'wedding ceremony'
balangkas	[balan'kas]	/balan'kas/	'framework'
bukal	[bu'kal]	/bu'kal/	'natural; inherent'
dilag	[di'lag]	/di'lag/	'splendor'
gansal	[gan'sal]	/gan'sal/	'odd number'
sahod	[sahod]	/sahod/	'receptacle'
hagkan	[hag'kan]	/hag'kan/	'to kiss'
hiyas	[hi'yas]	/hi'yas/	'gem'
makina	[makinah]	/makinah/	'machine'

naririto	[^ˈ nariritoh]	/ˈnariritoh/	'here'
labak	[^ˈ labak]	/laˈbak/	'depression on the surface of the ground'
lamay	[^ˈ lamay]	/ˈlamay/	'night vigil'
lanta	[^ˈ lanˈtah]	/lanˈtah/	'withered'

(b) [^ˈa] low front tense unrounded under stress before /y/ and /w/ in the same syllable.

balangay	[^ˈ balaˈŋay]	/balaˈŋay/	'sudden death'
kampay	[^ˈ kamˈpay]	/kamˈpay/	'gesture of the hands'
galamay	[^ˈ galaˈmay]	/galaˈmay/	'legs of a crab'
kaway	[^ˈ kaˈway]	/kaˈway/	'waving of the hand'
lantay	[^ˈ lanˈtay]	/lanˈtay/	'pure'
mamay	[^ˈ maˈmay]	/maˈmay/	'nurse'
pangimay	[^ˈ paŋiˈmay]	/paŋiˈmay/	'anaesthesia'
balangaw	[^ˈ balaˈŋaw]	/balaˈŋaw/	'rainbow'
balaraw	[^ˈ balaˈraw]	/balaˈraw/	'dagger'
galaw	[^ˈ gaˈlaw]	/gaˈlaw/	'movement'
dalaw	[^ˈ dalaw]	/ˈdalaw/	'visit'
dilaw	[^ˈ diˈlaw]	/diˈlaw/	'yellow'
hilaw	[^ˈ hiˈlaw]	/hiˈlaw/	'uncooked'

/e/. Mid front tense unrounded [e*] varies freely with higher mid front tense unrounded [e] in all positions except before /y/. Before /y/ under any stress, slightly raised higher-mid front unrounded [e^] occurs as in [ke^y'lan] /key'lan/ 'when'; [me^y'ron] /mey'ron/ 'have'; [pe^y'netah] /pey'netah/ 'comb'. The difference in the tenseness of the allophones of this vowel under different stresses is not noticeable.

alero	[a'le*roh]	/'a'leroh/	'eaves'
pekas	[pe*kas]	/'pekas/	'freckles'
tela	[te*lah] or [telah]	/'telah/	'fabric'
termino	[te*rminoh] or [terminoh]	/'terminoh/	'term'
keso	[ke*soh]	/'kesoh/	'cheese'
ketong	[ke*toŋ]	/'ketonŋ/	'leprosy'
babae	[ba'ba'e*h]	/ba'ba'eh/	'woman'
depensa	[de'pe*nsah]	/de'pensah/	'defence'
dwende	[dwe*ndeh]	/'dwendeh/	'dwarf'
gera	[ge*rah]	/'gerah/	'war'
sebo	[se*boh]	/'seboh/	'tallow'
selang	[se*lanŋ]	/'selanŋ/	'delicacy'
heko	[he*koh]	/'hekoh/	'dark sauce'
hepe	[he*peh]	/'hepeh/	'chief'
hero	[he*roh]	/'heroh/	'brand'

mediko	$\angle \text{'me}^* \text{dikoh} \angle$	$/\text{'medikoh}/$	'physician'
metodo	$\angle \text{'me}^* \text{todoh} \angle$	$/\text{'metodoh}/$	'method'
metro	$\angle \text{'me}^* \text{troh} \angle$	$/\text{'metroh}/$	'meter'
letra	$\angle \text{'le}^* \text{trah} \angle$	$/\text{'letrah}/$	'letter'
reberebe	$\angle \text{'re}^* \text{birebih} \angle$	$/\text{'rebirebih}/$	'hastily'

Tagalog vowels /i/ and /e/ are phonemes and at the same time allophones of the other half of the pair. In the Tagalog words $\angle \text{'mesah} \angle$ 'table' and $\angle \text{'misah} \angle$ 'mass', /e/ and /i/ are distinct phonemes since their alternation produces a difference in meaning. But in many cases the alternation of /e/ and /i/ does not make any difference in meaning. The words $\angle \text{'dinih} \angle$ and $\angle \text{'dineh} \angle$ meaning 'here' are both understood to mean 'here' and can be used interchangeably, in the same way as $\angle \text{'la}^* \text{lakih} \angle$ or $\angle \text{'la}^* \text{lakeh} \angle$ would not make any difference to a Tagalog speaker. In this particular case /e/ and /i/ are allophones in free variation of the phonemes /i/ and /e/.

$\angle \text{o} \angle$. The allophones of this phoneme are not phonologically predictable. Mid back tense rounded $\angle \text{o}^* \angle$ and higher low back tense rounded $\angle \text{ɔ} \angle$ are in free variation under any stress.

ubos	$\angle \text{'u}^* \text{bo}^* \text{s} \angle$	$/\text{'u}^* \text{bos}/$	'all eaten'
------	--------------------------------------------------	----------------------------	-------------

ulol	⟨'u'lol⟩	/u'lol/	'crazy'
usbong	⟨'us'boŋ⟩	/us'boŋ/	'sprout'
pohas	⟨'pohas⟩	/pohas/	'sheet'
posporo	⟨'po*spəroh⟩	/posporoh/	'match'
pulo	⟨pu'lo*⟩	/pu'lo'/	'island'
tokwa	⟨'to*kwah⟩	/tokwah/	'pressed soy-bean'
topo	⟨'to*pəh⟩	/topoh/	'call for time out'
kolera	⟨'ko*lerah⟩	/kolerah/	'cholera'
komika	⟨'komikah⟩	/komikah/	'comic'
baluktot	⟨baluk'to*t⟩	/baluk'tot/	'curved'
balugbog	⟨balug'bog⟩	/balug'bog/	'nape of fowls'
bapor	⟨ba'po*r⟩	/ba'por/	'ship'
bola	⟨'bo*lah⟩	/bolah/	'ball'
borlas	⟨'borlas⟩	/borlas/	'tassel'
doon	⟨do'ɔn⟩	/do'on/	'there'
sobre	⟨'sobreh⟩	/sobreh/	'envelope'
molde	⟨'moldeh⟩	/moldeh/	'mold'
nito	⟨ni'to*h⟩	/ni'toh/	'of this'
ninuno	⟨ni'nuno*⟩	/ni'nuno'/	'ancestor'
noo	⟨no'ɔh⟩	/no'oh/	'forehead'
lona	⟨'lonah⟩	/lonah/	'canvas'
look	⟨lo'ɔk⟩	/lo'ok/	'bay'
lote	⟨'loteh⟩	/loteh/	'parcel of land'
ronda	⟨'ro*ndah⟩	/rondah/	'patrol'

Minimal contrasts among all the vowels of Tagalog are abundant. A few involving contrast of /o/ with one of the vowels are listed below:

∠'bote <u>h</u> ∠	/'boteh/	'bottle'	∠'bot <u>ch</u> ∠	/'botoh/	'vote'
∠'pala <u>h</u> ∠	/'palah/	'shovel'	∠'palo <u>h</u> ∠	/'paloh/	'mast'
∠'laha <u>d</u> ∠	/'lahad/	'opening'	∠'laho <u>d</u> ∠	/'lahod/	'mucus- like substance'
∠'hila <u>h</u> ∠	/'hilah/	'pull'	∠'hilo <u>h</u> ∠	/'hiloh/	'dizzi- ness'
∠da'la <u>h</u> ∠	/da'lah/	'bring'	∠da'lo <u>h</u> ∠	/da'loh/	'attend- ance'
∠'kasa <u>h</u> ∠	/'kasah/	'firm'	∠'kaso <u>h</u> ∠	/'kasoh/	'case in court'
∠'kopa <u>h</u> ∠	/'kopah/	'cup'	∠'kopo <u>h</u> ∠	/'kopoh/	'all taken'
∠'baso <u>h</u> ∠	/'basoh/	'glass'	∠'buso <u>h</u> ∠	/'busoh/	'sea diver'
∠'haba <u>h</u> ∠	/'habah/	'while'	∠'habo <u>h</u> ∠	/'haboh/	'tem- porary'
∠'gala <u>s</u> ∠	/'galas/	'of taste'	∠'galo <u>s</u> ∠	/'galos/	'scratch'
∠bu'ni <u>h</u> ∠	/bu'ni'/	'toothless'	∠bu'no <u>h</u> ∠	/bu'no'/	'skull'
∠'hulo <u>h</u> ∠	/'hulo'/	'source of a stream'	∠'hula <u>h</u> ∠	/'hula'/	'guess'

Sub-minimal contrasts are also found in Tagalog as illustrated below:

[^hpihoh] /^hpihoh/ 'fixed' [^hpaho'] /^hpaho'/ 'one of
the mango variety'

[lako] /'lako/ 'merchan- [lokəh] /'lokəh/ 'crazy'
dise being peddled'

[ˈdayəh] /ˈdayəh/ 'stranger' [ˈdayə] /ˈdayə/ˈdeceit'

[gu'lon] /gu'lon/ 'rolling' [ˈgulan] /ˈgulan/ 'age'

THE TAGALOG DIPHTHONGS

The vowels of Tagalog are classified as simple vowels and diphthongs. The simple vowels are those pronounced with the vocal organs remaining more or less in one position throughout the utterance of the vowel sound.

A diphthong is defined as a binary nucleus that functions like a simple vowel. They are complex vowels made up of simple vowels gliding into /y/ or /w/ in the same syllable. The diphthongs found in Tagalog are /ey, ay, oy, uy, aw, iw/.

The diphthong /uy/ in unstressed position may take a lower variant /υ/. In most unstressed syllables in rapid speech, Tagalog /ay/ within phrases alternates with /ey/, sometimes with /e/. In the production of

Tagalog /oy/, the tongue starts slightly higher than for /o/ and normally moves up to the position for /y/.

	<u>Front</u>	<u>Central</u>	<u>Back</u>
High	iw		uy
Mid	ey		oy
Low		ay aw	

FIGURE 4

Tagalog Diphthongs

The Tagalog diphthongs (shown in schematic form in Figure 4) are illustrated in the following examples:

sisiw	/'sisiw/	'chick'
giliw	/'giliw/	'darling'
baliw	/ba'liw/	'crazy'
reyna	/'reynah/	'queen'
may	/mey/	'there is, are'
peyneta	/pey'netah/	'shell comb'
kaylan	/'keylan/ or /'kelan/	'when'
tayka	/'teykah/ or /'tekah/	'wait'
inay	/'i'nay/	'mama'
bahay	/'bahay/	'house'

pugay	/ˈpugay/	ˈto salute or greet
suway	/suˈway/	ˈdisobedience
taglay	/tagˈlay/	ˈborne
sakay	/saˈkay/	ˈpassenger
sabaw	/saˈbaw/	ˈbroth
hilaw	/hiˈlaw/	ˈuncooked
hikaw	/ˈhikaw/	ˈearrings
gusilaw	/guˈsilaw/	ˈeyeshade
bingaw	/biˈŋaw/	ˈnotch
silaw	/siˈlaw/	ˈglare
hoy	/hoy/	ˈan answer to a call
luyloy	/luyˈloy/	ˈhanging loosely
baboy	/ˈbaboy/	ˈpig
biloy	/ˈbiloy/	ˈdimples
siyukoy	/siˈyukoy/	ˈmerman
aruy	/ˈaˈruy/	ˈouch
kasuy	/kaˈsuy/	ˈcashew

THE TAGALOG CONSONANTS

Like those of most other languages, the consonants of Tagalog can be grouped with equal ease into either "orders" or "series". The basis of the grouping, in other words, can be either the point or the manner of articulation. The Tagalog consonantal system lends

itself to arrangement into five orders -- bilabial, dental, palatal, velar, and glottal -- and seven series -- voiceless stop, voiced stop, nasal, fricative, trill, and semivowel.

As in the case of the vowels, a chart can be set up representing the relative positions of the articulations of the various consonants (Figure 5). In such a chart, the horizontal dimension represents the various points of articulation; and the vertical dimension, the different manners of articulation, beginning with stops and ending with semivowels. Voicing may be considered as a third dimension, normally shown by the symbols *vl* for voiceless sounds, and *vd* for voiced sounds.

Voiceless Stops. The voiceless stops of Tagalog are /p/, /t/, and /k/. The most common variant of each is an unaspirated tense stop - bilabial in the case of /p/, dental in the case of /t/, and velar in that of /k/. Tagalog /p, t, k/ are unaspirated, whether in stressed or unstressed syllables. The allophones have unrestricted distribution. The phoneme /k/ shows one allophone: a back velar voiceless spirant, occurring intervocalically. The intervocalic condition is met wherever the flanking segmental phonemes are vowels, regardless of the presence of open juncture between

Manner of		Point of Articulation				
Articulation		Labial	Dental	Palatal	Velar	Glottal
Stops	vl	p	t		k	'
	vd	b	d		g	
Fricative	vl		s			h
Nasals	vd	m	n		ŋ	
Lateral	vd		l			
Trill	vd		r			
Semi-Vowels	vl	w		y		

FIGURE 5

Consonant Chart of Tagalog

one of the vowels and /k/. The Tagalog voiceless stops occurs in all three positions in words as illustrated below:

pikot	/'pikot/	'besieged; ambush'
pekas	/'pekas/	'freckles'

pako	/'pako'/	'nail'
paha	/'pahah/	'girdle; band'
poso	/'posoh/	'dug-out'
pugon	/pu'gon/	'stove'
pungay	/'puṅay/	'lambency of the eyes'
puri	/'purih/	'honor'
posporo	/'posporoh/	'match'
pumpon	/pum'pon/	'bouquet'
hagap	/'hagap/	'general notion'
salap	/'salap/	'small fishing net'
lupalop	/lu'palop/	'any place or land'
tibay	/'tibay/	'enduring strength'
timog	/'timog/	'south'
tema	/'temah/	'theme'
tabas	/'tabas/	'style of cut'
tali	/'tali'/	'twine'
tabo	/'tabo'/	'coconut shell scoop'
tomo	/'tomoh/	'volume'
tore	/'toreh/	'tower'
tukod	/'tukod/	'prop; bracket; support'
tulog	/'tulog/	'sleep'
tiktik	/tik'tik/	'detective'
tugtug	/tug'tog/	'sound of music'
lapat	/'lapat/	'well adjusted'

balat	/ba'lat/	'skin'
kamot	/'kamot/	'scratch'
kabag	/ka'bag/	'gas pain'
kola	/'kolah/	'glue'
kupas	/ku'pas/	'discolored'
kikil	/'kikil/	'file'
kimkim	/kim'kim/	'held in the fist'
kadkad	/kad'kad/	'spread out'
kaka	/'kakah/	'eldest uncle or aunt'
kakak	/'kakak/	'cackling of hens, ducks'
kokak	/'kokak/	'cry of the frog'
kugkog	/kug'kog/	'echo of sound through water'
salaksak	/salak'sak/	'puncture'
hayok	/ha'yok/	'weak with hunger'
lagok	/la'gok/	'gulp'

Voiced Stops. /b, d, g/ are voiced lenis unaspirated stops. The allophones [b], [d], and [g], except for the vibration of the vocal bands throughout their articulation, correspond in position to their voiceless counterparts. /b/ is bilabial, /d/ is dental and /g/ velar. The articulation of /g/ is not as far back as /k/. All the three occur initially, medially, and finally.

The phoneme /d/ is rather rare intervocalically, because of frequent morphophonemic alternation with /r/ in that position. /d/ and /r/ alternate freely after pause or open juncture in almost all native words:

sa daan /sa 'da'an/ or /sa 'ra'an/ 'on the road';
 dadating /'dádatiŋ/ or /'daratiŋ/ 'coming'; padaan
 /pa'da'an/ or /pa'ra'an/ 'may I pass'. In some words formed by affixation, the initial [d] of the root changes to [r] when the prefix ends with a vowel. Similarly, final [d] becomes [r] when the suffix added starts with a vowel.

Prefix

[dító] /'dítóh/	'here'	:	[pa'ritóh] /pa'ritóh/	
				'to come here'
[di'lag] /di'lag/	'splendor'	:	[mari'lag] /mari'lag/	
				'lustrous beauty'
[damót] /'damót/	'stinginess'	:	[ma'ramó*t] /ma'ramót/	
				'stingy'
[dag'dag] /dag'dag/	'addition'	:	[parag'dag] /parag'dag/	
				'ask for an addition'

Suffix

[man'híd] /man'híd/	'numbness'	:	[man'hirin] /man'hirin/	
				'get numb'
[palad] /'palad/	'luck'	:	[pala'rin] /pala'rin/	
				'to be lucky'

[pa'lakad] /pa'lakad/ 'policy' : [pala'karin] /pala'karin/
 'allowed to go'

The /b, d, g/ series is illustrated below:

bikas	/'bikas/	'posture'
bihon	/'biho*n/	'white rice noodles'
benta	/'bentah/	'sales'
batak	/'batak/	'pull'
basag	/ba'sag/	'broken'
babae	/ba'ba'eh/	'woman'
babag	/'babag/	'collision; impact'
baboy	/'baboy/	'pig'
talab	/ta'lab/	'cutting through'
igib	/'i'gib/	'a trip of water carrying'
dikin	/di'kin/	'pot support'
diga	/'digah/	'idle talk'
dako	/'dakoh/	'direction'
dali	/'dali'/	'inch'
dote	/'doteh/	'dowry'
dulo	/'duloh/	'end'
dagdag	/dag'dag/	'addition'
tadyak	/tad'yak/	'backward kick'
tadyang	/tad'yan/	'ribs'
tabad	/ta'bad/	'process of blood letting'
tadtad	/tad'tad/	'minced'

giling	/'giliŋ/	'grinding'
gahi	/'gahi'/	'mark of breakage'
gala	/ga'la'/	'having the wanderlust'
gatas	/'gatas/	'milk'
gatong	/'gatoŋ/	'fuel'
goto	/'gotoh/	'ox or cow tripe'
lagi	/'lagi'/	'always'
haging	/'hagiŋ/	'buzzing sound'
hagis	/'hagis/	'throw; cast'
hagad	/'hagad/	'pursuer'
hagok	/'hagok/	'snore'
lagom	/'lagom/	'all-inclusive'
bagbag	/bag'bag/	'broken up'
lapag	/la'pag/	'the space below'
sipag	/'sipag/	'industriousness'
matyag	/mat'yag/	'to observe'

Some minimal contrasts between the voiced stops and their voiceless counterparts follow:

/p/			/b/	
/'pahid/	'wiping off'	vs	/'bahid/	'stain'
/'paliŋ/	'slope'	vs	/'baliŋ/	'turn'
/'pala'/	'grace'	vs	/'bala'/	'threat'
/pa'nas/	'tiredness'	vs	/ba'nas/	'sultriness'
/paŋ'law/	'gloomy'	vs	/baŋ'law/	'first rinsing'

/pan'tay/ 'same height'	vs	/ban'tay/ 'guard'
/t/		/d/
/ta''an/ 'long lines	vs	/da''an/ 'way'
for inland water-		
fishing'		
/ta'ga'/ 'incision'	vs	/da'ga'/ 'rat'
/ta'has/ 'direct'	vs	/da'has/ 'force'
/ta'kip/ 'cover'	vs	/da'kip/ 'arrested'
/'takoh/ 'stopper'	vs	/'dakoh/ 'direction'
/ta'moh/ 'acquire'	vs	/da'moh/ 'grass'
/pan'tay/ 'same height'	vs	/pan'day/ 'blacksmith'
/'hilot/ 'midwife'	vs	/'hilod/ 'scrubbing of
		skin'
/k/		/g/

/'kaya/ 'able'	vs	/'gaya/ 'imitation'
/'balak/ 'plan'	vs	/'balag/ 'trellis'
/'kayas/ 'act of shaving	vs	/'gayas/ 'inlaid work'
off'		
/ka'hol/ 'bark of the	vs	/ga'hol/ 'lacking in time'
dog'		
/ka'pok/ 'cotton'	vs	/ga'pok/ 'rotten inside'

Nasals. The nasal series /m/, /n/, and /ŋ/ are voiced nasal continuants, that is, in their production the air-stream escapes freely through the nose without

interruption or audible friction. /m/ is bilabial. It is produced with the lips forming a closure; the soft palate is lowered; the tongue generally anticipates or retains the position of the adjacent vowel. /n/ is dental. It is produced with the tip of the tongue against the back of the upper teeth. /ŋ/ is velar. A closure is formed in the mouth between the back of the tongue and the velum, adding the resonance of the nasal cavity to that of the pharynx and that small part of the mouth chamber behind the velar closure. /m/, /n/, and /ŋ/ distribute similarly in all three positions, initial, medial, and final. When in final position, they are all unreleased. Illustrations follow:

madla	/mad'la'/	'all; everyone'
maginoo	/'magino'oh/	'gentleman'
impok	/im'pok/	'savings'
malikmata	/malik'matah/	'transfiguration'
mamad	/ma'mad/	'softened and swollen'
lagom	/'lagom/	'all-inclusive'
namnam	/nam'nam/	'savor'
ninuno	/ni'nuno'/	'ancestor'
naman	/na'man/	'also; too'
nunal	/nu'nal/	'mole'
munti	/mun'ti'/	'small'

lalamunan	/lala'munan/	'throat'
salon	/sa'lon/	'large hall'
ngiki	/'ŋikih/	'chills'
ngalan	/'ŋalan/	'name'
ngalot	/ŋa'lot/	'crushed by chewing'
ngitngit	/ŋit'ŋit/	'rage; fury'
ngongo	/'ŋoŋo'/	'one who speaks as if the nose is closed'
nguynguy	/ŋuy'ŋuy/	'sulky'
daing	/da'in/	'lamentation'
kambing	/kam'biŋ/	'goat'
ningning	/niŋ'niŋ/	'brilliance'
lalang	/la'laŋ/	'ruse; trick'
lagunlong	/lagun'loŋ/	'rumbling sound of fall- ing waters'
sakong	/'sakoŋ/	'heel bone'

Assimilation. Tagalog nasals /m/, /n/, and /ŋ/ alternate before labial stops, dental stops, and velar stops. Thus, any of the nasal consonants may tend to become /m/ before /p, b/; /n/ before /t, d, l, r, s/ and /ŋ/ before /k, g, h, y, w/. Assimilations may occur within words and word boundaries but are more generally observed in the former case. Morphemes /aŋ/ and /'baro'/

morphophonemically becomes /am'baro'/ 'the dress'; morphemes /bu'kaŋ/ and /bi'big/ becomes /bukambi'big/ 'favorite expression'; morphemes /la'biŋ/ and /dala'wah/ becomes /labindala'wah/ 'twelve'.

Lateral. The phoneme /l/ is a voiced lateral, articulated with the tongue tip touching the alveolar ridge. The tongue is relatively straight and flat from the tip to the root. /l/ is substantially the same whether alone with a vowel or forming a cluster with consonants like, /p, b, k, g/ in loan words. It occurs in all three positions in words. They are illustrated below. The Tagalog /l/ is of a "light", front resonance type:

labak	/la'bak/	'depression on the surface of the ground'
labanos	/laba'nos/	'radish'
lakas	/la'kas/	'strength'
lagim	/la'gim/	'gloom'
lahok	/la'hok/	'mixture'
lalim	/l'alim/	'depth'
klima	/k'limah/	'climate'
dalaga	/da'lagah/	'unmarried woman'
lalaki	/la'lakih/	'man'

plaka	/'plakah/	'record'
klase	/'klaseh/	'class'
blakbord	/'blakbord/	'blackboard'
areglado	/arig'ladoh/	'fixed'
globo	/'globoh/	'globe'
bloke	/'blokeh/	'block'
glorya	/'gloryah/	'glory'
tuloy	/tu'loy/	'come in'
kalye	/'kalyeh/	'street'
mahal	/ma'hal/	'expressive'
kasal	/ka'sal/	'wedding'
bawal	/'bawal/	'forbidden'

Trill. /r/ is a voiced apico-alveolar trill. The tip of the tongue is raised and lightly touches the alveolar ridge as the out-going breath stream sets it into momentary vibration. The soft palate is raised. At the beginning of stressed syllables, at the end of words, and at the end of syllables followed by another syllable starting with a consonant, /r/ taps the alveolar ridge producing a sound that is a little longer and a more noticeable vibration. Preceding a short unstressed syllable, it may be little more than a single tap. In isolated Tagalog words, it occurs mostly in medial position, never initially or finally, except in proper names and

loan words. In consonant clusters, /r/ is generally a trill, that is, a succession of taps by the tip of the tongue on the alveolar ridge. The phoneme is illustrated below:

riles	/ˈriles/	ˈrails of train
regalo	/reˈgaloh/	ˈgift
regla	/ˈrêglah/	ˈrule
rehas	/ˈrehas/	ˈrailing
reto	/ˈretoh/	ˈchallenge
raha	/ˈrahah/	ˈrajah
dril	/ˈdril/	ˈstrong cloth
krimen	/ˈkrimen/	ˈcrime
kris	/ˈkris/	ˈMalayan dagger
prito	/ˈpritoh/	ˈfried
kapre	/ˈkapreh/	ˈevil genie
premyo	/ˈpremyoh/	ˈprize
preno	/ˈprenoh/	ˈbrakes
libre	/ˈlibreh/	ˈfree; gratis
sobre	/ˈsobreh/	ˈenvelope
reserba	/riˈserbah/	ˈreserve
drama	/ˈdramah/	ˈplay
grado	/ˈgradoh/	ˈclass mark
dragon	/draˈgon/	ˈdragon
trapo	/ˈtrapoh/	ˈcleaning rug

grano	/ˈgranoɦ/	'grain'
trahe	/ˈtraheɦ/	'suit of clothes'
litro	/ˈlitroɦ/	'liter'
torta	/ˈtortah/	'full-sized omelet'
ruler	/ˈruler/	'ruler'
senador	/sinaˈdor/	'senator'
mayor	/maˈyor/	'elder'

Semivowels. Tagalog has two semivowels or glides, /y/ and /w/. The phoneme /y/ is produced with the front part of the tongue raised toward the hard palate. The lips are unrounded or in a neutral position depending upon the following sound. The velum is raised. It occurs at the beginning and middle of words in the syllable-initial position, and generally only before [a], [o], and [u]. In loan words it occurs before [e].

yabag	/yaˈbag/	'sound of footfall'
yabo	/yaˈboɦ/	'fruit flesh'
yakal	/yaˈkal/	'lumber'
yamot	/yaˈmot/	'annoyance'
yapos	/yaˈpos/	'embrace'
yoyo	/ˈyoyoˈ/	'toy'
yuko	/yuˈkoˈ/	'with bowed head'
yugto	/yugˈtoˈ/	'division or act in a stage play'

yupi	/yu'pi'/	'dent'
yungib	/yu'ŋib/	'cave'

Loan Words

yema	/'yemah/	'yolk'
yero	/'yeroh/	'galvanized iron'
yeso	/'yesoh/	'chalk'
yelo	/'yeloh/	'ice'

/w/ is produced with the lips rounded and the back of the tongue arched toward the velum which is raised. /w/ occurs only before [a] and [i] at the beginning and in the middle of words, and before [e] in loan words. Illustrations follow.

wika	/'wika'/	'language'
tawid	/'tawid/	'crossing' or act of crossing'
wisik	/wi'sik/	'sprinkled softly'
wilig	/wi'lig/	'water sprinkled on cloth'
windang	/win'daŋ/	'torn to shreds'
welga	/'welgah/	'strike'
tawa	/'tawah/	'laugh'
wawa	/'wawa'/	'mouth of a river'

tawad	/ˈtawad/	'forgiveness'
tawag	/ˈtawag/	'call; summons'
wagas	/waˈgas/	'pure'
wahak	/waˈhak/	'rent or ripped longi- tudinally'
wakas	/waˈkas/	'end'
wala	/waˈla/	'none'
wari	/ˈwari/	'it seems'
wasto	/wasˈto/	'correct'

Fricatives. Tagalog has two fricative phonemes: /s/ and /h/. In the articulation of /s/, the tongue blade is raised toward the alveolar ridge, the sides of the tongue come into contact with the gums, but the blade is free. /s/ may therefore be characterized as a shallow-groove alveolar fricative. /s/ is unrestricted in its distribution as illustrated below:

sabad	/saˈbad/	'interruption in some- one's speech'
sabaw	/saˈbaw/	'broth'
saglit	/sagˈlit/	'instant moment'
sakdal	/sakˈdal/	'very'
sakim	/saˈkim/	'avaricious; selfish'
pasa	/paˈsah/	'bruise'

sasa	/sa'sah/	'nipa palm'
pasag	/pa'sag/	'wiggle'
tasak	/'tasak/	'stab with a poniard'
labas	/la'bas/	'outside'
paspas	/pas'pas/	'gust of wind'
tastas	/tas'tas/	'unstitched'

/h/ is a glottal fricative. The vocal bands do not vibrate but are brought close together. As the breath is exhaled, a slight frictional sound is audible. It occurs at the beginning, middle, and end of words.

habol	/'habol/	'hurry to overtake'
hagibis	/ha'gibis/	'rapidity'
halaw	/ha'law/	'selected'
hanip	/'hanip/	'chicken flea'
hangad	/ha'ŋad/	'purpose'
hapdi	/hap'di'/	'excruciating pain'
sahig	/sa'hig/	'floor'
pihikan	/pi'hikan/	'fastidious'
masahista	/masa'histah/	'masseur'
maharlika	/mahar'likah/	'noble'
paha	/'pahah/	'straw'
pahalaga	/pahala'gah/	'evaluation'
taho	/ta'hoh/	'ginger tea'

Glottal Stop /'/. In the production of the glottal stop the glottis between the vocal bands is tightly closed, stopping the air column coming from the lungs. The air pressure below the glottis is released by the sudden separation of the vocal bands. The glottal sound occurs at the beginning, within, or at the end of a word as the following examples show:

<u>Initially:</u>	ibig	/i'ibig/	'wish, want'
	aso	/i'asoh/	'dog'
	oras	/i'oras/	'hour'
<u>Medially:</u>	paa	/pa''ah/	'foot'
	saad	/sa''ad/	'stated'
	paano	/pa''anoh/	'how'
<u>Finally:</u>	hindi	/hin'di'/	'no; not'
	baha	/ba'ha'/	'flood'
	akma	/ak'ma'/	'fitted'

The glottal stop is distinctive in word-final position as shown by the minimal pairs below³:

/b'agah/	'glowing coal'	vs	/b'aga'/	'lungs'
/b'atah/	'bathrobe'	vs	/b'ata'/	'child'
/pi'lih/	'twisted'	vs	/pi'li'/	'selected'

³The orthographic form of these pairs is the same: baga, baga, etc.

/pu'tih/	'picking flow- ers by cutting'	vs	/pu'ti'/	'white'
/sa'lah/	'interwoven strips of bamboo'	vs	/sa'la'/	'broken'
/sa'loh/	'cupping support' from under'	vs	/sa'lo'/	'mechanical catch'

In a stream of speech the word-final glottal stop is generally weakened or lost, unless it is in sentence initial and final position. The loss of the glottal stop lengthens the vowel before it. The lengthened vowel often changes to a higher variant if it is /o/.

Umupo ka.	[ʔumu'pu kah]	/ʔumu'pukah/	'sit down'
Hindi na.	[hin'di nah]	/hin'dinah/	'never mind'
Uuwi siya.	[ʔu'u'wi si'yah]	/ʔu'u'wisiyah/	'he is going home'

CONSONANT CLUSTERS

Tagalog consonant clusters occur initially, medially, and finally. Their occurrence is mostly in loan words which have become an integral part of the language. The initial consonant clusters found in Tagalog are:

/pl, pr, pw, py, ts, tr, tw, ty, kl, kr, ky, bl, br, bw, by, dr, dy, gl, gr, gy, sw, sy, hw, hy, nw, ny, ŋy, lw,

ly, rw, ry/.

Examples of the clusters summarized above appear below:

/pl/	plaka	/'plakah/	'disk'
	plorera	/'plorerah/	'flower base'
/pr/	premyo	/'premyoh/	'prize'
	prenda	/'prendah/	'pledge'
/pw/	pwede	/'pwedeh/	'possible'
	pwesto	/'pwestoh/	'stall'
/py/	pyano	/'pyanoh/	'piano'
	pyansa	/'pyansah/	'bail'
/ts/	tsuper	/'tsuper/	'chauffeur'
	tseke	/'tsekeh/	'check'
/tr/	trahe	/'traheh/	'suit'
	trapo	/'trapoh/	'rug'
/tw/	twid	/'twid/	'straight'
	twerka	/'twerkah/	'nut'
/ty/	'tyan	/'tyan/	'belly'
	tyaga	/tya'ga'/	'enduring'
/kl/	klabo	/'klaboh/	'cloves'
	klase	/'klaseh/	'class'
/kr/	kris	/'kris/	'dagger'
	krema	/'kremah/	'cream'
/ky/	kyapo	/'kyapo'/	'water plant'

/bl/	bloke	/'blokeh/	'block'
	blusa	/'blusah/	'blouse'
/br/	braso	/'brasoh/	'arm'
	brilyo	/'brilyoh/	'lustre'
/bw/	bwag	/'bwag/	'demolished'
	bwis	/'bwis/	'tax'
/by/	bya	/'bya'/	'a kind of fish'
	byahe	/'byaheh/	'trip'
/dr/	dragon	/dra'gon/	'dragon'
	drama	/'dramah/	'drama'
/dy/	dyan	/'dyan/	'there'
	dyanitor	/'dyanitor/	'janitor'
/gl/	globo	/'globoh/	'globe'
	glorya	/'gloryah/	'glory'
/gr/	graba	/'grabah/	'gravel'
	grasa	/'grasah/	'grease'
/gy/	gyera	/'gyerah/	'war'
/sw/	swelas	/'swelas/	'sole'
	sweldo	/'sweldoh/	'salary'
/sy/	sya	/'syah/	'he or she'
/hw/	hwes	/'hwes/	'judge'
	hwisyo	/'hwisyoh/	'trial'
/hy/	hya	/'hya'/	'shame'
/nw/	nwebe	/'nwebeh/	'nine'

/ny/	nya	/'nyah/	'his or her'
/ɲy/	ɲyaw	/'ɲyaw/	'meow'
/lw/	lwag	/'lwag/	'spaciousness'
	lwalhati	/'lwal'hati'/	'glory'
/ly/	lyabeh	/'lyabeh/	'wrench'
/rw/	rweda	/'rwedah/	'wheel'
	rwina	/'rwinah/	'ruins'
/ry/	ryan	/'ryan/	'there'

The medial and final consonant clusters found in Tagalog are: /ks, ns, rd/. Illustrations follow:

/ks/	ekstra	/'ekstrah/	'extra'
	eksklusibo	/'eks'klusiboh/	'exclusive'
	ekskursiyon	/'ekskursi'yoh/	'excursion'
	ekspres	/'eks'pres/	'express'
	eksponente	/'ekspo'nenteh/	'exponent'
	eksplotasyon	/'eksplotas'yon/	'exploitation'
/ns/	instrumento	/'instru'mentoh/	'instrument'
	institusyon	/'institus'yon/	'institution'
	instruksiyon	/'instruksi'yoh/	'instruction'
	inspirasyon	/'inspiras'yon/	'inspiration'
	instalasyon	/'instalas'yon/	'installation'
	instinto	/'ins'tintoh/	'instinct'
	instituto	/'insti'tutoh/	'institute'

/rd/ kard /kard/ 'card'

SYLLABLE STRUCTURE

The syllable structure in Tagalog is /((C)CV(C))(C)/. The symbols enclosed in parenthesis may or may not occur. When two syllables are combined in a single word, the structure is /CV(C)CV/. The Tagalog syllable pattern has CV(C) structure where CV never occurs in final position. Thus, no utterance in Tagalog begins or ends with a vowel: /pra.'ne.lah/⁴ 'flannel', /ka.'tas/ 'juice', /'ba.lah/ 'bullet', /'lu.ha'/ 'tears', /'trak/ 'truck'.

The Tagalog syllable can be defined then as the domain of a single stress, may begin with a consonant or with a consonant cluster, and may end with not more than two consonants. It contains a single vowel and requires a final consonant in all final syllables. A single intervocalic consonant is always part of the syllable of the vowel that follows it: /'hu.la'/ 'guess', /la.'gok/ 'gulp', /'lo.teh/ 'parcel of land', /'si.noh/ 'who', /'si.neh/ 'cinema', /'tu.kod/ 'prop', /'u.tos/

⁴The dot on the baseline indicates syllable boundary. Word final /h/ and /'/ are dropped in utterance medial position.

'command', /'ka.tig/ 'outrigger', /bu.'kal/
'inherent'.

When one of the syllable clusters occurs intervocallically, the first consonant ends one syllable and the second begins the next. Thus /'ek'semah/ 'eczema' is syllabified /'ek.'se.mah/; /'ek'samen/ 'examination' becomes /'ek.'sa.men/; /'eksibis'yon/ 'exhibition' - /'ek.si.bis.'yon/; /'eksami'nadoh/ 'investigator' - /'ek.sa.mi.'na.doh/; /'ek'semted/ 'exempted' - /'ek.'sem.ted/.

Three or four consonant intervocalic sequences split into a syllable-final consonant cluster and a syllable-initial cluster or single consonant. Thus /'ekstrah/ 'extra' is syllabified /'eks.trah/; /'ekspres/ 'express' - /'eks.pres/; /'eksplos'yon/ 'explosion' - /'eks.plos.'yon/; /'ekspo'nenteh/ 'exponent' is syllabified /'eks.po.'nen.teh/. If two consonants that cannot form a cluster occur intervocallically, the first is syllable-final, the second syllable-initial: /bak'lad/ 'fish corral' - /bak.'lad/; /tag'hoy/ 'lament' - /tag.'hoy/; /bug'bog/ 'noisy clubbing' - /bug.'bog/; /sintam'lay/ 'lack of interest' - /sin.tam.'lay/.

When in word-formation affixes or reduplicative

syllables are added to a root, the syllable division is as in a simple word: /'ak'latan/ 'library' is syllabified /'ak.'la.tan/; /tak'buhan/ 'running a race' - /tak.'bu.han/; /'a'mihan/ 'north wind' - /'a.'mi.han/; /'inu'min/ 'drink' - /'i.nu.'min/; /'a'ak'yat/ 'will climb' - /'a.'ak.'yat/; /pa'pasok/ 'will go to school' - /pa.'pa.sok/.

When vowels would otherwise meet, they are separated by the non-distinctive intervocalic glottal stop: /ma'a'ari/ 'possible' is syllabified as /ma.'a.'a.ri/; /pa''alam/ 'good-bye' - /pa.'a.lam/; /ma'a'noh/ 'something indefinite which may not be understood between speakers' - /ma.'a.'noh/; /ga''anoh/ 'how much' - /ga.'a.noh/; /baba'eh/ 'female' - /ba.ba.'eh/.

When a word is doubled or when words come together in a phrase, the word division is maintained as a syllable division. Doubled words and compound words are similarly treated: /'a'kay'akay/ 'led by the hand', i.e. /'a.'kay.'a.kay/; /ba'kubako/ 'crooked', i.e. /ba.'ku.ba.ko'/; /'pataypatay/ 'sluggish', i.e. /'pa.tay.pa.tay/; /'bahay-kuboh/ 'small house' (compound of bahay 'house' and kubo 'small'), i.e. /'ba.hay.ku.boh/; /'a'nak'araw/ 'albino' (compound of anak 'offspring' and araw 'sun'), i.e. /'a.'nak.'a.raw/.

TAGALOG SUPRASEGMENTAL PHONEMES

In addition to the vowels and consonants, the inventory of elements that make up the pronunciation of the Tagalog and Pampango languages must include phonemes of stress, pitch, and juncture. The allophones of the vowel and consonant phonemes are the segments of sound which occur sequentially to make up morphemes and word-forms in the language uttered. The features of stress, pitch, and juncture, occur along with the vowels and consonants, often coinciding with or marking off longer stretches of speech. Stress, pitch, and juncture are so closely related that it is difficult to present one without discussing all three.

STRESS

A sound or syllable which is stressed is one in the articulation of which there is expended a relatively great effort and muscular energy.⁵ Tagalog has two degrees of stress: primary and weak. Primary stressed syllables are marked with the symbol /' / before the syllable; weak-stressed syllables are unmarked. Phonetically

⁵A. C. Gimson, An Introduction to the Pronunciation of English (London: Edward Arnold Publishers Ltd.), p. 217.

there is a third degree of stress, midway between primary and weak. This secondary degree of stress, which lacks phonemic status, is a conditioned variant of weak stress, occurring only in closed syllables not followed by juncture. The secondary accent has an intermediate degree of stress and ordinarily lacks the pitch-rise. Thus, the first syllable of /'batah/ 'robe' is strongly stressed and the first syllable of /bā'tah/ 'endure' has secondary stress: [ˌba'tah].

In Tagalog, one of the main components of stress is vowel length. A stressed vowel is pronounced longer than the same vowel unstressed. The position of the primary stress very often determines the meaning to be assigned to a word. The phonemic character of Tagalog stress may be demonstrated by such pairs as the following:

aso	/,'asoh/	'dog'	vs	aso	/,'a'soh/	'smoke'
kulob	/,'kulob/	'pro-	vs	kulob	/ku'lob/	'what-
		ducing more heat'				ever'
bilog	/,'bilog/	'round-	vs	bilog	/bi'log/	'round'
		ness'				
baba	/,'baba'/	'chin'	vs	baba	/ba'ba'/	'descent'
baga	/,'bagah/	'glow-	vs	baga	/ba'gah/	'particle
		ing coal'				used in questions'

batak	/'batak/	'pull'	vs	batak	/ba'tak/	'stretched'
buhay	/'buhay/	'life'	vs	buhay	/bu'hay/	'alive'
bukas	/'bukas/	'tomor-	vs	bukas	/bu'kas/	'open'
		row'				
dalit	/'dalit/	'slice'	vs	dalit	/da'lit/	'psalm'
galang	/'galan/	're-	vs	galang	/ga'lan/	'wrist'
		spectful'				
gulong	/'gulong/	'roll-	vs	gulong	/gu'lon/	'wheel'
		ing'				
sala	/'salah/	'error'	vs	sala	/sa'lah/	'interwoven
						strips of bamboo'
habol	/'habol/	'hurry	vs	habol	/ha'bol/	'closely
		to overtake'				attached'
liso	/'liso/	'simple'	vs	liso	/li'so/	'bewil-
						dered'
lakad	/'lakad/	'walk'	vs	lakad	/la'kad/	'bare-
						footed'

All Tagalog full-word bases have at least one strong-stressed syllable; the great majority have only one. Some Tagalog function words and affixes have strong stress, others weak. Except in a limited number of single-word utterances, strong stress in Tagalog seems to occur consistently in two places, the penultimate and the final syllables.

Verbs (roots)

saing	/ˈsaɪŋ/	'cook by steam'
tulog	/ˈtulog/	'sleep'

With prefix

magsaing	/magˈsaɪŋ/	'to cook'
matulog	/maˈtulog/	'go to sleep'

Proper names

Mario	/ˈmaryoh/	'name of a boy'
Santos	/ˈsantos/	'surname'

In some words, the strong stress occurs on the final syllable and when used in connected speech, these words usually are in pre-junctural position. Illustrations follow:

silá	/siˈlah/	'they'
kita	/kiˈtah/	'you and I'
magaspang	/magasˈpaŋ/	'coarse'
malakas	/malaˈkas/	'strong'
luglog	/lugˈlog/	'noodles dipped in boiling stock'
isda	/ˈisˈdaˈ/	'fish'
maglako	/maglaˈkoˈ/	'peddle around'

magsuklay /magsuk'lay/ 'to comb'

If a syllable has a word stress in certain classes of words and a glottal stop is lost in the phrase, the whole group is often spoken with one primary word-stress. The loss of the glottal stop is compensated for by the lengthening of the vowel before it.

Susi ito. /'susih 'itoh/ 'This is a key.'

Bata siya. /'batah siyah/ 'He is young.'

Puso niya. /'pusoh niyah/ 'Her heart.'

PITCH

Pitch is often closely correlated with stress. Pitch involves the musical tone of the voice and the points at which changes in this tone occur. Tagalog has three contrasting levels of pitch: low, mid, and high, or /1/, /2/, and /3/. The beginning of a sentence or an isolated phrase is arbitrarily marked with /2/ unless the first syllable carries primary stress. Pitch /3/ is coincident with primary stress in most phonemic phrases. The end unit of a phonemic stress pattern may come down to /1/, as in a declarative statement, or it may end in pitch /2/ or /3/, as in questions or series.

A very common pitch pattern in Tagalog is /231/, illustrated by sentences like the following: (The period

at the end of the phonemic phrase indicates the end of phonation. Pitch levels are schematically shown in the transcription by an overlining in which a higher line indicates a higher pitch).

Mataba si Linda. /²mata'ba' ²si ³'lindah./ ¹'Linda is stout.'

_____↓⁶
mata'ba' si 'lindah.

Maputi si Mario. /²mapu'ti' ²si ³'maryoh./ ¹'Mario is fair-complexioned.'

_____↓
mapu'ti' si 'maryoh.

Kumakain si Boni. /²ku'maka'in ²si ³'bonih./ ¹'Boni is eating.'

_____↓
ku'maka'in si 'bonih.

Patterns of this kind have a discernible meaning, though this meaning is often not as obvious and concrete as the lexical meaning of words. Nonetheless, the only

⁶For the symbol /↓/ etc., see p. 67.

linguistic feature that marks the above utterances as statements and the following ones as questions is a phonological one, namely the pitch pattern:

Mataba si Linda? ²/mata'ba' ¹si 'lindah? ³/ 'Is Linda stout?'

_____↑
mata'ba' si 'lindah?

Maputi si Mario? ²/mapu'ti' ¹si 'maryoh? ³/ 'Is Mario fair-complexioned?'

_____↑
mapu'ti' si 'maryoh?

Kumakain si Boni? ²/ku'maka'in ¹si 'bonih? ³/ 'Is Boni eating?'

_____↑
ku'maka'in si 'bonih?

Yes/No Questions. Questions answerable by 'yes' or 'no' in Tagalog take one of the following pitch patterns:

1. /2312/

Si Nena ba siya? ²/si ³'nenah ²ba ¹si ²'yah?/ 'Is she Nena?'

si 'nenah ba si'yah?↑

2. /3212/

Kilala mo ba ako? /³kila'²lah moh bah ¹'a'²koh?/ 'Do you know me?'

kila'lah moh bah 'a'koh?↑

3. /312/

Totoo ba? /³to'¹to'oh bah?²/ 'Is it true?'

to'to'oh bah?↑

4. /23/

Kami? /²ka'³mih?/ 'We?'

ka'mih?↑

In Tagalog, the final rising juncture is relatively short and the last syllable is slowed down slightly.

Specific Questions. Specific questions in Tagalog take the /321/ or /2321/ pitch patterns. Normally they begin high or have their rise on the first stressed syllable.

ble as illustrated below:

1. /321/

Kailan siya dumating? /ka³'i²'lan si'yah duma¹'tiŋ?/ 'When
did he arrive?'
_____↓
ka'i'lan si'yah duma'tiŋ?

2. /2321/

Saan siya pupunta? /sa²'an³ si'yah² 'pupunta¹h?/ 'Where
is he going?'
_____↓
sa'an si'yah 'pupunta'h?

Commands. Pitch patterns for commands in Tagalog are often the same as that of specific questions, i.e., /321/ or /2321/.

Requests. The intonation for requests in Tagalog which is considered the most polite is the yes/no question intonation, although the voice does not rise as high at the end as it would normally do in a yes/no question, thus:

/2312/

Halika nga. /ha²'lika³h ŋa¹'./ 'Come here'

ha'likah ɲa'.↑

Bigyan mo nga ng tubig. /big'yan moh ɲa' ng 'tubig./ 'Give
him water.'

big'yan moh ɲa' ng 'tubig.↑

JUNCTURE.

Juncture phenomena are the phonological effects of the transition between sounds or between sound and silence. In the continuous flow of speech, there are pauses or slight delays, characteristically occurring at the end of sentences. The effects of these pauses on the pitch or stress patterns can be conveniently subsumed under the phenomena of juncture. If the voice is cut off on a level pitch, ordinarily indicated by a comma in traditional writing, the overlining is broken to indicate this feature which marks the end of a phrase. At the end of a sentence there is a transition from sound to silence which may be characterized by a rise in pitch with a fading into silence, symbolized by /↑/, or by a fall in pitch with a fading into silence, symbolized by /↓/.

It might be possible to symbolize these pitch changes by merely changing the level of the overlining,

but this would necessitate adding additional levels of pitch which would not be well-defined, since the rise or fall usually does not coincide with pitch levels established at any other point in the utterance. Also the number of pitch levels would have to be increased by at least two, which would add complexity to the representation with no corresponding advantage. The following sentences in Tagalog show a contrast in meaning that is determined by the selection of one or another of the terminal junctures:

1. Lalakad ka. /la'lakad kah./ 'You will go.' (Command)

_____ ↓
la'lakad kah.

vs

_____ ↑
la'lakad kah? 'Will you go?' (Inquiry)

2. Umalis siya. /'uma'lis si'yah./ 'He arrived.' (Unexpectedly)

_____ ↓
'uma'lis si'yah.

vs

_____ ↑
'uma'lis si'yah? 'He arrived?' (Surprised)

3. Bulok iyan. /bu'lok 'i'yan./ 'That's rotten.' (Im-
plies Don't eat it.)

—
bu'lok 'i'yan. ↓

vs

— ↑
bu'lok 'i'yan? 'Is that rotten?'
(Disbelief)

RHYTHM.

In terms of the rather artificial dichotomy usually established, Tagalog is a syllable-timed rather than a stress-timed language, that is, its syllables tend to be of roughly equal duration and almost equal emphasis.

Tagalog rhythm is conditioned by the following factors:

- (1) Stronger stresses do not occur at regular intervals.
- (2) There is no regular variation in length as this is conditioned by the type of consonant which follows the vowel and by stress.
- (3) Two contiguous syllables are never both under strong stress.

CHAPTER III

PAMPANGO PHONOLOGY

Pampango has twenty-one segmental phonemes: /p, t, k, ʔ (glottal stop), b, d, g, m, n, ŋ, s, h, l, r, y, w, i, e, a, o, u/. Suprasegmentally, it has three phonemes of stress, primary /'/, secondary /ˆ/, and weak (unmarked). It has four levels of pitch, usually represented from lowest to highest as /1/, /2/, /3/, and /4/. Pampango further has three terminal junctures, rising juncture /↑/, falling juncture /↓/, and sustained juncture /|/.

THE PAMPANGO VOWELS

The dialect of Pampango on which this study is based has five vocalic phonemes: /i/, /e/, /a/, /o/, and /u/. This dialect has assimilated part of the Spanish phonemic system along with the usual mass of Spanish vocabulary. These vocalic phonemes are presented below, with the chart arranged in such a way as to show the part of the tongue and tongue position involved for each vowel (Figure 6).

There are two vowels in high position, /i/ and /u/; two in mid position /e/ and /o/; and one vowel in low position, /a/.

<u>STRESSED</u>			
	<u>Front</u>	<u>Central</u>	<u>Back</u>
	<u>Unrounded</u>	<u>Unrounded</u>	<u>Rounded</u>
High	i		u
Mid	e		o
Low		a	

<u>UNSTRESSED</u>			
	<u>Front</u>	<u>Central</u>	<u>Back</u>
	<u>Unrounded</u>	<u>Unrounded</u>	<u>Rounded</u>
High	i		u
Mid	e		o
Low		a	

FIGURE 6
Pampango Vowel Chart

A few general observation about the vowels of Pampango will obviate a good deal of repetition in the presentation of the individual phonemes. All Pampango vowels are preceded by a non-phonemic glottal stop [ʔ] in absolute initial position or after a pause. Glottal onset also occurs between identical vowels, in either open or close transition, but here the glottal stop varies freely with zero, and a single, lengthened vowel is the result. After a non-identical vowel, in either open or close transition, glottal onset varies freely with non-glottal onset. The sequence consonant + [ʔ] + vowel occurs only where there is open juncture after the consonant. Thus, the occurrence of a glottal between a consonant and a vowel is a sure sign of the presence of open juncture.

Pampango vowels are generally of uniform length. Lengthened variants, however, may occur under strong stress, while before pause, and as the result of the fusion of identical vowels described above, lengthening is obligatory. Regardless of segmental environment, Pampango vowels vary from tense to lax.

The details of the five vowels, with examples, follow:

/i/. The phoneme /i/ is a high front tense

unrounded vowel. The front part of the tongue is raised very close to the palate. The tip touches the inner surface of the lower front teeth. The lips are in neutral position with the corners of the mouth drawn back a little. /i/ varies from tense to lax, the latter /ɪ/, usually occurring in closed syllables. It occurs initially, medially, and finally as illustrated below:

ipan	⟨'ɪ'pan⟩	/ 'i'pan/	'tooth'
indu	⟨'ɪn'duh⟩	/ 'in'duh/	'mother'
isipan	⟨'ɪ'sipan⟩	/ 'i'sipan/	'thought'
itsura	⟨'ɪt'surah⟩	/ 'it'surah/	'appearance'
itu	⟨'ɪ'tuh⟩	/ 'i'tuh/	'this'
ipus	⟨'ɪ'pus⟩	/ 'i'pus/	'servant'
ipas	⟨'ɪ'pas⟩	/ 'i'pas/	'cockroach'
ika	⟨'ɪ'kah⟩	/ 'i'kah/	'you'
iya	⟨'i'yah⟩	/ 'i'yah/	'he, she'
ila	⟨'ɪ'lah⟩	/ 'i'lah/	'they'
ici	⟨'ɪ'ki'⟩	/ 'i'ki'/	'tail'
baquit	⟨ba'kit⟩	/ba'kit/	'why'
talilis	⟨tali'lis⟩	/tali'lis/	'abscond'
tinipun	⟨ti'nipun⟩	/ti'nipun/	'accumulate'
dictan	⟨'diktan⟩	/ 'diktan/	'dictate'
misoso	⟨mi'sosoh⟩	/mi'sosoh/	'dip'
parati	⟨pa'ratih⟩	/pa'ratih/	'always; ever'

sican	['sikan]	/'sikan/	'force'
putacti	[putak'tih]	/putak'tih/	'hornet'
susi	['susi']	/'susi'/	'key'
loti	['lotih]	/'lotih/	'lot'
atsi	['at'sih]	/'at'sih/	'madam'
gawi	[ga'wi']	/ga'wi'/	'manners'
pisti	[pis'tih]	/pis'tih/	'plague'
mabandi	[maban'dih]	/maban'dih/	'magnate'
panalalaqui	[panala'lakih]	/panala'lakih/	'manhood'

/u/. The phoneme /u/ shows the following allophonic variants: [u], [u*], and [u̠]. Characteristically, [u] is a high tense rounded vowel under stress except in a final syllable. The lips are rounded considerably and the back of the tongue is raised. The phoneme, which occurs in all positions, is illustrated below:

utang	['utaŋ]	/'utaŋ/	'debt'
mu	[mu']	/mu'/	'only'
uran	['uran]	/'uran/	'rain'
ulas	['ulas]	/'ulas/	'blanket'
upaya	['upayah]	/'upayah/	'authority'
uling	['uliŋ]	/'uliŋ/	'charcoal'
ulina	['ulinah]	/'ulinah/	'because of him'
supot	['supot]	/'supot/	'bag'

sulu	[su'lu* <u>h</u>]	/su'luh/	'light'
alistu	[<u>'</u> alis'tu* <u>h</u>]	/ <u>'</u> alis'tuh/	'agile'
magulu	[magu'lu* <u>h</u>]	/magu'luh/	'problematical'
tayug	[ta'yu*g <u>]</u>	/ta'yug/	'height'
ustu	[<u>'</u> us'tu* <u>h</u>]	/ <u>'</u> us'tu*h/	'adequate'
busbus	[bus'bu*s <u>]</u>	/bus'bus/	'opening'
sico	[si'ku* <u>h</u>]	/si'kuh/	'elbow'
burarul	[bura'ru* <u>l</u>]	/bura'rul/	'kite'
puntu	[<u>'</u> pu*ntuh]	/ <u>'</u> puntuh/	'accent'
meyanu	[meya'nu* <u>h</u>]	/meya'nuh/	'abstract'
ipabalu	[<u>'</u> ipaba'lu* <u>h</u>]	/ <u>'</u> ipaba'luh/	'acquaint'
laru	[la'ru* <u>'</u>]	/la'ru'/	'oil'
limus	[li'mu*s <u>]</u>	/li'mus/	'alms'
casamut	[kasa'mu*t <u>]</u>	/kasa'mut/	'among'
tacut	[ta'ku*t <u>]</u>	/ta'kut/	'afraid'
simbulu	[simbu'lu* <u>h</u>]	/simbu'luh/	'emblem'

[u_ξ] is a high back lax round vowel. It varies freely with lower high back lax round [u] under weak stress except in final syllables.

lumacad	[l <u>u</u> _ξ 'makad]	/lu'makad/	'hike'
maulit	[ma' <u>u</u> _ξ 'lit]	/ma'u'lit/	'hardheaded'
alulud	[<u>'</u> alu' <u>u</u> _ξ 'lud]	/alu'lud/	'gutter'
tuparan	[tupa'ran]	/tupa'ran/	'fulfill'

mumuna	⟦m̥u'munah⟧	/mu'munah/	'first'
tumbuc	⟦t̥um'buk⟧	/tum'buk/	'fist'
tarucan	⟦tar̥u'kan⟧	/taru'kan/	'explore'
pabula	⟦'pab̥ulah⟧	/'pabulah/	'fable'
sucdulan	⟦s̥uk'dulan⟧	/suk'dulan/	'extreme'
sugud	⟦s̥u'gud⟧	/su'gud/	'exert'
matulid	⟦mat̥u'lid⟧ or ⟦matu'lid⟧	/matu'lid/	'down-right'
sacuna	⟦sak̥u'na'⟧	/saku'na'/	'disaster'
caluguran	⟦kal̥ugu'ran⟧	/kalugu'ran/	'dear'
mutus	⟦m̥u'tus⟧	/mu'tus/	'command'
suculan	⟦s̥uku'lan⟧	/suku'lan/	'cell'
ibaluktut	⟦'ib̥aluk'tut⟧	/'ibaluk'tut/	'carve'
bucu	⟦b̥u'kuh⟧	/bu'kuh/	'node'
mamulaclac	⟦mam̥ulak'lak⟧	/mamulak'lak/	'bloom'
calucu	⟦kal̥u'kuh⟧ or ⟦kalu'kuh⟧	/kalu'kuh/	'blaze'
bucud	⟦b̥u'kud⟧	/bu'kud/	'aside'
minuran	⟦min̥u'ran⟧	/minu'ran/	'recoil'

⟦a/. There are really no central vowels in Pampango. The only one which comes close to being a central vowel is the phoneme /a/. The main member is a low central-retracted lax unrounded vowel. The central part is very slightly raised. The tip of the tongue does not

touch the lower front teeth. It occurs in all three positions in words. in free variation with [a].

acu	[a'kuh]	/a'kuh/	'I'
lona	[lonah]	/lona/	'canvass'
candila	[kan'dila]	/kan'dila'/	'candlelight'
ala	[a'la]	/a'la'/	'none'
sabagal	[sa'bagal]	/sa'bagal/	'handicap'
api	[a'pih]	/a'pih/	'fire'
senyas	[senyas]	/senyas/	'hint'
abut	[a'but]	/a'but/	'reach'
cabayu	[ka'bayuh]	/ka'bayuh/	'horse'
atin	[a'tin]	/a'tin/	'have'
larawan	[la'rawan]	/la'rawan/	'image'
ari	[a'ri]	/a'ri'/	'king'
marinat	[ma'rinat]	/ma'rinat/	'insanitary'
pabaya	[paba'ya]	/paba'ya'/	'lax'
akit	[a'kit]	/a'kit/	'see'
parnaso	[par'nasoh]	/par'nasoh/	'literature'
dacal	[da'kal]	/da'kal/	'manifold'
lamesa	[la'mesah]	/la'mesah/	'table'
laman	[la'man]	/la'man/	'meat'
salapi	[sala'pi]	/sala'pi'/	'money'
ngara	[na'rah]	/na'rah/	'they said'

taba	[<u>ta'ba</u>]	/ta'ba'/	'lard'
ela	[<u>'e'lah</u>]	/'e'lah/	'not'
carela	[<u>'karelah</u>]	/'karelah/	'theirs'
obra	[<u>'ob'rah</u>]	/'ob'rah/	'occupation'

The low central vowel /a/ has an allophone which is raised to [ə] when in unstressed syllables.

anam	[<u>'anəm</u>]	/'anam/	'six'
mangan	[<u>'maŋən</u>]	/'maŋan/	'eat'
danum	[<u>də'num</u>]	/da'num/	'water'
aba	[<u>ə'bah</u>]	/a'bah/	'oh'

[e]. /e/ is a mid front lax unround vowel. The front of the tongue is slightly raised towards the palate, but is much lower than /i/. The tip of the tongue is against the inner surface of the lower front teeth. The lips are unrounded with the corners of the mouth slightly drawn back. It occurs initially, medially, and finally in words.

eran	[<u>'eran</u>]	/'eran/	'stairs'
eyu	[<u>'e'yuh</u>]	/'e'yuh/	'do not'
epidemya	[<u>'epi'demyah</u>]	/'epi'demyah/	'epidemic'
enabalu	[<u>'enaba'luh</u>]	/'enaba'luh/	'does not know'
ebun	[<u>'ebun</u>]	/'ebun/	'egg'

esquela	⟨'esku'welah⟩	/ 'esku'welah/	'school'
ebus	⟨'e'bus⟩	/ 'e'bus/	'coconut leaves'
ela	⟨'elah⟩	/ 'elah/	'not'
emu	⟨'emuh⟩	/ 'emuh/	'yours'
mete	⟨'meteh⟩	/ 'meteh/	'dead'
tete	⟨'teteh⟩	/ 'teteh/	'bridge'
sesen	⟨'sesen⟩	/ 'sesen/	'attend'
leguan	⟨le'guwan⟩	/ le'guwan/	'beauty'
lasenggu	⟨la'sengguh⟩	/ la'sengguh/	'drunkard'
indredus	⟨'in'dredus⟩	/ 'in'dredus/	'gossip'
sucle	⟨suk'leh⟩	/ suk'leh/	'comb'
bale	⟨ba'leh⟩	/ ba'leh/	'house'
tagumpe	⟨ta'gumpeh⟩	/ ta'gumpeh/	'victory'
pile	⟨pi'leh⟩	/ pi'leh/	'lameness'
dase	⟨da'seh⟩	/ da'seh/	'mat'
bule	⟨bu'leh⟩	/ bu'leh/	'pea'
tiwase	⟨tiwa'seh⟩	/ tiwa'seh/	'peaceful'

Pampango vowels /i/ and /e/ alternate in medial and final position in some words. These, I believe are dialectal alternations: ⟨ku'marih⟩ and ⟨ku'mareh⟩ 'lady sponsor in baptism'; ⟨'bakit⟩ and ⟨'baket⟩ 'why'; ⟨la'lakih⟩ and ⟨la'lakeh⟩ 'man'; ⟨'mekenih⟩ and

[^hmekeneh] 'come here', the latter used with a very slight shift in intonation. These forms can be used interchangeably without any difference in meaning. But in certain utterances /i/ cannot alternate with /e/. These words must have /e/, never /i/: [^hmeteh] not [^hmetih] 'deceased'; [^hmarineh] not [^hmarinih] 'shame'. So while there is morphophonemic alternation between members of the set in a limited number of lexical items, the phonemic status of /e/ and /i/ is clearly established in the language as a whole.

/o/. /o/ is a mid back tense round vowel. The tongue is retracted and the back part is raised. The lips are rounded. It is always a bit lower than its Tagalog counterpart. Illustrations of this phoneme, which occurs in all positions, follow:

oras	[^h oras]	/ ^h oras/	'time'
obra	[^h obrah]	/ ^h obrah/	'occupation'
oyan	[^h oyan]	/ ^h oyan/	'here is'
oren	[^h oren]	/ ^h oren/	'there are'
oreni	[^h orenih]	/ ^h orenih/	'here are'
obat	[^h obat]	/ ^h obat/	'why'
oyta	[^h oytah]	/ ^h oytah/	'there'
boti	[^h botih]	/ ^h botih/	'bottle'

pota	⟨po'tah⟩	/po'tah/	'later
nocarin	⟨'nōkarin⟩	/'nōkarin/	'where'
bosnan	⟨bos'nan⟩	/bos'nan/	'deduct'
maroc	⟨ma'rok⟩	/ma'rok/	'foul'
aldo	⟨al'doh⟩	/al'doh/	'day'
maco	⟨ma'koh⟩	/ma'koh/	'go away'
erano	⟨'eranh⟩	/'eranh/	'no more'
daralo	⟨'daraloh⟩	/'daraloh/	'to visit'
paro	⟨'paroh⟩	/'paroh/	'shrimp'
repaso	⟨re'pasih⟩	/re'pasih/	'review'
sabo	⟨sa'boh⟩	/sa'boh/	'broth'
yero	⟨'yeroh⟩	/'yeroh/	'galvanized iron'
cayo	⟨'kayoh⟩	/'kayoh/	'cloth'

Minimal contrasts among all the vowels of Pampango are found in the present corpus. Illustrations follow:

	/i/		/a/	
/'mintah/	'went'	vs	/'mantah/	'sheet'
/'birah/	'to let go'	vs	/'barah/	'yardstick'
/'biru'/	'joke'	vs	/'baru'/	'dress'
/si'lu'/	'ribbon'	vs	/sa'lu'/	'breast'
	/i/		/u/	
/'misah/	'mass'	vs	/'musah/	'muse'
/'i'sah/	'one'	vs	/'u'sah/	'deer'

/'bikas/	'posture'	vs	/'bukas/	'tomorrow'
	/e/			/a/
/'mesah/	'table'	vs	/'masah/	'dough'
	/e/			/u/
/se'lu'/	'person's name'	vs	/su'lu'/	'lamp'
	/a/			/o/
/'balah/	'bullet'	vs	/'bolah/	'ball'
	/a/			/u/
/sa'li'/	'twist'	vs	/su'li'/	'buy'
/bu'la'/	'bubbles'	vs	/bu'lu'/	'a kind of bamboo'
/ma'la'/	'mirade'	vs	/mu'la'/	'the very beginning'
/,a'la'/	'none'	vs	/,u'la'/	'prophecy'
/'patuh/	'drake'	vs	/'putuh/	'bread'
/'dulan/	'low table'	vs	/'dulun/	'to go to market'

PAMPANGO VOWEL-SEMIVOWEL SEQUENCES

If a diphthong is defined as a phonemically simple but phonetically complex vocalic unit, it is quite clear that there is nothing in Pampango that can properly be called a diphthong. Pampango, however, has a variety

of vowel-semivowel and semivowel-vowel sequences. If there are sequences of /ey/, /ay/, and /oy/ in Pampango, such sequences occur only as variants of /e/, /a/, and /o/. In the illustrations that follow, the sequences distribute in all positions.

/w+V/

wido	/ˈwidoh/	ˈinclination
wa	/wah/	ˈyes
banwa	/banˈwah/	ˈsky
wakas	/waˈkas/	ˈend
wali	/waˈlih/	ˈyounger sister
wawa	/waˈwa/	ˈsaliva

/y+V/

yelo	/ˈyeluh/	ˈice
yamu	/ˈyamuh/	ˈonly
yanamu	/yaˈnamuh/	ˈlastly
meyari	/meˈyari/	ˈfinished
senyas	/ˈsenyas/	ˈsignal
yoduan	/yoˈduwan/	ˈpass it over
bayli	/ˈbeylih/, /ˈbelih/	ˈdance
kayli	/ˈkeylih/, /ˈkelih/	ˈleft
mayli	/ˈmeylih/, /ˈmelih/	ˈlaughing
cayarian	/keyariˈan/, /keyariˈˈan/	ˈlast

THE PAMPANGO CONSONANTS

There are sixteen consonants in the Pampango sound system. The consonant phonemes may be divided into two groups: stops and continuants. The stops include a voiceless unaspirated series /p, t, k, '/, and a voiced series /b, d, g/. The continuants include two voiceless fricatives /s/ and /h/; a voiced nasal series /m, n, ŋ/; a voiced lateral /l/; a flapped vibrant /r/, and two semivowels /w, y/ as summarized in Figure 7.

The consonants are discussed in the order in which they are presented in the chart beginning with the stops and ending with the semivowels.

Voiceless Stops. The voiceless oral stops of Pampango are /p, t, k/. /p/ is bilabial. The voiceless breath is stopped completely and is released as the lips move to the position of the next sound. It is an unaspirated fortis stop. /t/ is dental and is pronounced with the tongue tip behind the upper front teeth. The velum is raised, and like /p/ the compression of the breath stream is strong. /k/ is a dorso-velar stop. The back of the tongue is brought into contact with the velum which is raised, blocking and compressing the breath stream. The phonemes /p, t, k/ occur in all positions

Manner of Articulation		Point of Articulation				
		Labial	Dental	Palatal	Velar	Glottal
Stops	vl	p	t		k	'
	vd	b	d		g	
Fricatives	vl		s			(h)
Nasals	vd	m	n		ŋ	
Lateral	vd		l			
Flap	vd		r			
Semi-Vowels	vl	w		y		

FIGURE 7

Consonant Chart of Pampango

initially, medially, and finally. The Pampango voiceless stop series is illustrated below:

	/p-/	
pacu	/'paku'/	'nail'
paras	/'paras/	'pungent'

palacul	/pala'kul/	'ax'
paro	/'paroh/	'shrimp'
puru	/'puruh/	'pure'
	/-p-/	
maputla	/ma'putla'/	'pale'
sapad	/sa'pad/	'flat'
tapal	/'tapal/	'patch'
ampun	/am'pun/	'and, also'
gapus	/'gapus/	'hogtie'
	/-p/	
isip	/'isip/	'think'
	/t-/	
talbog	/tal'bog/	'to soak'
tali	/'tali'/	'to tie'
tabing	/'tabiŋ/	'screen'
tanaman	/'tanaman/	'plant'
tumud	/'tumud/	'town'
	/k-/	
culut	/ku'lut/	'curly'
cabalen	/kaba'len/	'townmate'

capatad	/kapa'tad/	'sister or brother'
caluguran	/kalu'guran/	'friend'
carin	/ka'rin/	'there'
carela	/ka'relah/	'theirs'

/-k-/

lalaqui	/la'lakih/	'boy'
dicut	/'dikut/	'grass'
palacul	/pala'kul/	'ax'
sacup	/sa'kup/	'subordinate'
dacal	/da'kal/	'many'

/-k/

manuc	/ma'nuk/	'hen'
anac	/'a'nak/	'child'

The Glottal Stop /ʔ/. In the production of the glottal stop the breath stream is wholly occluded by the vocal bands and the air below the glottis is expelled by their sudden separation. This stop occurs as a distinctive sound before and after a vowel at the beginning, in the middle and at the end of words. Medially the glottal stop alternates with zero. The glottal stop is lost morphophonemically before other words in a sequence. The

phoneme is illustrated below:

<u>Initially:</u>	atsi	/ˈatˈsih/	ˈmadam
	aluagi	/ˈalˈwagih/	ˈcarpenter
	ulas	/ˈuˈlas/	ˈblanket
<u>Medially:</u>	paniucad	/paˈniyukad/	ˈmeter
	pipainawan	/pipaˈˈinawan/	ˈlodge
	tauli	/taˈˈuliˈ/	ˈtardy
<u>Finally:</u>	ici	/ˈikiˈ/	ˈtail
	baru	/ˈbaruˈ/	ˈdress
	biru	/ˈbiruˈ/	ˈjoke
	pacu	/ˈpakuˈ/	ˈnail
	babi	/ˈbabiˈ/	ˈpig
	maputla	/maputˈlaˈ/	ˈpale
	sali	/ˈsaliˈ/	ˈto buy
/muˈliˈ/	ˈgo home	but	/muˈli neh/ ˈshe will go home
/kuˈkuˈ/	ˈfingernail	but	/in kuˈku nah/ ˈher fin- gernail

Voiced Stops. The voiced stops /b, d, g/ correspond in position to /p, t, k/. /b/ is bilabial, /d/ is dental and /g/ velar. They are fully lenis stops.

Medially, /d/ alternates freely with /r/ after a vowel of a prefix or a reduplication: /daˈkal/ ˈmany

: /'dadakal/ or /'darakal/ 'getting many'; /da'lundon/
 'dark' : /meda'lundon/ or /mera'lundon/ 'getting dark';
 /'dakit/ 'fetch' : /da'dakit/ or /da'rakit/ 'fetch
 someone'.

In simple word forms, /d/ rarely occurs intervocalically, except (1) in proper names as in Rodolfo, Candida, and (2) in loan words such as /masku'laduh/ 'hefty'; /ban'didoh/ 'bandit'.

The distribution of the voiced stops is unrestricted. The series is illustrated below:

<u>Initially:</u>	/b/	
biyabas	/bi'yabas/	'guava'
bisa	/'bisa'/	'like'
bagu	/'baguh/	'new'
bale	/ba'leh/	'house'
	/d/	
dacal	/da'kal/	'plenty'
dapot	/da'pot/	'but'
dusug	/'dusug/	'move'
	/g/	
ginapos	/gi'napos/	'handcuffed'
gamat	/ga'mat/	'hand'
gamitan	/ga'mitan/	'use'
gapus	/'gapus/	'to hogtie'

gamusan	/ga'musan/	'scratch'
gunutan	/gu'nutan/	'to pull the hair'

Medially:

	/b/	
babi	/'babi'/	'pig'
cumbira	/kumbi'rah/	'invitation'
imbentu	/im'bentuh/	'invention'
debotu	/de'botuh/	'devotee'
gabun	/ga'bun/	'soil'
	/d/	
comandanti	/kuman'dantih/	'major'
tanda	/tan'da'/	'mark'
medalia	/me'dalyah/	'medal'
	/g/	
agad	/a'gad/	'soon'
dagdag	/dag'dag/	'something added'
lagyu	/lag'yu'/	'name'

Finally:

	/b/	
manib	/'manib/	'join'
panganib	/pa'nanib/	'peril'
lub	/lub/	'inside'
	/d/	
tulid	/tu'lid/	'in line with'

talacad	/ta'lakad/	'rise'
bayad	/'bayad/	'remittance'
maglakad	/magla'kad/	'hike'
	/g/	
damulag	/da'mulag/	'carabao'
sinag	/'sinag/	'gleam'
labag	/la'bag/	'illegal'
tayug	/'tayug/	'height'

Some minimal contrasts between the voiced stops and their voiceless counterparts follow:

	/p/			/b/
/'pusa'/	'cat'	vs	/'busa'/	'popcorn'
/'lapis/	'pencil'	vs	/'labis/	'in excess'
	/t/			/d/
/ta'lan/	'hold'	vs	/da'lan/	'road'
/ta'kal/	'measured'	vs	/da'kal/	'many'
/bu'kut/	'not'	vs	/bu'kud/	'one only'
	'straight'			
	/k/			/g/
/'bakah/	'cow'	vs	/'bagah/	'glowing ember'
/'kulat/	'smear'	vs	/'gulat/	'surprise'
/ku'lut/	'curly'	vs	/gu'lut/	'back'

Fricatives. /s/ is a voiceless grooved fricative. In the articulation of /s/, the tongue blade is raised toward the alveolar ridge, the sides of the blade being closer to the ridge than the somewhat depressed center. The teeth are brought almost together so that when the breath is forced out, the teeth provides partial obstruction, producing the sibilance. /s/ is always fortis showing the form [s] in all positions as illustrated below:

	/s-/	
silid	/si'lid/	'room'
senyas	/'senyas/	'signal'
sabo	/sa'boh/	'soup or broth'
sali	/'salih/	'to buy'
salol	/sa'lol/	'pants'
sapad	/sa'pad/	'flat'
sulo	/su'lo'/	'torch'
	/-s-/	
pista	/pis'tah/	'holiday'
calasan	/kala'san/	'demolish'
nasa	/'nasa'/	'desire'
pasis	/'pasis/	'a pass or permit'
	/-s/	
itas	/'i'tas/	'hoist; lift'

matas	/ma'tas/	'majestic'
oras	/'o'ras/	'hour'
patus	/'patus/	'shoe'

/h/ is a voiceless fricative with the vocal bands brought close together. It occurs only in loan words (but not consistently) and is very limited in distribution. The Pampango [h] sound is difficult to classify as a phoneme. Pampango speakers do not produce the sound natively, and for them, there is a tendency to pronounce /tin'dahan/ 'store' as /tin'da'an/. Pampango educated speakers trying to produce the sound tend to make this phonological peculiarity: they produce the glottal stop /'/ and the /h/ sound in free variation when /h/ is supposed to occur in a word, and often add /h/ sound before any vowel sound when it is not needed: for /halim'bawa'/ they say /'alim'bawa'/ 'example'; for /bi'hasah/ - /bi'asah/ 'wise'; for /tuk'suhan/ - /tuk'su'an/ 'joke'; for /ma'hanin/ - /ma''anin/ 'windy'; for /'lihim/ - /'li'im/ 'secret'.

In loan words the /h/ sound does not appear before /i/ and is seldom found syllable-initial. Illustrations follow:

hepi	/'hepih/	'chief'
------	----------	---------

bihelya	/bi'helyah/	'fasting'
birhen	/bir'hen/	'virgin'
liha	/'lihah/	'sandpaper'
palihan	/pali'han/	'anvil'
tiho	/ti'ho'/	'plate of gold'
kuteho	/ku'tehoh/	'comparison'
huwes	/hu'wes/	'judge'

Nasals. There are three nasal consonants in Pampango /m/, /n/, and /ŋ/. They correspond in articulatory position to the stops /b/, /d/, and /g/ previously described. /m/ is bilabial. It is produced with the lips closed; the velum is lowered, allowing the breath stream to escape through the nose. /n/ is dental. The tip of the tongue is placed against the back surface of the upper front teeth. /ŋ/ is velar. The back of the tongue is raised to come in contact with the velum which is lowered. Pampango /m/, /n/, and /ŋ/ have one form each [m], [n], and [ŋ] respectively. /m/, /n/, and /ŋ/ distribute in all three positions, initial, medial, and final. The series is illustrated below:

/m/	minum	/mi'num/	'drink'
	manyaman	/man'yaman/	'delicious'
	mata	/ma'tah/	'eye'

	malagu	/mala'gu'/	'beautiful'
	maragul	/mara'gul/	'big'
	metun	/'metun/	'one'
	gamit	/'gamit/	'equipment'
	kama	/'kamah/	'bed'
	dumaya	/du'maya'/	'bleed'
	lalam	/la'lam/	'under'
	manamdām	/manam'dam/	'borrow'
/n/	ninu	/ni'nuh/	'who'
	napun	/'napun/	'yesterday'
	nasi	/'nasih/	'rice'
	nucarin	/nu'karin/	'where'
	mana	/'manah/	'inheritance'
	leparan	/le'paran/	'width'
	amucan	/amu'kan/	'wheedle'
	capilan	/ka'pilan/	'when'
	pantalan	/panta'lan/	'wharf'
/ŋ/	ngeni	/'ŋenih/	'now'
	ngan	/'ŋan/	'whole'
	singsing	/siŋ'siŋ/	'ring'
	quilingan	/ki'liŋan/	'favor'
	bengi	/'beŋi'/	'night'
	pamangampi	/pama'ŋampih/	'favoritism'
	cabang	/'kabaŋ/	'while'

timbang	/tim'ban/	'weight'
nung	/nun/	'whether'

Lateral. The phoneme /l/ is a voiced lateral. It is articulated by placing the tip of the tongue on the alveolar ridge. Both sides of the tongue are lowered. The Pampango /l/ has a "light", forward resonance rather than the "dark", retracted sound. It occurs initially, medially, and finally as illustrated below:

/l-/	lalam	/'lalam/	'under'
	lagyu	/lag'yu'/	'name'
	lalaqui	/la'lakih/	'boy; man'
	lasu	/'lasuh/	'ribbon'
	lua	/'lu'a'/	'tears'
	lunus	/'lunus/	'mercy'
/-l-/	malaru	/mala'ru'/	'oily'
	mala	/'malah/	'mystery'
	ala	/'a'la'/	'none'
	dulang	/du'lan/	'table'
	quilub	/ki'lub/	'inside'
	magulu	/magu'luh/	'intricate'
	masalusu	/masa'loru'/	'fast'
	calug	/ka'lug/	'jolting'
/-l/	magaltal	/magal'tal/	'itchy'

mabagal	/ma'bagal/	'slow'
gulgul	/gul'gul/	'disarranged'
sarul	/sa'rul/	'hoe'

Flap. /r/ is an alveolar flap. It is produced by an energetic single bouncing of the tip of the tongue against the hard palate. It is partially voiced. Pampango /r/ has two allophones, a single retroflex alveolar tap [r̠] found intervocalically, and a retroflex alveolar multitap trill [r̠̠̠] found in final position. In initial position, the two allophones occur in free variation with a preference for the multitap trill in absolute initial position and the single tap in clusters.

It seems probable that [r̠] and [d̠] were formerly variants of a single phoneme, with [r̠] occurring intervocalically, both [r̠] and [d̠] as free variants pre-pausally, and only [d̠] elsewhere. /r/ and /d/ alternate in word initial position: /'detah/ and /'retah/ 'those'. The phoneme /r/ occurs initially, medially, and finally in words. Illustrations follow:

/r-/	relos	/re'los/	'watch'
	rosas	/'rosas/	'pink'
/-r-/	carin	/ka'rin/	'there'
	marinat	/mari'nat/	'insanitary'

cumbira	/kumbi'rah/	'invitation'
parada	/pa'radah/	'review'
maracap	/ma'rakap/	'caught'
maragul	/mara'gul/	'big'
casiran	/kasi'ran/	'defect'
tuparan	/tu'paran/	'fulfil'
marangal	/mara'ŋal/	'honorable'
iparapat	/'ipa'rapat/	'assign'
caratig	/ka'ratig/	'adjacent'
mituru	/mi'turu'/	'impart'
durut-durut	/du'rut-durut/	'lingering'

Semivowels. Pampango has two semivowels or glides, /w/ and /y/. /w/ is bilabial. It occurs only initially and medially. /y/ is alveopalatal. It occurs in initial and medial positions. Illustration follows:

/w-/	wido	/'widoh/	'love for'
	wa	/wah/	'yes'
	wacas	/wa'kas/	'end'
	wali	/wa'lih/	'younger brother'
	walu	/wa'luh/	'eight'
	wapin	/'wapin/	'of course'
	wawa	/'wawa'/	'saliva'

/-w-/	iwagwag	/'iwag'wag/	'brandish'
	gawa	/ga'wa'/	'act'
	pamanaliwa	/pamana'liwa'/	'evolution'
	catimawan	/kati'mawan/	'freedom'
	saliwan	/sa'liwan/	'acquires'
	cunwari	/kun'wari'/	'pretend'
	cawayan	/ka'wayan/	'bamboo'
/y-/	yelu	/'yaluh/	'ice'
	yeru	/'yeruh/	'galvanized iron'
	yabut	/'yabut/	'to hand'
	yacu	/'yakuh/	'I'
	yamu	/'yamuh/	'only'
	yanamu	/ya'namuh/	'lastly'
	yapin	/'yapin/	'certainly'
	yatsa	/yat'sah/	'throw'
	yoduan	/yo'du'an/	'pass it over'
/-y-/	pabaya	/pa'baya'/	'wayward'
	manaya	/ma'naya'/	'wait'
	iyan	/'i'yan/	'this'
	dumayu	/du'mayuh/	'withdraw'
	umuyutan	/'umu'yutan/	'wheedle'
	gayunman	/ga'yunman/	'tempt'
	piyabayan	/piya'bayan/	'amalgamate'

CONSONANT CLUSTERS

Pampango consonant clusters occur mostly in loan words. Some have established so widely in the language that for most speakers they are used as Pampango words without any consciousness of their origin. No two consonants cluster medially. Intervocally, they must be divided by plus juncture into a final consonant followed by an initial consonant. Thus, "buntuc" 'head' must be split syllabically /bun.'tuk/; "tinta" 'ink' /tin.'tah/ and "gulgul" 'disarrange' /gul.'gul/; "cabli" 'cable' /'kab.lih/. Examples of clusters occurring initially appear below:

/pr/	/'prendah/	'collateral'
	/'prayleh/	'friar'
	/'premyuh/	'prize'
	/pru'webah/	'proof'
/pw/	/'pwertuh/	'port'
/py/	/'pyanuh/	'piano'
	/'pyansah/	'bond'
	/'pyabayan/	'combine'
/tr/	/'tratuh/	'treatment'
	/'tren/	'train'
	/'triyangguloh/	'triangle'

/ty/	/'tyoh/	'uncle'
/kr/	/kristi'yanuh/	'Christian'
	/'krus/	'cross'
/kw/	/'kwadruh/	'frame'
	/'kwaltah/	'money'
	/'kwerdas/	'string or chord'
/bl/	/'blondeh/	'blond'
	/'blusah/	'blouse'
/by/	/'byulin/	'fiddle'
	/'byasah/	'resourceful'
	/'byahe/	'trip'
	/'byuduh/	'widower'
/dy/	/dya'manteh/	'diamond'
/gr/	/'gradu/	'rating'
/sw/	/'swabeh/	'mild'
/my/	/'myerkules/	'Wednesday'
/ny/	/'nyebeh/	'snow'

SYLLABLE STRUCTURE

Pampango syllable structure can be described in terms of vowel nucleus, simple or complex, preceded by an initial consonant and in word internal position, optionally followed by final consonant. Except for loan words there are no consonant clusters within the syllable. Consonant clusters occur only across syllable boundaries.

The minimum syllable in Pampango is CV. Since the longest permitted initial cluster is two consonants, the maximum syllable in Pampango is CCV.

Combinations of a semivowel and a vowel have been noted in the corpus: /yan/ 'that'; /ban'wah/ 'sky'; /me'yari'/ 'finished'; /wah/ 'yes'. When syllable-initial clusters occur intervocalically, the first consonant ends one syllable and the second begins the next.

Vowel clusters within or between syllables do not occur in Pampango. One-morpheme words have the following syllable structures:

CVC /nah/ 'already'; /wah/ 'yes'

CVCVC /da'loh/ 'caller'; /si'loh/

 /clumsy'; /'nasa'/ 'desire';

 /'sebh/ 'grease'; /su'lu'/

 'light'; /'mitas/ 'ascend';

 /'tubud/ 'assemblyman'; /'buran/

 'cancel'; /si'lab/ 'conflagration';

 /bi'gu'/ 'despair'; /bu'kud/ 'exclu-

 sive'

CVCCVC /pas'luh/ 'galvanized iron';

 /kam'bin/ 'kid'; /pan'teh/ 'level'

 /bak'las/ 'loosen'; /'dimlah/

'cold'; /'sobrah/ 'excess'; /'banteh/
 'guard'; /'pulsuh/ 'pulse'
 CVCCVC /sād'sad/ 'ashore'; /buntuk/
 'head'; /bus'bus/ 'hole'; /gas'tus/
 'expense'; /'lundag/ 'leap'; /'senyas/
 'hint'; /bun'duk/ 'mountain'

PAMPANGO SUPRASEGMENTAL PHONEMES

STRESS

Pampango has three phonemes of stress: primary /'/, secondary /^/, and weak (unmarked). The components of stress in Pampango seem to be length and intensity. The position of primary stress very often determines the meaning to be assigned to a word. The phonemic character of Pampango stress may be demonstrated by such pairs as the following:

/'sayah/	'skirt'	vs	/sa'yah/	'festivity'
/'balat/	'birth-	vs	/ba'lat/	'skin'
	mark'			
/'paku'/	'nail'	vs	/pa'ku'/	'fern'
/'kuku'/	'cough'	vs	/ku'ku'/	'fingernail'

PITCH

Pampango intonation is identified as the fluctuating tone pattern accompanying the word uttered by a speaker. This sentence melody is coordinated with the lexical stress on the words in the sentence.

There are four levels of pitch in Pampango indicated by the symbols /1/, /2/, /3/, and /4/ with /1/ the lowest level of relative pitch and /2/, /3/, and /4/ successively higher levels. These pitches are relative within the phonemic phrase and are used to indicate the intonation pattern.

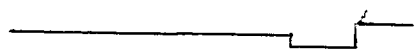
In general, Pampango intonation tends to go up at the end of the utterance. The normal statement pattern in Pampango is /213/ illustrated by the following sentences:

Statement.


Mataba ya i Linda. /mata²'ba' ya i 'lindah^{1 3}/ 'Linda is stout.'

mata'ba' ya i 'lindah

Maputi ya i Mario. /mapu²'ti' ya i 'maryoh¹/ 'Mario is fair-complexioned.'³


mapu'ti' ya i 'maryoh

Mamangan ya i Boni. /²ma'manan ²ya i ¹'bonih/³ 'Boni is
eating.'


ma'manan ya i 'bonih

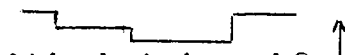
Questions.

Interrogative sentences expecting answers either affirming or denying the question consist of a rise from a level 1 tone on the penultimate syllable of the utterance to a level 3 or 2 tone on the ultimate. The location of the lexical stress does not affect the pattern.

The normal Pampango yes/no question takes one of the following intonation patterns:

1. /3213/

Iya i Nena? /³'i'yah i ²'nenah?¹/³ 'Is she Nena?'


'i'yah i 'nenah? ↑

2. /2312/

Kakilala mo ko? /²kaki ³'lalah ¹moh ²koh?²/ 'Do you know me?'

kaki 'lalah moh koh? ↑

3. /13/

Tutu pin? ¹ ³
/ 'tutuh pin?/ 'Is it true?'

'tutuh pin? ↑

4. /213/

I kami? ²¹ ³
/ 'ika 'mih?/ 'We?'

'ika 'mih? ↑

Specific Questions. Specific questions in Pampango use the /2321/ or /231/ intonation patterns. Normally the pitch rises with stronger stress and falls with weaker stress. Some illustrations follow:

Nucarin ya munta? ↓ ² ³ ² ¹
/nu 'karin yah 'muntah?/ 'Where is he
going?'

Capilan ya dinatang? ↓ ² ³ ¹
/ka 'pilan yah dina 'taṅ?/ 'When did
he arrive?

↑
/mun'tah kah?/

'Will you go?' (Inquiry)

 ↓
/dina'taŋ yah./

'He arrived.' (Unexpectedly)

 ↑
/dina'taŋ yah?/

'He arrived?' (Surprised)

 ↓
/si'ra' neh yan./

'That's rotten.' (Implies 'Don't
eat it')

 ↑
/si'ra' neh yan?/

'Is that rotten?' (Implies 'Don't
eat it')

RHYTHM

Pampango syllables are of regular length. Like Tagalog it is syllable-timed. Pampango very rarely has two contiguous syllables both under strong stress. Tagalog has no reduced vowels but as earlier noted Pampango /a/ does have an allophone [ə] in a restricted distribution.

The Pampango speaker tends to use full vowels all of about equal duration and emphasis.

CHAPTER IV

COMPARATIVE ANALYSIS OF TAGALOG AND PAMPANGO PHONOLOGY

TAGALOG AND PAMPANGO SOUND SYSTEMS COMPARED

Certain differences in sounds and intonation patterns exist between Tagalog and Pampango, and since students speaking the latter language and learning Tagalog manifest a 'foreign accent' that seldom fails to come to the attention of Tagalog listeners, these differences are distracting to the primary purpose of communication, which should direct attention to what is said, not to how it is said. It would, therefore, be a reasonable ideal to attempt to teach Tagalog sounds and intonation patterns correctly. In order to do this the teacher must be aware of the systems of Tagalog and the native language of her pupils, so that she can (1) model the Tagalog utterances correctly in the event she does not speak the language natively, and (2) offer other specific guidance to the pupils she is teaching whenever they use their native language patterns while speaking Tagalog.

In the comparison of the sound structures of Tagalog and Pampango it was necessary to find out which sounds Tagalog and Pampango have in common, which sounds

are similar, and which are different. As Lado defines it, "two sounds are similar if they have the same features of sound which are found to be significant phonetic components of phonemes."¹ Among these features are (1) vibration of the vocal chords versus non-vibration; (2) air stream flowing through the mouth, nose or both (oral, nasal, nasalized); (3) various kinds of articulation and various points of articulation.

After the sounds being compared are shown as the same, similar or different, they are then grouped into categories. To arrive at the hierarchy of difficulty, the segmental phonemes in the target language, which in this case is Tagalog, were arranged in order from the most difficult to the easiest. A knowledge of this hierarchy of difficulty is imperative if we wish to predict the errors that a Pampango learner of Tagalog would be likely to commit, and to know which items need more intensive drill than the others. Below are two categories arranged according to difficulty:

1. New category - sounds or groups of sounds
which exist as phonemes in the target language,

¹Robert Lado, Linguistics Across Cultures (Michigan: The University of Michigan Press, 1957), p. 9.

but no similar sounds exist as phonemes or as allophones in the native language.

2. Transfer or reinterpreted category - sounds or groups of sounds which exist as phonemes in the native language, but the phonetic realizations are different from those in the target language; hence the native sounds may intrude in the target language.

In the light of these points, it can be safely said that the most difficult problems which the difference in phonemic inventory between Tagalog and Pampango presents to the Pampango learning Tagalog are the fricative problem, the trill problem, the central vowel problem, the back vowel problem, and the diphthong problem.

Consonants, Vowels, Diphthongs

Below are parallel charts of Tagalog and Pampango sounds, Figure 8. The chart is presented in three columns: the structure of Tagalog sounds in column one, the structure of Pampango sounds in column three, and between them in column two is a picture of the conflict of systems which results when the sounds of Pampango are superimposed on the structure of Tagalog.

Each column in the chart is presented in a sche-

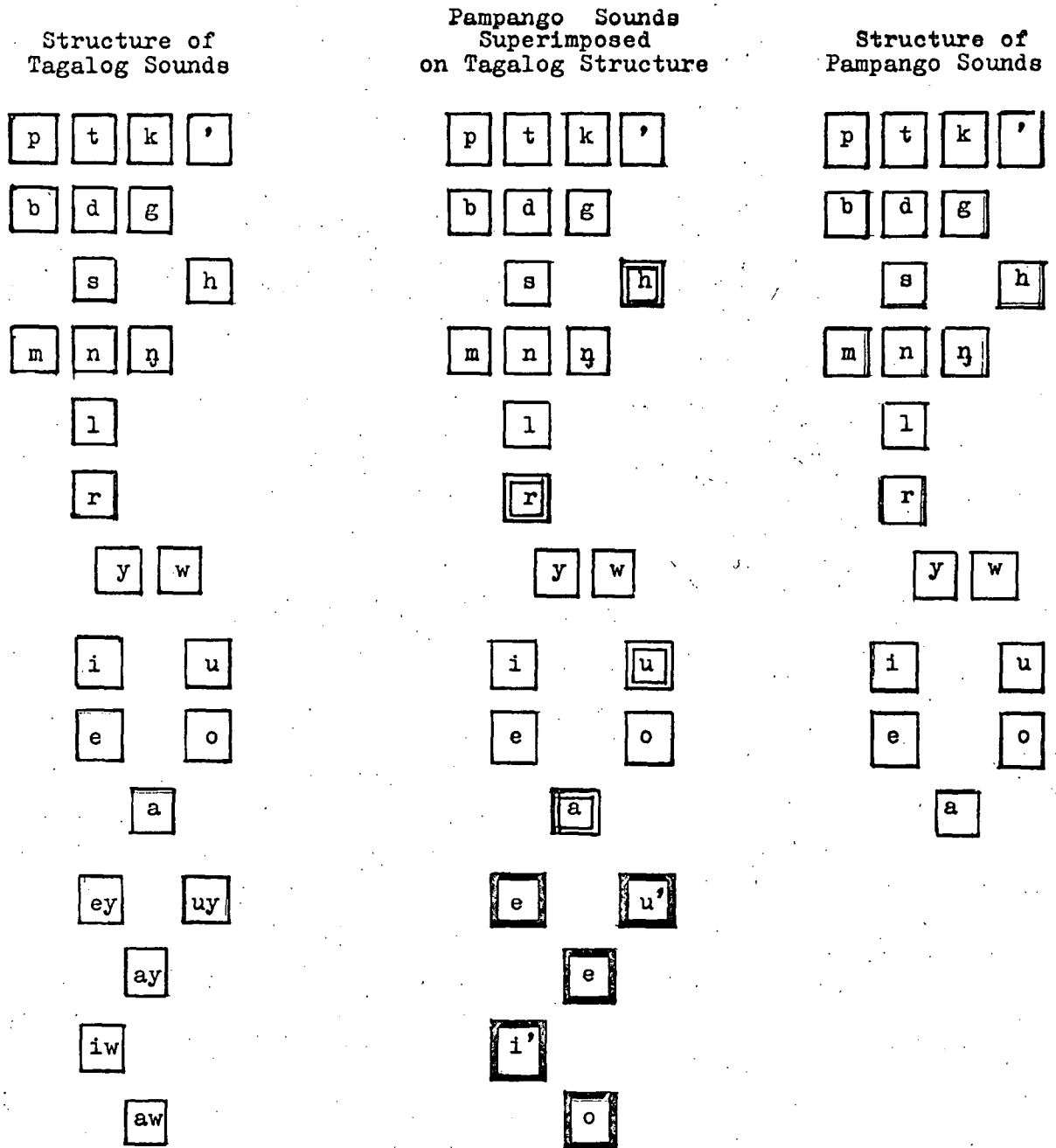


Figure 8. A Two-Dimensional Schematic Arrangement of the Structures of Tagalog and Pampango Sounds

matic arrangement to show both the differences and similarities of the languages being analyzed. The rows in each of the three columns represent the different sounds: stops, fricatives, nasals, liquids, and semivowels. Then follow a block of simple vowels and two blocks of diphthongs. The files of each column represent the position of articulation, from labial, to dental, to palatal, velar and glottal.

A heavy line around a block in the middle column shows "cases vides" or holes in the pattern of Pampango, as compared to Tagalog. Since such holes or gaps have a tendency to become filled, the symbols in such blocks represent the most likely substitute available from the Pampango inventory. A double line around a block indicates a difference in the phonetic realization of the sounds which will prove to be of considerable difficulty to Pampango learners of Tagalog.

The Glottal Stop /ʔ/ and /h/. A Pampango learner of Tagalog has difficulty with these sounds. The /ʔ/ sound occurs in all positions but there are some cases where a Pampango speaker tends to substitute this sound /ʔ/ for an /h/ as in the Tagalog words hulaan /hu'la'an/ 'guess' and mahinhin /mahin'hin/ 'modest'. A Tagalog

listener would hear /'u'la'an/ and /ma'in''in/ from a Pampango speaker because he is not actually producing the /'/' sound but a "breathy glottal stop". But very rarely or not at all does a Pampango substitute an /h/ for a /'/' except in very few loan words.

The letter h in Spanish, after which the Pampango orthography is patterned, is not sounded in the spoken language. A Pampango speaker likewise does not sound the phoneme /h/ in his speech even when he sees it in written form. Tagalog initial or medial /h/ is dropped or replaced by another sound; thus: hangin /'haŋin/ 'wind' is /'aŋin/; harana /ha'ranah/ 'serenade' is /'a'ranah/; mahaba /ma'haba'/ 'long' - /ma'kaba'/; bahay /'bahay/ 'house' - /'ba'eh/; halus 'almost' - /'alus/.

/r/. Both Tagalog and Pampango have phonemic /r/, but phonetically there is very little in common between Tagalog /r/ and Pampango /r/ except in vibration. Tagalog /r/ is essentially several flaps or taps. At the beginning of stressed syllables, at the end of words, and at the end of syllables before a following syllable starting with a consonant, the Tagalog /r/ taps the upper gum ridge several times, while the Pampango /r/ is often equal to a simple vibration of a trill, sometimes to a very short stop.

/a/. The allophone of the Pampango low central vowel /a/ is [ə] when in unstressed syllables. Pampango [a], which is a raised central vowel, is clearly bound up with stress.

The [a] sound will not be very difficult to pronounce for most speakers of Pampango because their language has a similar sound and a slight variation won't make any difference in Tagalog.

/o/ and /u/. Tagalog /o/ and /u/ are considered distinct phonemes except in a case where the vowel /o/ precedes a glottal sound at the end of a word. The disappearance of the glottal stop in rapid conversation results in the raising of the vowel preceding it; thus if a word ends in /o'/ as in ilayo /'ila'yo'/ 'take away', the /o/ becomes /u/ when a word follows it as in Ilayo mo /'ila'yuh moh/ 'take away'. Pampango speakers make no distinction between these two sounds so that the Tagalog /o/ and /u/ may be used by them interchangeably. Pampango speakers favor the higher vowel; thus they tend to pronounce Tagalog words having medial and final /o/ sound with a /u/ sound: lagom /'lagom/ 'all inclusive' is /'lagum/; pato /'patoh/ 'duck' - /'patuh/; sipilyo /si'pilyoh/ 'brush' - /si'pilyuh/; tao /'ta'oh/ 'mortal

- /'ta'uh/; karo /'karoh/ 'car' - /'karuh/.

Diphthongs. Pampango does not have the following diphthongs /iw/, /ey/, /ay/, /aw/, and /uy/. They are therefore classed as new categories for a Pampango learner of Tagalog.

For the new diphthong sounds, Pampango learners of Tagalog substitute the following:

(a) /iw/ replaced by /i/ or /i'/'

giliw 'darling' /'gili'/ for /'giliw/

sisiw 'chick' /'sisi'/ for /'sisiw/

paksiw 'fish steeped in vinegar'

/pak'si'/ for /pak'siw/

baliw 'crazy' /ba'li/ for /ba'liw/

aliw 'entertainment' /a'li/ for /a'liw/

(b) /ey/ replaced by /e/

reyna 'queen' /'renah/ for /'reynah/

may 'there is' /meh/ for /mey/

peyneta 'comb' /pe'netah/ for /pey'netah/

(c) /ay/ replaced by /e/

bahay 'house' /'baeh/ for /'bahay/

taglay 'borne' /tag'leh/ for /tag'lay/

sakay 'passenger' /sa'keh/ for /sa'kay/

inay 'mama' /i'neh/ for /i'nay/

(d) /aw/ replaced by /o/

hilaw 'uncooked' /hi'loh/ for /hi'law/
 silaw 'to be dazzled' /si'loh/ for /si'law/
 sabaw 'broth' /sa'boh/ for /sa'baw/
 gusilaw 'eyeshade' /gusi'loh/ for /gusi'law/
 bingaw 'notch' /bi'ŋoh/ for /bi'ŋaw/

(e) /uy/ replaced by /u'/'

aruy 'ouch' /'a'ru'/ for /'a'ruy/
 kasuy 'cashew' /ka'su'/ for /ka'suy/
 tsapsuy 'chopsuey' /'tsapsu'/ for /'tsapsuy/
 wansuy 'parsley' /wan'su'/ for /wan'suy/

/bdg/. With the bilabials, dentals and velars the difference between Tagalog and Pampango is almost negligible. Pampango learners of Tagalog will have no difficulty in learning these sounds.

/ptk/. These phonemes are similar in point of articulation in both Tagalog and Pampango. They distribute similarly in the two languages, initially, medially, and finally. They will not cause difficulty.

/mnn/. They are similar in distribution in Tagalog and Pampango. A Pampango speaker will have no special problem with these consonants.

/l/. They are very similar phonetically in both languages and will not create a problem.

/y/ and /w/. Prevocally they are identical in both Tagalog and Pampango. Postvocally, they do not form diphthongs in Pampango as they do in Tagalog /iw/, /ey/, /ay/, /aw/, and /uy/.

Consonant Clusters. In initial position Tagalog and Pampango share a number of consonant clusters, and these can be expected to cause the Pampango no difficulty. New clusters in Tagalog, especially those occurring medially and finally, do require teaching. But generally, some clusters and cluster types will be easier for the Pampangos to learn due to the existence of the cluster or cluster types in loan words used widely in their language.

Intonation Systems

Small differences exist between the intonation systems of Tagalog and Pampango. Both languages have similar types of final rising juncture. The rise in both is relatively short and the last syllable is slowed down slightly. Tagalog /↑/ and Pampango /↑/ are identical for practical purposes, as can be noted in the following equivalent sentences:

TagalogPampango

- | | |
|---------------------------------|-------------------------------------------------------|
| <p>1. mala'kih bah 'i'yan ↑</p> | <p>mara'gul yah 'i'yan ↑ 'Is that
big?'</p> |
| <p>2. kila'lah moh si'yah ↑</p> | <p>kakila'lah meh ↑ 'Do you know
him?'</p> |
| <p>3. mata'mis an me'lon ↑</p> | <p>maya'muh in me'lon ↑ 'Is the
melon sweet?'</p> |

Information questions are commonly pronounced in Tagalog on the pattern /321 / or /2321 /, which is almost exactly duplicated in Pampango. Hence, a Pampango will have no problem in learning the Tagalog pattern for this type of question. Any slight difference can be heard easily and corrections should not be difficult. This can be illustrated in the following almost but not quite equivalent sentences:

TagalogPampango

- | | |
|----------------------------------|-----------------------------------------------------------|
| <p>1. sa''an kah 'pupuntah ↓</p> | <p>'nukah mun'tah ↓ 'Where are you
going?'</p> |
| <p>2. kay'lan kah duma'tin ↓</p> | <p>kapi'lan kah dina'tan ↓ 'When
did you arrive?'</p> |

3. mag'kanoh 'i'toh ↓ mag'kanuh yah 'i'nih ↓ 'How
much is this?'

The normal statement pattern in Tagalog is /231/. This rising-falling pattern will present difficulty for Pampango speakers because their language uses a different pattern. Pampango has a /213/ intonation. Much drill on this difference should be given to Pampango speakers because they are likely to carry over their intonation patterns in speaking Tagalog.

Stress. Stress in both Tagalog and Pampango is characterized by a lengthening of the stressed syllable but in Pampango this lengthening seems to be a little more prominent, and of greater duration. In Tagalog length is conditioned almost entirely by stress. Note the following contrasts:

<u>Tagalog</u>	<u>Pampango</u>	
'ak·lat	'ak··lat	'book'
'tu·big	'tu··big	'water'
'ba·toh	'ba··tuh	'stone'
'lo·roh	'lo··ruh	'parrot'
'da·mit	'da··mit	'clothes'
'nob·yoh	'nob··yuh	'bridegroom'

The length of the intonation phrase in Pampango seems to be somewhat shorter than in Tagalog, that is, there are more frequent phrase boundaries, or junctures, within sentences. This characteristic of Pampango pronunciation, when superimposed on Tagalog, contributes to the Tagalog speaker's judgment that the Pampango pronunciation has a sing-song effect. This can be illustrated in the following:

Tagalog

mey magan'dañ 'baro' | si 'nenah. 'Nena has a beautiful
dress.'

Pampango

'atin yaŋ | masan'tiŋ 'baru' | si 'nenah.

Tagalog

'a'noh | aŋ gustoh moh? 'What do you want?'

Pampango

na nuŋ | bu'rih | moh?

Rhythm. The difference between the rhythm of Pampango and that of Tagalog is almost negligible. Pampango and Tagalog syllables are of more or less equal

duration. More than in Tagalog, Pampango stress-contrasts are sometimes neutralized to favor the regular rhythmic alternation of strong and weak stresses. There are no phrasal restrictions upon Tagalog and Pampango stress.

CHAPTER V

SUMMARY AND CONCLUSIONS

The important facts about this study on the taxonomic phonological analysis of Tagalog and Pampango may be summarized as follows:

Consonants. The Tagalog sound system has sixteen consonantal sounds, of which seven are stops, two are fricatives, three are nasals, two are glides or semivowels, one is a lateral, and one a trill. All of these consonants are found in Pampango.

The Tagalog stops are essentially similar to their Pampango counterparts, with the exception of the glottal stop [ʔ]. In the production of Tagalog glottal stop, the vocal bands are tightly closed, stopping the air column from the lungs. It is produced with considerable more energy in its articulation than Pampango [ʔ] because the Pampango speaker does not actually produce the [ʔ] sound but a "breathy glottal stop."

The three nasals are produced more or less identically with their Pampango counterparts. They occur in similar phonetic environments.

[r] in Tagalog is always an apico-alveolar

trill regardless of environment. It does not occur in word-initial or word-final position except in loan words. In Pampango it is an alveolar flap.

The lateral [l] is generally articulated on the alveolar ridge regardless of phonetic environment for both.

The two glides [w] and [y] in Tagalog occur in syllable-initial and syllable-final positions. [y] occurs at the beginning and in the middle of words in the syllable-initial position and generally before [a], [o], and [u] and before [e] only in loan words. [w] occurs only before [a] and [i] at the beginning and in the middle of words, and before [e] in loan words. Pampango semivowels [w] and [y] occurs in initial position only, apart from the combination [-oy].

There are two fricatives [h] and [s]. Tagalog [s] is essentially similar to Pampango [s]. The voiceless fricative [h] is stable in Tagalog but difficult to classify as a phoneme in Pampango.

Vowels. There are five vowels in Tagalog generally similar to their counterparts in Pampango. In both languages, the vowels are monophthongal, even when they are lengthened in production. Pampango speakers tend to replace Tagalog final /o/ by the higher tense vowel [u].

Diphthongs. There are six diphthongs in Tagalog: [ey], [uy], [ay], [oy], [iw] and [aw]. The last four occur only in word-final position and [ey] and [uy] in medial position. Pampango does not have the following Tagalog diphthongs: [ey], [uy], [ay], [iw], and [aw].

Stress. Tagalog stress, of which there are only the strong and the weak forms, is signalled primarily by lengthening of the vowel in the syllable. Strong stress generally occurs on the penultimate and final syllables of isolated words and phrases. Pampango has three levels of stress.

Intonation. The pitch phonemes and pitch contrasts of Pampango may be transferred to Tagalog intact with a little variation especially in the rising-falling pattern.

Rhythm. The differences between the rhythm of Pampango and that of Tagalog are negligible as the syllables are of more or less equal duration, that is, the duration of the syllables does not vary with their phonemic composition nor with the suprasegmental environment.

CONCLUSIONS

The foregoing discussion points to the following conclusions:

1. Basically, there are more similarities than differences in the form, structure, and distribution of the phonemes in Tagalog and Pampango, but it can be safely predicted that phonemic contrasts based on sounds which are phonetically distinct both in Tagalog and in Pampango will be more readily acquired than sounds where the phonetic data does not serve to reinforce and emphasize the phonemic contrast. It can be predicted also that the phonemic contrasts which will be hardest to acquire will be those in which the Pampango can use part, but only part of the allophonic material of Pampango.

2. The pronunciation difficulty of Pampangos learning Tagalog will arise from the systematic differences in phonological structure between the two languages, such as differences between the phonemic inventories, differences in the phonetic realization of phonemes which are being learned by the students, and differences in the distribution of phonemes which occur in both languages.

3. Teachers and textbook writers should be aware of the fact that the learning of a second language is influenced by the habits one has formed in his first language, that is, the learner tends to produce the second language in the image of his native language. In view of this, the materials of instruction in the second language should be based on a systematic comparison between the native language of the learner and the target language. A comparative and contrastive analysis of the two languages will bring out the points of similarity and difference between the two. Where the two languages are alike, the habits in the first language will help in learning the second, where they differ, the habits of the native tongue will hinder or act as a roadblock in learning the target language. That being the case, the materials of instruction should consider probable points of difficulties and focus more attention upon them in order to forestall the formation of wrong language habits.

Furthermore, the comparison of the student's native language and the language to be learned furnishes a basis for better description of the language-learning problems involved, preparation of teaching materials, and constructions of tests for diagnostic and evaluation

purposes. It is not only possible to predict areas of interference as well as facilitation between the two languages but also to rank into different levels of ease and difficulty. Teachers with a knowledge of such problems can be expected to guide their students better. They will understand the cause of an error and be better able to prepare corrective drills.

4. Real difficulties can be much more efficiently attacked if they are taken up one at a time, at least at the beginning.

5. The textbook writer must provide the actual materials aimed at enabling the student to overcome his difficulties. His task is to organize the problems listed in the analysis into a series of lessons of approximately equal difficulty. Then, the completed lesson must be interpreted by the teacher to a class trying to learn Tagalog. The teacher should be aware of all the problems which originate from the native language of the students as provided by the contrastive analysis.

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