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# Difficulties for Vietnamese when pronouncing English Final consonants

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***Abstract:** Vietnamese people have many difficulties when pronouncing English. Among those, this paper will firstly deal with the hypothesis “English word-final consonants are not pronounced in a native-like way by Vietnamese speakers”. Theoretical phonological research about final consonants in the Vietnamese language and English has been carried out to characterize the difficulties. Data from Vietnamese informants were collected and analyzed, then synthesized to the most significant problems. Vietnamese effort to pronounce English word-final consonants will be towards omitting, adding schwa or replacing by sounds closer to those existing in their mother-tongue. Results of native speakers’ evaluation of Vietnamese-accented final consonants are also concluded to clarify how comprehensible informants’ pronunciation is. These findings will hopefully be useful for those who are interested in the topic and for further research.*

## **1. Introduction**

As a developing country, Vietnam currently has an urgent need for the international language English to attract foreign investment as well as promote the economy, especially after becoming a member of the World Trade Organization. English, previously included in the curriculum from the first year of middle school, is now officially taught for children from six years old. Foreign language centers are dramatically increasing in number, and English is the most popular foreign language offered for learners. Although English has become an important demand for schooling and job opportunities, Vietnamese people cannot pronounce English properly. Like some other languages, Vietnamese has phonotactic features that keep native learners from pronouncing English like native speakers. The limitation of Vietnamese word-final

sounds and the frequency of English word-final consonants errors which are made by most Vietnamese speakers have caught significant attention to this area of the topic. Initially, this paper will investigate the difficulties of Vietnamese speakers of English when dealing with English word-final consonants. This is considered one of the most significant problematic phonetic features and it attracts much interest from linguists and teachers of English inside and outside of Vietnam. The findings of this research will hopefully help Vietnamese speakers become aware of their systematic errors and carefully try to produce native-like English word-final sounds. Further research by the same researcher will be carried out to give broader and more sufficient consideration about the whole topic.

## **2. General Aim**

This research is aimed at offering a systematic study of the articulation of word-final consonants of Vietnamese-accented English. Firstly, the differences in word-final consonants of the two languages are considered in background research. In the second part of this paper, recorded data and evaluations from native speakers are analyzed. Difficulties and tendencies in informants' final consonants and cluster pronunciation are synthesized into certain types. The comprehensibility of these productions is then worked with in order to get a general assessment of how native-like Vietnamese speakers' English final consonants are. These findings are then related to theory and discussed further. Finally, the conclusion of the whole essay summarizes and comments on the findings of this research.

### 3. Background research

#### 3.1. Vietnamese final consonant:

Vietnamese phonetics and phonology are not sufficiently and scientifically studied by local as well as foreign linguists. Actually, some serious studies about Vietnamese are controversial. The problems of which varieties should be chosen as standard Vietnamese, or which International Phonetic Alphabet (IPA) letters should be used to transcribe Vietnamese sounds still remain unanswered. The background studies for this paper are a combination of many sources and points of view with references given afterwards, but the IPA letters used are mostly adopted from the official textbook for students of linguistics studies in Vietnam in which phonetics and phonology was written by Vietnamese leading phonetician Đoàn Thiện Thuật (Nguyen *et al.*, 2006). None of the varieties is specifically used to transcribe the examples, and transcription for “prescriptive” Vietnamese pronunciation is used.

Vietnamese is one of the syllable-timed languages which each syllable is short and simple in construction. The structure of each syllable is (C) V (C). Taiwan Buffalo International (2001) characterized syllabic structure in Vietnamese by this table:

	Tone		
	Final (rhyme)		
Initial	Onset	Nucleus	Coda

Another presentation of Vietnamese syllable structure according to Ngo (2005) is more specific. In this table, the tone of each Vietnamese syllable covers the whole syllable and

only the nuclear vowel is compulsory, which is shared by Doan Thien Thuat (Nguyen *et al.*, 2006) and officially accepted by Vietnamese educators:

Tone			
Initial consonants	Labialization	Nuclear vowel	Final consonant/ Semi-vowel

(Ngo, 2005: 7)

Numbers of codas available in Vietnamese are limited to a certain degree, specifically, there are only six consonants and two semi-vowels which can stand in word-final position. Following are details about final consonants in Vietnamese. The IPA for Vietnamese vowels are listed both in Nguyen *et al.* (2006) and adopted in Ngonngu.net (2006), consisting of thirteen monothongs and three diphthongs /i, e, ε, ɤ, ɤ<, a, ɯ, ɔ, ɔ<, E<, ie, ɯɤ, uo/. The articulation of these monothongs and other consonants is clearly illustrated in Appendix 1. The important vowels that usually decide the pronunciation of final consonants are rounded /u, ɔ, o/ and front /i, e, E</. Details about rules of Vietnamese final consonant pronunciation are adopted from Đoàn (1999), and the examples are taken from the Vietnamese dictionary (Hoàng, 2000).

i) /m/: in words like

*em* [Em] (I, younger sister/brother)

*lượm* [lɯ7m] (pick up)

*nghiêm* [NIem] (strict)

ii) /n/: in words like

*ăn* [a<n] (eat)

*làm* [lam] (do)

*phiên* [fiɛn] (turn)

iii) /N/: there are 3 allophones of this phoneme:

[N◻m]: bilabialised, preceded by rounded vowels /u  
, ɔ, o/

*xong* [sɔN◻m] (finish)

*súng* [SuN◻m] (gun)

*không* [XɔN◻m] (no, not)

[J]: corresponding to letters "nh", preceded by front vowels /i, e, ɛ/

*bệnh* [beJ] (sick)

*tình* [tiJ] (love)

*nhanh* [JE<J] (fast)

[N]: elsewhere

*tặng* [ta<N] (give gifts)

*thiên* [t<sup>h</sup>iɛN] (supernatural)

*chuyện* [cuɔN] (favourite)

iv) /p/: with no air released after pronunciation, in words like

*úp* [up] (up-side-down)

*Pháp* [fap] (France)

*tiếp* [tiɛp] (continue)

v) /t/: In English, [t] ending is pronounced both as [t] and [tʰ], but in Vietnamese it is always pronounced shortly and sharply without aspiration such as:

*ớt* [ʔt] (chili)

*giết* [ziət] (kill)

*ghét* [gEt] (hate)

vi) /k/: this sound is produced where the letter “c”, “ch” is shown at the final position of a syllable and it is agreed by many linguists that this phoneme has 3 allophones which appear in a complementary distribution.

[kɸ]: this ending sound is bilabialised if the consonant is preceded by rounded vowels /u, o, o/

*ngọc* [Nɔkɸ] (pearl)

*cốc* [kɔkɸ] (glass, cup)

*nhục* [Jukɸ] (insulted)

[c]: preceded by front vowels /i, e, E/, performed by letters "ch"

*ngịch* [Nɪc] (naughty)

*lệch* [lɛc] (askew)

*sách* [SEc] (book)

[k]: elsewhere

*nhác* [Jak] (lazy)

*bực* [bMk] (angry)

*lược* [luok] (boil)

*nhức* [Jiek] (shout)

vii) /u<sup>^</sup>/ or /w/ : this final semi-vowel only appears in forms of letters “u” or “o” which follow vowels to make diphthongs or triphthongs, for example:

*đau* [da<sup>u</sup>] (hurt) where vowel [a] is short and more closed, front

*vào* [va:u<sup>^</sup>] (enter) where vowel [a:] is longer, open and back

*đều* [deu<sup>^</sup>] (both, alike, equal)

*rượu* [ɸM7u<sup>^</sup>] (wine)

viii) /i<sup>^</sup>/ or /j/: appears in forms of “i” or “y” and is preceded by vowels to make diphthongs and triphthongs:

*tay*

[tai<sup>^</sup>] (hand) in which [a] is short, more closed and front

*dài* [ja:i<sup>^</sup>] (long) in which [a:] is longer, open and back

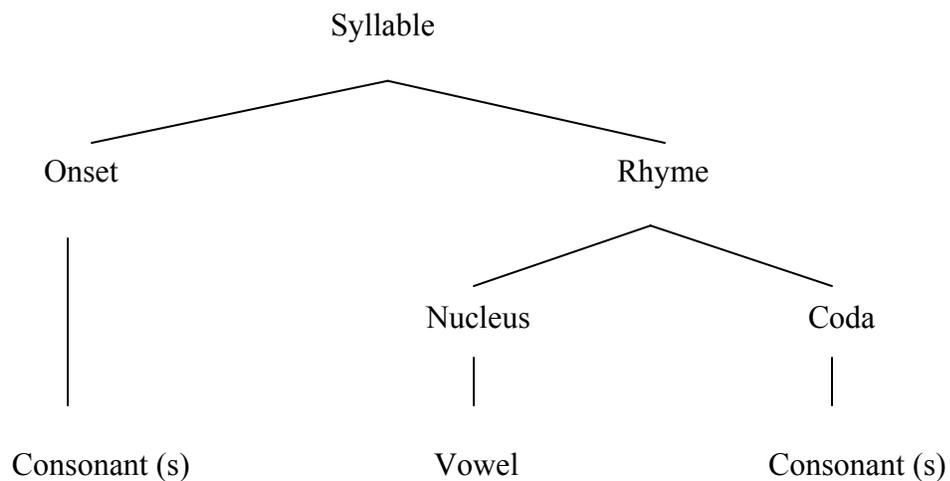
*quây* [kw7<i<sup>^</sup>] (surround)

The ending semi-vowels discussed in vii) and viii) are controversial because Đoàn Thiện Thuật (Nguyen *et al.*, 2006) transcribed these two sounds as /u<sup>^</sup>/ and /i<sup>^</sup>/ while some other researchers such as Ngo (2005), Osburne (1996) and articles of Taiwan Buffalo International (2001) use /w/ and /j/. The involvement of these two semi-vowels in this research might appear unnecessary due to their weak relation to the investigation of Vietnamese final consonants. However, they are important hints for Vietnamese-accented English.

It is easily diagnosed that final consonants in Vietnamese consist of only nasal consonants /m, n, N/ and unaspirated voiceless plosives /p, t, k/ with their allophones. Before the sixth century, Vietnamese was concluded to have some consonant clusters in the word-initial position some centuries ago but never at the end in the article from Ngonngu.net (2006). The limited codas as well as non-cluster mother tongue contribute many difficulties for Vietnamese people in properly pronouncing any foreign languages with a wide range of final consonants and clusters. English, as prestigious as it is, has extremely many final sounds that are foreign to Vietnamese speakers, and its consonant clusters with two, three or even four consonants are challenging for their linguistic acquisition.

### 3.2. English final consonant:

Yule (2006: 47) states “The basic structure of the kind of syllable found in English words [...] is shown in the accompanying diagram”:



It is widely agreed that syllabic structure of English is (C) (C) (C) V (C) (C) (C) (C). Almost every English consonant appears word-finally, except for /h/, /w/ and /j/ (Cummins, 1998). Besides, English has a lot of complicated consonant clusters, as mentioned previously, combining two, three and even four consonants together in the onset and coda. This is commented as “quite unusual for languages to have consonant clusters of this type” (Yule, 2006: 48).

Spencer (1996) shares Yule’s (2006) ideas about the English coda: “The simplest way of handling these data is to say that English permits any number of coronal obstruents to be tagged onto the end of a syllable. This would seem to make the coda rather a complicated animal” (Spencer, 1996: 99). He also gave many examples of ending clusters containing two consonants such as *lamp, film, health, grasp*; three consonants such as *prompt, against, next* and four-membered clusters from plural of past tenses such as *glimpsed, sculpts, twelfths, texts, sixths and thousandths*, and added: “very few languages seem to have this sort of property” (Spencer, 1996: 86).

For pronouncing English consonants both at onset or coda “to the extent that phonetics is part of an exact scientific discipline” (Ladefoged, 2001: 56), nineteen rules were also listed which might require learners of English rough effort to be adequate (Ladefoged, 2001: 57-60). Yule (2006: 48), however, suggested that “It is also noticeable in English that large consonant clusters are frequently reduced in casual conversational speech”. Complex consonant clusters are omitted by speakers to simplify the process of articulation; which is moving towards the idea of using comprehensible rather than standard English pronunciation that is shared by many linguists and will be discussed in later parts of this paper.

What may be concluded from English phonotactics is that “English permits any number of coronal obstruents to be tagged onto the end of a syllable”, and for coda clusters: “the order sonorant + obstruent” (Spencer, 1996: 86-99). It is apparently noticeable and widely accepted that English consonant clusters are one of the most complicated and unusual phenomena of language. Besides many sounds that are not involved in linguistic cognition of non-native speakers, its consonant clusters as well as phonetic changes in consonant quality in formal and informal speech prevent non-natives from accessing and adopting English pronunciation fully. This problem not only belongs to speakers of Asian origins whose native languages are mostly mono-syllabic, but also for other parts of the world, even those who share the same language family with English. Vietnamese is not an exception.

### **3.3. How are English final consonants difficult for Vietnamese speakers?**

Trần (2005) stated that “Vietnamese phonology seems to be more complicated than English, but in the long run, this system becomes simpler and more acquisitive than English”. He added: “it may take a non-native speaker of Vietnamese two months to learn Vietnamese phonology profoundly, and then he will surely be able to pronounce any Vietnamese word; whilst British or American people during their whole life have to learn how to pronounce new words continuously with a lot of support from dictionaries” (my translation). Vietnamese is supposed to be easy to phonetically acquire when speakers have an efficient input, especially of the tones. That is one of the reasons why Vietnamese native speakers have to deal with many obstacles to learn foreign languages

which are not relatively close to and as easy as their language, for instance, Russian, French, English or Spanish.

There has been quite a number of studies about Vietnamese' difficulties in pronouncing English consonants and clusters. These have led to important findings, which become a valuable basis for further studies, most visibly, for this paper. Ha (2005:

Order	Sound	Mispronunciation
1	θ	t̃
2	s	ʃ
3	tr	tʃr ; tʃ
4	t	tʃ, s
5	ʃ	z
6	dʒ	z, tʃ, t, j, ʒ, s
7	tʃ	ʃ, ʒ, z
8	t	ʃ, ch, s,
9	v	
10	ʒ	f
11		z tʃ, dʒ

**TABLE 3. English phonemes that may be difficult for Vietnamese speakers.**

IPA	Confused with:
/θ/	ʔ, s/
/s/	/d, z/
/p/	/b/
/g/	/k/
/tʃ/	/z/
/ʃ/	/z, tʃ/
/s/	/ʃ/
/tr/	/tʃ, tʃ, t/
/t/	/ʃ/
/v/	/f/
/e/	/ee/
/ee/	/e, a/
/u/	/u, ʌ/

Note. Adapted from the Center for Applied Linguistics # 4, n.d., p. 3.

35-46) after analyzing her data finally came to these conclusions on the left, in comparison with the table formed by Center for Applied Linguistics (Neumann, 2007).

Research done by Ha (2005), though data were from numerous informants, is unilateral, containing only problems of people from the North by the confusion most obviously between /s/ and /ʃ/, /tr/ and /tʃ/, /z/ and /z/. Those findings, which were mentioned in the table by Center of Applied Linguistics (Neumann, 2007), are applicable for every Vietnamese learner as it contains all the errors that Vietnamese speakers of any regions of the country can make. They are also persuasive to linguists

who have certain knowledge about Vietnamese dialects. Taking final consonants into consideration, for example, /T/ and /D/ at word-finally are commonly confused with /t/ and /d/ everywhere, whereas /p/ sound in /pOp/ *pop* is often mispronounced as /bOp/ *Bob* by Southern people and /S/ sound in /puS/ *push* becomes /pus/ *puss* by northerners.

Tang (2007: 7) offers a comparison table below:

TABLE 1  
Comparison of Vietnamese and English Consonant Sounds in Syllable-Initial and –Final Position

	Vietnamese Only	Shared Sounds	English Only
Syllable-Initial	t (to), t <sup>h</sup> (tho) t <sup>l</sup> (trò), c (chơi), t, z (răn), s (sáng) <sup>1</sup> y (gà), x (không) ŋ (ngũ), n (nhỏ)	p (pin or pie), b (bà or bear), d (đen or doll), k (kéo or kite), m (má or me) n (nằm or note), f (phố or fire), v (vả <sup>2</sup> or very) s (xin or send), z (rôi <sup>2</sup> or zebra), h (hết or hair), l (lâm or love) j (đi <sup>1</sup> or yard) r (răn <sup>3</sup> or utter)	t (time), g (go), θ (thing), ð (then), ʃ (shoe), ʒ (measure), tʃ (chain), dʒ (june), ɹ (rope), w (water), s-clusters (sk, scr, sm, sn, str...) r-clusters (br, cr, scr, dr, gr), l-clusters (bl, cl, fl, gl), w-clusters (dw, sw, tw, qu)
Syllable-Final		p (lốp or hop) t (ít or bat), k (gác or luck), m (lâm or lamb), n (sơn or sun), ŋ (sông or song)	b (lab), d (sod), g (bag), θ (bath), ð (bathe), f (laugh), v (love), s (kiss), z (buzz), ʃ (ash), ʒ (rouge), tʃ (itch), dʒ (bridge), l (ball) -pt (slept), -ps (oops), -kt (walked), -ks (licks), -ft (laughed), -sp (lisp), -st (list), -sk (brisk) –lp (help), -lb (bulb), -lt (wilt), -ld (wild), -lk (bulk), -lf (elf), -lv (delve), -lθ (wealth), -ltʃ (belch), -ldʒ (bulge), -lm (balm), -mp (bump), -mf (triumph), -mθ (warmth), -nt (mint), -nd (wand), -nθ (tenth), -nz (lens), -ntʃ (wrench), -ndʒ (binge), -ŋk (bank), -ksθ (sixth), -kst (whisked), -lpt (helped), -mpt (bumped), -mps (bumps)...

Studying this table specifically for word-final consonants, there are some points that conflict with the background of Vietnamese and English consonants described

previously, for example the /N/ sound in *sông* is bilabialized [N̠m] and different from the /N/ in *song*, so *sang* (come over) and *sang* (past tense of *sing*) seem to be a better sample couples since they are produced with exactly the same articulation. Furthermore, Tang (2007) did not list four-membered consonant clusters that are absolutely foreign to the Vietnamese language. Nevertheless, this material is quite detailed and should be appreciated. It is easily seen from this data that English has a number of consonants, especially final consonants and clusters that do not exist in Vietnamese rather than vice versa. As a result, pronouncing English final consonants and consonant clusters properly is one of the most difficult things that learners have to face from the very beginning.

Osburne (1996, 164-181) analyzed a case study from her subject - a Vietnamese native speaker who came to the United States in 1972 - then drew the conclusion that: “In addition to cluster reduction, optional deletion of single syllable-final consonants, especially fricatives, which is attested for Vietnamese L1 speakers [...] was found”, and “Consonants omitted, however, were always final consonants not permitted by Vietnamese (for example /l/ in [k̠nt̠h̠ro] *control*, /z/ in [b̠k̠h̠v] *because*)” (Osburne, 169). She also stated that Vietnamese is non-rhotic so there is no /r/ sound at the end of English syllables spoken by Vietnamese.

What can be concluded from the above studies is that Vietnamese learners have a tendency to: firstly move strange English ending sounds towards similar sounds which exist in their mother tongue, secondly omit the sounds that are too difficult for them and thirdly reduce final clusters. This may make their English very “Vietnamese”, which causes some problems for communication with native speakers and others. The rest of

this paper will deal with the analysis of English word-final consonants pronounced by Vietnamese speakers.

#### **4. Hypothesis**

English final consonants are not pronounced in a native-like way by Vietnamese speakers.

#### **5. Method**

Data from five informants of various Vietnamese accents and proficiency in English were recorded inside and outside Vietnam then sent to the researcher by e-mail. The first informant is a twenty year-old male from Hue, which is at the centre of Vietnam with a very different accent from the north and the south. He began learning English three years ago in high-school classes as well as extra courses. However, his English is still at pre-intermediate level, and there are some words in the text he does not know. The second informant has been exposed to English for eight years in Ho Chi Minh City which is situated in the south of Vietnam. She is also twenty and attends extra communicative English classes. The next informant is a female in-service bachelor of English. An extra thing should be mentioned is that there are two kinds of university education in Vietnam: full time main-stream and night shift in-service for those who are working and feel the need to study more. The difference between education quality of the two types is quite visible. In-service students are considered not as good as main-stream ones due to their age and their lack of time. This informant is thirty-seven years old, from the West Highland part of the country. She started studying English when she was twelve but does

not have much chance to use her English. The fourth is a twenty-three year-old male from the capital Hanoi who came to Sweden to study English four months ago. Like the other informants, he began to learn English from twelve and had English classes continuously at schools since then. The last informant is a special case, who started learning English since the sixth grade, became very interested in the subject and won the third prize in a national competition in English which is awarded to the very few best students countrywide. He is twenty-three and has left Ho Chi Minh city for California in the United States for nearly five years. In the hope of creating an objective analysis, the data were chosen from speakers of different parts in the country and abroad, distinguishing accents of Vietnamese with various levels of English proficiency. Problematic words and a short text used for recording are given in Appendix 2. Cool Edit Pro 2.0 and Windows Media Player were used for cutting and analyzing final consonants produced.

After analyzing the data, an evaluation chart given in Appendix 3 was delivered to six native speakers of English, in which the evaluators demonstrated their impressions of Vietnamese-accented English. All of the six evaluators have English as their mother-tongue, three of whom are American and others are from England, Ireland and Australia. Furthermore, they all have experience in communicating orally with non-native speakers of English everyday. Four of them have a lot of exposure to Vietnamese speakers of English and the rest do sometimes. This information becomes reliable as the evaluators have “prepared” their ears and their minds for understanding and assessing those data according to their experience. The purpose of collecting this information is to figure out how native-like Vietnamese-accented English word-final consonants are from the ears of

native speakers besides electronic analysis. Hopefully, the findings will be more exact compared to acoustic studies and human feelings.

The results are presented mostly in tables and charts, then explained by theoretical studies. Discussions and applications are to be pointed out on the basis of the findings.

## 6. Results

The results of the analyzed data are divided into three categories: single final consonants that exist in Vietnamese or sound similar to Vietnamese, single final consonants that are foreign to Vietnamese and final consonant clusters. Evaluation by native speakers also comes as the last part of findings.

### 6.1. Data analysis results

#### 6.1.1. Final consonants that are closely related to Vietnamese coda

As noted from the beginning, Vietnamese permits nasals and voiceless plosives at the end of each syllable. However, these sounds are not pronounced exactly like those produced by native speakers. The numbers of these /m, n, N, p, t, k/ sounds are counted from the wordlist and the text, then the numbers of the sounds in the list and text that are not pronounced exactly by each speaker are represented in the chart below:

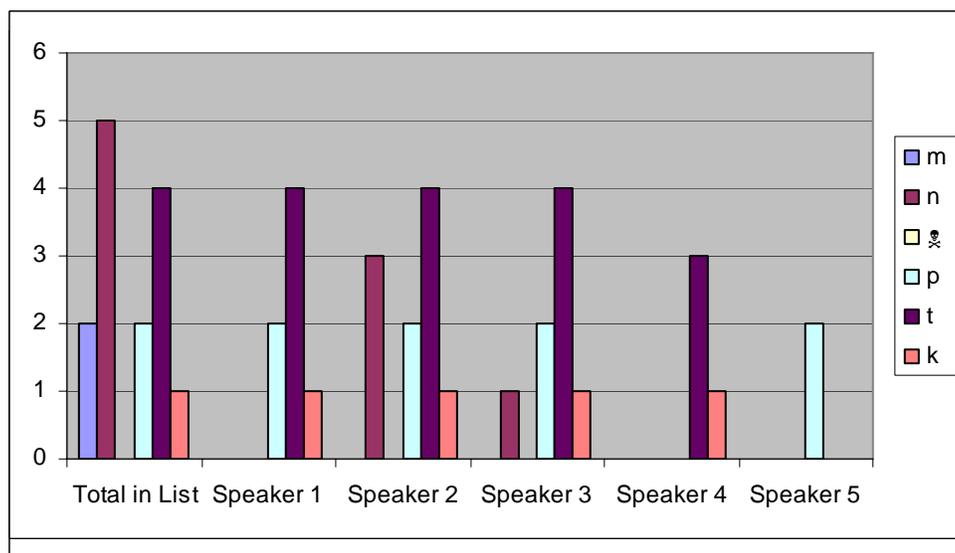


Chart 1: Number of errors with final consonants that are closely related to Vietnamese coda

The most salient feature can be found is that nearly all /p, t, k/ are unaspirated. Speaker 5, although his English is quite good, still makes systematic errors with aspirated /p/ but not the same error with /t, k/. The fourth informant, in an attempt to avoid the mistakes, has carefully pronounced every /p/ with aspiration but /t, k/ are still unaspirated. However, when it comes to the text, he makes all three /p/ unaspirated. The other three speakers cannot pronounce any /p, t, k/ with aspiration in the final position as native speakers. Nevertheless, this is not considered a serious problem for mutual understanding. Native speakers are sometimes also lazy to aspirate in casual speech.

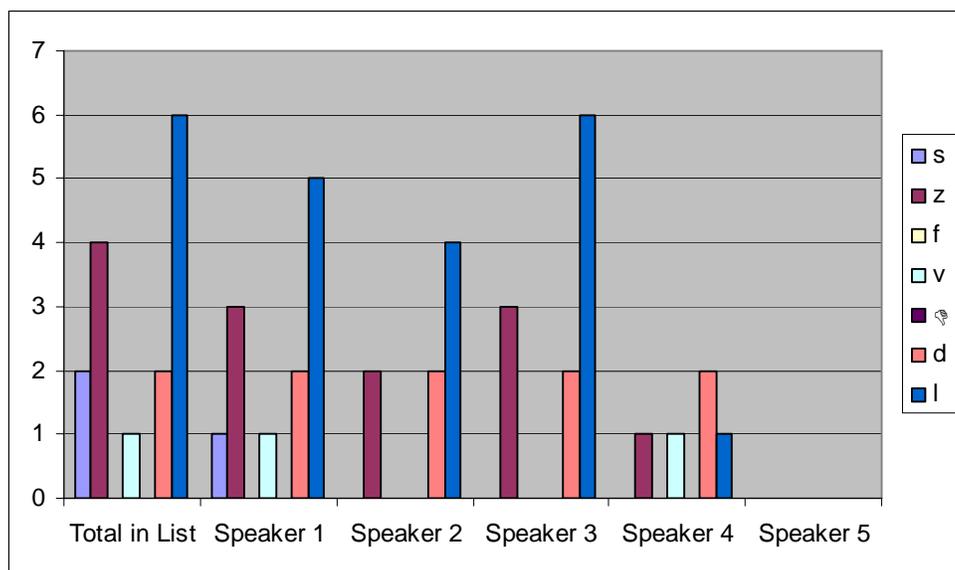
Secondly, all /m/ sounds are predictably pronounced perfectly but not all of /n/ sounds are right. Apparently, *down* is pronounced as [daʊ<sup>^</sup>] by every informant regardless of proficiency or accent. The second speaker with a southern accent pronounces both *green* and *grin* as [grɪ:n], *in* as [ɪn] and omits /n/ in *govern*. The confusion between /n/ and /N/ is also found by the third informant. /N/ appears only once in *long*, and like /m/, there is no difficulty for Vietnamese speakers to pronounce it correctly.

Thirdly, the results with /t, k/ from the five informants surprisingly introduce quite a lot of omission and errors in final position. Although they do exist in Vietnamese codas, /t/ in *comfort, about, might, great, thought* is not pronounced. Most of them end with the vowels right before them, some become /k/ or /T/ due to speaker's accents and acquisition. /k/ ending in *back* and *make* turn into palatals with a front vowel [bɛ<c] and

[mɛc] with front vowels by several speakers. Furthermore, *like* is pronounced as [lɑɪ] by all speakers in the text. Four of them commit the same error in the list, except the fifth informant. This is a mistake rather than an error because “error” is defined as systematic fault made by the lack of awareness. He himself is aware of the problem and does try to avoid it systematically but in natural speech, some parts of his pronunciation are affected by his mother tongue and he makes the mistake unconsciously. A conclusion drawn out from Table 1 is that qualities of final consonants that exist in Vietnamese do not quite match those of English. This leads to unexpected errors. However, they are not decisive factors for final consonant pronunciation difficulties and can be changed with more awareness and practice. The other two categories prove to be much more problematic.

### 6.1.2. Final consonants that are foreign to Vietnamese speakers

The word list and text, unfortunately, contain only seven consonants that are not familiar to Vietnamese speakers: /s, z, f, v, ɰ, d, l/. However, each of them appears many times so hopefully the findings are reliable. Using the same format with findings in Chart 1, results counted from this category are performed in Chart 2:



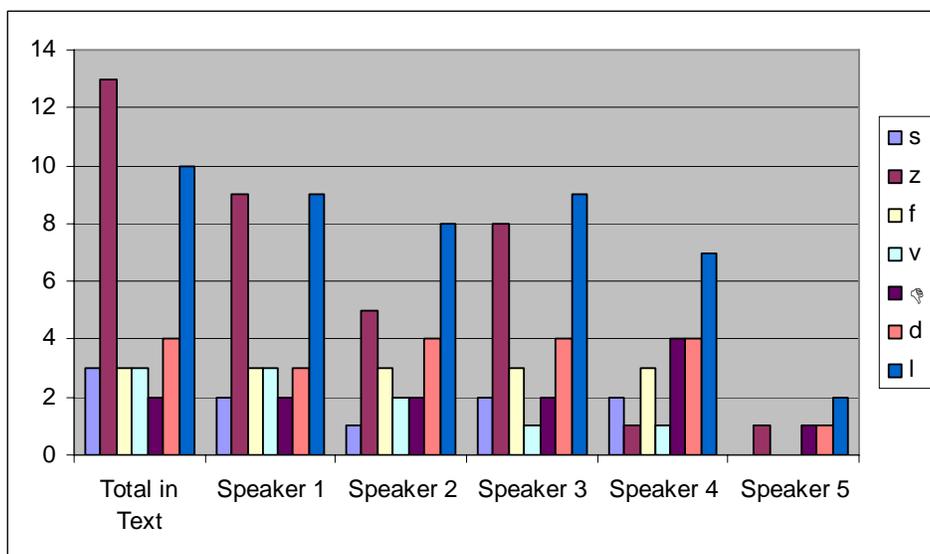


Chart 2: Number of errors with final consonants that are foreign to Vietnamese coda

As /s/ is one of the popular sounds of English, Vietnamese learners have better awareness of pronouncing this sound. This can be found in the comparatively small number of errors made with final /s/ in the word list in careful speech. On the contrary, it is still a foreign consonant to them so they cannot avoid these errors when it comes to the text. Four speakers have their *house* as a homophone of *how*. The situation is worse with /z/ in word-final position. *His, has, because, places, goes, is* final sounds are all vowels for the first speaker. The second one pays more attention to /z/ sounds but *choose, places, trees, is* become [tʃu:ʒ], [pleɪʒ], [tri:ʒ] and [i:ʒ] several times. The third informant makes the same errors, and her pronunciation of /z/ in *his* is confused with unaspirated /t/ in *hit*.

What can be seen from the articulation of /f/ by these speakers is generalized in the movement towards an unaspirated bilabial /p/ sound, so that *if* becomes [ɪp]. The

same phenomenon is found with /v/ when *of* is reduced to [əp] by most speakers. Besides, *have* is pronounced unstably as [hʧ], [hʧp], or [hʧuʌ] by different speakers while *believe* is found correctly in three cases, in other two as [bɪˈliːv]. There is no rule that this foreign sound should move to another similar sound in their mother tongue. It depends on individuals as well as words followed that sound.

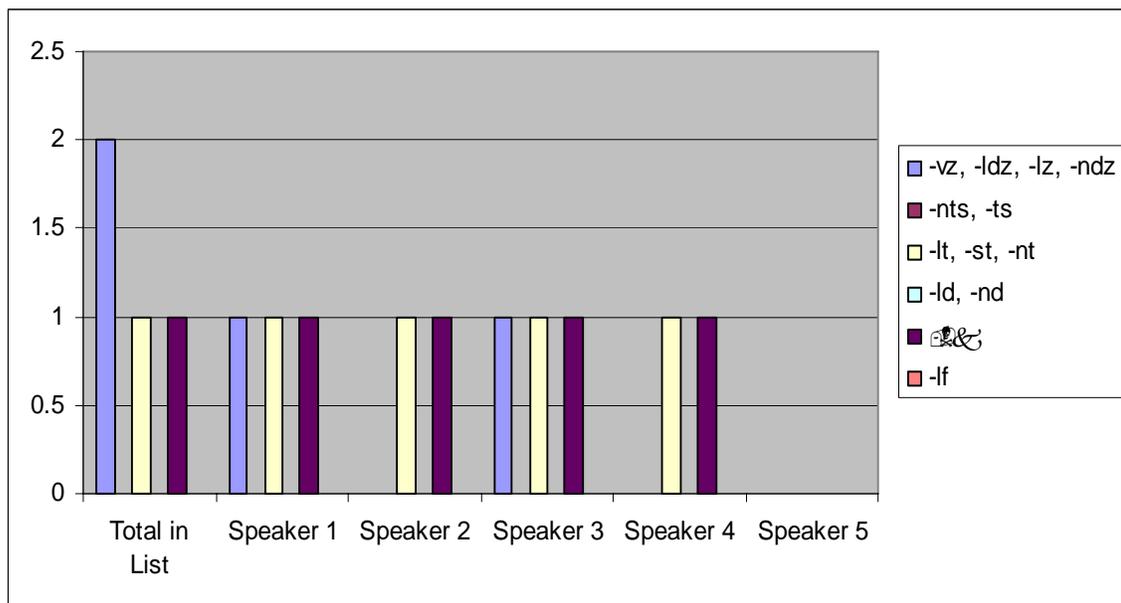
*With* is pronounced as [wɪs], a substitution for [d] in two cases, and others as unaspirated voiceless /t/ in [wɪt]. The same movement commonly happens to /d/ in *could*, *would*. However, there are situations where /d/ in *could* and *would* becomes /s/ and /k/ varying by speakers' regional accents. Most significantly, *side* and *sigh* are homophones for four of the informants.

Last but not least, final /l/ is considered as the most stable and systematic error that all informants face at least once or twice in the data. /l/ in *school*, *small*, *pull*, *pool* becomes /n/ as [sku:n], [smon], [pʊn] and [pu:n] in most cases and becomes a semi-vowel /w/ or /uʌ/ in *feel*, *still*, *until*, *will* after the vowels /ɪ, i:/ which is very similar to vocalized dark l in many dialects of English. Once it is heard as [smɔ:] for *small* which is followed by an initial bilabial /b/ in *boy*. This is an acceptable assimilation of sounds in normal speech. Similarly, /l/ is pronounced properly in *all* by every speaker because it comes before the curled initial in *round*.

Generally, there is certainly confusion between voiced and voiceless sounds, which happens fairly commonly between /t/ and /d/, /s/ and /z/. Besides, omission of problem sounds is popular. A tendency to move foreign sounds towards the first language's coda is also apparent. These logically lead to a mispronunciation of final clusters.

### 6.1.3. Final consonant cluster:

The final clusters found in the material are categorized into six groups, in which /-nd/ cluster has the most with eight *ands*. However, in normal speech, *and* exists in its weak form as [ən] or [ɾn], so it is acceptable not to count the pronunciation errors of this cluster. The other /-nd/ cluster is *round* appearing in the phrase *all round the house*, whose /d/ at the end might be devoiced or omitted to move to the next word beginning with /D/, so the consonant /n/ is more visible instead. There are, in fact, not many final clusters in the material where seven of clusters ending with a /z/ group are included and a few of others. All the errors found are again demonstrated in the chart



below:

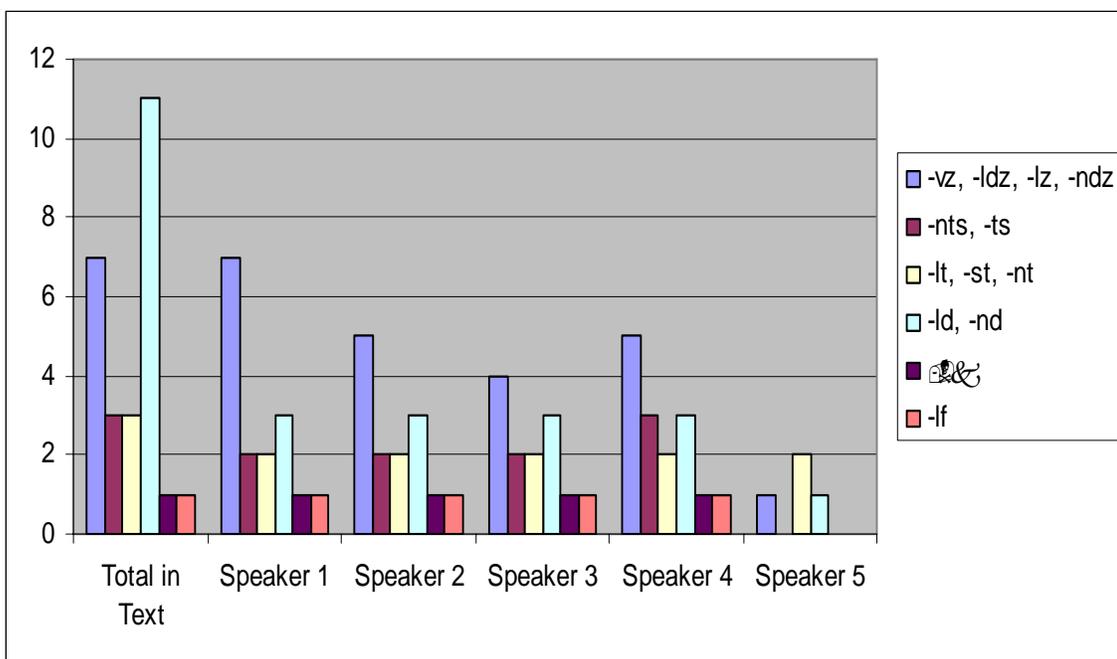


Chart 3: Number of errors with final consonant clusters

Less numerous as the problem final clusters are, it is recognizable that the number of errors in comparison with the number of all them found in the list and text is of quite a high proportion. Most significantly, *round* is pronounced as [r aʊ], *adult* as [ə dʌ l] or [ə dʌ n], *wouldn't* as [wʊ d n]. by all speakers. Three-membered clusters such as /-ldz/ in *fields*, /-ndz/ in *friends* and /-nts/ in *wants* are impossible for four informants but not for the last. Two-consonant clusters that contain /l/ in /-lz/, /-lt/, /-ld/ or /-lf/ are observed to be really difficult for all speakers since the sound itself never appears in their first language coda as in Chart 2. When it comes before another consonant, it is totally omitted, and in most cases the final consonants also disappear so that *feels* become [fi:ʊ], *world* becomes [wɜ:ɹ], *himself* becomes [hɪmseu^] and *told* turns into [tɒn] or [tɒʊ]. The disappearance of /l/ in such a position is, however, acceptable in the sense that some accents of English like Cockney, Estuary and African-American Vernacular English also turn it into dark [ɫ] which is observed as a vowel or a semivowel.

/-Nk/ in one and only word found in list as well as text *think* is another interesting problem to observe, as four over five speakers pronounced it as *thing* by the deeply rooted effect of their mother tongue. Clusters ending with voiceless /-s/ and /-t/ also cause quite a lot problems for informants.

The most remarkable error found in final clusters of these informants is the addition of schwa so that *lives* turns into [lɪvəz], *leaves* becomes [li:vəz] and *believes* [bɪli:vəz]. The reason why schwa only happens in these words may be due to the spellings that mislead the two female informants. Other speakers just omit the clusters and end their word with a vowel, or simply try to pronounce one of the consonants. Generally, final clusters are one of the most difficult categories in English pronunciation for Vietnamese speakers. They are so different from their mother tongue. The problems are found in the tendency to reduce the number of members of clusters or even omit them totally. Schwa is also used as a solution for the ease of speech.

In conclusion, English final consonants are not produced like native speakers by these informants. The consonants nearer to Vietnamese including nasals and unaspirated voiceless stops are identified as their first language's own coda. Dealing with consonants that are new and different from their coda, they either omit them or reduce them to the sounds that exist in Vietnamese. Clusters are also omitted or reduced, and schwa is added between consonants to make new syllables in some cases.

Final consonants can convey meanings since English has so many words that differ only in their coda and they also play important roles in grammar for singular or plural as well as tenses. The inability to produce exact word-final consonants may prevent speakers from being understood by others when speaking English, and more

importantly, may affect learners' confidence to communicate. An analysis of an evaluation of native speakers on Vietnamese informants' final consonants may bring a more particular and humanistic point of view besides systematic phonetic processes.

## **6.2. Evaluation of native speakers on Vietnamese-accented final consonants:**

According to the description in the method of this research, six native speakers were asked to listen to the recorded data and mark their impression in the evaluation scales. These contain four choices to avoid the tendency to centralize the evaluation among evaluators to the middle point like in odd options. Giving numbers for evaluation results, in which native-like is zero, not native like but understandable is 1, some difficulty is 2 and great difficulty is 3, a table marks from six native speakers' evaluation of each speaker is given below. The higher the marks are, the more incomprehensible speakers' final sounds become:

Speaker 1	Speaker 2	Speaker 3	Speaker 4	Speaker 5
16	15	16	12	8

Table: Evaluation of native speakers on informants' final consonants

It is easily seen that the first and third speakers with 16 points have been considered as very difficult to understand. Referring to data analysis and charts 1, 2 and 3, these two speakers have the most errors with unaspirated /p, t, k/, with ending /z/ and /l/ as well as clusters. The evaluation is reasonable enough as the first informant has

studied English for only three years in a small city, and the other, in spite of being a bachelor of English, did her degree at quite an old age with a naturally lower ability of acquisition and the lack of a communicative educational approach. The second informant is better with the compromising between very and a little difficult for native speakers to comprehend with 15 points. This speaker pronounces voiced consonants quite well but has significant problems with nasal confusion. The fourth, who gets 12 points, is generally assessed as a little difficult to understand with his final consonants. He makes quite a lot of errors with word-final /s/ and /l/, but better than the other three with clusters and aspiration. The last, being one of Vietnam's brightest students of English and having stayed in the United States for some years, is rated 8 points with the best choices among five speakers. The data analysis also showed that his English final consonants are clear and comprehensible enough; however, unfortunately, the volume of the recording is quite low to correctly recognize the sounds. One of the evaluators admits that she just can guess his final consonants sometimes.

The most important thing which directly gives the answer to the hypothesis of this paper is that none of native speakers consider any of these five informants produce their final consonants and clusters like native speakers. This may lead to the conclusion that Vietnamese speakers of English have to face so many problems to produce native-like final sounds. It may take learners a long time of extreme practice and improvement to pronounce them like native speakers.

## **7. Discussion of results**

The findings concluded after processing the recorded data turn out to be predictable compared with those mentioned from the background research. The movement towards similar sounds in Vietnamese is best demonstrated by the relation between Vietnamese phonotactics and the results of data analysis. Those are the unaspiration of /p, t, k/, the simplification of /l/ into /n/ or /u^/, the replacement of /k/ by [c] after vowels that are similar to Vietnamese front vowels [e, E<] in *make* and *back*. The confusion between voiced and voiceless final sounds is a result of the limitation into voiceless coda or nasals in Vietnamese. All word-final consonants that are not nasals should be voiceless, so that voiced final consonants in *could*, *would*, *with*, *of*, *have* mostly become voiceless. /k/ in *like*, /d/ in *side*, /t/ in *about* and /n/ in *down* are reduced into [laI], [saI], [a''baP], [daP] because in Vietnamese diphthongs or triphthongs, /i^/ and /u^/ must be the last sound of a syllable and no other consonants are allowed to be attached to them. Other omission of final consonants cases found in the data can be explained in this way are *house*, *round*, *told*, *feels*, *because*, *choose*, etc. Finally, as Vietnamese has only one consonant in the coda, final clusters are reduced into one consonant to be specific: *friends* [frIen], *think* [TIN], *adult* [a''dvt] etc. or adding a schwa [a] between the members to make two different syllables as a result of the monosyllabic mother tongue. Another thing which should be mentioned is that there are certain points in the text with natural speech that pulled speakers to correct and acceptable pronunciation. For instance, *and* is listed in the number of words containing in the material but is not counted as errors of Vietnamese informants as most of the time it appears in its weak form with the reduction of final clusters. Some more can be found are the assimilation and reduction of final consonants in *all round* [O:raUnd], *round the house*

[raʊndəhaʊs], *have friends* [hʌfrɪendz], *and do* [ʌndu:] and *have to* [hʌftə] etc. These types of pronunciation are not counted as errors in the results as native speakers would do the same in natural speech. The findings of this research also point out an effort of these informants, who are objectively chosen among Vietnamese learners and users of English as a foreign language, to gradually move their pronunciation towards comprehensible English first, and native-like English later, rather than omit all the sounds that are foreign to them. The younger generation has more motivation and ability to overcome the difficulties to improve their English due to the fact that a thirty-seven year-old bachelor of English gets the same points of incomprehensible accent as just a three-year learner of English. The older generation will soon be left behind by young beginners, pre-intermediate and intermediate learners of English. This also shows a promising development of English among Vietnamese speakers with better and better quality.

The selection of informants from different Vietnamese accents is reasonable enough due to the fact that their English pronunciation in general can be found to be affected by elements of their own accents. The most apparent feature found in final consonants belongs to speaker of Ho Chi Minh city as a southern part whose ending /n/ becomes /N/ in *green*, *grin* and even *in*; and speaker of West Highlands whose ending /t, d/ becomes /k/ in *thought*, *could* and *would*. Those are not easy to see from the northern informant because the effect of his accent on initial consonants is more prominent with the confusion between /tr/ and /tʃ/ in *trees*, /s/ and /ʃ/ in *shut*, *ship*, *sheep*. The speaker from the central region, where pronunciation of Vietnamese is considered clearer but the intonation is quite flat and difficult to comprehend for people from other regions of Vietnam, is not an exception. This element also shows its effect on the speaker's English

intonation. The fifth who is at an advanced level of English seems to successfully escape from those features of his southern accent. These would bring some ideas about later research on the affect of Vietnamese accents into their English. The findings of this paper, hopefully, will become useful for those who are interested in Vietnamese-accented English, those who need to communicate with Vietnamese speakers by means of English and teachers of English for Vietnamese learners. By grasping the tendency towards omission, movements towards mother tongue and schwa addition of final consonants might help foreigners understand Vietnamese speakers' English more easily. Teachers might notice the problematic sounds and the unsatisfactory substitutions to pay more attention in leading learners to the exact or comprehensible sounds.

Native speakers' evaluation also brings interesting findings to this research. Whether Vietnamese-accented English is native-like or not should be judged by native speakers themselves. Objectively, English final consonants, especially clusters, are difficult for non-native speakers and, as observed by many phoneticians, not all these sounds are pronounced properly by natives in casual situations. That is to say the idea of native-like word-final consonants is quite theoretical, and the evaluation of these informants' ending sounds may be theoretically carried out. None of the six evaluators assessed any of them as native-like, which strongly illustrated the very real low probability that Vietnamese speakers will speak English with native-like pronunciation. Nevertheless, the brighter side of the picture is the proportion of "easy to understand" and "a little difficult to understand" is comparatively much more than "very difficult to understand". Consequently, it is possible for natives and other speakers of English to

recognize Vietnamese final sounds and understand Vietnamese-accented English with a little patience. It is an encouragement to Vietnamese speakers of English.

## **8. Summary and conclusion:**

In conclusion, this paper takes a closer look at the differences in Vietnamese and English final consonants which leads to the difficulty of Vietnamese in pronouncing English final consonants like native speakers. Five informants have taken part in recording the word list and the text, and six native speakers have contributed their evaluation on these data. The results after processing match theoretical research well, which shows that difficulties of Vietnamese speakers in English final consonants mostly result in:

- i) omitting the ending sounds that are too foreign or difficult for them, especially those who contains semi-vowels /i<sup>^</sup>, u<sup>^</sup>/ before final consonants
- ii) reducing and moving the final consonants and clusters towards their first language like /s, z, l, v, f, d, ɒ, -nd, -Nk, -st, -ld, -ldz,.../ to single unaspirated /p, t, k/ or nasals /n, N/ or semi-vowels /i<sup>^</sup>, u<sup>^</sup>/
- iii) adding schwa in final clusters like /-vz/

These tendencies in their English pronunciation are evaluated by native-speakers generally as a little difficult to understand, and more importantly, their final consonants are totally not native-like.

As a self-criticism, the material used for collecting data includes few types of problematic consonants and clusters to Vietnamese speakers due to the vague aim at the

beginning stage. The findings are therefore very limited to certain degree. The word list and text should have been chosen critically so that foreign ending sounds to Vietnamese like /dz/, /s/, /ʔ/, /tʃ/, /g/, /b/ and more clusters would be looked at, and the results would be more interesting and convincing. Besides, two of the recordings are not of good quality. One of them is invaded by background noise and the other is recorded from quite a distance from speaker's mouth, so all the final consonants and clusters are diagnosed to be there but very hard to identify exactly. This experience should be avoided in later research.

The method of this research, however, is an objective and sufficient approach to the topic, in which theory cooperates well with analysis of real data from Vietnamese informants of various accents and levels of English as well as evaluation of native speakers with much experience in communicating with non-natives around the world. The results, in this sense, are reliable. These findings can be used for further researches on the comprehensibility of Vietnamese-accented English for other speakers of English as first, second or foreign language, or the typical effect of the mother tongue on Vietnamese speakers' English. Non-native speakers' evaluation on Vietnamese English as well as more research on English vowels or initial consonants' quality, word stress and intonation produced by Vietnamese learners and users of English are also suggested.

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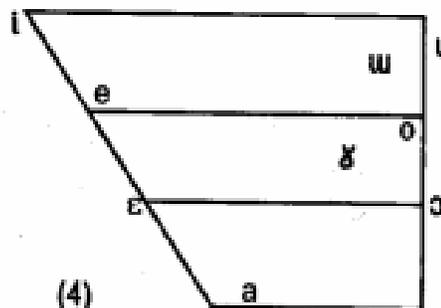
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## Appendix 1

### Vietnamese vowels:

The articulation of /i, e, ε, ɤ, a, ɯ, u, o, ɔ/ is illustrated in the vowel chart beside.

The others /ɨ, ə, ɛ̄, ɔ̄, ɛ̄/ are produced the same as /ɤ, a, o, ε/ but with an extra-short duration. These four are separate vowels rather than allophones or weak forms of the above vowels.



(Nguyen *et al.*,

2006)

They are also performed by different letters in Vietnamese alphabet. The symbols /i^/ and /u^/ used in the research are non-syllabic and appear at the end of Vietnamese syllables.

### Vietnamese consonants:

Table I. Phonemic inventory of the Vietnamese southern dialect.

		Initial							Final			
		Bilabial	Labiodental	Dental	Alveolar	Retroflex	Palatal	Velar	Glottal	Bilabial	Alveolar	Velar
Plosives	Voiced	b			d					p'	t'	k'
	Voiceless Aspirated			pʰ, tʰ		t	c	k				
Nasals		m			n		ɲ	ŋ		m	n	ŋ
Fricatives	Voiced											
	Voiceless		f		s	ʂ <sup>a</sup> (ʂ) <sup>a</sup>		ç	x			h
Approximants		w			l		j					

<sup>a</sup>Although this phoneme continues to be distinct from /s/, its occurrence in connected speech is decreasing (Dinh & Nguyen, 1998).

(Neumann, 2007)

Vietnamese northern dialect does not include the initial /w, j/ but has some more initial consonants such as bilabial /v/, alveolar /z/ and glottal /ʔ/ according to Ngonngu.net (2006).

## Appendix 2

adult	longer
because	man
this	places
believe	pool
boy	country
choose	quickly
comfort	room
could	run
ship	school
day	see
very	would

sheep	feel
pull	friends
shut	govern
small	great
still	green
think	thought
become	high
grin	house
through	leaves
trees	like
window	unhappy

A small boy lives in this house. There are fields with sheep all round the house. His room is at the back and he can see his school from the window through the green leaves of the trees if he wants to pull them to one side.

He feels very unhappy because he has no friends and he believes that if he could become adult quickly he wouldn't have to go to school. If he could choose, he would like to govern the country and think great thoughts about the world and have friends in high places. But he is not yet a man and he must still shut up and do what he is told.

One day he might run away from school and make his way to another country in a ship. But really, it is not long until he will no longer be a boy. He can comfort himself with that thought. He starts to grin and goes down to the pool for a swim.

### Appendix 3

#### **Evaluation of Vietnamese Accent**

Evaluator Information: (Please type or highlight the answers if you do this by computers)

1. Your first language: \_\_\_\_\_

2. a. Do you have experience in communicating orally with non-native speakers of English?

Yes                       No

b. If “Yes”, how often?

Everyday               Some times a month               Less than that

3. Your exposure to Vietnamese-accented English:

A lot                       Sometimes                       Never

Evaluation Table:

There will be 5 Vietnamese speakers reading a list of words and a text. Please listen and put an **X** in the boxes that correspond to your impression in the below table.

Speakers	Evaluation of Speakers' Final Consonants and Clusters			
	Very difficult to understand	A little difficult to understand	Not native-like but easy to understand	Native-like
Speaker 1				
Speaker 2				
Speaker 3				
Speaker 4				
Speaker 5				