REDUCED FORMS AND LIAISONS IN THE TEACHING OF ENGLISH TO THAI LEARNERS

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ABSTRACT

This paper proposes the inclusion of reduced forms and liaisons in English as a second language instruction, especially as part of pronunciation exercises or in speaking and listening classes since these two aspects contribute much to the effectiveness of communication as will be addressed later in the paper. This paper is divided into 6 parts. The first part of the paper gives an overview of the nature of pronunciation as defined by Pennington and Richards (1986), which will serve as necessary background knowledge in understanding the two features of pronunciation in focus, namely reduced forms and liaisons. The second part argues the need to teach both reduced forms and liaisons in English to ESL learners. The third part provides a definition for both reduced forms and liaisons in order to capture a detailed understanding of each one. The fourth part attempts to describe Thai reduced forms and liaisons in search for commonalties with those found in English so as to understand the phenomena and make links to The fifth part addresses second language pedagogic possibilities. acquisition of reduced forms and liaisons and includes the discussion of consciousness in language learning, which is related to reduced forms and liaisons. The final part suggests a variety of sources rich in lessons and teaching techniques especially aimed at reduced forms and liaisons.

Introduction

As the world has become smaller and as English is now established as the world's international language, there is a growing need for effective communication between non-native speakers of English and native English speakers, and increasingly among non-native speakers themselves. Apart from other linguistic components of the language, such as syntax, pronunciation plays a significant role in effective oral communication.

Pronunciation has long overcome the traditional view that it is a component having to do with linguistic competence and accuracy. Instead, it has been seen for some time now as an aspect concerning communicative and conversational fluency competence (Pennington & Richards, 1986), and, thus, an imperative component that language learners must be provided with, aiming at reasonably intelligible pronunciation that will empower them with not merely survival skills, but also success in communication.

It is with hope that this paper would promote even more teaching of reduced forms and liaisons in connected speech in addition to the already commonly taught stress and intonation.

Pronunciation

It is necessary to have an understanding of the nature of pronunciation in order to know the pronunciation needs of language learners. Pennington and Richards (1986) have given a brief definition of the features of pronunciation by dividing pronunciation into 3 features: segmental features, voice setting features and prosodic features.

Segmental features are defined phonetically by Pennington and Richards as minimal units of sound - how sounds are produced in the word "why" versus "wry", for example. Pennington and Richards note that a shift has been seen in the emphasis given to pronunciation teaching, moving from the focus on individual components of sound towards a more "top-down" approach, taking connected speech into account and including focus on voice-setting prosodic features. Yet the teaching of separate sounds in smaller units of the language - the word level - remain quite

common in language classrooms and language texts, as it provides a basis of further instruction in other components of pronunciation.

Secondly, voice-setting features or voice quality is defined by Pennington (1996) as the individual, unique and longterm characteristic of a voice spanning stretches of speech. The term is used to describe our auditory impressions of individuals or different groups of speakers when their speech is produced by certain qualities and features of their speech organs (Pennington, 1996). This phenomenon has pointed us to observe, for instance, the voice quality of male speakers from some cultures, who have the tendency to speak without enunciating or moving their lips very much. In the typical language classroom, this particular feature of pronunciation is not mentioned too often, although knowledge of native speaker voice-setting features may aid learners in making their pronunciation more native-like through, if possible, imitation of voice quality.

The last feature of pronunciation is the prosodic feature or the suprasegmental area which involves levels of stress, pitch and tone in stretches of speech rather than in individual sounds (Pennington & Richards, Pennington and Richards say 1986). prosodic features refer to rhythm and intonation patterns in longer utterances as well as the "coarticulatory phenomena" of the blending and overlapping of sound in natural speech. Prosodic features are usually included as one of the focuses in the classroom, taking secondary language importance among other elements of the language, such as grammar or vocabulary. If prosodic features were introduced to language learners at all, they would often be limited to stress and intonation, while the

area of coarticulation, such as reduced forms and liaisons in connected speech seem to have been neglected.

To explain the term "coarticulation features" further, it may help to make the following distinction. In English, which is known as a stress-timed language¹, as opposed to Thai, which is a tonal language², when longer stretches of speech are produced at a natural speed, co-articulation, stressing and destressing in this environment cause liaisons and the weakening of sounds, which often cause language learners a amount difficulty certain comprehending, although they may actually be familiar with all the vocabulary contained in that particular stretch of speech. Still, liaisons and reduced forms in connected speech are rarely taught in a language class despite the need for learners to acknowledge these two elements through listening practice.

The need to focus on reduced forms and liaisons

There are two reasons why it is important to focus on reduced forms and liaisons. Firstly it is a necessary step comprehending native-speaker towards speech. One of the major obstacles that hinders non-native speakers of English from effective listening seems to be the inability to detect reduced forms and/or liaisons, which are subtle nuances of the language. Expecting to hear every word mentioned individually, language learners often times hear these subtleties as obscure chunks of sounds. These elements are usually not the main focus in the EFL classroom, yet they have a huge impact on the language learner, especially in terms of listening.

From my observations in a Business English Oral Communication class in Thailand, students struggle to understand a dialogue by native speakers especially when spoken in a natural pace. The following is one example monologue that students had difficulty in comprehending even after listening to it 3 times:

"A mistake that nearly everyone has made is to put off unpleasant decisions, which generally means not laying off personnel in times of recession, often until it's too late." (Wallwork, 1999)

From the transcription of the tape, we can see clearly how the speaker produces this stretch of speech:

/ə̃məs'tekðətni:rli: j 'evriwə:'nəz'me:diztə put'əf ə̃nple:zə̃ntdə'sizə̃nzwitf 'dzẽ:nrəli:mi:nznətle j ĭŋ'əfpərsə'ne:l j:n taı̃mzəfri'sefə̃n 'əfə̃n ə̃ntil itstu:'let/

Some of the reduced forms present are seen in the words: "that", "has", "to", which have all taken the schwa sound $(/\mathfrak{d}/)$, and in the word "generally". These reductions are unexpected to the second language learner who anticipates hearing the full form. Liaisons have also created misunderstanding. Many students, for instance, heard, "...to put of fun pleasant...", when what was actually "...to put off unpleasant was. decisions..." This incident is one that happens quite often in a listening class and, therefore, raises the need for more attention to reduced forms and liaisons in the language classroom.

Further, Goh (1999) found students in her study who were aware of the factors that influenced their listening comprehension, one of which was mentioned as being "phonological modifications", such as the

¹ Roach (1989) defines a stress-timed language as a language where the stressed syllable of each word stands out and other syllables are produced relatively weakly in a string of speech.

² Roach (1989) defines a tonal language as a language in which the tone can determine the meaning of a word.

linking of sounds (liaisons). Such factors make it difficult for students to divide streams of speech and comprehend the speech. Goh further confirms that because spoken English contains features reduced forms, elisions, and link-ups. learners have further difficulty comprehension.

Another factor that students in Goh's study (1999) were aware of, this time regarding speaking, was that some ESL listeners do not pronounce certain words accurately and in turn have difficulty recognizing the words when native speakers say them due to the difference in the way they pronounce the words, especially when the words come in a string. In a syllabletimed language, such as Thai, words are given more or less equal stress, while English, as mentioned above, is a stresstimed language. With an L1 background, non-native learners may not be used to hearing speech where some syllables are given more stress than others. The L1 syllable-timed background may affect the way non-native speakers produce sounds where they should be producing reduced forms but don't.

This brings us to the second reason why we need to focus on reduced forms and liaisons. We need to be able to produce sounds in a more natural manner generating liaisons and reduced forms so that the native speaker or non-native speaker interlocutor is able to understand us without very much difficulty. Faber (1986) refers to research done by Cutler and Clifton in 1982 which suggests that errors of stress placement does not seriously affect the recognition of a spoken word as long as the pattern of full and reduced vowels is not changed. Faber (1986) believes that this finding could also be applied to connected speech and that

when compared to the placement of stress, it may be more worthwhile to have learners concentrate on producing "correctly-reduced vowels" in order for them to be easily understood by native speakers. To further confirm this, Mayers (1981) also confidently points out that:

The correct use of weak forms by the foreign learner will not only reduce confusion, but assist the rhythm, stress, and intonation of his or her speech, and thus drastically reduce the 'foreignness' of an accent (p. 423).

The ability to produce liaisons and reduced forms in their speech would certainly aid language learners in both listening and speaking. Being trained in some way to produce or at least be aware of these two aspects of pronunciation will only be beneficial for effective communication.

Defining English reduced forms and liaisons

In this part, reduced forms and liaisons in English will be defined. The term "weak forms," used by some linguists, will be used interchangeably with the term "reduced forms."

Reduced forms

In English, function words, such as articles, adjectives, and prepositions are stressed when they are spoken in isolation. In other words, they are pronounced in their strong form. In connected speech, where function words are usually given less importance and are unstressed, they are pronounced in their weak form or reduced form (Avery & Ehrlich, 1992). Very commonly are function words unaccented, but they too can be accented in special situations such as that of emphasis. Grimson

and Cruttenden (1994) define unaccented weak forms as reductions in the length of sounds and obscurations of vowels towards /ə, ɪ, ʊ/ and the elision of vowels and consonants. They also list examples of the most common unaccented reduced or weak forms together with their accented counterpart. (See Appendix A.)

Both note that the following 19 words are over 90% produced as unaccented weak forms: at, of, the, to, as, and, or, a, his, an, but, been, for, her, we, be, shall, was, them. They also observe that the following verb forms retain their strong form when they occur finally even though they do not take the stress: Who's coming? 'I am /æm/; Who's got it? 'I have /hæv/. In much the same manner, prepositions like to, from, at, for, will take the strong form, and not the weak form, when receiving primary accent, as in Where have they gone to? (/tu:/, /tu/, but not /tə/); What are you laughing for, at? (/fo:/, /æt/). This observation also applies when prepositions and auxiliary verbs occur finally in what Grimson and Cruttenden call a "deletion site" where the following item is understood, as in He looked at /xt/ and solved the problem. - what is being "looked at" is understood - or in People who can afford to /tu:/ buy luxuries.

Grimson and Cruttenden conclude that the more rapid the speech is, the greater the tendency there is for reducing forms. Indeed, reduced forms occur naturally and cannot be divorced from connected English speech.

Liaisons

A simple definition of "liaisons" would be a linking sound that occurs within connected speech and in between vowel sounds. Once again, adopting the framework of Grimson and Cruttenden (1994), a detailed description of liaisons is Grimson and Cruttenden provided here. state that in "vocalic junctures" or the stretch in-between two words, where the first word ends in $\frac{1!}{l}$, $\frac{1}{l}$, $\frac{1}{l}$, $\frac{1}{l}$, or $\frac{1}{l}$ and the following word begins with a vowel, there may be a slight linking [j] that can be heard in between, e.g. I ate [a1 i e1t], he earned [hi j ərnd], Roy asks [roi jæsks]. distinction must be made between the linking [j] and the phonemic / j /, which is produced much forcefully and clearly, my Oak [mai j ok] vs. my volk [maijok]. In the same manner, a linking [w] may be present between a final /u:/, /əu/, and /au/ and a following vowel, e.g. how and when [hauwəndwen], Oh, Amanda Again, there are minimal [owəmæ:ndə]. pairs that illustrate the linking [w] and the phonemic /w/ as in two eyes [tu^w aiz] vs. too wise [tuwaiz].

Although Grimson and Cruttenden do not accept it as a genuine liaison, another type of linking may appear where a consonant precedes a vowel, such as in run on, give out, come here. Grimson and Cruttenden say that in the above cases, "it is unusual for a word-final consonant to be carried over as an initial in a word beginning with an accented vowel" (p. 264). They also mention that voiceless plosives in phrases like back off, get on, stop it do not require aspiration, although, they do accept that a few phrases commonly used show such linking with the voiceless plosives, as in at home, not at all. I maintain that either type would nonetheless have influence on nonlistening comprehension therefore, would be worth introducing to an ESL class.

There is yet another type of liaison more commonly heard in British RP that would also affect non-native listening comprehension and that is the word-final post-vocalic /r/ found when the following word begins with a vowel (Grimson and Cruttenden 1994). There is a tendency for such /r/s to link on to the following vowels: /a:, o:/ and single vowels or diphthongs containing final [a] (/a, 3:, 1a, ea, ua/). taken from Grimson Examples Cruttenden (1994) are far off, four aces, answer it, fur inside, near it, wear out, secure everything. We can conclude the occurrence of the linking /r/ by looking at Grimson's and Cruttenden's (1994)observation as follows:

1. The insertion of $/\mathbf{r}/$ is obligatory before a suffix beginning with a vowel, where the $/\mathbf{r}/$ is historically justified.

pour pouring pour it in /po: po:ri\tin/

2. The insertion of $/\mathbf{r}/$ is optional, though generally present, before a following word beginning with a vowel, where the $/\mathbf{r}/$ is historically justified.

dear dearer

my dear Adrian an idea of hers
/maidiə ræn ənai diərəvhərz/

- 3. After [ə], even an intrusive /r/ (i.e. historically unjustified) is generally used before a following word, e.g. vanilla essence /vəˈnɪlərˈɛsəns/, vodka and tonic /vadkərənˈtanɪk/.
- 4. After /a:/ and /ɔ:/, an intrusive /r/ is often avoided before a following vowel, e.g. nougat and chocolate /'nu:garən'tʃɔklɪt/, straw in the wind /'strɔrɪnðə'wɪnd/.

5. The insertion of intrusive /r/ before a suffix is strongly resisted, e.g. strawy /stra: 'rɪ /.

Word-final post-vocalic /r/s found in British English may be less commonly heard in the English used as an international language – among non-native speakers of English. However, since English is indeed a world language, we should not take it for granted that ESL learners will not encounter this type of liaison. Therefore, to a certain extent, focus must be placed on the different types of liaisons so as to prepare the language learner for what to expect.

Thai reduced forms and liaisons

Now that reduced forms and liaisons in English have been defined, analyzing Thai reduced forms and liaisons may be helpful in identifying commonalties with the purpose of seeking a way to teach the two features to Thai learners of English.

Literature on Thai that has been found encompasses the area of tones, stress, intonation, with researchers such Abramson (1962), Noss (1964), Gandour (1974), Erickson (1985), Tingsabadh & Deeprasert (1997) and many others who have explored such areas. I have yet to discover studies on Thai reduced forms and liaisons. Thus, from my observations, I will attempt to describe the patterns of Thai reduced forms and the phenomena of liaison in the Thai context, starting first with reduced forms.

I have seen vague forms of reduction of sounds in Thai. Some may argue that since Thai is a syllable-timed language, where the amount of time required to say a sentence depends on the number of syllables, and not on the number of stresses, the production of syllables should not be affected because each

syllable in a stretch of speech tends to be stressed, whereas in English, blends and omissions of sounds tend to appear in natural conversation to accommodate its stressed-timed rhythmic pattern. This seems to make perfect sense; however, because of laxity in the production of sounds in non-formal situations, there is evidence that illustrates the existence of reduced forms in the Thai language. Some reduced forms are commonly used in casual conversation, and

other reduced forms may be unique to the individual. With the limited corpus I acquired within a one-month period (2003) through observations of co-workers and friends, I have categorized Thai reduced forms into 3 types. All transcriptions in this section are made possible using Newman's (1985) phonetic symbols for Thai. (Please refer to Appendix B for consonant, vowel and tone charts.)

1. Reduced sounds – the tendency to reduce or alter the sound from the original written form

Examples	Not reduced	Reduced	Meaning
ไม่เอา ไม่อร่อย	/malau malardi/	/ma:au maroi/	I don't like it; it's not tasty.
จะไปไหน	/tʰɤcapaɪnai:/	/tʰscəpana:/	Where are you going?
ก็ได้	/kɔ̂dai:/	/kədû:/ or /kədæ/	Alright

2. Reduced words – the tendency to reduce or shorten the words from the original altogether

Examples	Not reduced	Reduced	Meaning
แค่นี้ก็แล้วกัน	/kʰæ̂ni:kɔ̂:lǽwkʌn/		That's all for now.
ขอพูคกับ	/kʰɔːpuːdkʌp/	/kʰɔːpuːdka?/	Could I speak to?
มือะไรอีกไหม	/mi:araɪi:kmaɪ/	/mi:raii:kma?/	Is there anything else?
มือะไรอีกเล่า	/mi:araii:klau/	/mi:raɪi:kka/	What else is there?

3. Reduced tones – the tendency to alter the tone from the original form

Examples	Not reduced	Reduced	Meaning
จะไปนอนแล้ว	/cə?paɪnɔ:nlæw/	/cəʔpaɪnə:nlæw/	I'm going to bed now.
ใค้ค่ะ	/daikʰa/	/daɪkʰə/	Alright.

Because of such limited corpus, I am unable at this time to make any generalizations as to how or why each type of Thai reduced form is formed. Though I am quite confident in saying that all the reduced forms mentioned above are possible in informal conversations, and the full form would be used in more formal conversations or in slower speech spoken by the earlier generation, especially the Minim "Phoo Dee Gao" or aristocrats from earlier days.

On the other hand, what is particularly interesting about liaisons in the Thai language, according to my observation, is that there seems to be a component of reduced forms intertwined. That is, if a stretch of speech in Thai contains liaisons, there is a likelihood that the liaison will occur after a reduction from the original form. I have categorized Thai liaisons into 2 types below:

1. Liaisons that originate from vocalic junctures

Similar to that of English, for this type, the first word ends in a vowel sound and the following word begins with a vowel sound. A slight linking is heard in-between.

Examples Without liaisons With liaisons Meaning
ไม่เอา ไม่อร่อย /maiav maiaroi/ /mai j av maroi/ I don't like it; it's not tasty.
ไปหน่วยอนามัย /painuaianamai/ /painuai j ənamai/ Going to health services

2. Liaisons that are the by-product of reduced forms

After being reduced in form, these liaisons result in the kind mentioned above containing vocalic junctures that allow liaisons to be made.

Examples	Without liaisons	With liaisons	Meaning
เหนื่อยแล้วหรือ	/nwailæwrw:/	/nwailæw " ɔ:/	Tired already?
ทำไมเล่า	/tammaɪlaʊ/	/təmmaɪ ^j ə/	Why?
จะบ้าหรือ	/càba:rɯ:/	/cəba:ɔ:/	Are you crazy?

To conclude, the outstanding difference I see between the occurrence of English reduced forms and liaisons and occurrence of Thai reduced forms and liaisons is that, in English, these two phenomena happen in natural conversational speech be it formal or informal. In Thai, however, both phenomena happen only in very casual settings. Still, by being able to detect such phenomena in Thai, the language teacher is then equipped with examples that could be used for teaching through demonstration and comparison of both such phenomena found in the two languages. The following section will provide practical information on second language acquisition of these two features.

The acquisition of reduced forms and liaisons by second language learners of English

According to Grimson and Cruttenden (1994), the little evidence that is available suggests that learners of English as a first language begin using the strong forms, and

not the weak forms, of function words and have a tendency to use a uniform length for each syllable. They did not mention how liaisons are acquired; however, it is safe to say that the acquisition of both reduced forms and liaisons in first language learners happen naturally and unconsciously.

Turning to second language learners in relation to acquisition of the two features. there have been a number of research studies that investigated the effects of instruction on the learning of pronunciation in general but not specifically on how second language learners actually acquire reduced forms or liaisons. In Pennington and Richards' (1986) review of research studies, although some researchers such as Suter (1976) and Madden (1983) found no positive effect for formal training on achievement pronunciation, other researchers such as Murakawa (1981) and Pennington (1984, March) report positive effects for phonetic training in adult second language learners. They also cite other researchers like Gilbert (1980), Neufeld and Scniederman (1980), de Bot (1983) and de Bot and Mailfert (1982) to have found positive effects on production or perception for training in prosodic features in second language learners.

Pennington In synthesizing and Richards' (1986) review of research findings on the effect of pronunciation training, Goh's (1999) research findings on learners' metacognitive awareness of factors that influence listening comprehension, Schmidt's (1990) belief that "paying attention" to language form facilitates language learning, we may conclude that it is necessary to provide second language learners with explicit training in prosodic features, in this case reduced forms and liaisons. Such explicit training takes place to bring their attention to such features and for them to be aware that such features do have an effect on their comprehension and production of the English language. In addition, such training should aim at learners from bringing controlled. cognitively based performance to automatic, skill-based performance through task-based instruction (Pennington & Richards, 1986).

For learners who aim at attaining a English accent, Grimson native Cruttenden (1994) recommend that they learn the weak forms of function words and regard them as regular pronunciations, using the strong forms whenever special emphasis is needed. There is no mention of how to learn liaisons in English. On the contrary, Pennington and Richards (1986) advocate teaching with the aim to gradually reduce the amount of native language influence on segmental, voice-setting, and prosodic features, which would include reduced forms and liaisons, and do not aim to eradicate completely the native speakers' accent. More importantly, Pennington and Richards further suggest that features of pronunciation "be taught as an integral part of oral language use, as part of the means for creating both referential and interactional meaning, not merely as an aspect of the oral production of words and sentences." (p. 219)

From this discussion, we know to explicitly introduce our learners to English reduced forms and liaisons in meaningful contexts because learners acquire such features best when they are aware that these features do exist, as they do in Thai, and that they do have an influence on their comprehension and production of the language. Not only must learners be aware that these two features exist, but they should also be aware to put into practice what they know about these features via meaningful task-based language activities carefully selected by instructors. Being persistently conscious of what they are doing in this manner will prompt learners to better their communication skills much more rapidly. The following and final section of this paper introduces a variety of sources rich in lessons and teaching techniques for reduced forms and liaisons.

Sources for teaching reduced forms and liaisons of English to ESL students

The following are sources that would supply the language teacher with practical lessons or techniques for teaching reduced forms and liaisons of English:

Ann Baker's and Sharon Goldstein's (1990) Pronunciation Pairs book contains a chapter (Unit 19) on the reduced form (schwa). There are pronunciation, listening, and speaking activities that do address liaisons in the chapter (p. 57-64).

The Pronunciation Book by Tim Bonen and Johnathan Marks (1992) contains an entire section called, "Sounds in sequence" (p.51-58), which aims to sensitize learners to

features found in connected speech. This section consists of ready-made activities that address weak forms, liaisons, elisions, and so on.

A book that would provide the instructor with British English reduced forms and liaisons would be Colin Mortima's (1985) Element of Pronunciation. This book offers a generous number of humorous dialogues containing weak forms (p.4-26) as well as link-ups or liaisons (p.45-60).

Lastly, New Ways in Teaching Listening, a book edited by David Nunan and Lindsay Miller (1995), supplies creative techniques for teaching reduced forms and liaisons.

These selected sources have been very useful to many ESL teachers in making learners aware of the features that may hinder effective communication. These texts will continue to be of value so long as lessons and techniques chosen from these sources can find a place in the language classroom.

Conclusion

Reduced forms and liaisons can and should be taught explicitly to ESL students during any listening or speaking class. Both features should be brought to the students' attention the students' hetter comprehension and improved communication. During listening activities throughout the course, instructors should constantly remind students to be aware of reduced forms and liaisons. And during speaking activities, students can be reminded to consciously apply reduced forms and liaisons to their speech.

It is with hope that knowledge gained from this article would ultimately take part in assisting Thai ESL learners to detect reduced forms and liaisons when listening, which would help them gain sharp listening skills, and in turn improve their speaking skills through the application of reduced forms and liaisons in order to be better understood in an international community where English has become the medium language.

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Appendix A

A list of words most commonly reduced in connected speech (Grimson and Cruttenden 1994)

	Unaccented (reduced)	Accented (not reduced)
a	/ə/	/eɪ/
am	/m, əm/	/æm/
an	/n, ən/	/ænd/
and	/ənd, nd, ən, n/	/ænd/
are	/ə/ + consonant	/a:/
	/ər, r/ + vowel	/a:r/
as	/əz/	/æz/
at	/ət/	/æt/
be	/bɪ / ([bi])	/bi:/
been	/bɪn/	/bi:n/ (also /bin/ for some speakers)
but	/bət/	/bnt/
can (aux.)	/kən, kn/	/kæn/
could	/kəd, kd/	/kud/
do (aux.)	/dʊ, də, d/ ([du])	/du:/
does (aux.)	/dəz, z, s/	/d^z/
	(e.g. What's $(= does)$ he	like? /wats i: laɪk/,
	When's (= does) he arriv	re? /wənz i: əraɪv/)
for	/fə/ + consonant	
	/fər, fr/ + vowel	/fo:r/
from	/frəm, frm/	/from/
had (aux.)	/həd, əd, d/	/hæd/
has (aux.)	/həz, əz, z, s/	/hæz/
have (aux.)	/həv, əv, v/	/hæv/

he	/hɪ, i:, ɪ/([hi])	/hi:/
her	/hə, 3, ə /	/h3:/
him	/ Im /	/hɪm/
his	/IZ/	/hɪz/
Is	/s, z/	/IZ/
me	/mɪ/([mi])	/mi:/
must	/məst/	/m^st/

Unaccented (reduced)		Accented (not reduced)
not	/nt,n/	/npt/
of	/əv, v, ə/	/va/
saint	/sənt, snt, sən, sn/	/seint/
shall	/səl/ ([ii])	/sæl/
she	/sɪ/ ([si])	/si:/
should	/səd/ ([sd])	/sud/
Sir	/sə/ + consonant	/s 3 :/
	/sər/ + vowel	/s 3 :r/
some (adj.)	/səm, sm/	/s ^ m/
than	/ðən, ðn/	/ðæn/
that (conj. and rel. pro.)) /ðət/	/ðæt/
the	/ðə/ ([ði])	/ði:/
	/ðə/ + consonant	
them	/ðəm/ also /əm,m/	/ðem/
there(indef. Adv.)	/ðə / + consonant	/ðeə/ (rare)
	/ðər/ + vowel	/ðeər/ (rare)
to	/tə/ + consonant	/tu:/
	/tu / + vowel	
us	/əs, s/	/As/
was	/wəz/	/wpz/
we	/wI/ ([wi])	/wi:/
were	/wə/ + consonant	/w3:/
	/wər/ + vowel	/w3:r/
who	/hu, u:, v/ ([hu])	/hu:/
will	/1/	/wil/
would	/wəd, əd, d/	/wud/
you	/jʊ / ([ju])	/ju:/

Appendix B

Thai consonant, vowel and tone symbols (Newman 1985)

Consonant Phonemes

	Bilabial &				
	Labio-dental	Dental	Palatal	Velar	Glottal
Voiceless unaspirated stops	p	t	c	k	
Voiceless aspirated stops	\mathbf{p}^{h}	t ^h	c^h	\mathbf{k}^{h}	
Voiced Stops	b	d			
Fricatives	f	S			h
Nasals	m	n			ŋ
Lateral		1			
Flap		r			
Semi-vowels	w		У		

Vowel Phonemes

	Front		Central & Back		Back	
	unrou	nded	unroun	ded	roun	ded
	^					
	short	long	short	long	short	long
High	i	i:	ш	w:	u	u:
Higher-Mid	e	e:	r	Y :	O	o:
Lower-Mid & Low	ε	ε:	a	a:	э	ე:

Tonemes						
Phonetic desc	ription of tones	Conventional	Conventional			
in isolate	d syllables	term	symbolization			
Using 'tone letters' Using pitch and			(also used in this			
****	contour terms		book)			
			(unmarked)			
	mid falling	mid	e.g. / na:/ 'rice paddy'			
	low falling	low	e.g. /na:/ '(a nickname)'			
	high falling	falling	e.g. / na: / 'face'			
	high rising	high	e.g. /na:/ 'aunt'			
\checkmark	low rising	rising	e.g. / na:/ 'thick'			