

A STUDY OF THE DIFFICULTIES OF THAI STUDENTS
IN PRONOUNCING ENGLISH CONSONANTS

by 45

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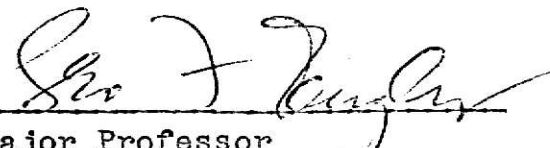
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CHAPTER I

INTRODUCTION

In the field of teaching foreign languages, what had been needed for centuries was a new method which would yield more effective results among language students. In the early part of the twentieth century, a new field of linguistic science called descriptive linguistics or structural linguistics began to develop, and its findings have contributed greatly to the development of a modern approach to language learning. Two of the pioneers in this area of study were Leonard Bloomfield and Charles C. Fries.¹

For teaching English to foreigners, the new approach was aimed at aural-oral mastery of the language and it was accompanied by adequate teaching materials which were prepared after a descriptive linguistic analysis.² Development in the field of testing and increased interest in laboratories for language practice has helped to further accomplish the central linguistic objectives.³

A student cannot say that he has really mastered a language unless he can control its phonological, morphological, and syntactical structures orally as well as in their written form. Students who first learn these structural systems orally seem to progress much more rapidly in the writing and reading of the language than those who attempt to learn to read and write without the benefit of learning the structures orally.⁴

When all the phonemes have been learned, and they can be arranged in order as words, and when the basic grammatical patterns have been understood, the student can say that he has learned the language if he has enough vocabulary to operate the sound and grammatical systems.⁵

Therefore analysis of the target language is an important activity for a foreign language teacher. He also must know the linguistic facts of the native tongue of his students. Through the contrastive study of the structural features of the target and the native languages the teacher will know better what the real learning problems are and can better provide for teaching them. He will gain an insight into the linguistic patterns involved that cannot be achieved otherwise.⁶ As for the student, he will be informed at the outset that he should be aware of the differences between the two languages and should try to form new language habits, keeping his own in the background, not as an interference, but as a help in learning the new language.

In teaching English to Thai speakers, consequently, there should be a complete analysis of both Thai and English to see where the similarities and discrepancies lie, if instruction in English is to be made to fit Thai, in order to bring effective results.⁷

"Foreign language teaching is always a matter of teaching a specific foreign language to students with a specific native language background."⁸

Statement of the Problem

Difficulty in learning English is complicated by the learner already having one set of pronunciation habits and having to learn

another set. The individual coming into contact with a foreign language brings with him his native linguistic habits, including its sounds and structures, which he invariably tends to transfer to the new language.⁹ This is true of Thais who are learning English. They carry over portions of their native pronunciation into English. For example, in Thai there is no such phoneme as the /θ/ of the English words through and bath. Thus it is often difficult for them to recognize and produce this phone. Since the Thai sounds /t/ and /s/ are very close to the English sound /θ/, the untrained Thai will pronounce the word through as /tru/ or /sru/ , and the word bath as /bxt/ or /bxs/. This is one example of a difficulty Thais encounter when learning English.

Review of Literature

In studying difficulties of Thai students in pronouncing English consonants, two sources of information are necessary: a description of Thai consonants and another of English consonants. It is much easier to find information on English consonants than on Thai. Little effort has been made to analyze the Thai language from the point of view of modern linguistics, which would in effect explain how the language operates systematically in signalling the meaning.¹⁰ Most work presented traditionally,¹¹ "crammed word classes into English molds, and began with Sanskrit, Pali, and Thai alphabets."¹²

About the time of World War II, modern linguists, under the Linguistic Society of America and the Intensive Language Program of the American Council of Learned Societies, first studied the Thai language. They also analyzed some thirty other languages as

a basis for preparing teaching materials for Americans, especially for use in the American Army. As a part of this effort, Mary R. Haas, who studied the Thai language under the program, wrote a series of textbooks which were published by the American Council of Learned Societies: Spoken Thai, Thai Reader, The Thai System of Writing.¹³ In this early attempt to analyze the Thai language linguistically, there are some inaccuracies, and Haas fails to state how she collected the data and how many informants were used. However, her works are very helpful for later linguists.

In 1952, Murray Fowler published his booklet, The Total Distribution of the Sounds of Siamese,¹⁴ showing the result of topographical analysis of Thai speech sounds. The weaknesses of this book include shortness of the observed period, one year between 1950 - 1951, and the fact that the data was collected from only one informant who spoke only the Bangkok dialect. The study did not aim at the pedagogy of the language, and no comparison was given of Thai to English sounds.

Richard B. Noss, in 1954, published An Outline of Siamese Grammar. This study presented "the main points of a synchronic description of standard spoken Thai"¹⁵ of his four Thai informants. He divided the book into three sections: phonemic, morphologic, and syntactic constructions.

In 1960, a Ph.D. dissertation on Thai and English was prepared by Foongfuang Kruatrachue at Indiana University.¹⁶ The study was based on Thai and American informants and serves as the basis for the contrastive analysis of Thai and American English used here.

Additionally, there are two studies of the English language

with a view toward teaching Thai students particularly. The first one is Bryce Van Syoc's Methods of Teaching English as a Foreign Language with Particular Reference to Speakers of Thai.¹⁷ The purpose of the author is to give a brief survey of the development of methods of language teaching and a thorough discussion of the theory and techniques for teaching pronunciation, grammar, vocabulary, writing and reading. The second one is published by The Southeast Asian Regional English Project (SEAREP), Pronunciation of English for Thai Speakers (1963).¹⁸ It is significant as an attempt to compare Thai and English sounds scientifically.

Information on English structure and the analysis of consonants and their allophones is drawn here, for the most part, from Trager and Smith,¹⁹ C.C. Fries,²⁰ L.G. Jones,²¹ and L.A. Hill.²² Two works dealing with the difficulties in pronouncing English consonants were especially helpful: Ohreist, Foreign Accent,²³ and Van Riper and Irwin, Voice and Articulation.²⁴

Purpose and Scope

This study presents a contrastive analysis of English and Thai consonants -- English is the target language and Thai the native language -- in order to point out some of the problems native Thai encounter when learning the English consonants. This consists first of an analysis of the English consonants and of the corresponding phonemes in the Thai system and secondly of a comparison of the two systems in order to show how they are similar, identical, or different. Finally, the areas of potential difficulty are pointed out.

Justification

As noted above, individuals tend to transfer, both productively and receptively, the habits of their native language to a foreign language. By means of contrastive analysis of English and Thai, one can identify points of difference in pronunciation and predict the potential interference resulting from the speech habits of the learner's native language. Such an analysis should not be an end in itself. The ultimate end is to enable Thai students to become proficient hearers and speakers of English. The conclusions arrived at are quite valuable in the preparation of drills in English where important consonant habits may be formed.

CHAPTER II

THAI CONSONANTS

Language Family and Speaker

The Thai language, here referring to the language spoken by the people in Thailand, belongs to the Sino-Tibetan Phylum (Indo-Chinese) in the Daic family. Although it was influenced by other languages such as Chinese,²⁵ Mon and Khmer,²⁶ and Pali and Sanskrit,²⁷ it has characteristics of its own. Basically, Thai is monosyllabic. There is no inflection in Thai - which is to say that words do not change to show distinctions of case, gender, number or tense - and no varying grammatical endings. Each word is self-contained; it may be a noun, an adjective, a verb or an adverb, depending on its place in a sentence; there are neither articles, prepositions nor conjunctions.²⁸

Today, the Thai language is spoken by about 33,000,000 people, the majority of whom live in Central and Southern Thailand. It is also in use in those parts of Laos and Cambodia which are on the eastern border of the country, while in the west it is the common speech of many thousands along the Burma-Thai border.

Dialects and Their Differences

There are four major Thai dialects -- standard Bangkok (official), northern, northeastern, and southern. Each dialect is divided into many subdialects. Each dialect is distinguished from the others in the phonetic shape of phonemes and in the distribution of tones. There are also considerable differences in

lexicon, but apparently very few in syntax.²⁹ However, Thai speakers have little difficulty in inter-dialect communication, because most of them know the official language, the dialect of Bangkok, which serves as the common dialect in the same manner as Mandarin serves Chinese speakers.

Thai Consonants³⁰

	Bilabial	Apical		Frontal	Dorsal	Glottal
		(Post) Dental	Alveolar	Palatal	Velar	
Stops	p	t		c	k	
	p'	t'		c'	k'	
	b	d				
Fricatives	f		s			h
Nasals	m	n			ŋ	
Liquids		l	r			
Glides	w			y		

Consonant Phonemes and Their Allophones

/p/ Weakly glottalized voiceless unaspirated bilabial stop. Occurs both initially, (single or in cluster), and finally. In initial position the sound is fortis and released, in the final,

lenis and unreleased.

/pi/	'year'
/pa/	'eilder aunt'
/p'op/	'to meet'
/pla/	'fish'

/p'/ Voiceless aspirated bilabial stop. Occurs only initially, (single or cluster).

/p'z/	'raft'
/p'on/	'troop'
/p'ra/	'priest'
/p'len/	'song'

/b/ Voiced lenis bilabial stop. Occurs initially. It is often prenasalized, [^mb] .

/bà/	'shoulder'
/ban/	'bloom',
/bân/	'home'
/baw/	'to be light'

/t/ Weakly glottalized voiceless unaspirated post-dental stop. Occurs initially, (single or in cluster), and finally, the allophones distributed as for /p/.

/ta/	'eye'
/tra/	'marking'
/rût/	'slide'
/p'ut/	'to speak'

/t'/ Voiceless aspirated post-dental stop. Occurs initially.

/t'i/	'time, instance'
/t'on/	'to endure'

/t'e/	'to pour'
/t'a/	'if'

/d/ Voiced lenis post-dental stop. Occurs initially. Often prenasalized, [ⁿd].

/di/	'good'
/dia/	'very quickly'
/du/	'look'
/dæd/	'sun light'

/c/ Weakly glottalized unaspirated voiceless fortis palatal stop, [t^y]. Sometimes weakly affricated. The sounds /c/ and /t/ before high front vowel sound very similar. The distinction between them is that /t/ is frictionless dental, and /c/ alveolar with short fricative release. It occurs initially only.

/c'a/	'shall, will'
/can/	'moon'
/ci/	'to tickle'
/cet/	'seven'

/c'/ Aspirated voiceless fortis palatal stop with slight affrication, [t'^y], [t'^s]. Sometimes a simple palatal sibilant [s'^y] or [s'^s]. Occurs initially only.

/c'on/	'to bump into'
/c'an/	'to be steep'
/c'a/	'tea'
/c'a/	'to soak'

/k/ Weakly glottalized voiceless unaspirated velar stop. Occurs initially, (single or in cluster), and finally, the allophones distributed as for /p/.

/kin/	'to eat'
/k ^ˆ aw/	'nine'
/kron/	'to snore'
/p ^ˆ uak/	'to fasten'

/k'/ Voiceless aspirated velar stop. Occurs initially, (single or in cluster).

/k ^ˆ a/	'to kill'
/k ^ˆ on/	'person'
/k ^ˆ ray/	'who'
/k ^ˆ wa/	'to snatch'

/f/ Voiceless labio-dental fricative. Occurs initially only.

/f ^ˆ aw/	'to watch'
/f ^ˆ on/	'rain'
/f ^ˆ arɔŋ/	'thunder'
/fan/	'tooth'

/h/ Glottal fricative.

/h ^ˆ a/	'five'
/n ^ˆ ah/	'(final particle)'

The variant (of both positions): voiceless vowel of same position as contiguous voiced vowel.

/s/ Voiceless alveolar fricative, grooved type. Occurs initially.

/s ^ˆ i/	'color'
/s ^ˆ ɛ/	'buy'
/s ^ˆ atan/	'money unit'
/s ^ˆ ɔŋ/	'two'

/m/ Voiced bilabial nasal. Occurs initially and finally, the former being fortis and released, the latter, lenis and unreleased.

/mu/	'hand'
/ma/	'to come'
/na ^h m/	'water'
/p ^v om/	'hair, I'

/n/ Voiced post-dental nasal. Occurs initially and finally, the allophones as for /m/.

/ni/	'this'
/nan/	'long'
/wan/	'day'
/t ^h awnan/	'only'

/ŋ/ Voiced velar nasal. Occurs initially and finally, the allophones as for /m/.

/ŋu/	'snake'
/ŋan/	'work'
/t ^h an/	'way'
/h ^v an/	'tail'

/r/ Voiced alveolar trill, flap, or glide, sometimes becomes a kind of retroflexed lenis /t/ (when absolute initially). Occurs initially, (single or cluster). It is rather devoiced when clustered with /p'/ and /k'/.

/rak'a/	'price'
/r ^h am/	'start'
/ru/	'to know'
/r ^h otjon/	'automobile'

Actually, all twenty consonants occur freely in initial position with most vowels. For instance:

/pi/	'trumpet'
/p'inp'at/	'zyrophone'
/penton/	'such as'
/wela/	'time'
/dæn/	'red'
/bant'ik/	'record'
/nənam/	'to suggest'
/sə/	'foolish'
/p'ən/	'superficial'
/tə/	'table'
/k'on/	'hair'
/pan/	'to mold'
/t'ɔŋ/	'gold'
/fayfa/	'electric'
/muk/	'pearl'
/ŋu/	'snake'
/k'ɪn/	'to ascend'

In final position, only nine consonants occur: / p, t, k, h, m, n, ŋ, w, y /. They are considered different from the initial occurrences in not being released and in being less tense. Three unreleased final stops / p, t, k /, a glottal fricative /h/, and three nasals /m, n, ŋ / can be preceded by all vowels, but /w/ is noted to occur after seven vowels only, / i, e, ɛ, æ, a, ɔ, ia /. It is combined with the vowels, producing high-back off-glides (approaching /o/ or /u/) with rounded lips. Final /y/ is observed

after central and back vowels / ə, ʌ, a, u, o, ɔ, ɔ̃, ia, ua /.

It produces high front (/i/ or /e/) off-glides of the vowels.

Examples:

/k'it/	'to think'
/rɪp/	'to hurry'
/sɛt/	'to finish'
/p'len/	'song'
/sɛŋ/	'light'
/wɛtlɔm/	'to surround'
/nɪk/	'to think'
/yɪm/	'to borrow'
/krɛn/	'introduction'
/yɛy/	'to despise'
/mɛn/	'fat'
/hɛn/	'store'
/cɛt/	'period'
/p'ut/	'to speak'
/t'on/	'lasting'
/rɔk/	'desease'
/wɔpɛp/	'dazzling'
/lɔn/	'she'
/riɛp/	'smooth'
/p'ɛɛn/	'dirty'
/p'ɛɛk/	'group'
/k'iw/	'eyebrows'
/rɛw/	'quickly'
/lɛw/	'bad'

/k ^h aw/	'glass'
/k ^v aw/	'mountain'
/k ^v aw/	'white'
/k ^v iaw/	'green'
/c ^v ay/	'still'
/k ^v ay/	'sell'
/tay/	'die'
/k ^v uy/	'to boast'
/koy/	'grasp'
/k ^h ay/	'gentle'
/r ^v ay/	'hundred'
/liay/	'to saw'
/suay/	'pretty'

Consonant Clusters

According to Fowler³¹ and Kruatrachue,³² there are eleven initial clusters in Thai, / pr, pl, p'r, p'l, tr, kr, kl, kw, k'r, k'l, k'w / which usually occur freely before all vowels. Anthony,³³ adds two more clusters of rare occurrence, /t'r, fr/.

Medial consonant clusters in Thai are numerous. Any of the finals / p, t, k, m, n, ŋ, w, y / can be followed by any of the initials / p, p', b, t, t', d, c, c', k, k', f, h, s, m, n, ŋ, r, l, w, y /, including the initial clusters / pr, pl, p'r, p'l, tr, kr, kl, kw, k'r, k'l, k'w /. Examples of the initial and medial clusters are:

/pruŋ/	'to cook'
/plæ/	'to translate'
/p ^v r ^h wa/	'because'

/p'lâtp'lân/	'enjoy'
/tritrɔŋ/	'to consider'
/krâbun/	'basket'
/klua/	'afraid'
/kwamsuk/	'happiness'
/k'ru/	'teacher'
/k'li/	'to spread'
/k'wa/	'right'

There are no final consonant clusters in Thai. Though they appear orthographically, especially in words borrowed from Pali and Sanskrit, these clusters are phonemically one unit. Sanskrit mitra 'friend' becomes Thai mitr /mit/, for example, and Pali dharmāsana 'pulpit' becomes Thai dharmāsn /dhammās/.

CHAPTER III

ENGLISH CONSONANTS

Language Family and Speaker

Modern English, which is a branch of the West-Germanic languages, consists of many dialects (for example, British English, Australian English, South African English, British Guiana English, and American English).³⁴ Within each of these branches we will find certain regional differences which may be noticed as we move from one region to another. In the latter half of the twentieth century, English is at a pinnacle of linguistic prestige and power. It commands an importance out of proportion to the number of its native speakers, because, though they constitute only 10 percent of the population on earth, at least 70 per cent of the world's mail is addressed in English and at least that much of its business is conducted in English.³⁵

The English referred to in this study is that version of American English known as General American, which is widely used as a radio standard because it is relatively free of regional identification.

Dialects and Their Differences

Modern American English had its beginning in the dialects of the language first spoken in the colonies of the eastern coastal regions during the seventeenth century. The colonists brought with them several Elizabethan English dialects.

As Americans moved away from the eastern part of the country,

their dialects tended to diverge. The history of the large settlement waves provides the clues to the beginning of the regional patterns of speech to be found.³⁶

Regionalisms do exist. There are now three major speech areas in the United States: Northern, Midland, and Southern.³⁷ Each speech area fosters its own regional subdivisions. These regional speech differences, however, offer no great barrier to communication. They consist more of flavor than of substance.³⁸

English Consonants³⁹

	Bilabial	Apical		Frontal	Dorsal	Glottal
		Dental	Alveolar	Palatal	Velar	
Stops	p b		t d		k g	
Affricates				tʃ dʒ		
Fricatives	f v	θ ð	s z	ʃ ʒ		h
Nasals	m		n		ŋ	
Liquid			l			
Glides	w		r	y		

Consonant Phonemes and Their Allophones ⁴⁰

The voiceless plosives / p, t, k / are congruently patterned; /p/ is bilabial, /t/ is alveolar, and /k/ is velar. These are strongly aspirated sounds [p', t', k'] when they occur initially or medially before stressed vowels, and optionally so in final position. The aspiration of [p', t', k'] is found to vary from very slight to rather heavy, all three being quite fortis.

peal /píyl/	tend /ténd/	cat /kæt/
appeal /əpíyl/	attend /əténd/	occur /əkər/
play /pléy/	tray /tréy/	clay /kléy/

In medial position before weak vowel or sonant (/r, l, m, n/) and preceded by /s/, they are weak plosives [p, t, k]. This is also optional in final position.

paper /péypər/	biting /báytiŋ/	pocket /pákɪt/
spill /spíl/	still /stíl/	skill /skíl/

Before another stop and often in final position, they are unreleased [p, t, k̚].

napkin /næpkin/	hatpin /hátpin/	actor /æktər/
stop /stáp/	spot /spát/	block /blák/

One other allophone of /t/ is [t̚], found in most American speech, occurring after strong vowels and before weak vowels. It is sometimes voiced and so short as to be a flap, as in butter, city.

The voiced stops / b, d, g /, formed like their voiceless counterparts / p, t, k /, retain fuller plosive force when they initiate stressed syllables -- [b̚, d̚, g̚], (the voiceless onset is always quite marked, and for some speakers there is very

little voicing), whereas they tend toward weaker sounds when they precede less stressed or unstressed and in medial position-- [b, d, g], and they have voiceless ending in final position-- [b^h, d^h, g^h].

beg /bég/	dip /díp/	gun /gǎn/
rubber /rǎbǝr/	ladder /lǎdǝr/	beggar /bégǝr/
rub /rǎb/	red /réd/	rug /rǎg/

There are two special characteristics of stop consonants which should be noticed: in [k'] and [ʒg] there is fronting before a high front vowel as in kid, key, and backing before a high back vowel, as in cook, cool, while a central position is found elsewhere, as kent, cat, cot; ⁴¹ and there are epenthetic stops which may be inserted between sounds as the articulators move through the plosive positions for following sounds, ⁴² for instance, dreamt /p/, hams /b/, sense /t/, 'sins /d/, and length /k/.

Voiceless and voiced affricates /č, ǰ/. Each of these affricates consists of two phonetically identifiable forms: the former is made up of a voiceless blade alveolar stop followed by a voiceless alveolar fricative, [t + š] ; and the latter is the same combination, but voiced [d + ž] . /č/ has only one allophone -- [č] -- in all positions. /ǰ/ may have voiceless onset initially, and voiceless close finally, thus -- [d^hǰ, ǰ, ǰ^h].

church /čǎrch/	judge /ǰǎǰ/
teacher /tíčǝr/	budget /bǎǰǝt/

Voiceless and voiced labio-dental fricatives, /f, v/. /f/ has one allophone -- [f] -- occurring in all positions. The allophones of /v/ are like those of /b, d, g, ǰ / -- with voice-

less onset initially, plain voiced medially and with voiceless close finally -- [$\overset{v}{\underset{\wedge}{v}}$, v, $v^{\underset{\wedge}{v}}$] .

fat /fæt/

vain /veɪn/

toffee /tɒfi/

living /lɪvɪŋ/

wife /waɪf/

live /lɪv/

The fricative /h/. The /h/ is the glottal or laryngeal fricative sound. It is initiated in the glottal area as the breath stream is forced between the vocal cords. The articulators in the vocal tract are from the beginning positioned for the vowels following the /h/. There are then, as many positional varieties of /h/ as there are vowels that may follow it.

him /hɪm/

ahead /əhed/

Voiceless and voiced interdental fricatives, /θ, ð/. The voiceless /θ/ has one allophone -- [θ] -- in all positions, but medial /θ/ is rare. Initial /ð/ is most frequently found in a few common words like the, this, these, those, there, then, and is otherwise rare.

thing /θɪŋ/

thine /ðaɪn/

pithy /pɪθi/

wither /wɪðər/

myth /mɪθ/

bathe /beɪð/

Voiceless and voiced alveolar groove fricatives, /s, z/.

/s/ has one allophone -- [s] -- in all positions, while the allophones of /z/ are parallel to those of /v/ and /ð/, therefore -- [$\overset{z}{\underset{\wedge}{z}}$, z, $z^{\underset{\wedge}{z}}$] .

sea /si/

zone /zəʊn/

missing /mɪsɪŋ/

roses /rəʊzɪz/

miss /mɪs/

rose /rəʊz/

play /pley/

tilt /tílt/

Retroflex (retracted) glide, /r/. There are five allophones of English /r/ according to Francis:⁴³ the [r] occurs commonly in initial position and between an initial /b/ or /g/ and following vowel. Between /p, f, θ, s, k/ and a following vowel, [r] may be in free variation with its voiceless counterpart, [r̥]. After /t/, many speakers use a voiceless alveolar retroflex fricative [ɻ̥], and after /d/ its voiced counterpart [ɻ]. Nonsyllabic [ɻ̥], which occurs as the offglide of some of the centering diphthongs, is phonetically similar to the other allophones of /r/ and in complementary distribution with them. That is, [r, r̥, ɻ̥, ɻ] always occur before vowels, and [ɻ̥] always occurs after them.

rat /ræt/

green /gríyn/

pry /práy/

fry /fráy/

try /tráy/

dry /dráy/

bird /bárd/

merry /mérɪy/

butter /báter/

jar /jáhr/

fur /fár/

cart /káhrt/

Some Americans such as New Yorkers, Bostonians and other Northeasterners have a so-called 'r-less' dialect. There is a tendency for these speakers to replace /r/ in final position by a centering offglide, in such expressions as "Close the door" [-dɔə]; these 'r-less' speakers reinsert the /r/ when it becomes intervocalic - "Close the door in the house." [-dɔrin-]. Bronstein calls this 'linking /r/'.⁴⁴

/m, n, l, r/ may become syllabic whenever they occur in syllabic final after other consonants. /y/ is sometime a syllabic, but it is not as common in cultivated American English.⁴⁵

chasm /kæzm/

bitten /bitn/

little /'litl/

butter /'bʌtr/

In initial position, the semi-vowel /y/ is a palatal onglide with front vowel /e/, and /w/ is a rounded onglide with back vowel /u/. Finally, /y/ results in high front offglide, and /w/ in close lip rounding.

yet /'yet/

we /'wi:/

you /'yuw/

woo /'wu:/

buy /'bʌy/

how /'hʌw/

Consonant Clusters

There are in English a great many consonant clusters which occur in initial, medial and final positions. The medial consonant clusters are not considered here, however, because it can be shown that they are composed of the final plus the initial consonant patterns.⁴⁶

In initial or pre-vocalic position the following combinations occur:

/pl/ play

/dw/ dwell

/pr/ pray

/dr/ dray

/py/ pure

/gl/ glow

/tw/ twine

/gr/ gray

/tr/ tray

/fl/ flow

/kl/ clay

/fr/ fray

/kw/ quick

/fy/ feud

/kr/ crew

/θw/ thwart

/ky/ cute

/θr/ through

/bl/ blow

/sp/ span

/br/ brew

/st/ stay

/by/ beauty

/sk/ skin

/sf/	sphere	/my/	mute
/sm/	small	/vy/	view
/sn/	snow	/spl/	splash
/sl/	slay	/spr/	spray
/sw/	swine	/spy/	spume
/sr/	shred	/str/	stray
/hw/	when	/skw/	square
/hy/	hue	/sky/	skew
		/skr/	screw

Final consonant clusters may contain two, three, four, or five (which is rare) segments. They can be classified into two groups.

1. Single Morpheme Words

/pt/	apt	/mf/, /mpf/	nymph
/ps/	copse	/nt/	tent
/tθ/	eight	/nk/	sink
/kt/	act	/nd/	lend
/ks/	box	/nč/	bench
/dθ/	width	/nj/	change
/dz/	adze	/nθ/, /ntθ/	tenth
/ft/	soft	/ns/, /nts/	fence
/fθ/	fifth	/nz/, /ndz/	lens
/sp/	wasp	/lp/	help
/st/	fist	/lt/	belt
/sk/	task	/lk/	silk
/mp/	limp	/lb/	bulb

/ld/	old	/r ^ː s/	marsh
/l ^ɪ j/	bulge, bilge	/rv/	curve
/lf/	wolf	/rz/	furze
/lθ/, /ltθ/	health	/rm/	worm
/ls/	false	/rn/	turn
/l ^ɪ s/, /l ^ɪ c/	welch	/rl/	curl
/lv/	solve	/kst/	text
/lm/	film	/ksθ/	sixth
/ln/	kiln	/mpt/	tempt
/rp/	chirp	/mps/	glimps
/rt/	court	/ndθ/	thousandth
/rk/	fork	/ŋkθ/	length
/rb/	curb	/ŋks/	lynx
/rd/	card	/lfθ/	twelfth
/rg/	iceberg	/rps/	corpse
/r ^ɪ c/	search	/rts/	quartz
/r ^ɪ j/	urge	/rst/	first
/rf/	turf	/rmpθ/	warmth
/rθ/	worth	/kstnz/	sextons
/rs/	hoarse	/zntθs/	thousandths
		/ŋgltn/	singleton

2. With Bound Inflectional Morphemes Added

With inflectional suffixes / s, z / (plurals, etc.)

added:

/ts/	rats	/gz/	figs
/bz/	cabs	/fs/	laughs

/0s/	wreaths	/lbz/	bulbs
/vz/	lives	/ldz/	colds
/dz/	breath	/l0s/	healths
/mz/	rooms	/lvz/	solves
/nz/	rings	/lmz/	films
/lz/	balls	/lnz/, /lz/	kilns
/pts/	scripts	/rps/	chirps
/t0s/	eights	/rks/	works
/kts/	acts	/rbz/	verbs
/d0s/	widths	/rdz/	cards
/fts/	lifts	/rfs/	surfs
/f0s/	fifths	/rvz/	curves
/sps/	lisps	/rmz/	warms
/sts/	fists	/rnz/	turns
/sks/	desks	/rlz/	curls
/mfs/, /m0fs/	nymphs	/ksts/	texts
/nks/	sink	/ks0s/	sixths
/n0s/, /nt0s/	ninths	/mpts/	tempts
/lps/	helps	/nd0s/	thousandths
/lfs/	gulfs	/nk0s/	lengths
/lts/	belts	/lf0s/	twelfths
/lks/	silks	/rstz/	bursts

With suffixes, / t, d /, (preterit and past participle etc.) added:

/bd/	rubbed	/ct/	matched
/gd/	hugged	/jd/	raged

/θt/	pithed	/nst/	danced
/˘st/	wished	/lpt/	helped
/vd/	moved	/lkt/	milked
/˘dd/	breathed	/l˘jd/	bulged
/zd/	raised	/lst/, /ltst/	waltzed
/˘zd/	rouged	/l˘st/, /l˘ct/	belched
/md/	roamed	/lvd/	solved
/˘nd/	wronged	/lmd/	filmed
/pst/	lapsed	/rpt/	wraped
/spt/	lisped	/rkt/	worked
/skt/	risked	/rbd/	curbed
/mft/	triumphed	/r˘ct/	perched
/˘nkt/	linked	/r˘jd/	surged
/n˘ct/	lunched	/rvd/	curved
/n˘jd/	changed	/rmd/	warmed
		/rnd/	warned

CHAPTER IV

CONTRASTIVE ANALYSIS OF THAI AND ENGLISH CONSONANTS

The chart of Thai and English consonants presented here was adapted from Kruatrachue.⁴⁷ It is arranged according to the point of articulation: bilabial, dental, alveolar, palatal, velar and glottal. For each point the orders are: stops, affricates, fricatives, nasals, liquids, and glides. The hyphens before and after each phoneme indicate the distributional pattern of that consonant with relation to a neighboring vowel (pre-vocalic, post-vocalic, or both).

	Bilabial		Apical				Frontal		Dorsal		Glottal	
			Dental		Alveolar		Palatal		Velar			
	Th.	E.	Th.	E.	Th.	E.	Th.	E.	Th.	E.	Th.	E.
Stops	-p- p'- b-	-p- -b-	-t- t'- d-			-t- -d-	c- c'-		-k- k'- -g-			
Affricates							^v -c- ^v -j-					
Fricatives	f- -v-	-f- -v-		-θ- ^ð -ð-	s- -z-	-s- -z-		^v -ʃ- ^v -ʒ-			-h- h-	
Nasals	-m- -m-	-m- -m-	-n- -n-			-n- -n-			-ŋ- -ŋ			
Liquids			l- -l-		r- -r-	-l- -l-						
Glides	-w- -w-	-w- -w-				-r- -y-	-y- -y-					

The Consonantal Distributions of Thai and English

	Thai	English
Initial	C- CC-	C- CC- CCC-
Medial	-C- -CC- -CCC-	-C- -CC- -CCC- -CCCC-
Final	-C	-C -CC -CCC -CCCC

In the Distribution of Thai Consonants

Initial C = any consonant

Medial C = any consonant

Final C = / p, t, k, h, m, n, ɲ, w, y /

Initial CC = / p'l, p'r, pl, pr, tr, k'l, k'r, k'w,
kl, kr, kw /

Medial CC = any of final C followed by any of initial C

Medial CCC = any of final C followed by any of initial
CC

In the Distribution of English Consonants ⁴⁸

Initial C = any consonant except /z, ʒ/

Medial C = any consonant

Final C = any consonant except /h/

For consonant clusters see page 25-29

Analysis of Thai and English Stops

All six English stops: / p, t, k, b, d, g / occur in both initial and final positions. In Thai, only three voiceless / p, t, k / occur in both positions, and the rest, / p', b, t', d, k' / occur only initially.

In Thai, the aspiration of voiceless stops / p', t', k' / is phonemic while in English it is only an allophonic feature [p', t', k'] of the voiceless phonemes / p, t, k /.

Thai voiced stops /b, d/ have nasal onset (voiced), while English initial voiced stops / b, d, g / have a voiceless onset. Usually all Thai stops are longer than those of English.

Areas of Difficulty

1. Thai learners of English fail to distinguish English voiceless and voiced final stops as in such pairs as

cap - cab bet - bed back - bag

The quantity of the vowels may sometimes be a clue for Thais to hear the contrasts of voiced and voiceless. Therefore, in producing them Thais tend to distinguish the pair by phonemicizing the length of the vowels, short for the first of the pair and long for the second. The voicing of the final consonants

which is only allophonically different for Thai is disregarded.

The absence of voicing in Thai final stops, and the systematic nonrelease of Thai final consonants add to the problem of the Thai speaker of English. This can be considered serious since it may produce a barrier to communication.

2. In pronouncing English / p, t, k / in initial position, Thais may replace them by Thai / p', t', k' / or / p, t, k /. Those who substitute Thai / p', t', k' / for English / p, t, k / will pronounce spill, still, skill, with aspiration. Those who use Thai / p, t, k / to pronounce the English / p, t, k / in the initial position will fail to aspirate pill, till, kill, which is not however a serious problem.

3. Because Thai has no velar voiced stop, Thais have trouble pronouncing English /g/, as in go, and dog; but it is not too difficult to learn to voice their /k/.

4. The different onsets of Thai /b, d/ -- [^mb, ⁿd], and English /b, d/ -- [^hb, ^hd] do not cause a major problem, since both features are only allophonic variations of the same phonemes. However, they do sound foreign to the native English speakers.

5. The difference in point of articulation of Thai / t, t', d / (dental) and English /t, d/ (alveolar) also does not cause a major problem for Thais in learning English, but the substitution of dental for alveolar does make for a foreign accent.

Analysis of Thai and English Affricates

The comparison of Thai and English affricates is difficult because in Thai /c' and c/ are stops with slight affrication while

English /^hc/ and /^hj/ are real affricates. Moreover, the contrast of Thai /c'/ and /c/ is in the quality of aspiration, either aspirate or unaspirated, but the contrast of English /^hc/ and /^hj/ shows it is the quality of the voicing, either voiced or voiceless, that is important.

Areas of Difficulty

Thai learners have a problem in pronouncing English affricates /^hc, ^hj/. The Thai's attempt at English /^hc/ sounds to native English speakers like English /s/. Actually he is using the Thai /s/ which is phonetically similar to English /^hs/. For English /^hj/ he uses Thai /c/, which is similar but sounds "a bit strange". Of these two discriminations, the former is critical, since it results in a phonemic confusion, but the latter is merely distracting. A consequence, however, is that Thais often have difficulty in distinguishing such pairs as

cheap - jeep cheat - sheet

Analysis of Thai and English Fricatives

English sounds of this group can be considered the most critical problem for Thai learners of English. In English, there are nine fricatives: / f, v, θ, ð, s, z, ^hʃ, ^hʒ, h / but only three / f, s, h / in Thai. Moreover, seven out of nine English fricatives (except /^hʒ, h/) occur in all positions, while the whole set of Thai fricatives (except /h/) occur initially only.

Areas of Difficulty

Thais should have no difficulty in the articulation of English /f/ since it is essentially the same as its Thai counterpart. The problem here involves its distribution. English /f/

occurs in initial, medial, and final positions. The Thai /f/ occurs only in initial position. On the other hand, /v/ is difficult, since there is no /v/ in Thai.

Thai has no /θ, ð/, so the speakers substitute Thai /t', t, s/ for voiceless interdental fricative /θ/ and Thai /d/ for the voiced onset /ð/.

Most Thais can not distinguish between sue and zoo, or rice and rise, because Thai does not have /z/. For them there is only one sound: /s/ for both, and it never occurs in word final position. Final /s/ tends to become /t/ as tenit for tennis apparently because of the frequency in Thai of words ending in /-it/.

The fricative /h/ does not cause much trouble for Thai learners. Both Thai and English /h/ occur in initial position as in house and /haw/ ('to bark' in Thai). In medial position both occur between vowels as in ahead and /ahan/ ('food' in Thai).

Analysis of Thai and English Sonorants

The Thai nasals /m, n, ŋ/ are similar to those of English, except that Thai /n/ is dental while English /n/ is alveolar. The distribution of nasals in Thai varies more than in English; in Thai any nasal may occur in any position while English /ŋ/ never occurs initially.

English /l/ is alveolar, with the tip of the tongue in contact with the alveolar ridge, while Thai /l/ is simply dental. In English, /l/ occurs in all positions, but in Thai the phoneme is limited to prevocalic position.

English /r/ is a retroflex, occurring in all positions. Thai /r/ is an unstable phoneme with many free or stylistic variants.

It is trill or flap at one time, and glide or retroflex at another, and it occurs prevocally only.

The points of articulation of Thai and English /w, y/ are similar: /w/ is bilabial, and /y/ is palatal. In both languages, they occur in all positions.

Areas of Difficulty

Thai speakers do not have much trouble in pronouncing English nasal consonants, except when final /m, n/ occur after the vowel sequences /ay/, /aw/, and final /n/ occurs after /oy/. They may not be able to hear and pronounce the nasal closure because in Thai there are no such consonant sequences in final position; semi-vowels /w/ and /y/ are already final consonants, so they are never followed by any other consonants. Therefore, Thais may not be able to hear and pronounce the nasal closure and tend to have trouble with pairs like:

lime - lie

mine - my

noun - now

join - joy

In medial position between vowels the sound /ŋ/ constitutes a problem to the Thai speakers of English, due to the difficulty they experience with the use of the English spelling, for example, the use of /ŋ/ as in singer or /ŋg/ as in finger.

English /l, r/ are exceedingly difficult for Thai learners. The linguists observed that even when the teachers very carefully and precisely pronounced a series of contrasting minimal pairs with /l/ and /r/, the students were quite inconsistent in their ability to distinguish the sounds. This seems strange because the Thai alphabet has symbols for 'l'-like and

'r'-like sounds ʀ and ʁ respectively. However, Van Syoc observed that many Thai speakers were often unable to distinguish between these sounds in their own language.⁴⁹ Thai linguists themselves confirm that at least historically Thai ʀ and ʁ symbolized separate phonemes, but the distinction is rapidly disappearing. Van Syoc also noticed that often when Thais were speaking freely or were off guard they pronounced their own [l] and [r] in free variation.

In teaching, the differentiation of /l/ and /r/ was seen to be a matter of developing two distinct phonemes for English in an articulatory area where most modern Thais used two variants of a single phoneme. Thus, it is a matter of distributing allophones of one phoneme in the native language into two phonemes in the target language.

Apart from the problem of substitution, /l, r/ are more difficult when they occur in prefinal or final position than when they occur prevocalically, because Thai has no /r/ in the first position. The omission of postvocalic /r/ is acceptable since the so-called "r-less" dialects of English have this feature. But, on the contrary, the substitution of final /l/ for final /r/ is not permitted. For instance, the word morning pronounced /mɔhniŋ/ is acceptable to a native speaker but /mɔlniŋ/ is not. / l, r, n / all have approximately the same point of articulation (alveolar) but different mode (/l/ is a lateral, /r/ is a semi-vowel, and /n/ is a nasal). /-n/ is permissible in final position in Thai; therefore, sometimes Thai speakers will use final /n/ for prefinal or final /l/ in English. They have a problem in distin-

guishing

spool	from	spoon
stole	from	stone

Semivowels /w/ and /y/ do not constitute a problem to Thai speakers, except that Thais add some friction to the English /w/ -- [B], and make it nearly /v/. /y/ may be sometimes produced with stop component and prenasalization: [ⁿg^y]. Although these difficulties can be relatively easily handled, another type of pronunciation problem which is more serious may be observed when these semivowels precede a final consonant. In this instance the Thai speaker hears them as consonants, i.e., part of a final consonant cluster. Since such a sequence is impossible in Thai, Thais insert an epenthetic vowel between the consonants of the cluster. This produces a two syllable word such as [layət] "light," [meyək] "make," and [bowət] "boat." This pronunciation is practically unintelligible to native speakers of English.

Analysis of Thai and English Consonant Clusters

When we compare the Thai and English languages, Thai contains relatively fewer consonant clusters than English. There is no doubt that the Thais encounter great difficulty with the English consonant cluster system.

Initially, Thai consonant clusters, with the notable exception of /k'w, kw/, contain /l, r/. And since /l, r/ alone seems to cause problems; these clusters, which are comparable with the English / pl, pr, tr, kl, kr /, do not help Thai learners pronounce English consonant clusters correctly. Occasionally, /l/ and /r/ are used

interchangeably for the second segment of the clusters, or /l, r/ are entirely dropped out. Similar problems occur with other English clusters containing /l/ or /r/.

English /kw/ is not difficult, because it is comparable with Thai /k'w, and kw/.

All other English consonant clusters will have to be considered as possible problems to the Thai students. One important difficulty likely to be encountered as noted above is the intrusion of a vowel to break up the consonant sequences and make them more nearly coincide with the consonant - vowel pattern of the syllables of the Thai language, especially the English clusters which begin with /s/ as in spin, /t/ as in twin, /d/ as in dwel, /θ/ as in thwart, /ʃ/ as in schlitz. Thais tend to produce the first segment of those clusters as if they were followed by /a/ in Thai (/ə/ in English), and thus, make additional syllables of them.

Another common difficulty of Thai students in pronouncing certain consonant clusters is that they omit one or more of the consonants in the clusters. For example, they may pronounce the word masts as [mæt] rather than [mæsts].

All English final consonant clusters constitute a major problem for Thai learners of English, because Thai consonant clusters never occur as syllable endings. The medial sequences also constitute difficulty to Thai students, especially whenever they contain more than two segments.

From the above discussion, it is clear that, in general, English consonant clusters are troublesome for Thais. The comparable ones that occur in Thai, instead of helping them in learning

English consonant clusters, are a serious barrier.

CHAPTER V

CONCLUSION

Although thousands upon thousands of Thai students study English, most of these students achieve small reward for their efforts in terms of mastery; that is to say, they are not able to use English effectively in any way. One of the explanations for such a low level of achievement is the inadequate preparation of the teachers. Something more, and something new, is needed in the training of the teacher of English if his students are to achieve the results desired.

Part of the answer to this problem is an analysis of the Thai and English sound systems. A contrastive analysis of the two systems then reveals the particular areas in the English system upon which Thai speakers must concentrate.

It has long been known that one who prepares to teach on the secondary level should include pedagogy courses in his professional training. The conclusions arrived at here are therefore not to be considered as ends in themselves. They are merely guidelines directed to the end of teaching English effectively to speakers of Thai, and the ultimate aim of this contrastive study of Thai and English consonants is to help Thai students overcome their

difficulties in mastering English pronunciation.

The allophonic occurrences and patterns of distribution of phonemes in the two languages account for the relative difficulty in mastering some and the comparative ease of using others. These problems can be classed as major or minor, based on their influence on the comprehension of native speakers of English. Major difficulties cause break downs in communication with English speakers, while minor problems result in an accent but do not interfere with understanding. Therefore, when constructing materials for lessons, greater emphasis should be placed on the more serious difficulties, which should be recognized and have more time and energy devoted to their elimination.

The positions of consonants must also be taken into account: final occurrences create more problems of pronunciation for Thai speakers than do medial ones, and consonants in initial position offer the least difficulty. These phenomena suggest that the emphasis in drills should be placed on the more difficult final occurrences of consonants than on less difficult initial ones.

FOOTNOTES

¹Leonard Bloomfield, Introduction to the Study of Language. (New York: Henry Holt and Co., 1914.)

Charles C. Fries, Teaching and Learning English as a Foreign Language. (Ann Arbor: University of Michigan Press, 1952.)

²John B. Carrol, and Earle S. Richards, "Instruction in Foreign Languages," Review of Educational Research, 22.1.116, (1952).

³Walker V. Kaulfers, "Foreign Languages," Review of Educational Research 25.161, (1955).

⁴Bryce Van Syoc, Methods of Teaching English as a Foreign Language. (Bangkok: The Social Science Association of Thailand Press, 1963), p.11.

⁵Ibid, p.11.

⁶Robert Lado, Linguistics across Cultures. (Ann Arbor: University of Michigan Press, 1952), p.2.

⁷Foongfuang Kruatrachue, "Thai and English: A Comparative Study of Phonology for Pedagogical Applications," Unpub. Doctoral Diss. (Indiana University, 1960.)

⁸Fries, op.cit. Preface.

⁹Kruatrachue, op.cit. p.10.

¹⁰Edward M. Anthony, "Field Report on Thailand," Language Learning, Special Issue, (1958), p.35.

¹¹Stuart Campbell, and Chuan Shawee Wongse, Fundamentals of the Thai Language. (Bangkok; The Prachandra Press, 1956.)

Basil O. Cartwright, The Student's Manual of the Siamese Language. (Bangkok: Subh Pakya Press. 1929.)

C.G. Eagling, An Elementary Handbook of the Thai Language. (Bangkok: The Prachandra Press, 1952.)

J. Tayler Jones, Brief Grammatical Notices of the Siamese Language. (Bangkok: The Mission Press, 1842.)

Peter A. Lanyon-Orgill, An Introduction to the Thai (Siamese) Language for European Students. (Canada: The Gurlew

Press, 1955.)

George B. MacFarland, Thai-English Dictionary. (Stanford: Stanford University Press, 1954.)

Gustav Schlegel, Siamese Studies. (Leiden: Oriental Printing Office, 1902.)

¹²Anthony, op.cit. p.36.

¹³Mary R. Haas, Spoken Thai. (Washington: American Council of Learned Societies, 1945.)

Thai Reader. (Washington: American Council of Learned Societies, 1954.)

Thai Vocabulary. (Washington: American Council of Learned Societies, 1955.)

Thai System of Writing. (Washington: American Council of Learned Societies, 1956.)

¹⁴Murray Fowler, and Tasniya Isarasena, The Total Distribution of the Sounds of Siamese. (Madison: The University of Wisconsin Press, 1952.)

¹⁵Richard B. Noss, An Outline of Siamese Grammar. (Washington: The American Council of Learned Societies, 1954.)

¹⁶Kruatrachue, op.cit.

¹⁷Van Syoc, op.cit.

¹⁸The Southeast Asian Regional English Project, Pronunciation of English for Thai Speakers. (Bangkok: Social Science Association of Thailand Press, 1963.)

¹⁹George L. Trager, and Henry L. Smith Jr., An Outline of English Structure. (Washington: American Council of Learned Societies, 1967.)

²⁰Fries, op.cit.

²¹In David Abercrombie, ed. For Roman Jakobson. (The Hague: Mouton and Co., 1956), p.245-253.

²²In Harold B. Allen, ed. Teaching English as a Second Language. (New York: McGraw-Hill, 1965), p.115-119.

²³Fred M. Chreist, Foreign Accent. (New Jersey: Prentice-Hall, Inc., 1964.)

²⁴Charles Van Riper, and John V. Irwin, Voice and Articula-

tion. (New Jersey: Prentice-Hall, Inc., 1958.)

²⁵Phya Anuman Rajadhon, Thai Language. (Thailand: The National Culture Institute, 1956), p.35.

²⁶Ibid, p.35.

²⁷William J. Gedney, Indic Loan Words in Spoken Thai. Unpub. Doctoral Diss. (Yale University, 1957), p.613.

²⁸Valentin Chu, Thailand Today. (New York: Thomas Y. Crowell Co., 1968), p.78.

²⁹Kruatrachue, on.cit. p.24.

³⁰cf. Kruatrachue, p.42.

³¹Fowler, on.cit. p.5.

³²Kruatrachue, on.cit. p.53.

³³Anthony, on.cit. p.8.

³⁴Arthur J. Bronstein, The Pronunciation of American English. (New York: Appleton Century Crofts, Inc. 1960), p.38.

³⁵John Nist, A Structural History of English. (New York: St. Martin's Press, 1966), p.3.

³⁶Bronstein, on.cit. p.42.

³⁷Nist, on.cit. p.366.

³⁸Harold Whitehall "The English Language," Introduction to Webster's New World Dictionary of the American English. (1957), p.XVI.

³⁹cf. Kruatrachue, on.cit. p.66.

⁴⁰Arthur Bronstein, and Beatrice F. Jacoby, Your Speech and Voice, (New York: Random House, 1967), p.100-138.

cf. Trager, Smith, on.cit. p.11-35.

⁴¹Trager, Smith, on.cit. p.30.

⁴²Bronstein and Jacoby, Your Speech and Voice. p.106.

⁴³Winthrop N. Francis, The Structure of American English. (New York: The Ronald Press Co., 1958), p.135.

⁴⁴Bronstein and Jacoby, Your Speech and Voice. p.139-140.

⁴⁵Bronstein, The Pronunciation of American English, p.106.

⁴⁶Jones, op.cit. p.252.

⁴⁷cf. Kruatrachue, p.91.

⁴⁸Walter Lehn and William R. Slager, "A Contrastive Study of Egyptian Arabic and American English," Language Learning 9.5, (1959), p.31.

⁴⁹Bryce Van Syoc, "Teaching English /r/ and /l/ (with special reference to speakers of Thai)," Language Learning XIV.3-4, (1964), 137-146.

BIBLIOGRAPHY FOR FURTHER REFERENCE

- Abercrombie, David. ed. In Honour of Daniel Jones. London: Longman, Green and Co., Ltd., 1964.
- Allen, Harold B. ed. Teaching English as a Second Language. New York: McGraw-Hill, 1965.
- Anthony, Edward M. "Field Report on Thailand," Language Learning, Special Issue, 1958.
- Bloomfield, Leonard. Introduction to the Study of Language. New York: Henry Holt and Co., 1914.
- Language. New York: Henry Holt and Co., 1933.
- Outline Guide for the Practical Study of Foreign Languages. Baltimore: The Waverly Press, Inc., 1942.
- Boas, Franz. Introduction to Handbook of American Indian Languages. Washington: Government Printing Office, 1911.
- Bronstein, Arthur J. The Pronunciation of American English. New York: Appleton-Century-Crofts, 1960.
- Bronstein, Arthur J., and Beatrice F. Jacoby. Your Speech and Voice. New York: Random House, 1967.
- Campbell, Stuart, and Chuan Shawewongse. Fundamentals of the Thai Language. Bangkok: The Prachandra Press, 1956.
- Carrol, John B., and Earle S. Richards. "Instruction in Foreign Languages," Review of Educational Research, 22:1.116, 1952.
- Cartwright, Basil O. A Siamese-English Dictionary. Bangkok: The American Presbyterian Mission Press, 1907.
- The Student's Manual of the Siamese Language. Bangkok: Subh Pakya, 1929.
- Chreist, Fred M. Foreign Accent. New Jersey: Prentice-Hall, Inc., 1964.
- Chu, Valentin. Thailand Today. New York: Thomas Y. Crowell Co., 1968.
- Eagling, C.G. An Elementary Handbook of the Thai Language. Bangkok: The Prachandra Press, 1952.
- Fowler, Murray, and Tasniya Isarasena. The Total Distribution of the Sounds of Siamese. Madison: The University of Wisconsin

Press, 1952.

Francis, Winthrop Nelson. The Structure of American English. New York: The Ronald Press Co., 1958.

Fries, Charles C. Teaching and Learning English as a Foreign Language. Ann Arbor: University of Michigan Press, 1945.

Gleason, H.A. An Introduction to Descriptive Linguistics. New York: Holt Rinehart and Winston, 1966.

Haas, Mary R. Thai Reader. Washington: American Council of Learned Societies, 1954.

Thai System of Writing. Washington: American Council of Learned Societies, 1956.

Thai Vocabulary. Washington: American Council of Learned Societies, 1955.

Haas, Mary R., and Heng R. Subbanka. Spoken Thai. Washington: American Council of Learned Societies, 1945.

Halle, Morris, ed. For Roman Jakobson. The Hague: Mouton and Co., 1956.

Hill, Archibald A. Introduction to Linguistic Structures. New York: Harcourt, Brace and Co., 1958.

Jones, J. Tayler. Brief Grammatical Notices of the Siamese Language. Bangkok: The Mission Press, 1842.

Kaulfers, Walker V. "Foreign Languages," Review of Educational Research. 25:161, 1955.

Kruatrachue, Foongfuang. "Thai and English: A Comparative Study of Phonology for Pedagogical Applications," Unpub. Doctoral Diss. Indiana University, Bloomington, Indiana, 1960.

Lado, Robert. Linguistics across Cultures. Ann Arbor: The University of Michigan Press, 1957.

Lanyon-Orgill, Peter A. An Introduction to the Thai (Siamese) Language for European Students. Canada: The Curlew Press, 1957.

Lehn, Walter, and William R. Slager. "A Contrastive Study of Egyptian Arabic and American English," Language Learning 9:3.31, 1959.

MacFarland, George B. Thai-English Dictionary. Stanford: Stanford University Press, 1954.

Nist, John. A Structural History of English. New York: St. Martin

Press, 1966.

Noss, Richard B. An Outline of Siamese Grammar. Washington: American Council of Learned Societies, 1954.

Phya Anuman Rajadhon. Thai Language. Thailand: The National Council Institute, 1956.

The Cultures of Thailand. Thailand: The National Council Institute, 1956.

Pike, Kenneth L. Phonemics: A Technique for Reducing Languages to Writing. Ann Arbor: University of Michigan Press, 1943.

Phonetics: A Critical Analysis of Phonetic Theory and Technique for the Practical Description of Sounds. Ann Arbor: University of Michigan Press, 1943.

Sapir, Edward. Language: An Introduction to the Study of Speech. New York: Harcourt Brace and Co., 1921.

Southeast Asian Regional English Project. Pronunciation, English for Thai Speakers. Bangkok: Social Science Association of Thailand Press, 1963.

Schlegel, Gustav. Siamese Studies. Leiden: Oriental Printing Office, 1902.

Shen, Yao. "Why No Translation?" Language Learning 3:3, 246-249. 1953.

Trager, G.L., and B. Bloch. "The Syllabic Phonemes of English," Language, 17:3, 238, 1941.

Trager, G.L., and Henry L. Smith. An Outline of English Structure. Washington: American Council of Learned Societies, 1957.

Van Riper, Charles, and John V. Irwin. Voice and Articulation. New Jersey: Prentice-Hall, Inc., 1958.

Van Syoc, Bryce. Methods of Teaching English as a Foreign Language. Bangkok: The Social Science Association of Thailand Press, 1963.

"Teaching English /r/ and /l/" (with special reference to speakers of Thai). Language Learning XIV: 3-4. 137-146, 1964.

Whitehall, Harold. "The English Language." Introduction to Webster's New World Dictionary of American English, 1957.

A STUDY OF THE DIFFICULTIES OF THAI STUDENTS
IN PRONOUNCING ENGLISH CONSONANTS

by

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ABSTRACT

Purpose: This report is an attempt to provide an effective guide to approaching the main problems of teaching English pronunciation to Thai speakers, by means of a contrastive analysis of the consonantal systems of the two languages. The results of this study indicate the particular areas in the English consonant system that Thai speakers have to work on if they are to acquire mastery of English pronunciation.

Procedure: This report is based on a contrastive analysis of the consonantal systems of Thai and English. The consonant troubles considered have also been studied by Foongfuang Kruatrachue and can be considered common and persistent. Summaries of the Thai and English consonant sounds are first presented. Second, contrasts between the two systems are noted, and finally the areas of difficulty are pointed out.

Summary of Findings: It can be said that the mispronunciation of English consonants by Thai speakers constitutes a major problem for them in teaching and learning English. Generally there are two types of deviations in the pronunciation of English consonantal phonemes by Thai learners: 1) those deviations which interfere with communication in English; 2) those which do not, but which sound foreign to the ears of native speakers of English.

Most of the consonant deviations belong to the first type. The substitutions of [ʃ] for [ʒ] and [ʧ] , [t , t' , s] for [e] , [d] for [ɗ] , and [l] for [r] , etc. , all lead to

misunderstanding in English. The devoicing of [b, d, g, ð, v, z, ʒ] is serious, since the sounds will be heard as the corresponding voiceless phonemes [p, t, k, θ, f, s, ʃ] respectively. The failure to voice these phonemes is crucial because the voiced and voiceless contrast is important and extensive in English; it runs through all the stop and fricative-series (except /h/). Also, the deviations of [w] as [B] (voiced bilabial fricative, allophonic variant of Thai /w/), and the omission of final closure, especially of laterals and nasals are critical because all of them affect communication.

The problem in the pronunciation of English consonant clusters, initial and final, is at least as serious as that of single consonants.

As can be seen in this study, the expected deviations do occur in areas of linguistic difference between Thai and English. Difficulties are encountered with the following:

1. Those sounds which do not exist in Thai, such as English [ç, ʝ, ø, ð̥, ʃ̥, ʒ̥].
2. Those English phonemes which consist of allophones which are separate phonemes in Thai, (Note the phonemic significance of aspiration in Thai.)
3. Those phonemes of Thai which generally correspond to an English phoneme, but which have allophonic variants which do not occur in English, such as the [B] allophone of /w/.

Thai learners of English should be aware that in learning a second language the matter of forming habits is essential and that habit formation takes time. It requires hours of practice

and repetition until the sounds and their patterns become automatic. The best language learning is overlearning. We must practice everything until it becomes second nature.
