THE PHONOLOGY OF VOICELESS AND VOICED PALATO-

ALVEOLAR FRICATIVES /ʃ/ AND /ʒ/ OF MALAYSIAN

LEARNERS OF ENGLISH WITH MANDARIN BACKGROUND

by

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Abstrak

Kajian berbentuk eksplorasi tentang Frikatif Lelangit-Gusi yang tidak bersuara /ʃ/ dan yang bersuara /ʒ/ ini dilakukan terhadap tiga puluh (30) pelajar Bahasa Inggeris daripada latarbelakang Mandarin di sebuah kolej swasta.

Objektif kajian ini termasuklah: mengenalpasti varian serta pola varian yang dihasilkan oleh subjek kajian, pola fonologi serta keupayaan subjek mengenalpasti kedua-dua fonim sasaran yang dikaji yakni /ʃ/ dan /ʒ/.

Kajian ini adalah berdasarkan metodologi yang disarankan oleh Labov (1984) yang berbentuk temubual. Kaedah ini juga pernah digunakan oleh Dickerson (1974) didalam kajiannya terhadap pelajar Bahasa Inggeris daripada latarbelakang Jepun. Sementara itu, Alias Abd. Ghani (1995) juga menggunakan metodologi Labov yang berbentuk pasangan minimal (minimal pairs), senarai perkataan (word list), bacaan dialog (dialogue reading) dan perbualan secara spontan (free conversation) untuk mengkaji corak stratifikasi stail didalam fonologi pelajar Bahasa Inggeris di Malaysia. Archibald (1992, 1993) pula menggunakan senarai perkataan dan ayat untuk mengkaji aspek penekanan (stress placement). Kajian ini pula menggunakan dua kaedah Labov yang terdiri daripada senarai perkataan dan pasangan perkataan hampir minimal.

Hasil penemuan kajian ini menunjukkan terdapat beberapa varian daripada lima senarai perkataan dan satu pasangan perkataan hampir minimal yang dihasilkan subjek. Varian yang paling kerap dihasilkan untuk senarai perkataan 1, 2 dan 3 bagi fonim /ʃ/ (awalan, pertengahan & akhir perkataan) ialah Frikatif Lelangit-Gusi yang tidak bersuara /ʃ/ dengan peratusan kekerapan sebanyak 85.33%, 82.67% dan 68.33% bagi setiap kedudukan di dalam perkataan. Bagi senarai perkataan 1 dan 2 bagi fonim sasaran /3/ (pertengahan & akhir perkataan) pula, varian-varian [ʃ] dan [tʃ] mencatatkan peratusan kekerapan sebanyak 79.33% dan 41.67%. Fonim sasaran /3/ tidak kerap dihasilkan oleh subjek dalam kajian. Hasil kajian menunjukkan bahawa Frikatif Lelangit-Gusi yang tidak bersuara /ʃ/ ialah varian yang amat kerap dihasilkan oleh subjek di dalam pasangan perkataan hampir minimal.

Hasil kajian juga menunjukkan subjek di dalam kajian ini tidak berupaya menghasilkan fonim sasaran $\frac{1}{3}$ dan tidak dapat mengenalpasti perbezaan atau kontrast diantara bunyi bersuara dan tidak bersuara bagi fonim-fonim sasaran $\frac{1}{3}$ dan $\frac{1}{3}$ dan hal ini jelas dari varian [5] dan [t5] yang dihasilkan dalam senarai perkataan 1 dan 2 bagi fonim sasaran $\frac{1}{3}$ (pertengahan & akhir perkataan).

Hasil kajian ini juga menunjukkan kemungkinan terdapatnya unsur-unsur 'interlingual transfer' (dari Mandarin ke Bahasa Inggeris) dan 'intralingual transfer' (kompleksiti di dalam sistem fonologi Bahasa Inggeris sendiri) terutamanya bagi fonim sasaran /3/.

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Abstract

This study is an exploratory investigation of the voiceless palato-alveolar fricative $/\mathfrak{f}$ and the voiced palato-alveolar fricative $/\mathfrak{f}$ sounds concerning thirty (30) subjects who are English learners with Mandarin background and are studying in a selected local private college.

The objectives of this study are to establish the possible variants produced by the subjects, the patterns of occurrences of the variants, the phonological patterns of the variants and the ability of the subjects in distinguishing the two target phonemes of /f and /z/.

This study is an adaptation of the studies of Labov (1984), Dickerson (1974), Alias Abd Ghani (1995) and Archibald (1992, 1993). Labov (1984) recommended a few methods to elicit data in the form of an interview whereby the subjects had to read words from word lists chosen. Dickerson (1974) also used this interview method in her study of interlanguage of Japanese learners of English while Alias Abd Ghani (1995) administered the minimal pairs, word list, dialogue reading and free conversation to investigate the patterns of style stratification in the phonology of Malaysian learners of English. Archibald (1992, 1993) administered a list of words and sentences to his subjects to obtain stress placements. This study, however, employed only two parts of the four-part Labov style test i.e. the word list and near-minimal pairs.

The results of this study indicate that there is a range of possible variants produced by the subjects for the five word lists and the near-minimal pairs. The most frequently produced variant for Word Lists 1, 2 and 3 for the target phoneme /f/ (Word Initial, Medial & Final) is the voiceless palato-alveolar fricative /f/ which recorded a percentage of frequency of occurrence of 85.33%, 82.67% and 68.33% correspondingly. As regards to the Word Lists 1 and 2 for the target phoneme /z/ (Word Medial & Final), the variants [ʃ] and [t₃] charted the percentage of frequency of occurrence of 79.33% and 41.67% correspondingly. The target sound /z/ was not often produced by the subjects. The most frequently produced variant in the Near-Minimal Pairs is the voiceless palato-alveolar fricative /f/.

The findings of this study also suggest that the subjects seem to be unable to produce the target phoneme /3 / and unable to distinguish between the voicing contrast of the two target phonemes /3 / and /3. This is indicated by the variants [\int] and [t \int] which were most frequently produced by the subjects in Word Lists 1 and 2 for the target phoneme /3 (Word Medial & Final).

The findings of this study also suggest some indication of interlingual transfer (from Mandarin into English) and intralingual transfer (difficulty within the English phonological system itself) especially with regard to the target phoneme /ʒ/.

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Chapter One

Introduction

1.1 Background of the Study

This study is an exploration of the two target consonant sounds i.e. the voiceless and voiced palato-alveolar fricative sounds /ʃ/ and /ʒ/ conducted in Tunku Abdul Rahman College (TARC), Penang branch campus. The medium of instruction in this college is English for all subjects except Bahasa Malaysia across the three schools, i.e. School of Business Studies, School of Arts and Science and School of Technology. The English language, particularly spoken English is becoming important in the tertiary level of education in Malaysia. Many private colleges are offering courses using English language as a medium of instruction, so proficiency in English helps a student understand reading and listening materials, and making himself understood when writing or speaking. Hence, proficiency in spoken English is an asset to convey one's ideas in presentations and discussions in the classroom, or in the workplace especially in the corporate sector.

In the aspect of the workplace, Asmah Haji Omar (1975) stated that proficiency in the English language was important for higher status positions in the government and the corporate sector. That was attributed to the English language which was a requirement and was an indispensable tool in achieving social and economic status. English is claimed to be still a requirement in the corporate sector in various job aspects such as marketing and sales, broadcasting, advertising, banking and finance, information technology and even lecturing. Therefore, proficiency in the language is much needed for one to climb the rungs of the corporate ladder.

One of the aims in the English Language course offered at tertiary level especially in private colleges is to enable a learner to speak fluently and effectively, so that he is understood by his listeners. This is in line with Asmah Haji Omar's (1983) view that spoken English in schools is taught with an aim of achieving a level of proficiency so that other Malaysians or other speakers of the English language understand the message that was conveyed. Very often, it was observed that many lecturers or course instructors lament that learners of the English language have difficulty conveying ideas across orally due to difficulties in pronunciation. The inaccurate pronunciation of the learners of the English language poses part of the difficulties in pronunciation. A case in point is when students were asked to pronounce the word 'seashore', /siso/ or /siho/ was inaccurately produced. Wang (1987) posited that though intelligibility problems occurring in the word level was relatively little compared to phrasal, clausal or sentence levels, a possible reason for the occurrence of intelligibility problems was the mispronunciation of words or in other words, segmental errors.

The researcher as a language instructor in this college too faces this situation. In general, learners of the English Language course in this college have the knowledge of the content to communicate in the Speaking Skills component and they have demonstrated their interest in reading other printed materials. The topics can vary from the health aspect such as the presence of 'Sodium Laureth Sulfate' in shampoos, to technical aspects such as the production of computer CD-ROMS and the maintenance of a computer. However, it was observed that learners who come from Mandarin background often encounter problems and frustrations in their daily oral communication in the English Language classroom due to inaccurate pronunciation of

English sounds. One of them is the voiceless and voiced palato-alveolar fricative $/\int$ and /3/. This results in they being misunderstood by their fellow classmates and their language instructor.

The learners' frustrations and problems have motivated the researcher to embark on this study to probe into the learners' pronunciation of voiceless palatoalveolar fricatives / β / and voiced palato-alveolar fricatives / β /. Therefore, it is in the opinion of the researcher that a systematic study of this problem is essential to validate the lamentations of lecturers and course instructors to ascertain the extent to which the phenomenon exists in the local setting. In order to ascertain the extent to which this phenomenon exists in a Malaysian setting, the researcher intends to establish the possible variants of the voiceless and voiced palato-alveolar fricative sounds, / β / and / β /.

Though several studies have been conducted in a foreign setting that seek to shed light on socio-economic status or level of education (Tay, 1982), this study focuses on a Malaysian context particularly on Malaysian Chinese students with Mandarin background producing the $/\int$ and the /3 sounds. The aim is to see if there is any influence of the English learners' first language (L1), if any, on the second language (L2) when producing the target consonant sounds i.e. the voiceless and voiced palato-alveolar fricative sounds $/\int$ and /3/.

It should be highlighted here that this study is limited to the segmental aspect of speech sounds which are the possible variants of the two target sounds; the

voiceless palato-alveolar fricative and the voiced palato-alveolar fricative $/\int$ and /3/sounds and patterns of distribution of the sounds produced by the learners who come from Mandarin background. To test the suprasegmental aspect of speech such as stress and rhythm of a native speaker would be beyond the scope of this study.

Wang (1987) posited that it suffices for a Malaysian to be able to speak or produce sounds that can be distinguished by a native speaker, it would also be of interest of this study to determine the ability of the subjects in distinguishing between the two target consonant sounds namely $/\int$ and /3 when producing them. Furthermore, according to Baker and Goldstein (1997), Mandarin background speakers confuse $/\int$ and /s and also /f especially when preceding the vowel /i. The Mandarin background speakers were also confused with the /3 sound. Major and Faudree (1996) carried out a study and found that many subjects were unaware of the voicing contrast. This may be due to the absence of voiced obstruents in Mandarin. Therefore, another aim in this exploratory study is to spot the deviation of the pronunciation of the learners of English with Mandarin background from the target language (TL) norms by establishing the variants.

A general study on Malaysian English was conducted by Platt and Weber in 1980, Wang in 1987 on the intelligibility of the Malaysian English and Alias Abd. Ghani in 1995 on the variability in the phonology of Malaysian learners of English. Though Alias Abd Ghani's study focused on consonant sounds and some aspects of the fricative sounds which are $/\theta/$ and $/\delta/$, little has been done on establishing the variants, patterns of phonology and patterns of occurrences of voiceless and voiced palato-alveolar fricative sounds, $/\mathfrak{f}/$ and $/\mathfrak{F}/$. Since there is little research done in this

area and there is lack of literature in the production of the two target consonant sounds $/\int$ and /3 and more so in a Malaysian context, the researcher hopes that this exploratory study will provide better insight into the area of voiceless and voiced palato-alveolar fricative sounds among learners with Mandarin background. Therefore, the researcher is motivated to embark on this research with the hope of providing empirical data concerning the production of $/\int$ and /3 in the speech production of Malaysian learners of English with Mandarin background. Among studies in the field of segementals are on the awareness of phonetic differences (Flege and Hammond, 1982 and Cichocki, et. al, 1993), accent and intelligibility (Derwing and Munro, 1997) and VOT (Flege and Munro, 1994) but not in the segmental aspect of speech production in a Malaysian setting.

Next, the researcher is of the opinion that segmental pronunciation is as important as suprasegmental pronunciation. Even though it would be beyond the scope of this study, suprasegmentals should not be ignored and this does not imply that suprasegmentals is less important. Wang (1987) explained that when speech sounds are properly produced, it does not necessarily mean that a speaker will be understood nor does it mean that proper pronunciation enables an utterance to be understood. Brown (1991) too stated that suprasegmentals affect intelligibility and accent and should be introduced to the learner first. The researcher feels that, segmental pronunciation is vital in conveying the message accurately in communication and is as important as suprasegmentals. This opinion is derived from Jenkins' article of pronunciation norms and models in 1998. In an effort to promote global intelligibility, all non-native speakers should be given some freedom to produce sounds related to their pronunciation norms provided that segmentals, nuclear

stress and articulatory settings are made aware to the learner and these do not inhibit intelligibility. The researcher also feels that even though non-native speakers are given the freedom to do so, they should be able to distinguish between two closely related sounds. Hence, non-native speakers in the context of this study should be able to demonstrate their ability in distinguishing two or more similar sounds during production. Munro and Derwing (1995) in their study of Mandarin speakers producing English, revealed that accent ratings co-related significantly with phonetic, phonemic and grammatical errors and goodness of intonation ratings. Thus, it should not be denied that one takes precedence over the other but both should not be ignored.

In teaching English, very often, teachers of English feel that the teaching of pronunciation is less important compared to the learning of writing and reading skills. To further substantiate this point, Morley (1992) found that many language teachers 'do not see phonology as a central area of language teaching.' Furthermore, Pennington (1998) found in her study that this area is considered 'useless' as pronunciation teaching will not affect a student's performance perhaps, this perception also occurs in the Malaysian setting. If it does, then this is probably due to the perception that the Malaysian education system at the Sijil Pelajaran Malaysiar level (Malaysian Public Examination) or SPM is exam-based and students are taught to focus on writing and reading skills rather than speaking skills. It should also be pointed out that these students have to sit for an oral examination but the larger weight in the final exam is in the form of a written examination at the end of the year. Even the MUET examination (Malaysian University English Test) sat by all Form Six (6) students places fifteen percent (15%) of the overall one hundred (100%) on the speaking skills compared to the reading comprehension skills which covers forty five

percent (45%) of the total percentage of the examination. Hence, it can be said that the focus is on reading and writing skills in the examination.

In his study, Milroy (1992) used the spoken form with the intention to detect the structural and phonetic changes in language through interactions with his respondents and social contexts of speech events in Belfast. However, in this study, the researcher intends to use the spoken form to identify the extent of the accuracy of the subjects' pronunciation and the different variants that they are able to produce. This is because the students' pronunciation depends on the English spelling and it is hoped that the researcher is able to explore the possible variants in this study.

1.2 Statement of the Problem

As a language instructor in TARC, the researcher finds that most learners of English seem to be having difficulty in pronouncing the /J and the /3 sounds. The researcher discovered that though the learners were given repeated corrections, they were still unable to produce the target sounds (TS) accurately. This often results in miscommunication. Brown (1991) provided a possible reason that this may be partly due to the pronunciation of separate phonemes which is not made clear or distinct by the students. Varonis and Gass (1982) in Derwing and Munro (1997) discovered from their study of listening comprehension of L2 accents by native learners of English that grammar and pronunciation influence the overall intelligibility. Brown's possible reason is less likely to work in this context as many students have been made aware of the differences of the target phonemes before.

Schmidt & Meyers (1995) thought that there is a possibility that the learners who are non-native speakers of the English language primarily lack motor patterns for new sounds or contact points for articulating new sounds. As such, perhaps, a sagittal view of the speech organs and the configuration of the articulators can be taught to these non-native speakers of the English language to improve their motor skills in the hope that they become more aware of the articulators and the places of articulation for sounds not present in their mother tongue.

In an informal interview with the pre-test subjects after the pre-test, it was found that many of them depended on the spelling system to produce the words in the pre-test word lists. Moreover, from observations while teaching in the classroom, learners tend to depend on the spelling system to pronounce certain words which are foreign to them but were inaccurately produced. As suggested by Brown (1991), learners have a tendency to depend on the spelling system of the English language. As the English spelling system is irregular, pronunciation becomes inaccurate. Also, Clark and Yallop (1992) supported that the writing system and speech is unparallel. Thus, pronunciation básed on spelling is not always accurate.

Thus it is essential that an exploratory study on this nature be undertaken to determine the possible sources of difficulty in the pronunciation of English phonemes i.e. $/\int$ and /z sounds by learners of English with Mandarin background in Malaysia.

This study aims to achieve five (5) objectives. They are presented as follows:

- a) To establish any phonological feature or variant produced by the subjects who are Malaysian learners of English with Mandarin background in a local private college. As many of the subjects tend to produce other sounds, the researcher expects to establish the possible variants produced by the subjects when producing the two (2) target sounds /ʃ/ and /ʒ/.
- b) To establish the patterns of occurrences of the possible variants produced. In order to achieve this, the frequency of occurrences of the variants in the word initial, word medial, word final and Near-Minimal Pairs are tabulated.
- c) To establish the patterns of phonology in the production of the target phonemes $/\int$ and /3 by Malaysian learners of English who come from Mandarin background.
- d) To determine the ability of the subjects who are Malaysian learners of English with Mandarin background in distinguishing the target phonemes.

To see if there are influences of the L1 in the production of the L2, if any. This is because Mandarin consonants are known to be different from those of English.

1.4 Scope of the Study

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This study is intended to be an exploratory study rather than a prescriptive study. As such, this study attempts to obtain the possible variants of the two (2) target phonemes, tabulate the frequency of the occurrences of the variants, establish a pattern of phonology in the production of the two (2) target sounds and the ability of the English learners with Mandarin background to distinguish the two (2) target phonemes. This study attempts to see if there is any influence of the L1 in the production of the L2.

The first variables in this study are the voiceless and voiced palato-alveolar fricative sounds, $/\mathfrak{f}$ and $/\mathfrak{f}$. They were selected due to the fact that the learners seem to have difficulty articulating these sounds at word or sentence levels.

Since the subjects in this study come from Mandarin background, the researcher had to carefully select the subjects in accordance to the criteria drawn up. One of the criteria drawn up is the mother tongue of the subjects. The Mandarin dialect is commonly used as a form of communication in this local private college and it is also the mother tongue of many subjects at home. As the majority of the students in this private college come from Mandarin background, the researcher is inspired to conduct a study on Mandarin background learners of English. This chosen variable is

also supported by the problems and frustrations in oral communication among these learners and between learners and their language instructor. The researcher is aware that there are other dialects such as Cantonese or Hokkien besides Mandarin. However, it is beyond the scope of this study to include other dialects.

It should be pointed out that the period of time spent in a Chinese vernacular school and the period of time exposed to the Speaking Skills component in the English language course play a role in this study. Though there is ample reservation of time in their secondary schools; at least four (4) days a week to teach the English Language in these schools, the researcher was told by the subjects that the exposure to the Speaking Skills component in the English Language was insufficient. Therefore, many subjects find that insufficient amount of time spent in the school for the Speaking Skills component in the English Language attributes to their current problems and frustrations when communicating orally with their classmates and language instructor. Therefore, this becomes a criteria the subjects must fulfil.

1.5 Background of Mandarin

1.5.1 Introduction

As Platt and Weber (1980) reported, the most commonly used Chinese dialect varies according to the states of Malaysia. For instance, Cantonese is widely used in the central part of the Peninsular Malaysia while Hokkien is commonly used in the southern parts of the Peninsular Malaysia as in Melaka and Johor and also in the northern part of the Peninsular Malaysia. The Chinese community in Malaysia is categorised into several dialect clans, i.e. Hakka, Cantonese, Hokkien, Teochew, and many more. Hence, a common

means of communication is needed for members of the different dialect clans. Thus, Mandarin is used as a common means of communication in the home, school, offices or other public places.

According to the 1994 report by Institut Tadbiran Awam Negara (INTAN) the primary education of Malaysian students is divided into three streams; the national language, Bahasa Malaysia, Chinese and Tamil. The Chinese stream of primary education uses Mandarin as the medium of education while Bahasa Malaysia is taught as a compulsory subject. The English language, on the contrary, is taught as a second language. Asmah Haji Omar (1983) stressed that the English language is designated to a 'second language' position as it is important in the education system and in international relations and the English language is a 'second language' only to Bahasa Malaysia.

Mandarin became the official language of China in 1920. Thence, Mandarin became the medium of instruction in schools. It is widely spoken in China, especially in all parts north of the Yangtze River and in much the rest of the country. The native language of about two thirds of the Chinese population, Mandarin represents the speech of Peking (Beijing). Thus, it is recognised as a standard language of China for playing a significant role in the political and cultural aspect in Peking (Beijing) (Bui, 1999)

The variety of Mandarin spoken in and around the Peking (Beijing) region forms the basis for "Putonghua" or "the common language". "Putonghua" is also known as the national language of China. Mandarin is also spoken in Taiwan on an official basis and is known as 'Guoyu" meaning "the national language". So, Mandarin is inclusive of "Putonghua" and "Guoyu". According to Li and Thompson, (1981), since both the "Putonghua" and "Guoyu" are based on the Peking (Beijing) dialect, both share similarities except certain areas in the vocabulary. Despite sharing similarities except vocabulary, both are not at all similar due to political differences. As both the "Putonghua" and "Guoyu" have a large population populating over an immense geographical area, both cannot avoid being influenced and affected by the local dialects of the population. Li and Thompson (1981) explained that due to the influences of the local dialects, Mandarin exists as an ideal only in theory but not in reality. Thus, the Mandarin language mentioned in this study is assumed to be devoid of the idiosyncrasies of the pronunciation of the subjects in this study i.e. similar in the pronunciation of the subjects.

Mandarin words or syllables with the same series of consonants and vowels but with different meanings are identified with the help of the four tones of the language. The four tones are level, rising, falling and high-rising. Mandarin has very few words ending with a consonant.

1.5.2 The Phonology of Mandarin

Platt and Weber (1980) pointed out that though Mandarin is structurally close to the other Chinese dialects, its vocabulary, tone and sound structures might differ to some extent from some dialects, for example, Hokkien.

The orthography of Mandarin is unique and distinctive in which the written form comprises of separate signs, which are also known as "characters". The "character" provides meaning to each syllable, thus each "character" makes each syllable semantically significant. As Mandarin has no consonant clusters, the syllable containing the consonant in the initial position can only be a single consonant. In Mandarin there are less than a thousand (1000) syllables; which are distinct in sound. Though in the English language, the alveolar nasal /n/ is a consonant and can occur in the word initial position. In Mandarin, it can only occur in the word final position together with another consonant, the velar nasal /ŋ/.

Due to Mandarin being introduced to and learnt by the non-Chinese, the Chinese words are represented in Latin letters of the alphabet. Arising from this endeavour to introduce and teach Mandarin to the non-Chinese, the Latin letters of the alphabet used to represent Chinese words often raise doubts and ambiguity.

The Pin Yin system of romanisation was developed as an answer to the endeavour to introduce to and teach the non-Chinese and has been the most workable by far. This system is the most workable as the spellings are relatively shorter than the spellings in the other systems and fulfils the expectations of the Chinese language as close as possible than the other systems. However, in this study, the Pin Yin system of romanisation is transcribed according to the IPA.

Jordan (2000) charted the Pin Yin romanisation of Mandarin and he found that in Mandarin, obstruents /p, b, t, d, k, g / are voiceless but the sounds /p, t, k/ are heavily aspirated and the sounds /b, d, g/ are unaspirated in the Pin Yin romanisation of consonants while /ts/, /tʃ/ and /ʃc/ are voiceless and heavily aspirated. The first /ts/ sound is a voiced alveolar plosive sound followed by a voiceless alveolar fricative sound. The second sound /tʃ/ is a voiceless palatal affricate and is retroflexed. The last sound /tʃ/ is also a voiceless palatal affricate but it is strongly palatalised.

The next series is /ds/, /dʒ/ and /dʒ/ which are also voiceless and unaspirated. The first sound /ds/, is a voiced alveolar plosive followed by a voiceless alveolar fricative sound while the second sound /dʒ/, is a voiced palatal affricate which is retroflexed and another /dʒ/ which is also a voiced palatal affricate is strongly palatalised.

The next two (2) sounds have similar sounds to the voiceless palatoalveolar sound $/\mathfrak{f}$. Firstly, the Pin Yin romanisation of the consonant $/\mathfrak{f}$ is similar to the voiceless palato-alveolar fricative sound $/\mathfrak{c}$ because it is strongly palatalised. Secondly, there is the voiceless palato-alveolar fricative $/\mathfrak{s}$ which is a retroflex sound.

However, Jordan (2000) reiterated that most speakers of non-standard Mandarin do not distinguish between the palatal sounds $/d_3/$, $/t_3/$, $/c_3/$, and

retroflex sounds for the consonants /dʒ/, /tʃ/ and /s/. For reference purposes, Table 1.1 shows the Pin Yin romanisation of the consonants /dʒ/, /tʃ/, /ʃ/, /ç/, /s/,/ds/ and /ts/. This table is adapted from Yao (1997).

Table 1.1: PinYin Romanisation of the consonants /dz/, /tʃ/, /ʃ/, /g/, /s/,/ds/ and

<u>/ts/.</u>

<u>Symbol</u>	Place of	Manner	Similarity
	Articulation	of Articulation	to IPA
/j/	Front Palatal	Voiceless,	/dʒ/
		unaspirated,	(arrow)
		affricate	
/q/	Front Palatal	Voiceless,	/dʒ/
		aspirated,	(seven)
		affricate	
/x/	Palatal	Voiceless,	/ç/ (west)
		fricative	
/zh/	Retroflex	Voiceless,	/dʒ/ (pig)
		unaspirated,	
		retroflex	
/ch/	Retroflex	Voiceless,	/tʃ/ (ruler)
		aspirated,	
		affricate	

Table 1.1, continued.

<u>Symbol</u>	Place of	Manner	<u>Similarity</u>
	Articulation	of Articulation	<u>to IPA</u>
/sh/	Retroflex	Voiceless,	/ş/ (book)
		fricative	
/z/	Blade-	Voiceless,	/ds/
	Alveolar	unaspirated,	(walk)
		affricate	
/c/	Blade-	Voiceless,	/ts/
	Alveolar	aspirated,	(grass)
		affricate	

1.6 Limitations of the Study

Due to time constraints, the researcher decides to study only thirty (30) subjects for each subject is required to produce fifty-two (52) words. As the time taken to record and transcribe the subjects' pronunciation takes up a lot of time and effort, this study is only a representative of the students in a selected private college.

Furthermore, due to the lack of facilities, such as a spectogram or a language lab, the researcher is only able to study the possible variants, the frequency of occurrences of the variants, the patterns of phonology and the ability of the subjects learning English with Mandarin background to distinguish the two target and similar phonemes in the researcher's office. It would be good if some kind of objective measurement using spectogram analyis be done to the speech data of this study.

Since the ability and awareness of the subjects and the other students in this selected private college may perhaps change in future, it is hoped that the findings for this study is interpreted in this present time frame.

Chapter Two

Literature Review

2.1 Review of Related Literature

According to Jenkins in 1998, accurate production does not guarantee intelligibility or signal meaning. However, in inter-language talk, lack of accurate production often has the opposite effect, that is, it obstructs meaning by distracting or even opening up possibilities of a different message. This may be true and applies to the situation of the subjects in this study who tend to send incorrect signals. For example, a 'shoe', [5] is pronounced as a 'sue', [s].

Not only do the subjects in this study produce sounds inaccurately, they have also left out sounds particularly the target phoneme /f/ in their conversation. Wang (1987) explained that this phenomenon of inaccurate pronunciation may affect the meaning of an utterance and that a mispronunciation in a consonant is more serious than a mispronunciation in a vowel. Wang (1987) quoted from Norrish (1983), that a message would still be understood if the vowel qualities were filtered out. On the other hand, if the consonants were taken out, the message became unintelligible.

Platt and Weber's study (1980) discovered that final consonants such as the voiceless palato-alveolar fricative /f were not produced by their subjects. Frequently, the /f sound was produced as /s/. According to Platt and Weber (1980), their findings revealed that many subjects modified the final consonants either by devoicing them or voicing them. However, the modification is minor as the difference is only in the

place of the articulators as to whether stop or constrict the sounds. For instance, the word 'fish' /fif/ was produced as /fis/. Ironically, their findings applied mostly on their subjects who came from a lower educational level. Furthermore, final consonant clusters were shortened to only one consonant as '*I forget this English word*' was pronounced as '*I forge' this Englis wor(d)*'. This sentence was produced by those who were born or had lived in Kuala Lumpur, Penang or Malacca and had exposure to English speaking situations i.e. identified as Group I and Malays from rural backgrounds of which some came from the Eastern States of Malaysia i.e. identified as Group II.

Since the subjects in this study are learners of English with Mandarin background, it may possibly be more difficult for them to produce the English sounds which are foreign in their mother tongue i.e. Mandarin. Moyer (1999) cited that the L1 of the subjects which is Mandarin can possibly affect their L2 pronunciation especially the voiceless and voiced palato-alveolar fricative sounds. Furthermore, the subjects who are adults may process phonetic input differently than children due to pre-existent phonetic categories from the L1. Therefore, this may create an impediment for the subjects who are adults from developing phonetically accurate L2 sounds.

According to Gleason (1975), it could be difficult for the students to realise and produce these two sounds that are foreign to them. It would be interesting at this point to see if the sound patterns of the students' mother tongue are deeply ingrained in the students that it controls their perceptions of the sound patterns.

A possible reason that the subjects are unable to discriminate minute differences in speech sounds may be because they have established the phonetic categories for their L1 which is Mandarin and perceive the L2 sounds as sharing a considerable portion of the phonetic space with the L1 counterpart. Therefore, the closer and the more similar both L1 and L2 sounds are, the subjects will tend not to notice the subtle differences that exist between the 2 sounds for instance $/\int/$ and /3/.

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Eckman (1981) found in his study of voicing contrasts that Spanish, Mandarin and Japanese speakers of English devoiced the final stops. Nevertheless, according to Eckman, the subjects' L1 phonology should not be held responsible, as all the mentioned L1s have no final stops. Vowel quality may also influence voicing. Leather and James (1991) is of the opinion that a speaker's L1 may influence his L2 still remains unquestioned in literature though there is the 'universal informal evidence' of the presence of a foreign accent. Eckman (1981), Purschel (1975), Esser (1978) and Scuffil (1982) in Leather and James (1991) suggested that by looking into a learner's L1, aspects of the phonological progress in a learner's L2 could be predicted. Then again, Briere (1968) is of a different opinion. Briere in the study of the production of French, Arabic and Vietnamese sounds by native English speakers mentioned that the phoneme inventories of both the L1 and L2 should not be held accountable to the patterns of L2 pronunciation. Once again the researcher reiterates that it is the intention of this study to establish the possible and various variants produced by the subjects and to provide confirmation on the influence of the L1 on one's L2.

On the other continuum, Flege's study (1980) on American English /d/ and Arabic /d/ in Odlin (1989) found that learners are able to produce sounds which are

almost similar to the target language. Even though the sounds produced are almost similar to the sound in the target language, the sound produced is neither close to the native language. It would be interesting to see if such an instance does occur with the subjects of this study. In the Malaysian context, Platt and Weber (1980) attributed this phenomenon to the transfer of linguistic concepts from the varieties spoken by the subjects such as Mandarin. In their study on Singapore English and Malaysian English, they revealed that such a variety of English evolved through the transfer of linguistic concepts of the varieties spoken such as Tamil, Bahasa Malaysia or Cantonese.

Brown (1991) posited that the English language used by EFL speakers in an EFL situation closely resembles the native variety model which is the Standard British English. However, if one were to speak with influences from one's native tongue, it is seen as a barrier to achieve native-like pronunciation. But then, in an ESL setting, there exists a variety with interference from the other native tongues in that setting. A case in point in Malaysia may be interferences from one of the various Chinese dialects, Malay, Hindu'or other languages from other ethnic groups. Nonetheless, the researcher also feels that the position of a sound in a word or syllable plays an important role on the level of difficulty for a word to be pronounced as mentioned in Odlin (1989). For instance, the word final position for both the target phonemes may possibly be challenging for the subjects to produce due to Mandarin having no consonants in the word final position. While the conclusion on the influence of L1 on one's L2 in later chapters, if any, besides the extent of the accuracy of the possible variants.

An almost similar study on fricatives was conducted by Cichocki, et. al in 1993 in Hong Kong on their six (6) subjects, ranging from twenty (20) to thirty (30) years of age. They were all native speakers of Cantonese and are students of French for one and a half $(1\frac{1}{2})$ years to three (3) years. The researchers predicted that voiced fricatives could be more difficult to produce compared to voiceless fricatives. This is because Cantonese has no voiced stops or fricatives like French. Basing their study on the Markedness Differential Hypothesis (MDH), they predicted that these subjects would face difficulties producing the voiced fricatives. However, their finding was puzzling as the initial voiceless fricative / \int / had zero difficulty due to the subjects' knowledge and fluency in the English language. Even though Cantonese and French are different languages with some forms being more marked than others, the six (6) subjects have no difficulty and this may possibly be that the initial position of the phoneme / \int / may be less marked compared to the final position of the phoneme / \int /.

Delving into the issue of fricatives and stops, Gamkrelidze (1978) stated that there are no languages with only fricatives but no stops. So, the occurrence of fricatives is indicative of the occurrence of stops with the former bearing a marked feature while the latter bearing an unmarked feature. Generally, it is presumed that sounds bearing the marked feature are more difficult to learn than sounds bearing the unmarked feature. Furthermore, according to Major and Faudree (1996) Mandarin, has only voiceless obstruents and voiced sonorants. Thereby, with the fricative sounds tested being obstruents one of which is voiceless and both bear the marked feature, it is hypothesised that possible variants of the targeted fricative sounds will be derived in this study. In their study of five (5) native speakers of Korean who had not received any English pronunciation classes, they discovered that their subjects scored lower or

almost equal percentage for accuracy in the production of voiced and voiceless obstruents. In the final position, the subjects scored only a little more than half the total percentage for accuracy in producing the voiced obstruents. This is due to the fact that Korean has only voiceless obstruents with three different types of phonemic distinctions. It should be pointed out again that it is not the intention of the researcher to disprove or prove the Markedness Differential Hypothesis (MDH) or the existence of interlanguage but only to obtain the various and possible variants for the two targeted sounds in this study.

In a study of fricatives carried out by Ladefoged and Wu in 1984 with only three (3) Chinese subjects, natives of Beijing and native speakers of Pekingese, they found that the fricatives the subjects produced could not be paired off to the English fricatives found in the IPA chart. One of the fricatives was $/\mathfrak{f}$ which is different from the $/\mathfrak{f}$ found in the IPA chart. Thus, few issues have arisen. Among the few, one is that it is an arbitrary task to transcribe a sound made from a specific place of articulation. Next, the feature system to distinguish and transcribe the sounds produced should be plentiful in order to encode the contrasts in the places of articulation and sounds produced. Lastly, the sounds produced should be able to be related to the specific phonetic properties. In this study, the researcher is going to establish the variants produced by the thirty (30) subjects and classify them as accurately as possible according to the IPA chart.

The researcher feels that the role of the language instructor is important in the production of accurate speech sounds. However, Derwing and Munro (1997) concluded that the language instructor leaves only a slight impact on the learner

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