A PHONOLOGICAL CONTRASTIVE STUDY OF VIETNAMESE AND ENGLISH

by

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IN

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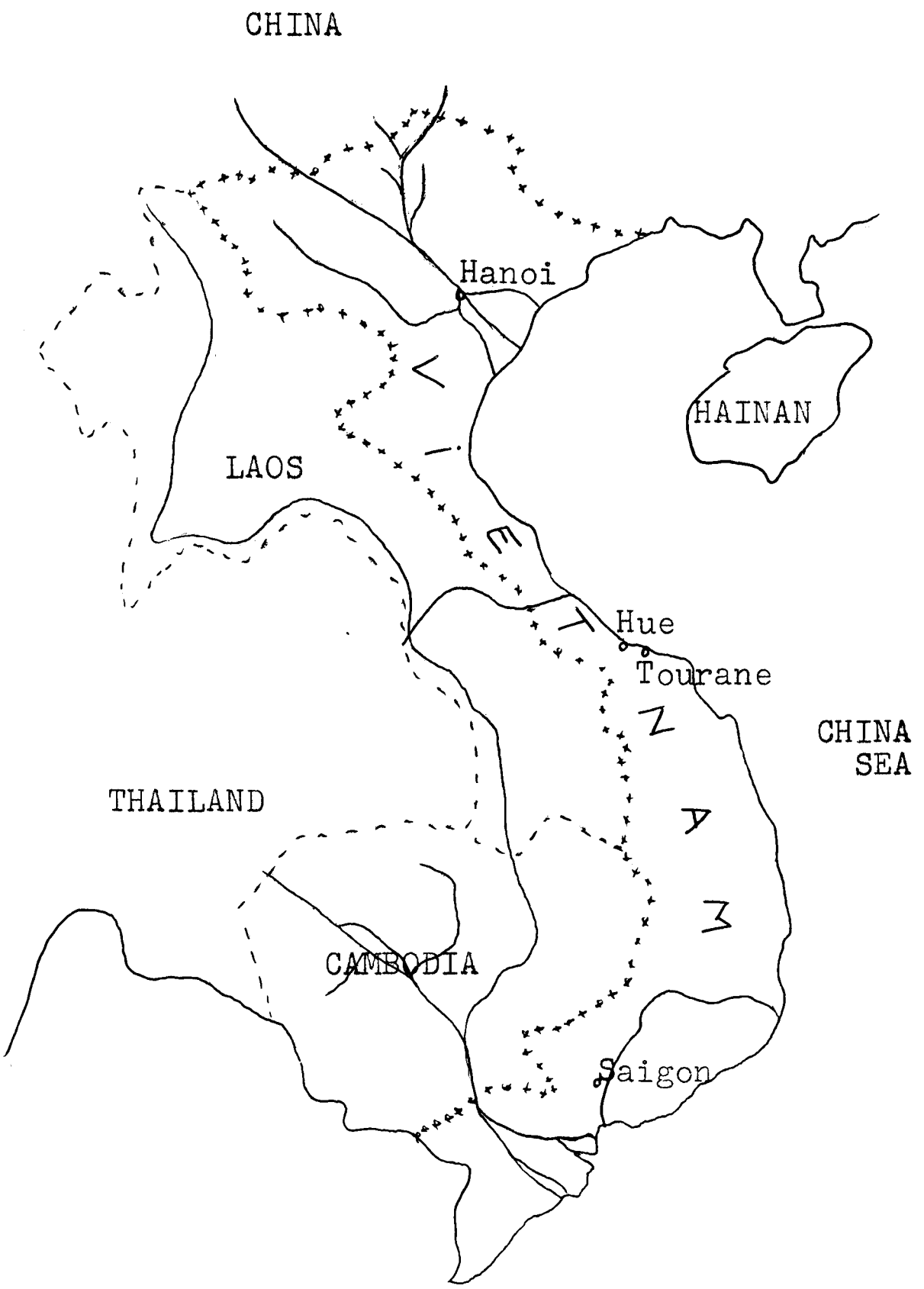


Map of Vietnam and Surrounding Areas

CHAPTER I

INTRODUCTION

Purpose of the Study

"English-speaking people constitute about one tenth of the world's population,"[1] which includes peoples from great nations: The United Kingdom, the United States, Australia, Canada. . . English, on the other hand, is widely studied outside the countries of its use as a second language such as in Taiwan, Japan, the Philippines, Thailand, and Malaysia, just to mention a few.

In Vietnam English is becoming popular due to historical, political, and social events. It is a required subject in secondary education. Teachers of English in public high schools are fairly well trained: They have three years (now four years) of study in the Department of English at the Faculty of Pedagogy in both Hue and Saigon Universities. They are taught philology, phonology, morphology, and syntax besides the cultural courses--history, civilization, and literature--of the English-speaking countries: The United Kingdom and the United States. All these courses are given by professors who are native speakers of English. Nevertheless they are not quite professionally qualified according

[1]Albert C. Baugh, A History of the English Language, 2nd ed. (New York, 1963), p. 4.

to the standards set forth by Robert Lado[2]; in any case, they are better provided with a linguistic background than a good many other teachers. Yet the number of graduates from the Faculty of Pedagogy and the Faculty of Letters (Faculte' des Lettres) are not enough for the tremendously increasing number of students. Therefore anyone who knows English or once lived in an English-speaking country, whether or not he had any course in the teaching of language, can give English lessons. The Vietnamese American Association in Saigon and Hue,[3] seems to provide a fairly good English learning due to the fact that courses are conducted by Americans. These Americans, however, are not really properly qualified teachers since it is not enough for a teacher "to speak a language to be qualified to teach it. ... He must also know the linguistic facts of the language of the students in order to understand the particular problems they will have in learning the target language."[4] C. C. Fries firmly states: "The native speaker of a language, unless he has been specially trained to analyse his own language processes, will be more likely to mislead than to help a foreigner when he

[2]Robert Lado, Language Teaching (New York, 1964), p. 8.

[3]The purpose of this organization is to promote friendship and understanding between the two peoples.

[4]Lado, Language, p. 9.

tries to make comments about his own language."[5] In other words, a good teacher is the one who knows his language and the language of his students well enough to understand the difficulties the learner will have and help him overcome them. "The teacher should have a complete knowledge of the structure of the language to be taught and of the students' vernacular."[6]

Except for those students or teachers who have studied linguistics, not many teachers of English in Vietnam as well as in other countries realize that they have to know their own language, its phonology, morphology, and syntax, to better teach English. It seems ridiculous to say that a native speaker does not know his own language, but it is likely that he is not aware of the structure or sound system of his mother tongue because he is brought up in his speech community. He picks up the language as easily as he walks, laughs, and eats. I never knew before I studied linguistics that Vietnamese does not have tripthongs because in the official spelling there are many words or morphemes which contain more than two vowel symbols, but "phonemes

[5] C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), p. 5.

[6] J. O. Gauntlett, Teaching English as a Foreign Language (New York, 1961), p. 25.

are not letters."[7] A native speaker of English never notices that p in pin is different from p in spin as far as the pronunciation is concerned, nor can he explain why the letter s following the letter t as in eats is pronounced differently from an s following d as in deeds. Linguistics will explain these difficulties. "The language teacher can not ignore the results of linguistics," says Lado, because this scientific study of language will help the teacher see the problems he has in his teaching or the difficulties his students have in their learning.

The primary purpose of learning a foreign language is to master its sound system first in order to speak with an acceptable pronunciation since "The sense, and consequently the understanding of a word, depends upon its pronunciation, even if it is pronounced only mentally."[8] Phonetics will give a full description of the sounds of a language. Phonemics will show how two languages are different. The teacher with some knowledge of the mechanics of speech will know how a new sound is produced and will compare it with the sound approximately equivalent in his mother tongue. Thus, he will know how to prepare the teaching

[7]Robert Lado, Linguistics Across Culture (Ann Arbor, Mich., 1961), p. 9.

[8]Charles H. Handchin, Methods of Teaching Modern Languages (New York, 1923), p. 90.

materials based on the comparison of the two sound systems. He will see the similarities and dissimilarities between both languages and can predict the difficulties the students will have in facing a new sound which is absent from their native language. I would like to emphasize here again that the teacher--whether he is a native or a non-native speaker--needs to know the language of the learner. To teach English to Vietnamese students, he will be more efficient and spend less time if he knows the Vietnamese sound system because "The basic problems arise not out of any essential difficulty in the features of the new language themselves but primarily out of the special set created by the first language habits."[9] Being familiar with these habits, the teacher can help his students master the sound system of the target language with better results.

Some linguists, aware of the importance of a parallel comparison of English and other languages in language learning and teaching, have made contrastive studies to ease the language teaching problems for the teachers and students of the Western world whose languages are related to English, but "very little attention has been devoted to the special problems of the learners whose native tongue is non-cognate with

[9]Foreword by C. C. Fries to Lado, Linguistics.

English."[10] I shall attempt in this paper to make a comparative analysis of the English and Vietnamese sound systems. This is not a very easy task because Vietnamese is an isolating analytic language entirely different from English, a fusional analytic language.[11] The former is monosyllabic, and the latter is polysyllabic.

Importance of the Study

"Language is a set of symbols" which represent the significant sound features pertaining to one particular tongue. Even though "there are no difficult language sounds per se"[12] because the human vocal apparatus can produce hundreds of different sounds, we still have great difficulty in mastering the sound system of a foreign language since we are not trained to produce and recognize the phonemes, the distinctive sound features, "the stream of speech," of that particular language. Different from walking, an inherent biological function of man, "speech is a non-instinctive, acquired, 'cultural' function."[13] We are so imprisoned in our speech habits that we cannot learn a foreign language with ease. "The muscles of our speech organs

[10]Gauntlett, p. v.

[11]Edward Sapir, Language (New York, 1949), pp. 142-143.

[12]C. C. Fries, "As We See It," Language Learning, I (January 1948), 12-16.

[13]Sapir, p. 4.

have early in life become exclusively accustomed to the particular adjustments and systems of adjustments that are required to produce the traditional sounds of the language."[14] These muscular habits are so marvelously formed that the speaker can hardly produce any other sounds than those of his own tongue. It is very hard for a native speaker of English to master the French uvular /r/ as in Robert or ronronnement because English /r/ is produced with a different articulation: It is either a flap or a trill liquid according to its distribution in a sequence. In the same way, a French person who learns English finds it difficult to pronounce English long vowels which, in most cases, are dipthongized, whereas French vowels are pure vowels, monophthongs. We Vietnamese experience the same difficulty in differentiating between /ɪ/ and /i/ as in sit and seat or bit and beat because they are allophonic in our sound system but phonemic in English. "A person 'listening' to another language actually does not 'hear' the sound units which do not exist in his native tongue."[15] The learning problem arises from this difference between two phonemic systems. We will transfer the structure of our language to the

[14]Sapir, p. 45.

[15]F. L. Bumpass, Teaching Young Students English as a Foreign Language (New York, 1963), p. 13.

target language, i.e., we will substitute for the foreign sound our corresponding sound similar to it. For example, since the voiceless interdental fricative /θ/ as in <u>think</u> /θink/ does not exist in Vietnamese, we will automatically use in place of it /th/ which occurs in our language, and we will pronounce it /think/. Vietnamese /th/ is an alveolar aspirated stop. A German will pronounce it like /sink/ or /t^hink/ because German does not have /θ/. In the same way, a native speaker of Tagalog will identify the English voiced labiodental fricative /v/ as his voiced bilabial stop /b/. He will say /bɛrɪ/ for /vɛrɪ/. The Chinese and Japanese cannot distinguish the contrastive difference between /r/ and /l/. For them <u>rice</u> and <u>lice</u> sound alike because /r/ and /l/ are sporadic variants of one phoneme in their languages. It is hard for an American to understand a Chinese when he says: /ai laik flaid lais/ for <u>I like fried rice</u>. This amusing error in pronunciation is shared by all people who have the same linguistic background. "College professors and unskilled laborers have the same difficulties."[16] This disturbing interference of the native tongue in learning a foreign language can be detected, "diagnosed," and avoided only by a careful contrastive analysis of two sound systems. The comparison will also offer "an

[16]H. A. Gleason, <u>An Introduction to Descriptive Linguistics</u> (New York, 1961), p. 363.

excellent basis for the preparation of instructional materials."[17]

The teacher should know the sound system and other pronunciation features of both languages to help his students develop an ability to operate their speech organs "to produce sound patterns characteristic of the language being learned"[18] and to acquire a new set of habits for oral production and aural reception. To learn a new language is to replace one system by another system of different distinctive features and their distribution in segmental sequences. This replacement will be rendered easier if the contrastive difference between two sound systems is clearly studied and pinpointed. The ultimate purpose of this study is to meet this need. The generalities of the two languages will be presented accordingly before the phonemic analysis of each is made, followed by the comparative analysis of the two phonemic systems which closes the study.

[17]William G. Moulton, The Sounds of English and German (Chicago, 1962), p. v.

[18]Gleason, Introduction, p. 344.

Scope of the Study

The present study will not take up all items involved in a full phonological comparison--juncture, intonation, and stress--in detail. The writer will focus only on the parallel comparison between the Vietnamese sound system, the phonemes and their distribution, and the English sound system. The contrastive analysis will reveal areas of difficulty in pronunciation the Vietnamese students have. It is hoped that this study will help the teacher and the student alike to gain an insight into the phonemic problems of teaching and learning the English pronunciation. It is intended further to serve as a basis for the preparation of teaching materials.

CHAPTER II

VIETNAMESE SECTION

Generalities

Language Family and Historical Remarks

Vietnamese is one of the main languages in South East Asia, spoken by 25,000,000 inhabitants of Vietnam. According to Gleason it belongs to the Austro-Asiatic family.[1] It was influenced by other languages: Mon-Khmer, Maylayan, and Thai,[2] yet chiefly by Chinese, as a result of a long period of colonization. In fact, we were forced to adopt the Chinese writing system for centuries, yet Vietnamese has characteristics of its own. For the present system of writing, we are indebted to the Catholic missionaries in the seventeenth century, including the Portugese, French, and Italians.[3] The most elaborate and systematic work was done by Rev. Father Alexandre de Rhode, who invented a Vietnamese writing system making use of the Roman alphabet and based on phonetic transcription. This explains the close correlation between the spelling

[1]H. A. Gleason, An Introduction to Descriptive Linguistics (New York, 1961), p. 471.

[2]Dinh Hoa Nguyen, Ngu Hoc Nhap Mon (Saigon, 1962), p. 125.

[3]M. B. Emeneau, Studies in Vietnamese (Annamese) Grammar (Berkeley, Calif., 1951), p. 1.

and the pronunciation of the language.

Dialects and Their Differences

In Studies in Vietnamese (Annamese) Grammar, Professor M. B. Emeneau quotes Henri Maspero's statement dividing Vietnamese into two major dialects: the Tonkinese-Cochinchinese and the dialects of Haut-Annam.[4] By Tonkinese-Cochinchinese, Maspero refers to the dialects spoken in the North (Tonkin) and those in the South (Cochinchinese) from Tourane southward (see the map). The central part between the North and the South is treated as Haut-Annam. Actually, the French colonial administration divided Vietnam into three parts: "Tonkin" in the North, "Annam" in the central part, and "Cochinchine" in the South. This division coincides with the difference in dialects spoken in the three main regions: the North, the Central, and the South. Traditionally, we believe that we have three main clear-cut accents[5] and that "A son parler, un Vietnamien est tout de suite identifié: par son accent, il est reconnu pour un habitant du Nord, du Centre ou du Sud, comme le Marseillais et le Breton se

[4]Henri Maspero, "Etude sur la phonetique historique de la langue annamite--Les Initials," Bulletin de l'Ecole Francaise d'Extreme Orient, VIII (December 1912), 5-9, as quoted by Emeneau, preface, p. v.

[5]A. Maillet, Les langues du monde (Paris, 1952), p. 581, confirms that Vietnamese has three main dialects: "avec ses trois dialects, tonkinois, annamite, cochinchinois."

font remarquer lorsque l'un et l'autre parlent le francais."[6]

I was rather surprised when I learned about the dialectal classification by Maspero. I cannot bear the idea that the northern dialects (the standard is Hanoi) and the southern dialects (Saigon is representative) can be grouped together! To me, the northern and southern dialects have many more different features than those mentioned by Professor Emeneau: "Tonkinese and Cochin Chinese are slightly differentiated from one another by differences of pronunciation and of vocabulary."[7] The differences are so great that at first meeting, the Northerner and the Southerner might not understand each other well. Some friends of mine who fled the northern Communist regime reported that they could hardly understand or make themselves understood when they first came south. Neither the person from the North or the South can understand the person from the central parts if the latter speaks too fast. To state this fact does not mean that each dialect has a different structure. The structure of the language is the same for these three regions, yet each dialect

[6]Van Ly Le, Introduction to Le Parler vietnamien, Sa Structure phonologique et morphologique functionelle (Saigon, 1960).

[7]Emeneau, preface.

has some phonemes which are nonexistent in the others. In this respect, the central dialect has more phonemes in common with the southern than with the northern. Above all, it is the distribution of tones which makes the dialects sound so different from one another, although the conventional symbols used in orthography are the same. For example, the Hanoi dialect has six distinguishing tones, while Hue, the standard dialect of the central part, and Saigon have only five tones. There is no differentiation in pronunciation between /ʔ/ and /~/ in the Hue and Saigon dialects. Therefore it is difficult for the people of these two regions to write the words with the correct tone symbols /ʔ/ or /~/ as the official spelling requires.

For centuries, Hanoi has been the political and cultural capital of Vietnam; consequently, the Hanoi dialect has been recognized as the standard dialect of the country. Most literary works are written in this dialect. Those written in other dialects would be considered as regional works.

After the Geneva Agreement in 1954, which divided Vietnam into two parts, a million people from the North came to Saigon, and Saigon has become, since then, the capital of the Republic of Vietnam (South), and it is becoming important politically, economically, and culturally. A great number of people from the central

part also moved south. It was the first time in our history that people from various parts got to live side by side as a result of political and economical events. Their dialects have been affected by this "mixture" and have influenced each other.

The difference between dialects will be discussed later in comparison with English for pedagogical purposes.

In this paper, I have analyzed my own dialect (Hue) and have served as my own chief informant since adequate materials are not available. Furthermore, two other students enrolled at Texas Technological College who speak the same dialect have helped me ascertain the accuracy of the pronunciation described.

Hue is the ancient capital of Vietnam located right at the midpoint in relation to the North and the South. Its speech, in general, has more features in common with the southern dialects, yet the "accent" and the tone system are particularly different from all the others.

I will present first the tones, then the vowels, the consonants, and finally the prosodic features.

As mentioned previously, Vietnamese sounds are recorded with the letters of the Roman alphabet; the tones are represented with diacritical marks. The Vietnamese writing system can be called phonemic

because each letter or group of letters represents a special sound. Hence, any word can be pronounced correctly according to its spelling, or any word can be spelled correctly according to its pronunciation. We do not know the spelling problem as the native speaker of English does.

Phonemic Analysis of Vietnamese

The Structure of Spoken Vietnamese

Spoken Vietnamese exhibits two simultaneous structural patterns like all other languages: the sound system and the grammatical system. This study is dealing only with the former, which itself consists of segmental phonemes (tones, vowels, and consonants) that are the primary interest of this analysis and suprasegmental phonemes or prosodic features (juncture, intonation, and stress). Since tone is an integral part of the syllabic nucleus and is completely foreign to Indo-European languages, it will be presented first as advised by Gleason,[8] for those unfamiliar with the pitch phoneme are able to read and understand the tone pattern associated with words or morphemes given as examples in this paper.

The tones

Like other tonal languages, Vietnamese uses tone to distinguish the meaning of words. Without the changing of pitch, many words would have become homonymous. The

[8]Gleason, An Introduction, p. 30.

TABLE I: VIETNAMESE PHONEMES*

Tones

/ (/)

ʔ (ʔ, ~)

\ (\)

. (.)

Vowels

i (i)	ɯa (ươ, ưa)	u^ (uô, ua)
i^ (iê, yê, ia)	ơ (ơ)	(ô)
e (ê)	^ (â)	ɔ (o)
ɛ (e)	a (a)	ă (ă)
ɯ (ư)	u (u)	

Consonants

k (k, c)	h (h)	v (v)	l (l)
c (ch)	kh (kh)	g (g, gh)	ŋ (ng, ngh)
ʈ (tr)	s (s)	y (d)	ñ (nh)
t (t)	z (r)	th (th)	n (n)
b (b)	d (d)	f (ph)	m (m)

*The first column contains phonemic symbols; the second contains in parentheses the official spelling.

change of pitch is so important in the tonal languages that some linguists call it a phoneme,[9] not a prosodic feature. Pitch phoneme is Gleason's term[10] to differentiate the tone from the vocalic and consonantal phonemes. Some others call it toneme. Henry Sweet classifies tone as one of the prosodic features. According to Jakobson's definition, a prosodic feature is "displayed only by those phonemes which form the crest of the syllabic and it may be defined with reference to the relief of the syllable or of the syllable chain."[11] Tone should belong to prosodic features created by the motion of the vocal cords along the line of the production of the vocalic nucleus.

Tone is not a distinctive feature in the Indo-European languages, hence to the speakers of those languages, it seems very complicated and difficult to learn. In actual fact, it is not so hopeless; It can be analyzed systematically as part of the phonemic system. Regardless of the number of tones which are present in one tonal language, the basic

[9] Foongfuang Kruatrachue, "Thai and English: A Comparative Study of Phonology for Pedagogical Applications," a doctoral dissertation (Indiana University, 1960), p. 25.

[10] Gleason, An Introduction, p. 284.

[11] Roman Jakobson, Selected Writings (The Hague, 1962), pp. 478-479.

concept is very simple if we describe them in terms of the binary opposition or the polarity principle[12] involving the polar terms such as high and low register and rising and falling pitch, in other words, level or modulation features which may appear in the same position in the sequence. The Vietnamese linguist Dr. Le van Ly considers tone a prosodic feature in Vietnamese comparable to the function of stress or quantity in many Indo-European languages: "L'accentuation affecte plutôt certaines langues indo-européennes; pour le Vietnamien, la prosodie comporte seulement le ton."[13] Le defines the tone as follows: "un fait phonique, comportant des modulations musicales, affectant l'élément vocalique d'un signe vocal et pouvant faire changer le sens intellectuel des mots possédant les mêmes phonèmes."[14] One sound can have six different meanings if it is pronounced with either different level features or different modulation features. For example:[15]

1. La /la/ : to shout
2. Lá /lá/ : a leaf

[12]Jakobson, Selected Writings, pp. 464-503.

[13]Le van Ly, Le parler vietnamien: Sa structure phonologique et morphologique fonctionelle (Saigon, 1960), p. 121.

[14]Le, p. 122.

[15]The description of these tones will be given below.

3. là /là/ : to be; to iron (northern dialect)

4. la /la/ : tired out

5. la̤ /la̤/ : strange, queer

6. la̰ /la̰/[16] : cold (water)

The diacritical symbol which represents the tone in most cases is put above the syllabic element or strongly above the first element of a diphthong if any. The Hue dialect has five contrasting tones[17] distributed into two groups: level and modulation (intersyllabic and intrasyllabic phenomena).[18] The examples will be given in official spelling, phonemic transcription, and English translation. Furthermore, I will use a musical scale to represent this "pseudo-musical" aspect of the language.[19]

[16]The dialect described in this paper does not distinguish between tone 4, la, and tone 6, la̰, in pronunciation; however, the meaning is recognized from the context.

[17]The northern dialects have six; the central, including the dialect described, and the southern have only five.

[18]Intersyllabic feature is the pitch level of one syllable in contrast with that of another. Intrasyllabic feature is the higher or lower register of one portion of the nucleus syllable in contrast with the other of the same syllable.

[19]The musical notation I shall use here to represent the tones does not by any means correspond to all cases. This is described after my own pronunciation, checked with a few friends of mine (all women). The pronunciation of course varies with the region, community, or even the individual.

Group I:

/ / unmarked in orthography; denotes a high level tone at the level of the musical note La, e.g.:

ba /ba/ : three

ma /ma/ : ghost

/ˋ/ denotes a mid-level tone, or musical note Mi, e.g.:

bà /bà/ : madam, grandmother

mà /mà/ : relative pronoun 'which,' 'that,' or a final particle which usually becomes /m / (weak stress)

/ ̣/ written as a dot under the syllabic element. It is a low-level tone, musical note Do, e.g.:

ba̤ /ba̤/ : a bound form of a compound word "bay ba" /b y ba/ means 'wrongly' or 'wrong'

ma̤ /ma̤/ : rice seedling or 'mom' (mother)

Group II:

/ʔ/ denotes a modulation of pitch starting at a mid-level and ending with a glottal stop, e.g.:

baʔ /baʔ/ : residue, a bait

maʔ /maʔ/ : a grave

/ˊ/ denotes a modulation of pitch starting at a low level and keeping the same level a moment before ending up at a higher level (contour pitch), e.g.:

bá /bá/ : Chinese loan word meaning 'father's older brother'; a proper name

má /má/ : 'cheek'; 'mom' (mother, widely used in the South)

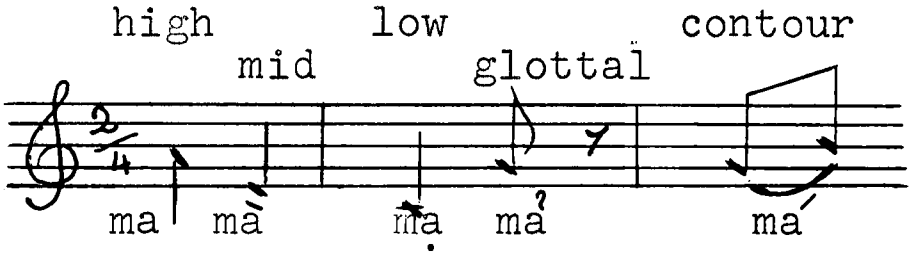
As presented on pages 19 and 20, there are six symbols in the orthography of the language which affect the meaning of the individual words and phonemicize them, yet in the Hue dialect, we have only five contrasting tones; <u>ma</u>̰ and <u>ma</u>ˀ are pronounced the same, but they are two different words with different meanings:

mảˀ /maˀ/ : 'a grave'

mãˀ /maˀ/ : 'a horse' (Chinese loan word)

The meaning is detected only when the word appears in context.

Tones presented on the musical scale



<u>Distribution of tones and their allophones</u>. Theoretically speaking, every syllable element can receive one tone, and only one. In actual fact, the tones do

not occur freely on all syllables; they are restricted by segmental features--the type of the nucleus and the type of final consonant.

All the tones can occur with final vowels as far as the possible combinations of sound are concerned, although some resulting sounds may not happen to be real words with lexical meaning. The tones are slightly glottalized when they are distributed on the final vowels, the simple and the complex.

Words ending with a stop occur only with the high rising tone (or contour pitch), and the low level tone words ending with a nasal occur freely with all the five tones.

Syllable Finals	Tones				
	High	Mid	Low	Glottal	Contour
Vowel	x	x	x	x	x
Stop after vowel			x		x
Nasal after vowel	x	x	x	x	x

The vowels

The vowel is the nucleus of words in Vietnamese. Each word contains one or a group of vowels with or without a consonant preceding or following.

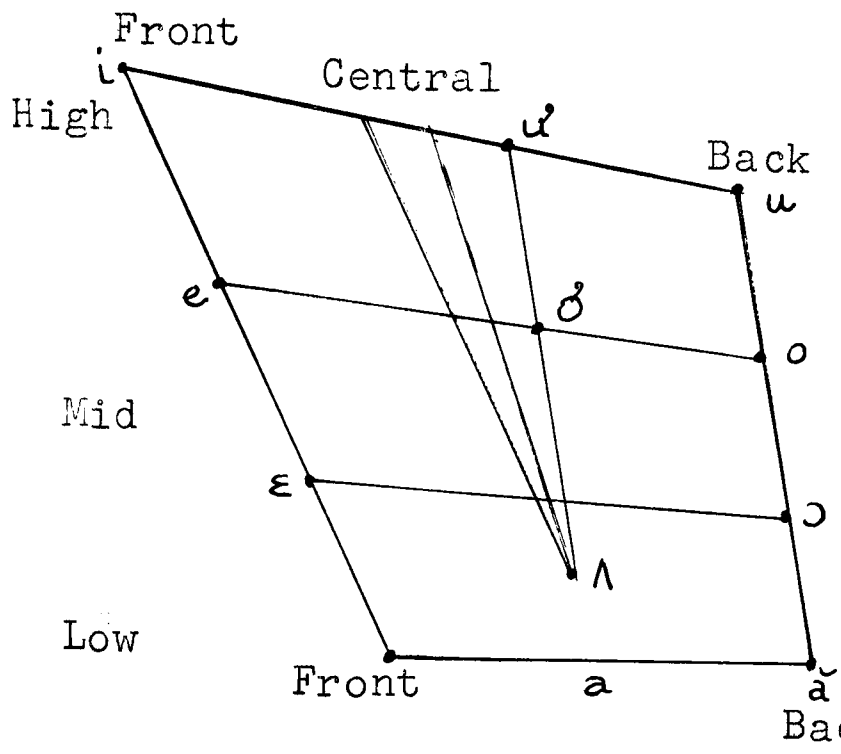
It is customary to use three main dimensions to describe vowels:

The position of the tongue: high vs. low
front vs. back

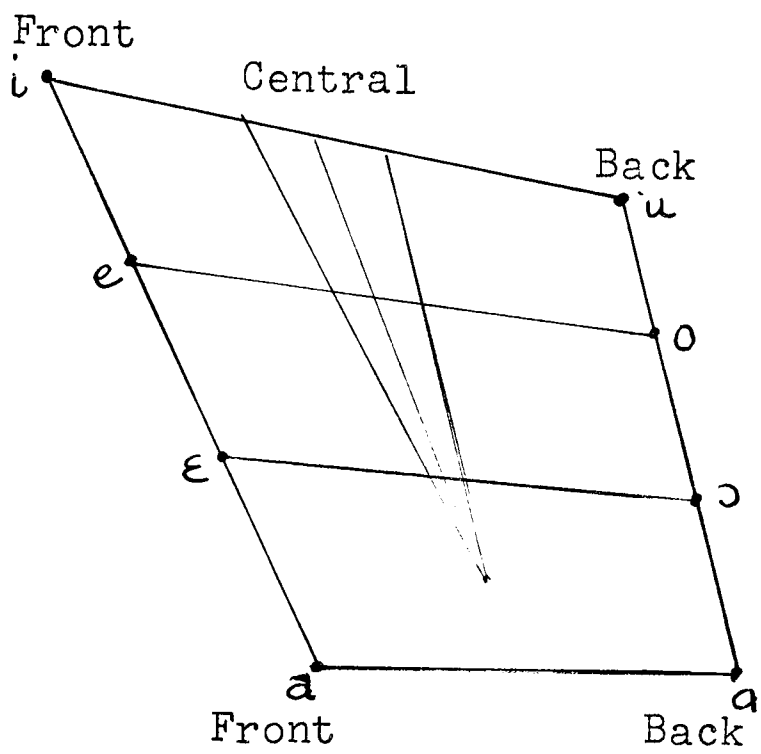
The position of the lips: rounded vs. unrounded

Eleven Vietnamese pure or simple vowels are arranged in the following chart according to those dimensions:

Vietnamese Vowels**



Cardinal Vowels*



*This diagram is adapted from Daniel Jones, An Outline of English Phonetics (New York, 1962), pp. 36 and 38.

**The Vietnamese vowels are arranged in Jones's vowel diagram to show the similarity between the Vietnamese and cardinal vowels.

Phonetic description of vowels

The front vowels /i, e, ɛ/

/i/ is the high front unrounded vowel. It is produced with the maximum front elevation of the tongue.

Vietnamese[18] di /di/ 'to go'

French[19] lit /li/ 'bed'

English to see /si/

/e/ is the higher mid-front unrounded vowel. It is produced with the elevation of the tongue lower than that of /i/.

Vietnamese đê /de/ 'dyke'

French été /ete/ 'summer'

/ɛ/ is the lower mid-front unrounded vowel. It is produced with the elevation of the tongue lower than that of /e/.

Vietnamese Mẹ /mɛ/ 'mother'

French mère /mɛr/

English bet /bɛt/

The central vowels /ɯ̂, ɔ̂, ʌ, a/

/ɯ̂/ is the high central unrounded vowel. It is produced like the back rounded /u/ with the same tongue height yet with the lips spread. It is found neither in French nor

[18]Examples are given in the following order: key words, phonemic transcription, and English translation.

[19]I use French examples here, for those who know French can thus recognize and pronounce the Vietnamese phonemes with more accuracy.

in English. It is close to the Turkish unrounded /ɨ/.

từ /tɯ̀/ 'from'

xứ /sɯ́/ 'country'

/ɤ̛/ is the unrounded counterpart of /o/. It is produced with the same articulation but with the lips neutral.

chờ /cɤ̀/ 'to wait'

bờ /bɤ̀/ 'shore' (seashore)

It can be compared with French /œ/ as in jeune, yet the Vietnamese /ɤ̛/ is produced with the lip aperture more open.

/ʌ/ is the lower mid-central vowel. It can be considered as a short nasalized counterpart of /ɤ̛/ which is longer in quantity and different in distribution.*

/a/ is the low central unrounded vowel. It is articulated with the lips neutral.

ba /ba/ 'three'

la /la/ 'to scold'

French la /la/ article 'the' (feminine)

English father /faðər/

Its duration is longer in comparison with its nazalized counterpart /ã/. It is described by some linguists as a diphthong /aə/ or by R. Jones and H. S. Thong as /a:/.

*See the examples on page 31.

The back vowels /u, o, ɔ , ă̆/

/u/ is the high back unrounded vowel. It is produced with the maximum back elevation of the tongue.

Vietnamese dù /yù/ 'umbrella'
vú /vú/ 'a nurse' (governess)
French doux /du/ 'sweet, gentle'
English blue /blu/

/o/ is the higher mid-back unrounded vowel.

Vietnamese cô /ko/ 'Miss' or 'a woman teacher'
tốt /tók/ 'good'
French nos /no/ 'our'
beaux /bo/ 'pretty,' 'handsome'

/ɔ/ is the lower mid-back rounded vowel. This sound is "intermediate" between [a] and [o].

Vietnamese lo /lɔ/ 'worry'
nho /ñɔ/ 'grape'
French tort /tɔr/ 'wrong'

It occurs in the British pronunciation of words like hot, not, and lawn.

/ă̆/ is the fairly back unrounded nasalized vowel. This sound is exclusively Vietnamese.

mắt /măk/ 'eyes'
bắt /băk/ 'to arrest, to catch'

This vowel is considered by some linguists

> as the short member of /a/; it is different from /a/ in that it can never occur in the final position and is followed restrictedly by a certain number of consonants.

Besides eleven simple vowels, there are three so-called complex vowels: /iʌ, ɯ̯a, uʌ/, each of which L. V. Ly in Le parler vietnamien[20] considers a unique phoneme. He classifies them as a group of vocalic phonemes with the lip aperture in between two sets, the first one /i, u, u/ with the lip aperture minimum and the second /e, o, o/ with the lip aperture at the second degree. He uses the degree of the lip aperture to describe the vowels as follows:

1st degree:	i	ɯ̯	u
2nd degree:	e	ɤ̯	o
3rd degree:	ɛ	ʌ	ɔ
4th degree:	a		ă

His complete chart of the Vietnamese vocalic phonemes appears in the following order:[21]

i	ɯ̯		u
iʌ	ɯ̯a		uʌ
e	ɤ̯	ʌ	o
ɛ	a	a	ɔ

[20]See "caractere monophonematique" des /iʌ, ua, uʌ/ that he writes /ie, wɤ̯, uo/, p. 56ff.

[21]Le, p. 58.

Distribution of vowels and their allophones[22]

All the simple vowels except /ă and ʌ/ occur freely in all positions, initially, medially, and finally. They even can form a syllable or an utterance by themselves. Examples:

/i/

im /im/ : 'silence'

chim /cim/ : 'bird'

chị /cị/ : 'elder sister'

ý /í/ : 'idea'

/i/ has an allophone, short [ɪ], when followed by a dental /t/, bilabial /p/, or palatals /c and n/:

thịt [thɪt] : 'meat'

dịp [dɪp] : 'occasion'

chích [cíc] : 'give a shot'

dính [yín] : 'sticky'

It is longer when it occurs by itself as a significant element as in

y /i/ : 'him'

[22]Le van Ly in Le parler vietnamien does not accept any allophone in the Vietnamese phoneme system. He says: "Tous ces phonèmes se caracterisent par leur netteté de réalization. Ils se trouvent partout les mêmes avec les caractères définis de leur categorie et ne sont influencés par le voisinage d'aucun autre phonème. Autremendit, les phonèmes vietnamiens ne connaisent pas de variants combinationes," p. 20. I would not agree with him because I can find allophones of some phonemes even in the dialect he describes (Northern) since I can speak this dialect also, and in addition, I have as informants the Vietnamese students at school who speak the same dialect.

or in the final position or followed by other consonants.

/e/

vê /vè/ : 'to come back'

tết /tét/ : 'new year'

êm /em/ : 'comfortable'

ê /e/ : 'aching feeling'

Like /i/, /e/ has an allophone, shorter [e], when followed by a dental /t/ and palatals /c, ñ/.

/ɛ/

em /ɛm/ : 'younger sister or brother' (vocative)

đem /dɛm/ : 'bring'

bé /bɛ́/ : 'small'

e /ɛ/ : 'lest'

/ɛ/ cannot be followed by dental /t/ or palatals /c and ñ/, yet its quantity is shortened when it is followed by /p/ as in

đẹp /dɛ̣p/ : 'pretty'

/a/

la /la/ : 'to scold or scream'

làm /làm/ : 'to work, to make, to do'

anh /añ/ : 'elder brother'

a! /a/ : exclamation of surprise or joy

/ă/

This phoneme cannot occur by itself and in the

final position. It is considered to be a short counterpart of /a/.[23]

ăn /ăn/ : 'to eat'

tắt /tắk/ : 'to turn off the light'

/ʌ/

Like /ă/, this phoneme /ʌ/ cannot occur by itself to form a significant element or occur in the final position. It is considered to be a short counterpart of /ɔ̛/.[24]

ấp /ʌ́p/ : 'farm or ranch' or 'to brood' (hen)

tập /tʌ̣p/ : 'to practice'

/ư/

xứ /sứ/ : 'country'

cứng /kứŋ/ : 'hard'

từ /từ/ : 'from'

ừ /ừ/ : 'yes' (colloquial term)

/ɔ̛/

sợ /sɔ̛̣/ : 'to be afraid'

sớm /sɔ̛́m/ : 'early'

ớt /ɔ̛́k/ : 'red pepper'

ở /ɔ̛̉/ : 'to dwell'

/u/

thu /thu/ : 'autumn'

[23]Le, p. 26.

[24]Le, p. 26.

cúc /kúkᵖ/ : 'chrysanthemum'

út /úk/ : the youngest child in a family, the baby daughter or son

ù /ù/ : 'to win' (a card game)

/o/

vô /vo/ : 'to enter, to come in'

tốt /tók/ : 'good'

ông /oŋᵐ/ : 'sir'

ồ ! /ò/ : surprise (exclamation)

/ɔ/

cho /cɔ/ : 'to give'

trong /ʈɔŋᵐ/ : 'inside'

óc /ɔ́kᵖ/ : 'brain, mind'

o /ɔ/ : 'aunt'

The three complex vowels can form an utterance by themselves. They occur freely in all positions like the simple vowels. This is one of the reasons why they are classified as unique phonemes because the diphthongs cannot occur as freely as the simple vowels.

/iʌ/

chia /ciʌ/ : 'to divide'

biết /biʌ́k/ : 'to know'

yêu /iʌw/ : 'to love'

ia /iʔʌ/ : 'go to the bathroom'

/uʔa/

mưa /muʔa/ : 'rain'

bướng /bưáŋ/ : 'stubborn'

ướt /ưák/ : 'wet'

ưa /ưa/ : 'to like'

/uʌ/

mua /muʌ/ : 'to buy'

muốn /múʌŋ/ : 'to want'

uống /uʌ́ŋ/ : 'to drink'

ua /uʔʌ/ : exclamation of surprise

General remarks. All the vowels are shorter when they are followed by the voiceless stops /t, p, c/ and the nasal palatal /ñ/ than when they are unchecked. In the final position, all the vowels, simple and complex, are slightly glottalized.

Besides 14 vowels, Vietnamese has two semivowels, one front and one back: /y, w/. They serve as glides in many types of combinations of diphthongs. They can either precede or follow a vowel phoneme. The tongue, in the production of a glide or a semivowel, is normally at a higher elevation and more front or more back in comparison with the peak vowel with which it is combined. We have on-glide and off-glide according to the position of the glide in the combination.

On-glide: the semivowel follows the vowel which forms the syllabicity of the sequence:

/ay/ in tai /tay/ : 'ear'

/aw/ in vào /vàw/ : 'to enter'

Off-glide: the semivowel precedes the vowel:

và /bỳa/ : 'and' (Saigon dialect only)

que /kwɛ/ : 'a stick'

When the semivowels /y, w/ occur initially followed by a vowel, they take the place of consonants and become voiced:

dạ /yạ/ : 'yes' (polite)

oe /wɛ/ : cry of a newborn baby

The consonants

The consonant phonemes are the nonsyllabic sounds which precede or follow a vowel nucleus or a syllabic sound in Vietnamese to form a word.

Twenty consonant phonemes are found in Vietnamese. They are described in terms of point of articulation and manner of articulation. These phonemes are presented in the following chart:

	Labial	Dental	Palatal	Velar	Glottal
Stops	p*	t th ṭ	c	k	
	b	d		g	
Fricatives	f	s	š	kh	h
	v		ẓ		
Nasals	m	n	ñ	ŋ	
Lateral		l			
Semivowels	w		y		

*/p/ is a voiceless counterpart of /b/; it never occurs in the initial position except in a few loan words; it is a defective phoneme and is therefore omitted here as a phoneme.

Phonetic description of consonants

The stops: /b, t, d, th, ṭ, c, k, g/

/b/ is the voiced unaspirated bilabial stop; it is produced with full phonation and with strong energy (fortis).

/t/ is the voiceless unaspirated dental stop.

/d/ is the voiced unaspirated dental stop.

/th/ is the voiceless aspirated alveolar; it is produced with a strong aspiration.

/ṭ/ is the retroflex alveolar stop, articulated with the retroflex tip of the tongue at the back of the alveolar ridge.

/c/ is the voiceless unaspirated palatal stop, articulated with the front of the tongue against the hard palate.

/k/ is the voiceless unaspirated velar.

/g/ is the voiced equivalent of /k/.

The fricatives: /f, v, s, s, z, kh, h/

/f/ is the voiceless labiodental; it is produced with a weak friction.

/v/ is the voiced counterpart of /f/.

/s/ is the voiceless postdental sibilant; it is approximately like the English /s/.

/s̆/ is a fricative articulated like the English /s̆/ with retroflexion of the top of the tongue back farther behind the alveolar

ridge with weak friction; it is voiceless.

/ẓ̌/ is the voiced retroflex alveopalatal fricative; its articulation is like that of /š̌/ but with a vibration of the vocal cords.

/kh/ is the voiceless palatovelar aspirant.

/h/ is the voiceless aspirated glottal fricative.

The nasals: /m, n, ñ, ŋ/

/m/ is the voiced bilabial nasal; it is like the French or English /m/.

/n/ is the voiced apico-alveolar.

/ñ/ is the voiced hard palatal nasal; it is like the Spanish /ñ/.

/ŋ/ is the voiced velar nasal; it is articulated like the English /ŋ/ as in sing.

The lateral: /l/

/l/ is the voiced frictionless lateral in postdental position; there is only one lateral in Vietnamese.

The glides: /w, y/

/w/ is a voiced bilabial continuant when it precedes a vowel forming an utterance.

/y/ is a voiced palatal continuant preceding a simple vowel or a complex vocal nucleus to form a syllable. This phoneme in the initial position is characteristic of the

central and southern dialects. It is replaced by /z/ in the northern dialects.

Distribution of consonants and their allophones

Vietnamese consonants can occur either initially or finally but never medially.

The initial consonants. All the consonant phonemes can occur initially, followed either by a simple vowel or a diphthong:

/b/

ba /ba/ : 'three'

bay /băy/ : 'to fly'

bán /báŋ/ : 'to sell'

/t/

ti /ti/ : 'the headquarters'

tiền /tiə̀ŋ/ : 'money'

tau /tau/ : 'I' (familiar)

/d/

đi /di/ : 'to go'

đổi /doy̰/ : 'to change'

đến /dén/ : 'to arrive'

/th/

tha /tha/ : 'to acquit'

thải /thay̰/ : 'to fire' (an employee)

thím /thím/ : 'the uncle's wife'

/ṭ/

tri /ṭi/ : 'to govern'

trời /ṭɤ̀y/ : 'sky'

trên /ṭen/ : 'above'

/c/

cha /ca/ : 'Father'

chúi /cúi/ : 'a broom'

chung /cuŋ/ : 'in common'

/k/

ký /kí/ : 'to sign'

kêu /kew/ : 'to call'

cong /kɔŋ^{m}/ : 'bended'

/g/

ghế /gé/ : 'chair'

gạo /gạw/ : 'rice'

gắng /gắŋ/ : 'to make an effort'

/f/

phố /fó/ : 'town'

phải /fảy/ : 'right'

phấn /fʌ́ŋ/ : 'powder or chalk'

/v/

và /và/ : 'and'

vui /vui/ : 'glad'

vâng /vʌŋ/ : 'yes' (polite--for the inferior to the superior)

/s/

xa /sa/ : 'far'

xấu /sʌ́u/ : 'ugly'

xin /sin/ : 'to beg'

/š/

si /ši/ : 'stubborn'

sai /šay/ : 'wrong'

sướng /sɯ́aŋ/ : 'happy'

/ž/

ra /ža/ : 'out'

rầu /žʌ̀w/ : 'unhappy'

riêng /žiʌŋ/ : 'private, separate'

/kh/

khó /khɔ́/ : 'difficult'

khói /khwáy/ : 'smoke'

không /khoŋ^{m}/ : 'no'

/h/

hỉ /hi^{ʔ}/ : 'to blow' (one's nose)

hoa /hwa/ : 'flower'

hát /hák/ : 'to sing'

/m/

ma /ma/ : 'ghost'

mai /may/ : 'tomorrow'

mắt /mắk/ : 'eyes'

/n/

nó /nɔ́/ : 'he' (to the inferior)

nói /nwáy/ : 'to speak'

nóng /nɔ́ŋ͡m/ : 'hot'

/ñ/

nhà /ña̰/ : 'house'

nhai /ñay/ : 'to chew'

nhẫn /ñʌ̰ŋ/ : 'a ring'

/ŋ/

nga /ŋa/ : 'Russia'

ngáy /ŋá̰y/ : 'to snore'

ngắm /ŋá̰m/ : 'to behold'

/l/

la /la/ : 'to scold'

lái /lá̰y/ : 'to drive' (a car)

lắm /lá̰m/ : 'very much'

The semivowels /w, y/ can become voiced consonants when they occur initially and serve to release the following syllabic sound as a proper function of a consonant.

/w/ is a voiced bilabial consonant which forms the labialization of the following vowel:

(khóc) oà /wà/ : 'to cry suddenly'

oải /wá̰y/ : 'tired'

oai /way/ : 'imposing'

/y/ is a voiced palatal consonant when it

occurs initially and forms with the following vowel an utterance:

da /ya/ : 'skin'

giành /yàñ/ : 'a branch' (of a tree)

dụ dỗ /yụ yo̰/ : 'to seduce'

/p/ mentioned previously as a defective phoneme which occurs finally as an allophone of /b/ in complementary distribution does, however, occur in the initial position in a few loan words:

/pik-ʌp/ : 'pick up'

/pin/ : French loan word 'battery'

/pip/ : 'tobacco pipe'

/piŋ-poŋ^{m}/ : 'table tennis'

In some dialects, especially southern, people substitute /b/ for this initial /p/. So it is reasonable to classify [p] as an allophone of /b/.

Final consonants. There are only eight consonants which occur in the final position. With the exception of /p/ all others can also occur in the initial position: /t, k, c, p, n, ŋ, ñ, m/.

The first four are voiceless stops; the remaining are their corresponding nasals. Since in the Vietnamese system we never find a voiced phoneme in the final position, we can say that it is /p/ which occurs finally and

never /b/. These final consonants are in fact analyzed as allophones of the corresponding phonemes in the initial position. They differ from their initial allophones in not being released and in being less tense or fortis.

Examples:

đất /dʌ́k/[25] : 'earth'
hết /hét/ : 'the end'
tích /tíc/ : 'vestige'
đẹp /dɛ̣p/ : 'beautiful'
nên /nen/ : 'had better'
bảng /bảŋ/[25] : 'board'
gánh /gáñ/ : 'a burden'
mềm /mèm/ : 'soft'

[25] Final [k] and [ŋ] are labialized after back rounded vowels and become [k^{p}] and [ŋ^{m}] respectively, e.g.:

học [hɔ̣k^{p}] : 'to study'
cúc [kúk^{p}] : 'chrysanthemum'
ông [oŋ^{m}] : 'Mr. or Sir'

TABLE II: INITIAL CONSONANTS AND VOWEL COMBINATIONS*

	i	e	ɛ	a	ă	ʌ	ŭ	ŏ	u	o	ɔ	iʌ	ŭa	uʌ
b	x	x	x	x	-	-	x	x	x	x	x	x	x	x
t	x	x	x	x	-	-	x	x	x	x	x	x	x	x
th	x	x	x	x	-	-	x	x	x	x	x	x	x	x
ṭ	x	x	x	x	-	-	x	x	x	x	x	x	x	x
c	x	x	x	x	-	-	x	x	x	x	x	x	x	x
k	x	x	x	x	-	-	x	x	x	x	x	x	x	x
kh	x	x	x	x	-	-	x	x	x	x	x	x	x	x
g	x	x	x	x	-	-	x	x	x	x	x	-	-	-
f	x	x	x	x	-	-	-	x	x	x	x	x	-	-
v	x	x	x	x	-	-	-	x	x	x	x	x	x	x
s	x	x	x	x	-	-	x	x	x	x	x	x	x	x
š	x	x	x	x	-	-	x	x	x	x	x	x	x	x
ẓ	x	x	x	x	-	-	-	x	x	x	x	x	x	x
h	x	x	x	x	-	-	x	x	x	x	x	x	x	x
m	x	x	x	x	-	-	-	x	x	x	x	x	x	x
n	x	x	x	x	-	-	x	x	x	x	x	x	x	x
ñ	x	x	x	x	-	-	x	x	x	x	x	-	x	x
ŋ	x	x	x	x	-	-	x	x	x	x	x	x	x	-
l	x	x	x	x	-	-	x	x	x	x	x	x	x	x
w	x	x	x	x	-	-	-	-		-	-	-	-	-
y	x	x	x	x	-	-	x	x	x	x	x	x	x	x

*This is one type of syllable structure (C+V).

Table II (continued)

Remarks:

1. The lowercase x denotes occurrences, and the hyphen (-) indicates nonoccurrence.

2. /ă, ʌ / are nonfinal; therefore they cannot associate with any consonant to form an utterance of this type (see the examples of /ă/ and /ʌ/ in the vowel section).

3. Besides /ă/ and /ʌ/, some vowels cannot be combined with certain consonants to form the syllable which is significant (C + V), yet they can be associated with those consonants if followed in turn by other consonants as final (C + V + C), for example:

phức	/fứk/	:	a bound form which occurs after the verb /thở̂m/ 'smell very good'
phường	/fưàŋ/	:	'a district'
vững	/vứŋ/	:	'stable'
mừng	/mứŋ/	:	'glad'
nhiệt	/ñiék/	:	'to abuse'

4. The phoneme /ư/ can precede /ở/, but the combination will sound close to the complex nucleus /ưa/.

TABLE III: VOWELS AND FINAL CONSONANT COMBINATIONS*

	Bilabials		Dentals		Palatals		Velars		Glides	
	p	m	t	n	c	ñ	k	ŋ	y	w
i	x	x	x	x	x	x	-	-	-	-
e	x	x	x	x	x	x	-	-	x	x
ɛ	x	x	-	-	-	-	x	x	-	-
m	-	-	-	-	-	-	x	x	x	-
ʌ	x	x	-	-	-	-	x	x	-	x
a	x	x	-	-	-	-	x	x	x	x
u	x	x	-	-	-	-	x	x	x	-
o	x	x	-	-	-	-	x	x	x	-
ɔ	x	x	-	-	-	-	x	x	-	-
o	x	x	-	-	-	-	x	x	x	-
a	x	x	-	-	x	x	x	x	x	x
iʌ	x	x	-	-	-	-	x	x	-	-
ua	x	x	-	-	-	-	x	x	x	-
uʌ	-	-	-	-	-	-	x	x	x	-

*The table is compiled from the examples given in Le van Ly, Le parler vietnamien, sa structure phonologique et morphologique fonctionelle (Saigon, 1960), pp. 74ff.

The consonant clusters. If we consider the sequences

dw in dwell

kw in quick, quack

tw in twine[26]

as initial consonant clusters, Vietnamese has a number of clusters of this type (C+(w)), and only this type of consonant combination is possible in Vietnamese. In fact all consonants (except the phoneme /f/) can be followed by (w) to form a combination in the initial position:[27]

qui /kwi/ : 'devil'

khoẻ /khwɛ/ : 'strong'

góa /gwa/ : 'widow or widower'

nguy /ŋwi/ : 'dangerous'

chóe /cwɛ/ : 'a big vase'

xóa /swa/ : 'to erase'

dọa /ywa/ : 'to threaten'

nhoài /ñwài/ : 'to stretch out' (one's body)

truy (nã) /ṭwi (na)/ : 'to search for some criminal'

suy (đồi) /swi (doy)/ : 'to degenerate'

toà /twà/ : 'a mansion, a palace'

dói* /dway/ : 'to be hungry'

[26]C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), p. 17.

[27]Most of these examples are taken from Le van Ly, p. 119.

thuê /thwe/ : 'to rent a house or hire a person'

huệ /hwẹ/ : 'lily'

loa /lwa/ : 'a loudspeaker'

bói* /bwáy/ : 'to read one's palm, one's fortune'

vói* /vwáy/ : 'to stretch out one's hand, to reach something far'

mọi* /mwạy/ : 'Negro'

nói* /nwáy/ : 'to speak'

Remark. The words marked with an asterisk are characteristic for the dialect described in this paper. Speakers of the northern dialects will pronounce the vocal nucleus as /ɔy/ instead of /way/ as in the Hue dialect.

As stated above, this type of combination (C + w) is the only type of consonant cluster which occurs in Vietnamese. If, on the other hand, we describe those consonants as labialized when followed by the glide [w], we can conclude that Vietnamese does not have any consonant clusters at all. The [w] glide which follows those initial consonants can serve to signal the lip rounding before the previous consonant is released with the following vocal nucleus. We should not confuse the pronunciation of the sequences /wi/ with /uy/. The former is produced with the [w] glide to the position of /i/:

qui /kwi/ : 'devil'
huy /hwi/ : 'to destroy'
luy /lwi/ : 'the outpost'
tuy /twi/ : 'marrow'

while the latter is a combination of the [u] sound and the [y] glide. This diphthong is produced with the position of the tongue of the [u] sound, then continues to the [y] glide:

cui /kuy/ : 'wood'
hui /huy/ : 'leprosy'
lui /luy/ : 'to run away'
tui /tuy/ : 'self-pity'

As a monosyllabic language, Vietnamese does not have any medial or final consonant clusters. That is, if we do not count the "written" consonant cluster in the initial or final position such as:

ng, ngh, nh, tr, th, ch, and ph

Each combination of two or three letters represents a unique sound which is different from each of the letters. I shall adopt the term "phonogram"[28] here for the symbol representing a single phoneme. It is remarkable that the phonograms (gh) and (ngh) are followed only by front vowels /i/ and /e/ or a diphthong beginning with the [y] glide, while (g) and (ng) can appear with a broader range

[28]Ralph M. Williams, Phonetic Spelling for College Students (New York, 1960), p. 6.

of vocal nuclei.

A compound word is usually written with a dash in between. In most cases, the second member is a bound form which cannot occur by itself in isolation:

diụu-dang̃ /yịw-yāŋ/ : 'gently, sweetly'

đẹp-đẽ /dɛ̣p-dɛ́/ : 'beautifully'

Although the second element of the compound begins with a consonant, it cannot be considered as a medial consonant of the utterance because the two elements are produced clearly as two syllables within one breath; the pause between the two is shorter than the pause between two separate words, or between junctures, but we still recognize the pause there:

cực-lực /kṵk/lṵk/ : adverb meaning 'with all one's heart'

This form cannot be pronounced /kṵklṵk/. At one time in history, some writers suggested writing these compound words (two syllable words) as one form, yet some of the resulting forms become unrecognizable and unintelligible such as:

phát-hành : 'to circulate' (magazines or newspapers)

In one form without the dash, it will be phát hành. We cannot know where the morpheme boundary is. It can be phát/hành : 'to circulate' or phá/thành : 'to break down a wall.' On the other hand, the distribution of

tone makes it clear that each word or syllable bears only one tone. This is a kind of demarcation which will signal the morpheme or word boundary.

Of all the combinations of phonemes possible in Vietnamese, a word cannot have more than three phonemes (CVC). The maximum structural pattern of the Vietnamese syllable can be analyzed by using the following formula:[29]

$$(C_1) \quad V \quad T \quad (C_2)$$

The meaning of the symbols:

I. C_1 C or Cw

V any vowel or V_1

T tone

C_2 final consonant

II. C any consonant

Cw labialized consonant C + w

V_1 complex vowel (iʌ, ưa, ua)

Prosodic features

Juncture

Junctures are the transition points between parts of a sentence and between sentences.[30] In other words,

[29]This formula is adopted from the one used by F. Kruatrachue in her doctor's dissertation "Thai and English: A Comparative Study of Phonology for Pedagogical Applications. (Indiana University, 1960), p. 56.

[30]R. B. Jones and Huynh Sanh Thong, Introduction to Spoken Vietnamese (Washington, D.C., 1960), p. 5.

juncture is a term which designates the morpheme boundary, word boundary, or the demarcation line in a sentence. In Vietnamese, juncture is singled out by the segmental phonemes and the distribution of tone. Because of the monosyllabicity of the language, every syllable is a significant element, separated from others by a very slight pause, presented in written form by a space, such as in the monosyllabic words in English:

one / two / three / four / five / six

As described in the consonant section, a syllable may be one of the following types:

V, VC, CV, CVC + tone

In addition to the segmental phonemes signaling the morpheme and word boundary, the distribution of tones helps make the whole picture clear: Each syllable can receive only one tone. In orthography, Vietnamese uses the same system of punctuation as English to indicate the limit of the immediate constituents in their respective hierarchy:

/,/	comma	indicate the clause final juncture or internal juncture
/;/	semicolon	
/:/	colon	

/./	period	indicate the sentence final juncture or terminal juncture
/?/	question mark	
/!/	exclamation point	

The phrase juncture is symbolized by a single bar (/); a double bar (//) is the symbol of the clause juncture; and finally, the double cross (#) indicates the sentence final juncture. Usually, the /#/ juncture is longer than the / // / juncture, which is, in turn, longer than the / / / juncture, which, in fact, is simply a transition between two phrases without any pause. The monosyllabic quality and the tone system of the language give "those who are accustomed to the languages of Western Europe the general impression of being underarticulated. Although the articulations are all precise enough, the resulting sounds seem to be made with little force, very softly and gently."[31]

Intonation

In any tonal language, it is very hard to determine whether intonation is a distinctive entity or partially a result of the tone pattern. Normally, the term "intonation" refers to the musical rhythm of the utterance. It usually "applies to whole sentences, though sometimes it may apply to a single phrase or clause of a sentence or even to a single word."[32] The

[31]Emeneau, p. 8.

[32]Jones and Huynh, p. 5.

tone pattern can also give the sentence, the clause, the phrase, or even the single word this musical quality. Paul Gouzien in his Manuel franco-tonkinois de conversation confuses the two entities: the tone and the intonation; under the heading "De l'intonation" he describes the tones![33] Lado clearly states that "tonal languages have an intonation system over and above the tone system of its words. The intonation system of tone languages tends to be a simple one limited to two additional pitch phonemes occurring at phrase and sentence final points."[34] This is true of the Vietnamese language also.[35]

In general, intonation is rarely phonemic in Vietnamese. It is affected by the distribution of tones over the individual morpheme or the words. At the sentence final juncture, the pitch level of the tone is usually lower than that elsewhere, except for the yes-no type of question, in which the voice always goes up, and the pitch level of the tone of the final syllable is higher than its ordinary pitch level:

Chiều nay chi có đi chơi đâu | không?

Answer in negative: Không.

[33] (Paris, 1897), see chapter "De l'intonation," pp. 3-9.

[34] Robert Lado, Linguistics across Cultures (Ann Arbor, Mich., 1961), p. 47.

[35] For a more complete picture of intonation in Vietnamese, see Jones and Huynh, pp. 5-6.

Translation:

Will you go out this afternoon?

No.

The "Khong" in the answer is said with a lower pitch contour.

Stress

Like intonation, stress in Vietnamese is not phonemic; it is, on the other hand, very hard to define its nature. L. C. Thompson, an American linguist who has a good knowledge of Vietnamese phonology, confesses that his analysis of stress in Vietnamese is unsatisfactory. Yet there is no doubt that Vietnamese utterances are pronounced with different degrees of loudness. It is observed that syllables vary in length in proportion to the loudness of stress; those with weak stress are very short. It seems to me, the emphasized word, the most important word in an utterance, bears the lowest degree of stress (emphatic stress). Jones and Huynh state that the last word in the phrase or the sentence receives the strong stress.[36] This is generally true but cannot be applicable to all cases.

[36]Jones and Huynh, pp. 6-7.

CHAPTER III

ENGLISH SECTION

Generalities

English is a Germanic language which shares fairly considerable features with its sister languages. However, it is in a course of development toward a simpler and less inflectional type than other Germanic languages.

The term "American English" is coined to differentiate the language spoken by 180 million people in the United States from the language spoken in the United Kingdom: British English. The difference between American and British English is primarily in the pronunciation of some words and in their respective accents. Even within the United States boundaries, the speech of the New England states is markedly different from that of the South, the Midwest, or the West Coast. Nevertheless, "one type of pronunciation is not more correct than another."[1] Correctness in pronunciation is a purely relative matter, and to "define a standard is to attempt the impossible because in England and America there is no standard.... Set the speech of New England as the American standard, particularly Boston, and you immediately open a door to a storm of protests. Do the same with any

[1]J. O. Gauntlett, Teaching English as a Foreign Language (New York, 1961), p. 5.

other speech dialect, and the same thing would happen."[2] Many linguists, therefore, agree on a Received Pronunciation (RP) and insist that it is only a standard, never the standard. The analysis of English phonemes described in this chapter is that of General American English, the speech of "educated" English-speaking people. It is not restricted to any particular American dialect; "since none of the speech dialects is intrinsically superior or inferior to another,"[3] the simplest and most advantageous phonological system for teaching purposes will be chosen.

Since it is assumed here that teachers of English have already acquired a fair knowledge of the sound system of the target language, an elaborate and detailed description of the English phonemes and suprasegmental phonemes is not the purpose of this chapter. The phonological pattern is presented here in such a way that it can be compared with the Vietnamese equivalent for pedagogical purposes. I shall begin the analysis with segmental phonemes (vowels and consonants) and then shall discuss the prosodic features (juncture, intonation, and stress). The author is not responsible for the

[2]Gauntlett, p. 7.

[3]Gauntlett, p. 7.

analysis of the English phonemes which she found in various books concerned with American and British English phonetics and phonemics except insofar as she compares them with Vietnamese.

Phonemic Analysis of English

The Structure of Spoken English

The vowels

The inventory of the English vowel phonemes varies from dialect to dialect, as does the pronunciation. W. G. Moulton confirms that "it is impossible to present a vowel system which is valid for all standard speakers of American English."[4] The one presented in this chapter is by no means representative of any particular dialect. H. A. Gleason in his An Introduction to Descriptive Linguistics lists nine vowels as simple, while K. L. Pike in his Phonemics gives eleven in number, four of which are considered as complex. These four are also found in Gleason's list of simple vowels! C. C. Fries, on the other hand, advocates eleven vowels as simple for convenience sake and brings forth the difference between the phonetic diphthongization of the vowel sounds [o, e, i, æ, ɔ, ɛ] and the phonemic diphthongs [ai, au, ɔi].[5]

[4]W. G. Moulton, The Sounds of English and German (Chicago, 1962), p. 73.

[5]C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), pp. 12-13.

E. Kruisinga[6] introduces a new term for the so-called "long vowels" or diphthongized vowels: "the free vowels":

/a/ as in father, farther

/ɔ/ as in Lord, chaw

/i/ as in feed

/u/ as in food

in contradiction with the "checked vowels":

/ e/ as in fat

/e/ as in wet

/i/ as in hit

/o/ as in hot

/u/ as in good

/ʌ/ as in much

With the addition of three "full diphthongs" of the (i , u) type [ai, au, ɔi] and the glides, he exhausts all the possible syllabic nuclei of English. A. A. Hill in his Introduction to Linguistic Structures selects the "over-all pattern" proposed by Trager and Smith for "the reason that it is the most complete, consistent, and simple analysis of English phonemes in existence."[7] This vowel pattern is arranged in a diagram of three columns and three rows representing the vertical and

[6]E. Kruisinga, A Handbook of Present-day English (Over Den Dom Te Utrecht, 1925), pp. 98-100.

[7]A. A. Hill, Introduction to Linguistic Structures (New York, 1958) p. 61.

horizontal position of articulation: front, central, back and high, mid, low, respectively:

/i i u
e ə o
æ a ɔ/

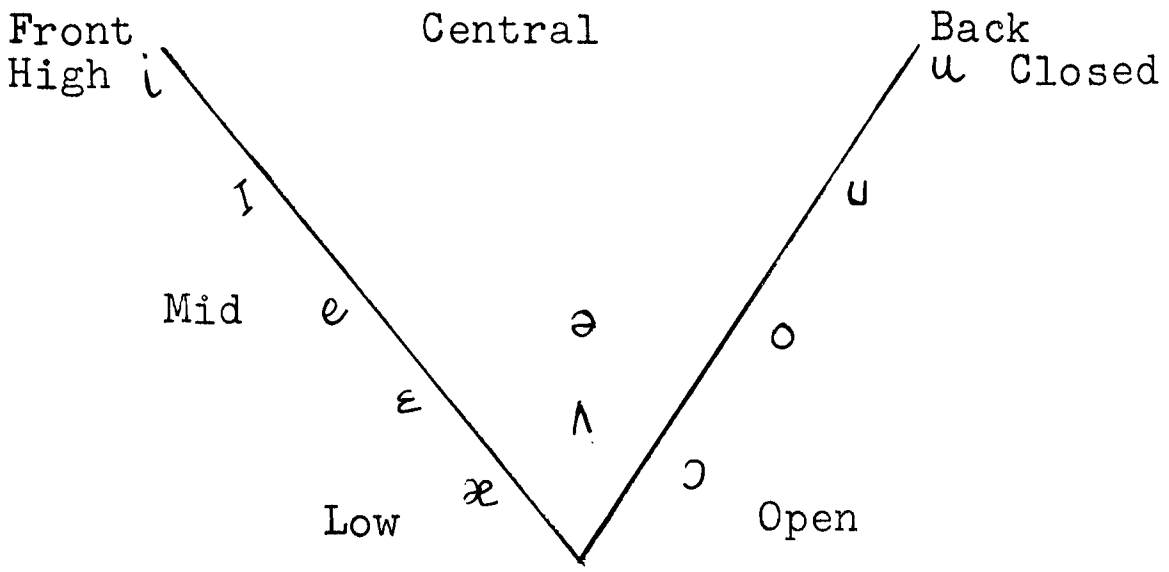
These nine vowels are identified as either simple or basic or short vowels. From these nine, there may be derived, in all, thirty-six different possible vocalic nuclei with three kinds of off-glide endings: a glide to a higher and more front position: /y/; to a higher back, more rounded position: /w/; and to a more central unrounded position: /h/. No single dialect employs them all, but all thirty-six are found somewhere among the English dialects, says Hill.

Actually there is no sharp boundary between monophthongs and diphthongs, but only a gradual transition. In fact, "all English vowels, when measured carefully, are bound to be diphthongs."[8] This explains the great difficulty that native speakers of English have to face when they learn French because French simple vowels are pure monophthongs.

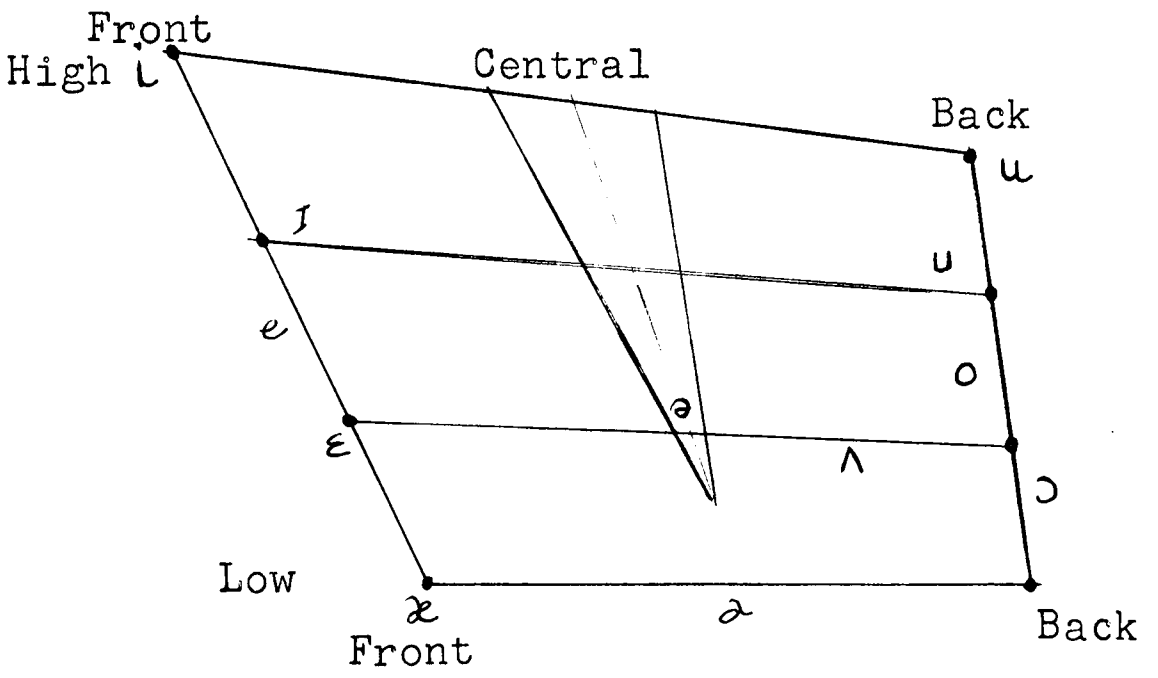
Normally we recognize twelve vowel phonemes in English systematized in a triangle which was originated back in the seventeenth century with the first intro-

[8]Moulton, p. 57.

duction of the notation of the vowel system by Hellwag, thus developed later by the Russian linguist, Prince Trubetzkoy, who used the point of articulation (Eigenton) and volume notation to generalize the vowel system of all the languages which are in existence in the world.



These vowels can be arranged in Daniel Jones's vowel diagram as follows:



The linguists at the English Language Institute of the University of Michigan such as Pike and Fries are in favor of an eleven-vowel scheme: /i, ɪ , e, ɛ , æ , ə, a, u, ʊ, o, ɔ/ and three diphthongs: /aɪ, au, ɔɪ / as in buy, bow, and boy. The famous British phonetician, Daniel Jones, makes a distinction between the schwa /ə/ and /ʌ/, which he describes as pronounced with lip spreading, with the soft palate in its raised position, and with the vocal cords in vibration.[9] It is observed as different from /ə/ in its quantity and quality. It is lower, more back, and stronger stressed.[10] On the other hand, according to Jones, /ʌ/ has only one allophone, while the nature of "the neutral vowel" is "subject to slight variations depending on the nature of the adjoining sounds."[11] The inventory of the English vowels is not unanimously agreed upon among linguists yet. The Michigan school in America considers [ʌ] as a variety of /ə/. Gleason transcribes but as /bət/, while Jones has it /bʌt/. Karl Reuning and many American phoneticians such as T. S. Kenyon, the author of American Pronunciation, C. E. Kautner, and R. West favor

[9]D. Jones, An Outline of English Phonetics (Cambridge, 1962), p. 86.

[10]See the vowel chart in Jones, p. 64.

[11]Jones, p. 92.

Jones's classification. Reuning said that the phone [ʌ] is so markedly different from the schwa [ə] that it is not quite reasonable to classify it as a member of the /ə/ family. In the words like

butter /bʌtər/

company /kʌmpəni/

the first syllable is obviously different from the second. Kenyon classifies /ə/ as different from /ʌ/:[12]

/ə/ custom /kʌstəm/

/ʌ/ above /əbʌv/

Phonetic description of vowel phonemes and their allophones

/i/ is a high front unrounded oral vowel; it is, in actual fact, a long vowel, sometimes written with two dots to indicate its length [i:] (Daniel Jones's system) or followed by a [y]- glide: [iy]:

eat /it/

meat /mit/

bee /bi/

It occurs freely in all positions: initial, medial, and final, as the above examples show.

/ɪ/ is a higher mid-front unrounded oral vowel; it is much shorter than its

[12]T. S. Kenyon, American Pronunciation (Ann Arbor, Mich., 1951), p. 24.

counterpart /i/ in quantity. This phoneme, like other relatively short vowels, does not occur finally:

it /ɪt/

sit /sɪt/

/e/ is a mid-front unrounded oral vowel; it is a diphthongized vowel actually and is sometimes written with a small i following [eˑ]. All the so-called "long" or diphthongized vowels occur freely in all positions:

Amen /emɛn/

afraid /əfred/

decay /dɪke/

age /ejˇ/

bait /bet/

/æ/ is a low front unrounded oral vowel; it is a rather short phoneme:

add /æd/

bat /bæt/

/a/ is a low central unrounded oral vowel:

alms /amz/

farm /farm/

Pa /pa/

/ɔ/ is a low back rounded oral vowel, sometimes written with a dot [ɔ·] to indicate

its length:

awful /ɔfl/

bought /bɔt/

saw /sɔ/

/o/ is a mid-back rounded oral vowel, sometimes written with a [u]-glide or a dot to show its length and the rounding of the lips: [ou], [o·]:

old /old/

pole /pol/

sow /so/

/ʊ/ is a high central or back, slightly rounded vowel, sometimes written with an i and a bar ɨ . This phoneme occurs only in the medial position:

book /bʊk/

look /lʊk/

/u/ is a high back rounded oral vowel:

ooze /uz/

boot /but/

clue /klu/

/ʌ/ is a lower mid-central vowel; it is more back than /ə/:

above /əbʌv/

butter /bʌtər/

It never occurs finally.

/ə/ is a non-high weak vowel of variable quality determined mainly by the neighboring phonemes. It occurs freely in all positions. In many dialects, it varies freely with the short [ɨ]:

above /ə bʌv/

tremendous /trəmɛndəs/

sofa /sofə/

Besides the number of vowels described above, English has three diphthongs which occur in all positions:

/ay/ or /ai/ is a low central high front gliding diphthong:

Irish /ayriš/

glide /glayd/

bye /bay/

/aw/ or /au/ is a low central high back rounded gliding diphthong:

out /awt/

house /haws/

bow /baw/

/ɔɪ/ is a low back high front gliding diphthong:

oil /ɔɪl/

boil /bɔɪl/

boy /bɔɪ/

All vowels are more or less nasalized before and after nasal sounds. All of them have allophones varying in length determined by the surrounding consonants. In general, vowels are longest in stressed syllables before voiced consonants, shorter before voiceless consonants and in polysyllabic forms not broken by juncture, and shortest of all when weakly stressed. Vowels also vary in height when they occur before semivowels.[13]

English semivowels /y, h, w/ serve as off- or onglides in combination with vowels according to the gliding direction of the main vowels, respectively.

The consonants

English has 24 consonant phonemes classified according to their respective point of articulation, manner of articulation, and the presence or absence of phonation. They are distinguished from each other by the distinctive features characterized by the three-way distinction listed above. The consonants in English are patterned amazingly in pairs (except for the nasals): voiced/ voiceless.

[13]Hill, p. 65.

Chart of English Consonants

	Labials	Dentals	Palatals	Velars	Glottal
Stops	p	t	č	k	
	b	d	ǰ	g	
Fricatives	f	θ s	š		h
	v	ð z	ž		
Nasals	m	n		ŋ	
Liquids		l r			
Semivowels	w		y		

Phonetic description of consonant phonemes and their allophones

The stops. The two sets of stops are distinct from each other by the presence or absence of the vibration of the vocal cords:

The voiceless stops /p, t, k/ are congruently patterned:

/p/ is bilabial

/t/ is alveolar

/k/ is velar

They have their respective allophones, the aspirated [p', t', k'] when they occur initially and medially before stressed vowels or initially with liquids /r/ and /l/ (consonant clusters) and optionally finally.

peel /pil/	ten /tɛn/	cat /kæt/
appear /əpir/	attend /ətɛnd/	occur /əkər/
plate /plet/	traffic /trafɪk/	claim /klem/

The allophones unaspirated [p, t, k] take place in the medial position before weak vowels or /r, l, m, n/ or after /s/:

paper /pepər/ beating /bitɪŋ/ basket /baskət/
spell /spɛl/ steam /stim/ skill /skil/

Other kinds of allophones, the unreleased [p', t', k'], are found before another stop and often finally:

leap /lip/ heap /hip/ seek /sik/
napkin /napkɪn/ hatpin /hatpɪn/ actor / æktr/

/t/ alone has one more allophone: the single flap [t̬] which occurs after a strong vowel and before a weak vowel. It is often voiced and very close to [d] as in:

kitty : kiddy
writing : riding
latter : ladder

just to mention a few.

The phoneme /k/ has other types of allophones conditioned by the following vowel: front or back, respectively:

kid /kɪd/
cat /k æt/
cute /kyʷt/

The voiced stops /b, d, g/ are also congruently patterned. They are voiced counterparts of the voice-

less stops /p, t, k/. They have the same features as far as the point of articulation and manner of articulation are concerned. They are kept distinct from their respective partners by the presence of phonation: The vocal cords vibrate when these phonemes are produced. These voiced varieties can occur in any position and have the same allophones in all positions:

boy /bɔy/	den /dɛn/	goose /gus/
baby /bebɪ/	noodle /nudl/	wagon /wagən/
crab /kræb/	glad /glæd/	dig /dɪg/

The variants in place of the articulation of /g/ are like those of /k/.

The affricates. /č, ǰ/ are alveopalatal voiceless and voiced affricates. The former is made up of a voiceless blade stop followed by a voiceless alveolar brushing sibilant, and the latter is the same combination voiced.[14] Both have the same allophone in all positions:

choice /čɔys/	Jean /ǰɪn/
teacher /tičər/	budget /bʌǰɪt/
match /mæč/	judge /ǰʌǰ/

The fricatives. There are nine fricatives (spirants) patterned symetrically in pairs, except the last

[14] F. Kruatrachue, "Thai and English: A Comparative Study of Phonology for Pedagogical Applications," a doctoral dissertation, Indiana University, 1960, p. 68.

one which is a peculiar phoneme, the nature of which is still in debate: /f, v; θ, ð; s, z; h/:

/f, v/ are voiceless and voiced labiodentals. They have one allophone in all positions:

fat	/fæt/	vow	/vow/
coffee	/kɔfi/	leaving	/livɪŋ/
wife	/wayf/	love	/lʌv/

/θ, ð/ are voiceless and voiced interdentals. They both have one allophone in any position. Medial /θ/ is rare.

thick	/θɪk/	that	/ðæt/
filthy	/fɪlθi/	although	/ɔlðow/
smith	/smiθ/	bathe	/beð/

/s, z/ are voiceless and voiced alveolar sibilants. They have one allophone in all positions:

sea	/si/	zoo	/zu/
kissing	/kɪsɪŋ/	roses	/rozɪz/
miss	/mɪs/	bows	/bawz/

/š, ž/ are voiceless and voiced alveopalatal sibilants. They have one allophone each. /š/ can occur in any position, while /ž/ occurs only in the medial and final positions:

shoe	/šu/		
washing	/wašɪŋ/	measure	/mɛžər/
wash	/waš/	rouge	/ruž/

/h/ is a voiceless glottal oral fricative. It occurs initially and medially. In the medial position, it becomes voiced intervocalically.

head /hɛd/

ahead /əhɛd/

/h/ is sometimes treated as a central glide by some linguists (see the English vowel section).

The nasals. /m, n, ŋ/ are voiced nasals, articulated bilabial, alveolar, and velar, respectively.

/m, n/ occur in all positions; /ŋ/ occurs only before unstressed vowels and finally:

meet /mit/	noon /nun/	
submit /sʌbmɪt/	final /faynl/	singing /siŋɪŋ/
ham /hæm/	can /kæn/	bring /briŋ/

Before /t/ between a stressed and unstressed syllable, /n/ combines with /t/ to make a nasal flap:

hunting /hʌntɪŋ/

The liquids. /l, r/ are liquids; the former is a voiced alveopalatal. It has an allophone, the so-called clear [l], in the prevocalic position and a velarized, or "dark," [l] in the postvocalic position.

/r/ is a retroflex different from /l/ in its lack

[15]Kruatrachue, p. 70.

of the continuant quality. It is sometimes treated as a semivowel which has three main allophones:

(1) The off-glide or syllabic [ə-] in the pre-final and final position

(2) The frictionless flap-like [r̆] in the initial and medial positions between vowels

(3) The fricative [ɹ] (r upside down) before vowels after /t, d/[16]

far /far/ run /rʌn/ fry /fray/
chart /šart/ try /tray/ butter /bʌtər/
bird /bərd/ fairy /fɛrɪ/

/m, n, l, r/ are syllabized when they occur in syllable final after other types of consonants, /m, n, l/ included, except for the sequence /lm/.[17]

In the initial position and before a stressed vowel, the semivowel /y/ becomes a voiced palatal consonant, and the semivowel /w/, a voiced bilabial consonant:

you /yu/ we /wi/
yes /yɛs/ water /watr/
beyond /bɪyənd/ wave /wev/

[16]G. L. Trager and B. Bloch, "The Syllabic Phonemes of English," Language XVII (1961), 238.

[17]Kruatrachue, p. 71.

Consonant clusters.[18] "There are in English a great many consonant clusters.... in initial or pre-vocalic position occur the following combinations, 39 in all":

Two elements:

pr	pray, press, prop, pry
tr	tray, tree, true, try
fr	fray, free, fruit, fry
gr	gray, grass, grew, greet
dr	dray, drew, drip, dry
kr	crew, crow, creed, cry
Θr	through, throw, thread, thigh
br	brew, broad, bread, brown
sr	shred, shrink, shriek, shrewd
st	stay, stem, stone, still
sp	span, spend, spin, spoil
sm	small, smoke, smart, smear
sk	skin, scare, score, sky
sn	snow, snare, sneeze, snail
sf	sphere, sphinx, sphenoid, sphincter
sl	slay, slow, sleep, sly
pl	play, plow, plea, ply
kl	clay, claw, clue, close
bl	blow, blue, bleed, black

[18]The tabulation of the consonant clusters is taken from C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), pp. 17ff.

fl	flow, flay, flee, fly
gl	glow, glue, glide, glass
dw	dwell, dwarf, dwindle
kw	quick, quack, quake, quell
tw	twine, twig, tweed, twelve
sw	swine, swear, swell, swim
hw	whine, where, why, which
θw	thwart, thwack
fy	feud, few, fury, fuse
ky	cute, cube, cure, cue
my	mute, music, mule, mural
by	beauty, bugle, bureau, butte
py	pure, putrid, pupil, puny
vy	view
hy	hue, huge, human, humus

Three elements:

str	stray, string, straw, strap
skr	screw, scroll, scratch, script
spr	spray, spread, sprawl, spring
spl	splash, spleen, split, splice
skw	square, squint, squat, squeal

Besides these initial consonant clusters, there are several medial and final consonant clusters in English.[19]

[19]To have a complete picture of consonant clusters in all positions, see Shen Yao, English Phonetics (Ann Arbor, Mich., 1962), pp. 151-153; and Fries, Teaching, pp. 18-20.

Many of the final clusters are the result of the inflectional endings that English has in the plural of nouns, in the third person singular of verbs, and in the preterit of verbs.

The consonants are generally lengthened before a voiced consonant and slightly shortened before a voiceless consonant:

bend /bɛnd/

bent /bɛnt/

however the length is not significant unless it is a case of gemination:

cup-board, pen-knife, red-dress

The prosodic features[20]

Junctures

There are two main types of juncture: internal juncture and terminal juncture.

Internal juncture or plus juncture which is written /+/ occurs within the borders of a phrase, at the morpheme boundary between the phonemes:

that stuff / ðæt + stʌf/

that's tough /ðæts + tʌf/

a name / ə + neɪm/

an aim /ən + eɪm/

[20]The analysis of this section is drawn from Hill.

It is commonly written simply as a space.

Terminal juncture occurs at the ends of sentences and of phrases. There are three types of terminal juncture:

(1) The "upturn" juncture of "rising inflection" signals the end of a question or a phrase with the respective pitch level and is symbolized by a double bar / // /:

John went home? //

I have two sisters // and two brothers #

(2) The downturn juncture is primarily the sound spelled with a period and written with a double cross /#/. It signals that the utterance is complete, and it can be therefore named as a sentence final juncture. Let us use the example above:

I have two sisters // and two brothers #

(3) The single bar juncture / / / is level and has neither upturn nor downturn. This type of juncture is simply the transition between the immediate constituents which is characterized by a slight pause:

The sun's rays / meet #

The sons / raise meat #

When occuring in sentence final, the single bar "usually creates the impression of an utterance left incomplete, as if there were hesitation or something else that the speaker might say.

"...Johnny had to get his car--"

Her voice ended on an upward inflection, letting the explanation hang suspended on the air.[21]

Intonation or pitch

It is not feasible to treat this prosodic feature quite satisfactorily because intonation rather belongs to syntax, and syntax is poorly studied in English.[22] At any rate, it is observed that there are four relative pitch levels represented by the figures /1/ to /4/, with /1/ for the lowest and /4/ for the highest.

2 3 1
John went to school to day #

This contour /231/ followed by /#/ is typical of simple declaration and also of the citation forms of single words.

Pitch patterns in English are analyzed as inherent to the sentence as a whole. The pitch pattern might be assigned to phrases or sentences:

2 3 2 2 2
I think so / said Mary /

2 2 2 3 1
I love my students #

A sentence can have more than one contour:

[21]See the illustration in Hill, pp. 23-26.

[22]Robert Lado, Linguistics across Cultures (Ann Arbor, Mich., 1961), p. 47.

2 2 2 2 3 2 2 2
He went to the movie / she went

2 3 1
to town #

The pitch contour can be summarized as follows: "It is a pattern of pitch levels rising and falling from a single peak and ending in a terminal juncture."[23]

Stress

In English, stress or degree of loudness which falls on individual words or phrases is phonemic, i.e., it keeps the words or phrases in contrast:

differ / defer

record / record

blackbird / black bird

The four-stress system is to be regarded as the normal one:

Primary stress is symbolized by /ˊ/.

Secondary stress is symbolized by /ˋ/.

Tertiary stress is symbolized by /ˆ/.

Weak stress is symbolized by /˘/.

or they may be presented by descriptive names:

Strong-loud

Loud

Weak-loud

Weak

[23]Hill, p. 28.

Actually, in normal speech, we are concerned only with the loudest stress (primary). Stress is characteristic of English. It is a great difficulty to the foreigner whose linguistic background is different. In spite of his mastery of the segmental phonemes of English, he usually fails to recognize the loudness degree and also fails to produce English utterances with the correct stress pattern, and consequently his speech is hard to understand, e.g.,

whíte hòuse ≠ whìte hóuse

blác̀k boàrd ≠ blác̀kbôard

cóncèrt ≠ còncért

CHAPTER IV

PHONOLOGICAL CONTRASTIVE ANALYSIS OF VIETNAMESE AND ENGLISH[1]

The phonemic analysis which we have made of the two phonological systems, Vietnamese and English, now enable us to contrast the two patterns to reveal the conflicts between them and to locate the troublesome contrasts, the similarities and discrepancies of the two sound systems, and thus the areas of difficulty for Vietnamese learners of English. This is the purpose of this chapter. It is intended, furthermore, to be a guide in the preparation of teaching materials in English for native speakers of Vietnamese since "it will soon be considered quite out of date to begin writing a text book without having previously compared the two systems involved," and "the linguistic comparison is basic and really inescapable if we wish to make progress and not merely reshuffle the same old materials."[2]

The contrastive study will reveal the principal problems in teaching English to Vietnamese learners.

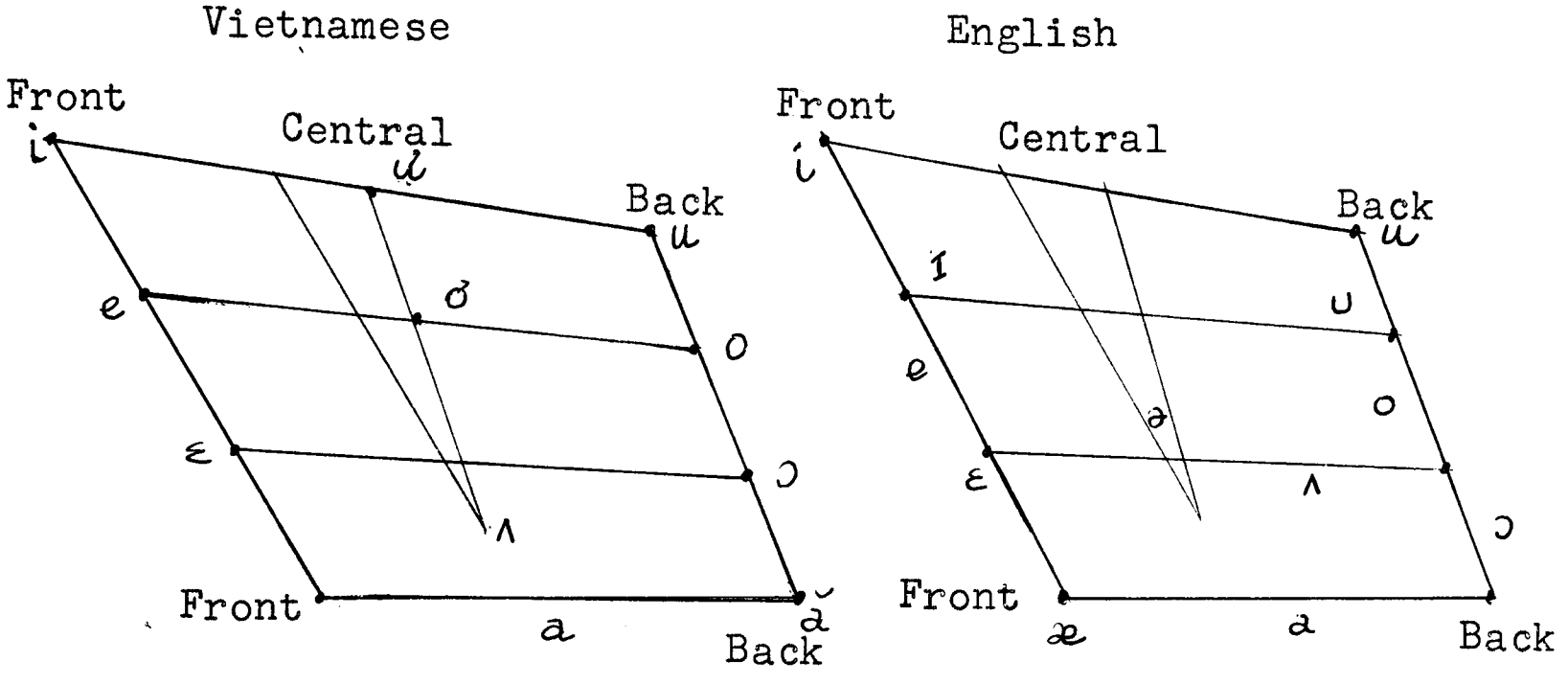
[1]The contrastive analysis is mainly based on William G. Moulton, The Sounds of English and German (Chicago, 1962); and Robert Lado, Linguistics across Cultures (Ann Arbor, Mich., 1961).

[2]Lado, p. 4.

The problems can be listed as phonemic, phonetic, allophonic, distribution, and spelling.[3]

Vietnamese and English Vowels

Simple nuclei:



Complex nuclei:

Centering Sequences[4]

iʌ ɯa uʌ ir er uz ɔr, etc.

Rising sequences consist of the different combinations of simple elements and glides: /w, y/ in Vietnamese and /w, y, h/ in English (see English vowel section).

[3]These items will be discussed in detail later along with the segmental analyses.

[4]In some English dialects, fear /fir/ is pronounced /fiə/, their /ðer/ is /ðeə/, poor /puwr/ is /puə/, four is /fɔə/. In such dialects (New England) those vowels can be compared to Vietnamese iʌ, ɯ, uʌ.

ɯ̯w iw ew ɛw ʌw aw	iw ew æw əw aw uw ow ɔw
ɯ̯y ay ey uy oy ɔy	iy ey æy əy ay uy oy ɔy
iʌw uaw etc.	ih eh æh əh ah uh oh ɔh

The Vowels

Distinctions in Vietnamese

The two vowel charts show the phonetic difference between the two vowel systems. Seven out of eleven Vietnamese simple vowels are identical with seven cardinal vowels as set up by Daniel Jones.[5] Nine vowels except for /a, ə/ (strictly speaking) are pure monophthongs. In articulating Vietnamese vowels, the tongue is generally higher (or more tense) than in the articulation of the English approximates. Thus, the Vietnamese vowel /i/ is much more tense than the English /i/. The lengthening of the vowel is not phonemic in Vietnamese.

The vowel distinctions which are unique to Vietnamese are/ɯ̯ and ă/ (see their phonetic description in the Vietnamese vowel section). It is to be remarked that all Vietnamese vowels are pronounced with noticeably greater tension of the muscles in the articulating organs. This is characteristic of most Vietnamese vowels as compared with the nearest English correspondents: Where in English the lips, the tongue, and the

[5]Daniel Jones, An Outline of English Phonetics (Cambridge, 1962), pp. 31ff.

other organs are more or less relaxed, in Vietnamese they are tense.

Distinctions in English

Strictly speaking, no single English vowel is observed to be identical with any of the eight cardinal vowels. Nearly all English vowels are phonetically or phonemically[6] diphthongized. They are normally produced with less energy than the Vietnamese. Length is phonemic in English. The vowels unique to English are /æ, ʊ/ (see their phonetic quality in the English vowel section).

Features Common to Both Languages

Both languages use a good many syllabic clusters or diphthongs, the results of the combination of simple vowels with /y/ or /w/ glides.

Teaching Problems

Vietnamese students will substitute the Vietnamese equivalents for the English vowels which are nonexistent in their native language. They will fail to recognize as well as produce English /æ/ and /ʊ/. They cannot hear the contrast between /a/ and /æ/, /æ/ and /ɛ/, or

[6]Pike analyzes /e/ and /o/ as in bait and boat as phonetic diphthongs; Bloomfield, Trager, and others analyze them as phonemic diphthongs. Lado, Linguistics, p. 22.

/u/ and /ʊ/. To their ears, they do not sound distinct as they do to the native speakers of English, e.g., a Vietnamese would say /kɛt/ instead of /kæt/ for cat. Suit and soot sound alike to him with long [u]. To overcome this negative transfer is not quite a critical problem. The teacher needs to describe the full phonetic qualities of the new sounds and then drill the students into new habits for the production of those new sounds. A list of contrastive words containing /æ, a, ɛ/ and /u, ʊ/ is necessary for this purpose.

Allophonic problems arise when one sound is phonemic in one language but allophonic in the other. For example, Vietnamese does have [i] and [ɪ], but the short [ɪ] occurs only before voiceless stops and the nasal /n/, hence a Vietnamese learner finds it difficult to distinguish English /i/ and /ɪ/ as separate phonemes.

Since all the vowels except the relatively short ones in both languages occur freely in all positions, the distributional problem is not very troublesome.

In practice, English vowels are not very difficult for Vietnamese learners because both vowel systems can be comparable in their respective quality: high, mid, low with front (unrounded), central (unrounded), and back (rounded). Despite Vietnamese monophthongization, Vietnamese students do not have real trouble with English diphthongized vowels because of a good many

diphthongs existing in Vietnamese. Vietnamese students might have difficulty in handling the English weak vowels /ɨ/ and /ə/.

In fact, most of the difficulties are not really the types which will hinder communication. Nevertheless, they sound foreign to the ears of the native speakers of English and thus deserve sufficient attention.

The Consonants

Distinctions in Vietnamese

The Vietnamese and English consonant chart shows the phonemes unique to one system and absent from the other. There are three classes of consonants[7] exclusively existing in Vietnamese:

(1) The alveolar stops: the aspirated /th/ and the retroflex /ṭ/

(2) The voiceless palatal velar spirant /kh/, which resembles the Greek velar fricative /χ/ and is approximately close to the German /ch/

(3) The palatal /c/ and nasal /ñ/, which resembles the Spanish /ñ/

These distinctions would present serious problems for English students in learning Vietnamese. They would probably substitute their English /θ/ for Vietnamese /th/ and their aspirated [k'] for Vietnamese /kh/,

[7]See their full phonetic description in the Vietnamese consonant section.

TABLE IV: VIETNAMESE AND ENGLISH CONSONANTS*

	Labials					
Vietnamese	-p	b-	f-	v-	-m-	-w-
English	-p-	-b-	-f-	-v-	-m-	-w-

	Dentals and alveolars								
Vietnamese	-t-	th-	d-	ṭ	s-		-n-	l-	
English	-t-	-θ-	-ð-	-d-	-s-	-z-	-n-	-l-	-r-

	Palatals					
Vietnamese	-c-		š-	ž-	-ñ-	-y-
English	-c-	-j-	-š-	-ž		-y-

	Velars			
Vietnamese	kh-	-k-	g-	-ŋ-
English	-k-	-g-		-ŋ

	Glottals
Vietnamese	h-
English	-h-

*Vietnamese and English consonants are grouped according to their respective point of articulation. A hyphen before and after each consonant indicates the distributional pattern of that consonant in relation to neighboring vowels (pre- or post-vocalic or both).

TABLE V: CONSONANT DISTRIBUTIONS OF VIETNAMESE AND ENGLISH

	Initial	Medial	Final
Vietnamese*	c		c
	cc		
English**	c	c	c
	cc	cc	cc
	ccc	ccc	ccc
		cccc	cccc

*Vietnamese: Initial c: any consonant
Final c: /p, t, c, k, n, , n, m, y, w/
Initial cc: any consonant except /f/) + /w/

**English: Initial c: any consonant except /ž/
Medial c: any consonant
Final c: any consonant

For the consonant clusters see C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), pp. 17-20.

respectively. The retroflex /ṭ/ and the palatal nasal /ñ/ are unmatched by anything in English. They are real problems for English learners, yet they can overcome the difficulty by simply being instructed very carefully about the phonetic nature of the new sounds in order to learn to pronounce them with adequate accuracy. Vietnamese learners, in turn, tend to substitute the Vietnamese stop /th/ for the nearest English sound, the fricative /θ/, and the aspirated stop /kh/ for the English aspirated allophone [k'] of [k]. These Vietnamese sounds and some others which in some respects are phonetically similar to some sounds in English but are not sufficiently like the English sounds to be classified as the same cause critical trouble for the native speakers of Vietnamese. It is more difficult to break an old habit than to learn a new one, e.g., Vietnamese /t/ is unaspirated in the initial position, its aspirated variety /th/ is phonemic, and its allophone, the unreleased [t'] occurs only in the final position. Vietnamese /t/ is matched by the English /t/; both are voiceless dental stops. In English, aspiration following the phoneme /t/ is allophonic, while in Vietnamese it is phonemic. Furthermore, Vietnamese dentals /t, d/ are more tense and articulated more front than the English equivalents. Nevertheless this phonetic difference does not cause any hindrance in communication. They only sound

odd to the native speakers of English.

Distinctions in English

Four classes of consonants are observed unique to English:

(1) The affricates /č, ǰ/

(2) The interdental fricatives /θ, ð/

(3) The bilabial voiceless stop /p/

The latter phoneme /p/ is phonemically significant in English, while in Vietnamese it is in complementary distribution with its voiced partner [b]. It is in the initial position in some loan words, but not all the Vietnamese succeed in pronouncing it as a voiceless consonant (see the Vietnamese consonant section).

(4) The voiced alveolar flap /r/

It "occurs at least (the exact conditioning factors are still unknown) between a stressed and unstressed vowel as an allophone of both /t/ and /d/ for example in matter, latter, sadder, etc."[8]

Besides these peculiar consonants, aspiration in English after certain consonants is allophonic but phonemic in Vietnamese, cf.:

/kh/ [k']

/th/ [t]

[8]Andreas Koutsoudas and Olympia Koutsoudas, "A Contrastive Analysis of the Segmental Phonemes of Greek and English," Language Learning, XII (1962) 214.

These distinctions which are unique in English cause real conflicts and critical difficulties for the Vietnamese students. They tend to carry their own phonemic habits into English and fail to imitate a proper pronunciation. The teacher should call the students' special attention to those sounds. The same is true with the problems of the new vowel sounds. These new consonant sounds should be described clearly in terms of their phonetic qualities. Once the students know how the new sounds are articulated, they should be given proper drill to master a new set of habits governing their vocal apparatus. It is helpful for the teacher, in drilling the new sounds, to start from the native sound closest to the point of articulation of the new sound and glide or change to the position of the new sound. For example, to help Vietnamese students produce the English palatal affricate /č/ or [tš], the students can be instructed to start from the position of [t], then draw the apex backward to the position of [š], slowly at first, then faster and faster until the student can reach an acceptably approximate pronunciation. If we have to teach Vietnamese to native speakers of English, we can do the same thing with the phonemes foreign to English. Finally, to avoid negative substitution, the teacher can make up a vocabulary list which shows that the foreign sound is phonemically in

contrast with the sound the students are familiar with, e.g.,

English /p-/ vs. /b-/
/č/ vs. /š/

Since /š/ does exist in Vietnamese, too, students tend to substitute /š/ for /č/, with which they are not familiar.

The details of the contrastive analysis of the two consonant systems are given in the next paragraph.

Teaching Problems

The labials

Vietnamese	-p	b-	f-	v-	-m-	-w-
English	-p-	-b-	-f-	-v-	-m-	-w-

Distributional problems

As the diagram shows, both languages have the same number of labials; the distribution of these phonemes is, however, not the same in both languages, and it will present troublesome conflicts.

In Vietnamese, initial bilabial (p-) is rare (see the Vietnamese consonant system); it is normally an allophone of the initial (b-) ; (-p) is always found in the final position and unreleased. Vietnamese labiodentals /f, v/ occur initially, while the English labiodental equivalents occur freely in all positions. The Vietnamese consequently fail to pronounce English /p/ in the initial and medial positions; they will say /b/ instead.

Also, they have trouble distinguishing the English final and medial voiceless and voiced fricatives since in Vietnamese we do not have any medial consonant and all the final consonants are either voiceless stops /p, t, c, k/ or nasals /m, n, n, ŋ/. We have difficulty with the allophones of /p/ in English also. It is difficult for us to pronounce [p'] with a "puff of air" and the unaspirated medial [p] which are foreign to our phonetic habits.

The bilabial sets

Vietnamese	-m-	-w-
English	-m-	-w-

The bilabial sets cause less trouble. Since Vietnamese is a monosyllabic language, it does not have any medial consonant; however, our students can pronounce the English medial [-m-] with ease and enough accuracy:

Mommy : /mami/

Since we have a compound word like

mau - mản : /mau + maŋ/

the students can be instructed to pronounce the two elements of Mommy without pause until they reach the proper pronunciation. Vietnamese /w/ might be claimed to be identical with the English /w/ because their articulation and distribution are relatively similar.

The dentals and alveolars

Vietnamese	-t-	th-	d-	ṭ-		s-		-n-	l-
English	-t-	-θ-	-ð-	-d-		-s-	-z-	-n-	-l-	-r-

The first group

Vietnamese	-t-	th-	d-	ṭ-
English	-t-	-θ-	-ð-	-d-

Phonetic, allophonic, and distribution problems. Eliminating the Vietnamese retroflex alveolar stop /ṭ/, which is exclusively Vietnamese, the three others /t, th, d/ are comparable to English /t, d, θ, ð / in some phonetic respects.

The Vietnamese stop /t/ is an unaspirated dental in the initial position, an unreleased or neutralized consonant the final position, while the English equivalent /t/ is an aspirated alveolar stop in the initial position and has two more allophones than the Vietnamese /t/. It is aspirated in the initial position, unaspirated after certain consonants, optionally unreleased or neutralized in the final position, and becomes a flap intervocalically (see English consonant section, the distribution).

The Vietnamese stop /d/ is an unaspirated dental which occurs only in the initial position; it is very close to the English alveolar stop /d/ but not quite the same. English /d/ is articulated further back at the tooth ridge and is slightly aspirated in the initial

position. English /d/ has the same allophone in all positions; optionally it is neutralized in the final position. Vietnamese students therefore should be warned about the difference in the point of articulation between Vietnamese and English pairs /t, d/. The aspiration of the English initial [t'-] can be demonstrated by a burning match which, when held close in front of the mouth, is blown out as the English aspirated [t'] is released. The distribution as well as the characteristics of the two sound systems should be clearly studied. Vietnamese students thus should learn the English medial [-t-] and the English medial and final [d]. It is hard for us Vietnamese to hear the contrast between the following pairs:

bat / bad

bet / bed

cat / cad

One more paragraph is needed to discuss the medial [-t-]. This is the most troublesome problem for us: We are confused with many allophones of the English /t/--unaspirated intervocalically or a special flap [t̬]. This American single flap [t̬] sometimes sounds exactly like /d/ in:[9]

coated / coded

[9]These examples are extracted from William G. Moulton, The Sounds of English and German (Chicago, 1962), p. 43.

hearty / hardy

filter / filled 'er

W. G. Moulton observes that "Probably all Americans distinguish these pairs of words in careful speech, and in a pronunciation exercise.... In ordinary talk however, most Americans use the special flap allophone [t̬] for /t/."[10] [t̬] is observed to follow a vowel and /l/ or /r/. Another problem arises when it follows an /n/, as in the almost universal pronunciation wanna ("I wanna go") for want to. "This pronunciation is often called 'sloppy.' Perhaps it is. The important point here is that everyone--or nearly everyone--uses it in normal speech."[11] Students should therefore be made aware of this phenomenon if they want to be understood and understand the native speakers. The difference between latter and ladder, writing and riding is clear when each appears in context:

/ai wɔnə go raidiŋ ən hɔrs bæk ðɪs aftərnun/

The word /raidiŋ/ is written riding and not writing of course! The production of this peculiar sound is more difficult than its recognition. Students cannot successfully watch whether /t/ follows a vowel, /l/, /r/,

[10]Moulton, p. 43.

[11]Moulton, p. 43.

or /n/ to achieve the special flap instead of the dental /t/ as it exists in their native tongue. If they master the English alveolar /t/, they still fail to use all its four allophones at the proper slot in its segmental structure. Listening to a tape recorder or imitating a genuine informant will help students to recognize and produce these allophones, especially the flap [t̬], which is sometimes phonetically similar to the flap [r̬].

The English interdental fricative pair /θ, ð/ are among the most troublesome sounds for Vietnamese students. We do have the voiceless alveolar aspirated stop /th/, which is phonetically in partial comparison to the English voiceless interdental fricative /θ/. Consequently, Vietnamese /th/ is commonly substituted for English /θ/ which sometimes renders the utterance incomprehensible. My teaching experiences prove this point. For the production of the English /θ/, the students put the tip of their tongue between the teeth as they were told, then unconsciously withdrew the apex backward before blowing out the sound; thus, the tip of the tongue touches the tooth ridge exactly as in the articulation of the Vietnamese /th/.

In the same way the English /ð/ is mixed with the Vietnamese retroflex alveopalatal fricative /ʐ̌/ or alveolar fricative /z/ which exists in the Hanoi dialect,

of which most of the educated people are fully aware and can successfully imitate. The English contrastive pair

then /ðɛn/

Zen /zɛn/ (Zen Buddhism)

sound the same to the Vietnamese.

The second group

Vietnamese s- -n- l-

English -s- -n- -l-

Distributional problems. The Vietnamese /s, n, l/ are phonetically similar to the English approximates /s, n, l/. These sounds consequently appear similar to our students; however, their distribution in the English phonemic structure is not the same as in Vietnamese, and our students will have phonetic problems, i.e., they have to learn how to link elements of English polysyllabic words to make them sound natural and understandable. The Vietnamese /s, l/ occur initially only; /n/ occurs at both ends of a morpheme or word because of the Vietnamese structure CVC. Therefore, the English medial and final /-s-, -l/ and medial /-n-/ are foreign to Vietnamese linguistic habits. The medial /s, l, n/ nevertheless do not cause critical problems because there are many partially reduplicative forms in Vietnamese which appear with these phonemes:

. xa - xôi /sa + soy/ : 'remote'

lạ - lùng /lạ + lùŋ^{m}/ : 'strange'

năn - ní /năŋ + ní/ : 'to beseech'

To enable the students to get at an acceptably approximate pronunciation of an English polysyllabic word, the teacher needs only to tell his students to link the syllables together without holding their breath at any syllable. The English word <u>sensational</u>, for example, will will normally be pronounced by a Vietnamese beginner as four separate syllables:

sən + se + šən + nən

The final [-l] is reproduced by his native final [-n]. This trouble can be surmounted rather easily by drilling the student into linking all the syllables together in one breath. Syllable-linking is characteristic of all the non-monosyllabic languages. It does not happen at morpheme boundaries only, but at the word boundaries as well. A native speaker of English would not say <u>an officer</u> separately as /ən/ɔfisər/, but he will say it in one word /ənɔfisər/; <u>when I</u> will become /whɛnai/, and the like. The speaker of a monosyllabic language will fail to make such a liaison if he is not well trained. To help the student achieve a new habit of connecting many elements of a word, the teacher might resort to the written form, i.e., rewrite the English phrase using the Vietnamese segmental structure as a basis in such a way that the needed word-linking can be pronounced without a

big effort, e.g., when I is rewritten whe - nai; is he well is rewritten i - zi - well; and an officer is rewritten a - nofficer.

The English final (-l) is more critical. The Vietnamese learner would say /sən + se + šən +nən/ or /sən +se + šən + nə +lə/ because in Vietnam /l/ is always followed by a vowel. To correct this error, the student should be told to keep the apex of his tongue against the gum-ridge as if he were going to say a word beginning with /l/ but not to release it. After the distributional analysis is made, drill is the only effective method to help the student achieve an approximate pronunciation because to speak a foreign language with a "perfect accent" is too ambitious for any foreigner who learns a language different from his own. "It is not reasonable as a rule to expect a foreign teacher (even a teacher) to speak just like an Englishman or an American, any more than it is to expect an Englishman or an American to speak just like a foreigner when using the foreigner's language."[12]

The third group

Vietnamese	-	-
English	-z-	-r-

Phonemic problems. The English /z, r/ are unmatched

[12] J. O. Gauntlett, Teaching English as a Foreign Language (New York, 1961), p. 63

by anything in Vietnamese. Consequently, they may cause positive conflict for the Vietnamese learners. In actual fact, we do not have a really hard time in mastering these because even though /z/ does not exist in the Hue dialect (see the Vietnamese consonant chart), it does exist in Hanoi and other northern dialects[13] as a phoneme, and all students are aware of the fact and can produce this sound with adequate accuracy. In fact, many Hue people can speak the northern dialect without any "accent" at all. The English /r/ is not too difficult either because a similar sound, the flap (r̆), does exist in the southern dialect as a sporadic allophone of /y/; in the Hue dialect, it is a sporadic allophone of /z̆/. Therefore it is not too difficult for the Vietnamese learner. However, as with other English final consonants which are not similar to one of the eight Vietnamese final consonants, we still have trouble with the English /z, r/ when they occur in the medial and final positions. To remedy this error, the teacher can apply the same method as suggested for other English final consonants mentioned previously.

The palatals

Vietnamese	-c-			š-	ž-	-ñ-	-y-
English	-č-	-ǰ		-š-	-ž-		-y-

[13]A contrastive analysis of the three main dialects--North, Central, and South--will be presented in comparison with English in the next chapter of this study.

The first group

Vietnamese -c-

English -č- -ǰ

Phonemic problem. The palatals /c, ñ/ which exist exclusively in Vietnamese are not our concern for the present purpose, to teach English to the Vietnamese. On the contrary, the exclusively English existing sounds /č, ǰ/ are our major problems since they are unmatched in the Vietnamese sound system. The teacher should spend enough time to acquaint the student with their phonetic nature and their distribution in the English segmental structure. To avoid negative substitution for the English /č, ǰ/ by the nearest Vietnamese sounds /š, ẓ/, the student needs to be drilled daily after a full discussion of the physiological factors involved in producing these sounds foreign to Vietnamese is made, until one day the learner realizes that the strange sounds are in contrast with his native ones, until he can pronounce Chinese as /čainiz/ instead of /šainiz/, /ǰɔrjə/ instead of /ẓɔrẓə/, and so forth.

The second group

Vietnamese š- ẓ- -y-

English -š- -ž- -y-

Phonetic and distributional problems. Two sets of the voiceless and voiced fricatives in both systems are phonetically comparable. In fact, the Vietnamese and

English /š/ are identical, while their voiced counterparts are different because of the fact that the Vietnamese sibilant /ẓ̌/ is retracted or retroflexed, while the English equivalent is a plain alveopalatal sibilant. Yet the phonetic difference is not great and does not hinder communication. The real problem is the distributional one. The Vietnamese sibilants occur only in the initial position, whereas the English equivalents occur more freely, /š/ in all positions and /ž/ in the medial and final positions. The distributional problem here is similar to that of other consonants discussed in several previous paragraphs. The same suggested teaching techniques can be applied with the distributional problem here as well.

The semivowel or palatal glide /y/ in Vietnamese is approximately identical with its equivalent in English. In Vietnamese it occurs initially as a consonant and finally as the on-glide of the diphthong; in English it is a consonant in the initial and medial positions between stressed vowels and an on-glide in the final position. The English /y/ does not cause real conflict, yet the phonotactic difference should be pointed out, and the drilling lessons are still needed until the student masters the distributional problem.

The velars

Vietnamese	kh-	k-	g-	-ŋ-
English	-k-	-g-		-ŋ

Allophonic and distribution problems. The Vietnamese velars are comparable to the English as far as the articulation is concerned. Vietnamese has one extra phoneme which is significant uniquely to Vietnamese, the voiceless palatovelar spirant /kh/, that would cause positive trouble to Americans who learn Vietnamese. The Vietnamese student, in turn, is inclined to substitute his native /kh/ for the English initial aspirated [k'] or simply to pronounce it without the "puff of air" like his Vietnamese initial unaspirated [k-]. Among the velars, this English /k/ with its three allophonic variants--aspirated in the initial position, unaspirated in the medial position after certain consonants, and optionally unreleased in the final position--might be looked upon as the cause of a serious problem--phonetic, allophonic, and distributional--for the Vietnamese. The distribution along with the phonetic difference of the allophones of the English /k/ should be clearly taught before any attempt at drilling can be thought of.

The other velars /g, ŋ/ existing in both languages are phonetically similar. The teacher should call the student's attention to the phonotactic difference which might cause trouble. This type of trouble is not too

difficult to overcome, however.

The glottals

Vietnamese h-

English -h-

Distributional problem. The glottal fricative /h/ is relatively identical in both languages. The English /h/ occurs initially and intervocalically, and sometimes it serves as a central glide (see the English consonant section), while the Vietnamese /h/ occurs initially only. But this phonotactic difference is not a problem to the Vietnamese students since the English /h/ is always followed by a vowel like the Vietnamese /h/.

General Remarks

The English consonants which are completely foreign to Vietnamese students are not many in number. They are restricted to affricates /č, ǰ/ and fricatives /θ, ð/. Vietnamese consonants which are phonetically comparable to their English approximates are normally more tense than the English. And finally, because of the Vietnamese segmental structure (CVC), we have distributional problems with almost all the English consonants which occur freely in all positions.

Analysis of the Consonant Clusters

Properly speaking, Vietnamese does not have any consonant clusters if the combination (C + w) is not counted.

The glide /w/ which follows any consonant except /f/ signals the labialization of the preceding consonant before it is released to form a syllabic peak with the vocal nucleus immediately following. This type of "consonant cluster" occurs initially only and never consists of more than two elements (C + w). There is only one case in which we see a reduplicative formation with four syllables:

Bù - lu - bù loa /bù + lu + bù + lwa/

It is an adverbial phrase which occurs exclusively with the verb <u>khoc</u>, 'to cry,' or sometimes the verb is simply dropped out and the adverb alone is used vividly to describe the manner of the action. This peculiar reduplication makes us think that at one time Vietnamese might have had the cluster /bl/.

The consonant cluster phenomenon is new to the Vietnamese as well as to speakers of other monosyllabic languages. The student therefore faces an extreme difficulty in his attempt to master all English consonant clusters which may consist of four elements. These occur finally and medially, but in the initial position the cluster never exceeds three elements.

The English consonant combinations consisting of a consonant and the glide /w/ such as /dw, kw, tw, sw, hw, sw .../ are not difficult for the Vietnamese student at all because such clusters do exist in his mother tongue.

With all other types of clusters, the student tends to insert a vowel (normally /ə̆/, which is approximately identical to the English unstressed vowel /ə/) between the consonants of the cluster to match his segmental phoneme structure (CV). Thus the insertion of /ə/ in between two elements will create an extra syllable: square will become /səkwɛ/ or /səkwɛrə/. With the three-consonant clusters, the insertion of /ə/ in between the first and the second element with a syllable division after the second consonant will create two extra syllables in words like:

street /sətərit/

splash /səpəlæš/ ...

Time and space do not allow this study to include a full discussion of problems concerning the English consonant cluster system. A separate research of this type of teaching problem is needed.

Other Problems

Besides the phoneme, allophone, distribution, and sequence problems discussed along with the contrastive analysis of the two sound systems, the Vietnamese learner has another problem in learning to master spoken English because of the English inconsistency in its spelling. The English alphabet is similar to his. If a Vietnamese mispronounces the word hiccough, this does not mean that he is ignorant of the pronunciation of all the segmental pho-

nemes involved, but he is unfortunately puzzled by the English written form -<u>ough</u> which represents a variety of pronunciation:

/-ɔf/ in cough

/-ʌp/ in hiccough

/-uw/ in through

/-ʌf/ in rough etc.

Vietnamese is exempt from such ridiculous symbols which stand for several sounds. Each written form in Vietnamese represents uniquely one sound. This fact does save time and effort for children as well as for foreign learners who master Vietnamese spelling. They need not bother to learn the spelling of every word. But the Vietnamese learner does have a crucial problem in learning English spelling. He has to memorize, for example, four English words: <u>honest</u>, <u>honor</u>, <u>hour</u>, and <u>heir</u>, the /h/ of which is silent. Quite often he has to look up the pronunciation of each word in the dictionary or check with an informant available. The native speaker himself has to look up the right pronunciation also!

Another problem arises when the same symbol might represent two different sounds in the two languages. The Vietnamese are frequently deceived by the English sequence /tr/ which does exist in Vietnamese orthography, but the written form in our language represents only one sound, the retroflex alveolar stop /ṭ/. In the

same way, (ch) in English usually symbolizes the affricate /č/, while in Vietnamese it is a digraph for the palatal stop /c/, the production of which is made by the blade of the tongue against the hard palate.

Other spelling problems trouble those Vietnamese students who have had French as their first foreign language.[14] These students usually get confused by two systems of writing, or even three: French, English, and Vietnamese. The Vietnamese student generally does not have a hard time facing the French sound system. The quality and quantity of most French vowels is similar to Vietnamese, and the same is true of the consonants. But this category of students, i.e., those who have had French, does face a double difficulty: They have to forget their own linguistic habits and their learned French habits when they study English. My brother, who had spoken fluent French before he learned English, one day came home and asked me the meaning of the following utterance:

/i am tirəd ut/

I asked him "Are you speaking Indian?" (we use this term for all dialects spoken in India and Pakistan). He

[14]In secondary school in Vietnam, two foreign languages, French and English, are required, but they are not taken at the same time. The student has a choice to take either English or French as the first foreign language at the Junior level (which is equivalent to the sixth grade in the American school system) with six hours per week. At the Senior level (tenth grade in the United States), the student will have the second foreign language with a four-hour load along with his first foreign language.

laughed and said, "No it is English: I am tired out spoken with French spelling!" The student should keep in mind that French /r/ is a uvular and that English /r/ is a flap /r/, although both are written with graph (r). The French digraph (th) is an unaspirated /t/ in a word like Othello /otɛlo/, while the English (th) is aspirated interdental fricative /Θ/, and Othello will be /oʊΘɛloʊ/. French (ch) represents the sibilant /š/, while in English it represents the affricate /č/ except in the words Michigan and Chicago /mišigən/ and /šikago / and other loan words. The teacher who must work with such a category of students should be aware of this situation. It is recommended that he make a contrastive analysis of French and English after the same work has been done between Vietnamese and English to point out the similarities and discrepancies in the English, French, and Vietnamese sound systems as well as the difference in the official spelling of each language in relation to its respective sounds.

Analysis of Vietnamese and English Prosodic Features

The analysis of Vietnamese phonology reveals that besides the tonal pattern which is inherent in the syllabic nucleus, Vietnamese does have other prosodic features--juncture, intonation, and stress. However it is probably impossible or too soon to attempt a satisfactory comparison of the prosodic features of Vietnamese with those of

English because the nature and quality of intonation and stress is not unanimously agreed upon yet.

As stated in the introduction, the present study does not have the ambition to venture into such a difficult area in detail, and it should not be expected to contain a full analysis of the prosodic elements of Vietnamese in comparison with those of English. Further research and investigation is necessary before any statement concerning such a comparison can be made. It is known, however, that juncture in Vietnamese is comparable to that in English; consequently, it does not present a difficult problem to the Vietnamese learner. It is also known that above the tonal pattern which is part of the phonemic system, the intonation and stress in Vietnamese are not phonemically significant as they are in English. These areas are counted among the greatest problems for our student. He can recognize the English sentence pitch but can hardly imitate the proper intonation distributed over the words and sentences, conditioned sometimes by the degree of word stress or emotional expression. Pitch in English is a part of the sentence and phrase, while in Vietnamese it is an inherent part of the individual word. The English intonation is foreign to Vietnamese linguistic habits. The most critical trouble, however, is not intonation but the stress pattern. It is not unreasonable to state that it is beyond human ability

for an adult speaker of a language like Vietnamese to put the right degree of stress on English words and sentences. The safest way to achieve a proper pronunciation is to look up the stress pattern of a new word in the dictionary! This is done sometimes by the native speakers of English as well.

CHAPTER V

AN ANALYSIS OF ENGLISH AND THREE MAIN DIALECTS SPOKEN IN VIETNAM

It is generally acknowledged that Vietnamese has three main dialects, spoken in three main regions: the North, the Central, and the South. The difference lies in the pronunciation of words and the tone pattern, not in morphology or syntax. In other words, there is only one language, but spoken with different "accents." It is not necessary to make a complete analysis of these dialects and English, yet it helps the teacher considerably if he knows the difference between these dialects so that he can better understand the particular problems of his students from different parts of the country. For example, /z/ exists in the Hanoi dialect as a phoneme but does not exist in the Hue or Saigon dialects. Robert Lado sees this situation in his statement: "When we need to know the problems facing speakers of more than one dialect, separate solutions must be worked out for each problem. If the differences are minor, it may be possible to combine the presentation of the problems, but the statements must remain quite specific."[1]

A brief phonemic analysis of the differences among the main dialects spoken in Vietnam is presented in this

[1]Robert Lado, Linguistics across Cultures (Ann Arbor, Mich., 1961), p. 23.

chapter.

For the purpose of comparison, four charts of the significant sound segments of English and the Hanoi, Hue, and Saigon dialects will show the characteristics of each dialect. The four phonemic charts will show the common difficulties Vietnamese speakers of all dialects will have (see the contrastive analysis of the Hue dialect and English, chapter III, in comparison with the phonemes in the Hanoi and Saigon dialects). On the other hand, there are a few phonemes which are unique to each of the three dialects, e.g., /š/ is not included in the Hanoi dialect, and therefore the English /š/ presents a real difficulty for the student speaking this dialect. The teacher can help him achieve the pronunciation of this sound if he is aware of the fact that this sound is nonexistent in the Hanoi dialect. It needs special attention. Hue and Saigon students have no difficulty with this English /š/ simply because it does exist in these sound systems.

The Hanoi palatal stop /c/ is pronounced with a strong friction, while the same phoneme in Saigon and Hue is not. Consequently, the speaker of Hanoi tends to substitute his aspirated /c/ for the English affricate /č/, while the speaker of the other two dialects tends to substitute his native /š/ for the English /č/. The English /z/ is identical with the Hanoi /z/. The transfer made

TABLE VI: ENGLISH (AMERICAN)

		Bilabial	Labio-dental	Inter-dental	Alveolar	Palatal	Velar	Glottal
Stops	vl*	p			t	č	k	
	vd*	b			d	ǰ	g	
Fricatives	vl		f	θ	s	š		h
	vd		v	ð	z	ž		
Nasals		m			n		ŋ	
Lateral					l, r			

	Front	Central	Back
Semivowels	y	r h	w
Vowels high	i		u
higher mid	ɪ		ʊ
mid	e	ə	o
lower mid	ɛ	ʌ	ɔ
low	æ	a	

*vl signifies voiceless, and vd indicates voiced.

TABLE VII: HANOI DIALECT*

		Bilabial	Labio-dental	Inter-dental	Alveolar	Palatal	Velar	Glottal
Stops	vl	-p			-t-	c-	k-	
	vd	b-			th- d-			
Fricatives	vl		f-		s-		kh-	h-
	vd		v-		z-		g-	
Nasals		-m-			-n-	ñ-	-ŋ-	
Lateral					l-			

	Front	Central	Back
Semivowels	y		w
Vowels** high	i	ɯ	u
higher mid	e	ɤ	o
mid			
lower mid	ɛ	ʌ	ɔ
low		a	ă

*The consonant chart is taken from Nguyen Dinh Hoa, Ngu Hoc Nhap Mon (Saigon, 1962), p. 66.

**The number of vowels and semivowels is the same in all dialects. Their quality and quantity are phonemically similar.

TABLE VIII: HUE DIALECT*

		Bilabial	Labio-dental	Inter-dental	Alveolar	Palatal	Velar	Glottal
Stops	vl	-p			t- th-	-c-	-k-	
	vd	b-			t- d_		g-	
Fricatives	vl		f-		s-	š-	kh-	h-
	vd		v-			ž-		
Nasals		-m-			-n-	-ñ-	-ŋ-	
Lateral					l-			
Semivowel						-y-*		

*This semivowel can occur initially in the Hue and Saigon dialects as a voiced palatal

TABLE IX: SAIGON DIALECT*

		Bilabial	Labio-dental	Inter-dental	Alveolar	Palatal	Velar	Glottal
Stops	vl	-p			-t- th-	-c-	-k-	
	vd	b- by-			t- d_		g-	
Fricatives	vl		f-		s-	š-	kh-	h-
	vd							
Nasals		-m-			-n-	-ñ-	-ŋ-	
Lateral					l-			
Semivowel						-y-		

*These phonemes are taken from R. B. Jones and Huynh Sanh Thong, Introduction to Spoken Vietnamese (Washington, D.C., 1960), pp. 2-3.

by the speaker of Hanoi into English is therefore a positive one, while this phoneme is not found in the Hue and Saigon dialects. The teacher should spend more time and practice this foreign sound with the students from Hue and Saigon.

/v/ is replaced by /by/ in the Saigon dialect. The teacher should call the student's attention to this fact when he teaches this English sound to the speaker from Saigon. Once they are aware of these minor differences, the teacher can better help his students from various regions of Vietnam.

CHAPTER VI

CONCLUSION

It has been stated in the Introduction that the primary aim of this study is to point out the similarities and discrepancies of the English and Vietnamese sound systems in order to help Vietnamese and Americans, both teachers and learners alike, to better teach or learn English as a foreign language. This contrastive analysis gives a clear view of the phonemic and structural differences between the two languages. It is intended first of all as a contribution to linguistics, and second, it is hoped that it will be a basis for improved and practical methods of teaching English and Vietnamese. The results of this study should primarily be used for the preparation of lessons and exercises for Vietnamese learners of English. Such exercises are the first steps in the aural-oral method of learning a new language since "language is primarily an auditory system of symbols."[1] This analysis can furthermore provide a basis for the comparative study of other languages and of geographic affinities of languages; for example, it shows the similarity in some aspects of Vietnamese with Chinese (monosyllabic and tonal), with Thai (tonal, final voiceless stops and nasals).[2]

[1]Edward Sapir, Language (New York, 1949), p. 17.

[2]F. Kruatrachue, "Thai and English: A Comparative Study of Phonology for Pedagogical Applications," a doctoral dissertation, Indiana University, June, 1960, p. 50.

From the merely pedagogical point of view, the analysis of the Vietnamese and English sound systems (Chapters II and III), their comparison (Chapter IV), along with the illustrations of the areas of difficulties will, according to C. C. Fries, "be of little practical aid to ordinary students unless they are built into lessons to furnish the exercises through which the necessary habits can be formed."[3] Bloomfield firmly believes that "it is always best to have an informant who is a native speaker of the language one wishes to learn."[4] This is 100 percent true, yet it is not feasible to have native speakers of English as teachers in Vietnam except in higher education. The task of teaching English thus falls on the Vietnamese teachers. They cannot speak with the perfection of native informants, of course, but with a thorough knowledge of the phonological system of Vietnamese and English, they can do a better job than native informants who lack training in linguistics and teaching methods. They can arrive at pretty satisfactory results in teaching pronunciation. Materials based on findings of a comparison of the two languages prove to be scientific and more efficient. A systematic comparison

[3]C. C. Fries, Teaching and Learning English as a Foreign Language (Ann Arbor, Mich., 1963), p. 37.

[4]Leonard Bloomfield, Outline Guide for the Practical Study of Foreign Languages (Baltimore, Md., 1942), p. 2.

will save the teacher from selecting (or using) various textbooks which merely list disparate items from here and there and neglect the fact that every language constitutes a whole structural system or a totality.

The teacher will have seen by now that the English vowel system is not too hard for the Vietnamese learner, but that the consonant system causes positive troubles. The teacher should drill the student into new habits of producing those sounds that are completely or partially foreign to the speakers of Vietnamese. Finally, among the prosodic features, the English stress pattern is extremely difficult for the Vietnamese. Nevertheless, if the student wants to arrive at an approximately correct pronunciation, he should cooperate with his teacher in trying to acquire a new set of habits, and he should be patient and alert in practicing and mimicking until he can speak the new language with the least "accent." He should realize that learning a language is to "practice everything until it becomes a second nature."[5] But practice is effective only when the student is fully aware of the major differences between his own sound system and that of the target language. It is hoped that this short study will be useful for improving the teaching of spoken English in Vietnam.

[5]Bloomfield, Outline, p. 16.

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