Potential Problematic Areas of English Pronunciation for Amharic Native Learners based on Phonological Contrast between the two Languages

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Abstract: This study was conducted to identify elements of English pronunciation foreign to the learners' native language and to spot possible difficulty areas that native Amharic speaking learners might encounter in learning and using English as a foreign language. The phonological system of Amharic appears to differ from its English counterpart in many ways. The study yielded a comprehensive contrastive-based finding: there are several English pronunciation aspects that are novel to Amharic phonology and therefore predicted as problems for Amharic speakers. Among other types of segmental differences, including allophonic and phonetic in type, the resultant list under phonemic problem areas included foreign English vowels, consonants and syllable structures; while the supra-segmental problems included English stress, intonation, and rhythmic patterns absent in Amharic. Its implications for EFL in Ethiopia suggest L1-based and empirically informed support and pronunciation materials.

Introduction

Contrastive Analysis Hypothesis (CAH) assumes that many of the mistakes made by learners are caused by differences between the native language (NL) and the target language (TL) (Spolsky, 1994). Previous researches made on CAH framework attempted to explain second language learning difficulty on the basis of differences between

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the NL and TL claiming that the NL-TL difference is the most important problem in learning the TL.

In the quest for exploring non-native pronunciation and the factors involved in learning and using it, second language phonological acquisition researches tend to approach the ways learners may encounter pronunciation difficulties through three distinct (but related) notions, where pronunciation teaching bears much of its theoretical foundations: contrastive analysis, error analysis or interlanguage, and intelligibility (Spolsky, 1979; Jenkins, 2000, 2004). The evidence in the three areas of second language (L2) pronunciation researches, contrastive-analysis, interlanguage, and intelligibility is almost uniformly consistent in indicating that learners often have extraordinary difficulty mastering new pronunciation patterns and that the extent and type of difficulties vary across groups mainly because of the role of first language, social experiences and other elements of context. Reviewing previous researches on the area, Flege (1988) acknowledges the extent of pronunciation difficulty in an L2 and its effect on communication to relate to the divergence of the native language from the target language phonetic and phonological norms including stress, rhythm, and intonation.

The first systematic approach in pronunciation teaching and research involved contrastive analysis techniques to the sound segments of the first language and the second language to identify differences between them and, it was assumed, highlight areas where first language transfer errors were likely to occur (Kenworthy, 1987; Brown, 1997). Later developments in the field began to embrace more sophisticated approaches to 'interlanguage phonology', taking into account of other processes (e.g. 'universal' or 'developmental' interacting with first language (L1) transfer (Pennington and Richards, 1986; Brown, 1997; Jenkins, 2000).

At its best, contrastive analysis is still a prevailing theory of second language acquisition, widely used by teachers because of the current

emphasis in L2 pedagogy on individual learner needs. As Jenkins (2004, p. 113) claims, "teachers have always continued to believe in the important influence of the mother tongue on L2 pronunciation acquisition." For Jenkins, "the interest in contrastive analytical research itself has never disappeared entirely, even though it is nowadays complemented by an equally robust interest in other approaches to interlanguage phonology" (p.113). The continuing use of contrastive methodology in contemporary L2 pedagogy is reviewed and appreciated by Jenkins (2004) for its use, e.g. in many Southeast Asian countries, in determining a range of phonetic and phonological differences between learners' native language and English to provide priority areas for classroom use, text books and teacher trainings. According to Jenkins (2004, p.113):

> Substantial evidence on the central role contrastive analysis tradition currently playing in L2 pedagogy comes from a growing body of research-based publications for teachers of students from L1s that earlier research had tended to overlook and/or treat superficially, by ignoring, where relevant, the role of local L1-L2 contact.

Thus as Jenkins (2004) argues, "it would, in any case, have been a serious mistake to throw out the modern contrastive analysis baby with the old contrastive analysis bathwater" (p. 113).

In light of the fact that second/foreign language pronunciation difficulties and errors are often caused by the transfer of well-established native language sound systems, there is a need to examine some of the characteristic phonological differences between learners' native languages and English and to use them as a basic rational for what to teach and what to focus on most (Stern, 1992; Brown, 1987; O'Connor, 1980). Though contrasting the phonology of the learners' native language with the target language is common in English as a second language (ESL) and English as a foreign language (EFL) situations as a valuable implication for pronunciation teaching

(Stern, 1992; Brown, 1987), there appears to be a gap of systematic study available in the Ethiopian EFL in this regard.

Because pronunciation is typically L1 bound and that Ethiopia is a multilingual country, what should be deemed for an ideal contribution to pronunciation teaching in the country is perhaps to carry out a systematic investigation corresponding to each of our learners' native languages. Therefore, the present study attempts to identify typical trouble spots of English pronunciation for one language group of learners speaking Amharic as native language. Hopefully, this might initiate other researchers to come up with other language groups in the country.

The literature in the Ethiopian EFL (English as a foreign language) teaching and learning provides no adequate focus and attention on phonological contrasts between the learners' first languages and English. So far as Amharic native learners are concerned, only a handful of studies explored English pronunciation of Amharic natives. Anegagregn (2012) investigated the intelligibility of Amharic native learner's English pronunciation to native English speakers residing in the country. While the study discovered that Amharic native subjects have limited intelligibility in their spoken English to the native interlocutors, it was found out that the intelligibility estimate was influenced by several factors, among others, owing to listener's familiarity to Ethiopian English and other speaker-listener factors. While researches in the wider context of global communication scenarios is of a paramount importance in an attempt to determine learners' varieties and actual trouble spots of English pronunciation, it should be supported by contrastive analysis between English and the learner's first language to establish a comprehensive inventory of Amharic learners' pronunciation in English.

A pioneer work in this regard is that made by Taddese almost 50 years ago that compared the segmental phonemes of Amharic and English in order to determine their similarity and differences and to predict

potential problem areas Amharic speakers would have. Taddese's contrastive study is, however, limited to the segmental level. Perhaps due to the references he used to represent English phonology, he did not include in his problematic vowel list some phonemes such as /ʌ/ that is also foreign to Amharic. Besides, perhaps due to the time of the study (in 1966), some phonetic symbols and phonological descriptions the study used does not correspond to the standard ways of representing English vowels by contemporary phoneticians today. Thus, there is a need to revise and extend the study by Taddese by including new phonemes that were not treated, and revising the phonetic representations and phonological descriptions where necessary with the present day inventory. As no similar contrastive works are available at supra-segmental level, a new contrast is essential for this study to supplement segmental problems. Thus, in the present study, characteristic differences between Amharic and English supra-segmental features were examined and then problem areas were predicted.

Contrastive descriptions can only predict part of the learning problem because those points of contrast cause various and variable problems among different learners, and between the production and perception of the target language (James, 1980). In the same vein, phonological problems indicated in the present study may be realized at different level by the Amharic native learners in their actual use of English depending on their exposure, instruction, and experience, and a number of other interlingual factors.

Method

This study aims to identify difficulties of Amharic speaking learners of English pronunciation may experience due to factors related to the influence of their native language. The study is therefore descriptive in type as it is designed to provide 'descriptive information' (i.e. dealing with naturally occurring phenomena) regarding Amharic speaking learners' possible interference areas while learning English

pronunciation. The study used content analysis method to describe, compare, and contrast Amharic phonology with English phonology.

Based on contrastive analyses framework, therefore, segmental and supra-segmental aspects of English and Amharic are compared; differences in the phonology of both languages are discussed, and then problematic areas are predicted.

Phonological Differences between English and Amharic

Segmental aspects of English and Amharic

English vowels

In the English vowel system, there are 21 different vowels usually divided into groups of short vowels, long vowels, and diphthongs: 8 short vowels, 5 long vowels, 8 diphthongs (Roach, 1983). English short vowels differ to each other in 'quality' (i.e. with the tongue adopting a different position). The symbols for English short vowels are /ɪ, e, æ, ə, ʌ, ʊ, ɒ, a/. There are three front vowels /ɪ/, /e/, /æ/ but they are different in the degree of openness of the mouth. /ɪ/ as in "bit", "pin", "fish" is more open than cardinal /i/ with slightly spread lips; /e/ is in somewhere between close-mid primary cardinal vowel /e/ and open-mid cardinal /ɛ/ and the lips are slightly spread; /æ/ is not as open as cardinal /a/, lips are slightly spread (Roach, 1983).

The central vowel /ʌ/ as in "bus", "some", "cut" is more open than the open-mid height and the lips are neutral. Finally, the 2 back vowels /ʊ/ and /ɒ/, but they are not fully back. /ʊ/ is more open and central than the cardinal /u/, but the lips are rounded. /ɒ/ is between open-mid and open height, lips are slightly rounded (Roach, 2002, p.15).

English has 5 long vowels /i:, u:, ɔ:, ɑ:, ɜ:/. The long vowel /i:/ is nearer to the cardinal /i/ than the short /ɪ/ e.g. "beat" vs. "bit", while the tongue shape is nearly the same as /i/ but the lips are only slightly spread. This

gives the two sounds different quality. /ɜ:/ is pronounced with neutral lips and central. /ɑ:/ is not as back as cardinal /ɑ/, open vowel and the lips are neutral. /ɔ:/ almost fully back, between cardinals /o/ and /ɔ/, strong lip-rounding. /u:/ not as back and close as cardinal /u/, moderately rounded lips. Besides the differences in tongue shape, lip shape, the main difference between long and short vowels is the length (Roach, 2002, p. 19).

In English, some of the vowels are known to have the quality of change during the course of their production. These vowels are generally called diphthongs as opposed to monophthongs or pure vowels (O'Conner, 1980). Roach describes diphthongs as the sounds which consist of a movement or glide from one vowel to another (2001). As the diphthongs consist of 2 vowels, they are like the long vowels but the first part is much longer and stronger than the second vowel. English diphthongs constitute /aɪ, eɪ, ɔɪ, ɪa, ɪə, au, ua, ea/. For example, in the diphthong /aɪ/, which has the vowel /a/ and /ɪ/, but the latter is recognized with smaller loudness, so it is much shorter and quieter. Besides, though the 'two' vowels are treated as one articulatory unit named as diphthong, they look likely to have two articulatory qualities but, the movement of the tongue from [ə] to [ɪ] in the above example is so smooth that it is called a 'glide' (Roach, 1983).

Furthermore, English has 'triphthongs' consisted of one of the diphthongs plus a vowel called 'schwa' represented phonetically as /ə/. A triphthong could be described as "a glide from one vowel to another and then to a third, all produced rapidly and without interruption" (Roach, 1983, p. 23). For instance, English five triphthongs are composed of diphthongs with /ə/ at the end: /eɪ/ + /ə/ = /eɪə/; /aɪ/ + /ə/ = /aɪə/; /ɔɪ/ + /ə/ = /ɔɪə/; /aʊ/ + /ə/ = /aʊə/; /əʊ/ + /ə/ = /əʊə/ as in the words "layer", "fire", "loyal", "hour", and "mower" respectively.

Amharic vowels

According to Baye (2000), Amharic has seven vowels. According to Mullen (1986, p. 132), "in addition to the five vowel system /a, e, i, o, u/, which is probably the commonest system in the world's languages, Amharic has two central vowels, i.e. /ɨ and ə/".

Mullen (1986) notes that vowel length in Amharic is not phonemic; no words of the language are distinguished by vowel length alone. Regarding length of Amharic vowels, Mullen states "*... the central vowels /ɨ/ and /ə/ are almost never long whereas any of the peripheral vowels may be, and /a/ often is*" (p.133). Mullen (1986) describes that length in Amharic vowels is only applying in certain conditions in monosyllabic words forming a closed syllable, as in 'maar' honey; 'beet' house; 'aaf' mouth. That is to say that 'a long vowel never occurs finally in the surface form of a word' (ibid).

Except /a/, peripheral vowels occur relatively rarely while the two central vowels /ɨ/ and /ə/ occur with great frequency. The other central vowel /a/ is exceedingly common. Besides, the peripheral and central vowels are also described as differing in their 'stability of quality'. Mullen notes that 'the five vowels on the periphery are subject to little influence from their consonantal environments and retain their essential quality even when short' unlike that of the central vowels /ə, ɨ/ which are 'environment sensitive, taking on various nuances of quality' (p.134).

Contrast between English and Amharic Vowels

A simple contrast between English and Amharic vowel systems reveals that there are apparently more vowels in English than in Amharic. The fact that the Amharic vowel inventory is characterized as a typical seven vowel system (Baye, 2000) as significantly fewer than that of the English vowel inventory with at least twenty vowel systems (Roach, 2001) suggests that Amharic native students would have difficulty

producing English vowels that do not exist in the corresponding vowel system of Amharic.

For example, English /æ/ is an absent category in Amharic, and hence contributes a special problem for Amharic speakers. Thus, substitution of /a/ or /e/ for /æ/ may occur as in words such as /map/ for /mæp/, or /men/ for /mæn/. English /ɒ/ is another vowel which constitutes a special problem for Amharic speakers for its absence in their native language. As a result, Amharic native learners may substitute Amharic /o/ for English /ɒ/ as /ol/ for /ɒl/ (Tadesse, 1966: 118). Likewise, learners may substitute English /ʌ/ with Amharic /ɨ/ as in words like 'cut' /kʌt/ 'nuts' /nʌts/. In addition to the Amharic lack of a low front vowel /æ/, the low back vowel /ɒ/, and the low central vowel /ʌ/ as in English, there is a different tongue positioning of the vowel /a/ between the two languages (i.e /a/ is a low back vowel in English while it is a low central vowel in Amharic). This suggests a great confusion to Amharic native speakers in producing such words as pat, pot, putt; cat, cot, cut; hat, hot, hut, etc.

Regarding length of vowels, English has five long vowels which tend to be longer than the short vowels in similar contexts. On the other hand, Amharic vowels are inherently short and even those which tend to be long are not contrastive in nature as in short/long vowels of English. The long/short distinctions made in English seem to be one of the most problematic areas in pronunciation for Amharic students. For example, Amharic learners often produce the long/short vowel pairs of English almost identically as if they were the same vowels. For example, distinction between many pairs of words such as the following may be lost in Amharic native learners due to absence of such distinction in their native language.

/ɪ/	/i:/	/u/	/u:/	/ʌ/	/ɜ:/
Bit	beat	pull	pool	bud	bird
Fill	feel	full	fool	gull	girl
Live	leave	soot	suit	shut	shirt
Slip	sleep	could	cooed	luck	lurk
Hill	heel	soot	suit	hut	hurt

In addition, Amharic native learners commonly replace long vowels with short vowels often accompanied by pronouncing the silent phoneme /r/, which usually follows the long vowels. For example, in the productions of words like 'early' /ɜ:lɪ/, 'car' /ka:/, 'more' /mɔ:/, short vowels /ʌ, a,ɪ,o/ would be used instead of the long vowels. Likewise, words like 'usually'/juːʒəlɪ/ and 'few'/fjuː/, the long vowels would be either deleted or substituted by short counterparts accompanied by the insertion of /w/ as in /jʒwalɪ/, and /fɪw/.

Talking about the types of vowel each language has, we can see that diphthongs and triphthongs exist in English, not in Amharic. This of course would cause many problems for Amharic native learners to produce the sounds; they tend to drop out the final part of the vowels. For example, Amharic speakers mostly use the first gliding vowel or replace it with other short vowel omitting the second element of the diphthong, as in /fojl/, /ditermajn/, /egzamajn/ for 'foii', 'determine', and 'examine' respectively. Such changes may sometimes be accompanied by insertion of semivowel consonants /w and j/ as in cases where /r/ appeared following the diphthongs usually at word final positions; eg. in 'poor, 'here', 'fare', the final consonant phoneme would be pronounced accompanying the use of short vowels instead of diphthongs as in /puɾ/, hɪɾ/ and /feɾ/.

Taking about the distribution of Amharic vowels, central vowels often begin a word while it is not the case for peripheral vowels. According to Baye (2000: 20), if Amharic speakers should speak a word starting with any of the peripheral vowels as in /iyasus/ 'Jesus', they make changes of the initial vowels into the central ones as in /ɨyasus/. Likewise, words such as 'inability', 'inaugural', 'Itali', 'islam', etc. would be produced by substituting initial /i/ with /ɨ/

Consonants

English consonants

According to Roach, English has 24 consonants as in the following table.

Table 1: Chart of English Consonant phonemes

	Bilabial	Labiodental	Dental	Alveolar	Palato-Alveolar		Palatal	Velar	Glottal
Plosive	p b			t d				k g	
Fricative			θ ð	s z	ʃ	ʒ			h
Affricate		f v			ʧ	dʒ			
Nasal	m			n				ŋ	
Lateral				l					
Approximant	w				R		j		

Source: (Roach, 1983, p. 52)

Amharic consonants

According to Baye (2000), Amharic has 30 consonant phonemes. Getahun (1990) notes that Amharic consonants /p, p', s'/ are borrowed and only occur in borrowed words. There is apparently a difference between linguists on the number and description of Amharic consonant phonemes, particularly on whether or not 'complex consonants' of Amharic are phonemes or combinations of two phonemes. Baye (2000) describes Amharic consonants in terms of manner of articulation and place of articulation (with voicing and ejectiveness). The following table, which is adapted from Baye, shows Amharic consonants.

Table 2: Chart of Amharic consonant phonemes

	bilabial	labiodental	Dental	palato-alveolar	palatal	velar	glottal
plosive	p b p'		t d t'			k g k'	ʔ
fricative			s z s'	ʃ ʒ			h
affricate		f		tʃ dʒ cʼ			
nasal	m		N		ɲ		
lateral			l r				
semivowel	w			r	j		

Baye (2000) presents all 30 Amharic consonant phonemes as voiceless, voiced, and ejective. In addition, those 'complex consonants' are also presented in the original table. Due to difficulty of their representation, they are not included in here (see Baye, 2000) for details).

The presence of ejectives in the Amharic language and the absence of this feature in the English language is an observable difference. Besides, any consonant except /h/ and /ʔ/may occur as a geminate in Amharic (Baye, 2000). Mullen (1986) notes that "Amharic gemination is phonologically significant in Amharic, distinguishing contrasting pairs of words. ... Eg, [ganna] 'christmass' vs. [gana] 'still/yet'' (p.139). A geminate may be created by the assimilation of a phonological feature as in [fallakk] 'you wanted'.

Looking at the distribution of Amharic consonants presented by Baye (2000), there exist several phonological processes including assimilations such as bilabialization, palatilization, velarization, glottalization, roundedness, voicing, devoicing, deletion (see Baye (2000) for details of phonological processes of Amharic consonants).

Contrast between English and Amharic consonants

Comparing the consonant system of each language clearly illustrates the fact that there are more consonants in Amharic (30 consonants) (Baye, 2000) than in English (24 consonants) (Roach, 1983). A close comparison between Amharic and English consonants reveals similarity of distribution in the manner of articulation while differences exist in that of place of articulation.

The consonant system of each language clearly illustrates the fact that there are some consonants in English which Amharic lacks. This include the voiced labiodental fricative /v/, and the interdental fricatives /θ, ð/. Amharic learners therefore may substitute these phonemes with the nearest sounds possible. It is common to hear Amharic learners produce /berɨndah/ for 'verenda'; /sin/ for 'thin'; and /zis/ for 'this'. Because of the realization of English interdental fricatives as [s] and [z], learners often incorrectly pronounce several English words such as 'thank', bath', 'method', 'path', 'clothe', 'mouth', etc.

Although Amharic has /t,d,s,z,n,l,r/ they do not exactly correspond to the English counterparts. The exact place of articulation of these consonants is alveolar in English while they are dental in Amharic. The realization of alveolar sounds in English as dental may represent the typical characteristic of Amharic EFL learners' English pronunciation.

Another difference in the consonantal distribution between Amharic and English is that there exist some phonological processes in Amharic such as palatalization, velarization, and rounding (Baye, 2000) but not in English. All Amharic consonants could get palatalized or rounded when they occur before front vowels /i, e/ and back vowels /u, o/ respectively. Similarly, velarization occurs in Amharic when dental/alveolar consonants appear before velar sounds (Baye, 2000). The following lists may illustrate pronunciation of Amharic speakers on such conditions.

Palatalization	Velarization	rounding
[pʸet] for 'pet'	[kʸigg] for 'king'	[plʷosiv] for 'plosive
[fʸew] for 'few'	[dʷokki] for 'donkey'	[lʷusid] for 'lucid'
[fʸilm] for 'film'	[lagg] for 'lung'	[hʷobi] for ' hobby'
[sʸet] for 'set'	[dʸiggl] for 'dingle'	[ʃʷut] for 'shoot'
[gʸ ift] for 'gift'	[plakk] for 'plank'	[zʷum] for 'zoom'
[pʸesmʸekar] for 'pacemaker'		

Syllable Types

Comparing the syllable structures from English and Amharic, Tadesse (1966) presents some of the characteristic differences in the way that each language utilizes syllables for forming a word. For example, he shows by the following chart syllable structures that are similar which are marked + (plus) and those that are different which are marked – (minus).

Table 3: Amharic and English syllable structure

Syllable Structure	Amharic	English
V	+	+
VC	+	+
VCC	+	+
CCV	-	+
CCCV	-	+
CVC	+	+
CVCC	+	+
CVCCC	-	+
CVCCCC	-	+

From this chart, English allows a wider variety of syllable types than Amharic. In this regard, the syllable types that Amharic allows seem to be restricted to one consonant at word initial position and two consonant clusters at final. In other words, such consonant cluster of (c) (c) V (c) (c) (c) (c) (c) in English does not occur in Amharic.

Because Amharic does not allow initial consonant cluster and more than two final consonant clusters, several English words of these cluster types are area of difficulty for Amharic native learners. Insertion of mid central vowel /ɨ/ is commonly used by the learners in pronouncing the following words as /pɨlan/ for 'plan'.

Initial 2-consonant cluster	Initial 3-consonant cluster	Final 3-consonant cluster	Final 4-consonant cluster
Plan	Split	Sands	Prompts
Train	Spring	Lifts	Glimpsed
Clean	Strike	Tents	Sculpts
Blame	Screen	Depths	Texts
Draw	Squash	Adopts	Sixths

Suprasegmentals of Amharic and English

Roach (2002) defines the term supra-segmental aspects of sound that is not of properties of individual segments (i.e. the vowels and consonants of which speech is composed). While the term is interchangeably used with the term prosodic (Roach notes preference of the term by the Americans and the British as suprasegmental and prosody respectively), it is often referred to as constituting pitch, loudness, tempo, rhythm and stress in a speech of a language. Aspects of stress, intonation, and rhythm of English and Amharic supra-segmentals is presented briefly below followed by the contrast the two languages have on this aspect of phonology. In the meantime, possible problem areas of English pronunciation for Amharic natives are predicted with illustrations.

English stress

In English, as Roach (2001) discusses, stress pattern is an essential component of a word's phonological form. Stress refers to when a syllable is said or heard 'louder and longer than unstressed syllables, and has distinctive pitch' (p. 89). Roach (1983) discusses the nature of

stress both from production and perceptual point of view as 'the production of stress is generally believed to depend on the speaker using more muscular energy than is used for unstressed syllables' and 'stressed syllables are recognized as stressed because they are more prominent than unstressed syllables' (pp. 72-73). At least four different factors are important in Roach's definition of what makes a syllable prominent: loudness, length, pitch, and a vowel that is different in quality from neighboring vowels.

Word stress in English is both variable and mobile. That means it is not fixed. When each word in English is said on its own, it has just one primary stress. On the other hand, if the word contains more than one syllable, then other syllables will have other levels of stress, and secondary stress is often found in words like ˌover ˈ*whelming* (with primary word stress on the *'whelm'* syllable and ˌsecondary stress on the first syllable) (Roach, 2002). Speaking of mobility, Roach notes that English word stress is also mobile in that the word stress pattern changes when the word occurs in particular contexts: for example, the word *'fifteenth'* in isolation is stressed on the second syllable, but in *'fifteenth place'* the stress shifts to the first syllable. This is known as stress-shift through which stress in English signals both grammatical and semantic category of words.

Stress is often referred to as 'distinctive' to denote its function in bringing about meaning and grammatical difference (Roach, 2001:32). For example, in English it has significant grammatical function in that it determines, among other things, whether a particular word is noun /adjective or verb (Roach, 2001). It is noted that the noun/adjective-verb distinction is common in English as in the word 'subject' which is stressed on the first syllable as a noun, while the stress shifts to the second syllable as a verb. There are several dozen pairs of two syllable words with identical spelling which differ from each other in stress placement, according to word class (noun, verb or adjective). The following common examples show 'the stress is placed on the second syllable of the verb, but on the first syllable of the noun or

adjective' (Roach, 1983: 84): 'abstract' 'æbstrækt (Adj.), æbs´trækt (Verb); 'conduct' 'kɔndʌkt (Noun), kən´dʌkt (Verb); 'contract' ´kɒntrækt (Noun), kən´trækt (Verb); 'desert' 'dezət (Noun), dɪ´z'ɜ:t (Verb); etc.

Sometimes variation in word stress in English are associated with the morphological structure of words (i.e. the way words are constituted from their stems, prefixes, and suffixes). As stress shifts form the first syllable to the second, the third, or the fourth syllable in longer words, words change their grammatical forms (Kelly, 2000). This can be illustrated with the shift of primary accent marked as in de̲mocrat, de̲mocracy, democra̲tic that has different grammatical forms as stress shifts.

Word stress also sometimes helps to distinguish certain compound words from related noun phrases (adj + n, n + n) and verb-plus-adverbial collections, as in English words of 'black bird' (compound) and 'black bird' (noun phrase) in which different meaning is conveyed each time referring to color or name of a bird respectively.

In addition to word stress, English has sentence stress in which syllable (or word) of a particular sentence is most strongly stressed (or accented). As Roach indicates, *we can detect different levels of stress in words of several syllables. ... [in] the four-syllable English word 'understanding': the strongest stress should be heard on the third syllable, but the second and fourth syllables are much weaker than the first syllable* (Roach, 2001: 32). Nevertheless, in the phrase 'understanding English', there is no longer a noticeable pitch on 'understanding' but shifts to the first syllable of 'English'. "The 'stand' syllable is still quite prominent, but it is not accented" (ibid.: 33).

Not all words in an English utterance receive equal prominence (Gimson, 1975; O'Conner, 1980). Words that are generally accented in word groups of an utterance are those that are more important than others in conveying meaning (ibid). The most important words, from the point of view of meaning, are usually the nouns, main verbs, adjectives,

adverbs, demonstrative and interrogative pronouns, and the words yes and no. In other words, 'content or lexical words' receive the accent in contrast with 'grammatical words' such as personal pronouns, prepositions, auxiliary verbs, articles, and conjunctions (O'Conner, 1980). By way of illustration, in sentences, for example, '*I've found my book; I could not see the house'; 'Have you heard the latest news?'; 'Yes, he wil'l;' No, thanks'*. In the examples above, content words, or the syllables in them received accent or stress, which is marked with underlining them. This pattern of English is often associated with the accentual or rhythmic feature of connected speech simply because it is mainly governed by the principles of rhythm in the language (O'Conner, 1980). This will therefore be raised once again in the next section that deals with rhythm.

Amharic stress

Most linguists agree that Amharic has lexical stress though it varies on stress assignment rules. Alemayehu (1995) states that linguists most often use syllable weight to determine stress assignment in a language. In his analysis to see the types of syllables in Amharic and to evaluate whether stress assignment is determined by syllable weight or not, Alemayehu (Ibid.) distinguishes between two types of syllables: light and heavy. "Open syllables with short vowels (i.e. CV) are considered as light and closed syllables or open syllables with long vowels (i.e. CVC or CVV respectively) are considered heavy" (p. 15). According to Alemayehu (1995), unlike many languages such as English, syllable weight is irrelevant in Amharic for stress assignment.

Amharic stress assignment marks the penultimate syllable of the stem of a lexical unit as the basis of stress. Although he disagrees with Alemayehu (1995) on the role of light and heavy syllable weight in the assignment of Amharic stress, Mullen (1986) identifies the following as a regular system of Amharic word stress.

- Stress falls on a heavy final syllable only in bi -syllabic words when the first syllable is light; *Eg. wàd´aaj 'friend'; sà-b´att 'seven'; fà-k´aád 'permission'*
- Otherwise, the final syllable is skipped and the right most heavy syllable is stressed.
  Eg. tà-máa-ri 'student'; m´àn-gàd 'street'; nà-gà-dà

In addition, according to Alemayehu (1995: 23), *stress may be assigned to all the seven vowels in Amharic /i, e, ɨ, a, à, u, o, and e / if they occur in a stressed position without paying heed to the quality of the following (or the competing) vowel or to the syllable structure it is found in.* This claim is illustrated by the following examples (ibid). We can notice from this discussion that both peripheral and central vowels in Amharic may receive lexical stress; /sàmuna/ 'soap', /ràkàbot/ 'a small table for putting on coffee cups'; /akimbalo/ 'a cover of the ethiopian pan'; /lominat/ 'a kind of soft drink'; /ɨnk´ut´at´aŠ/ 'new year; /tɨmk´àt/ 'baptism'; /angàbgàbi/ 'burning issue'; /tɨnɨkkare/ 'strength'; /dik´ala/.

Contrast between English and Amharic stress

Stress-accent Vs. Pitch-accent

According to the description of some Amharic prosodic features by Alemayehu (1987), it can be said that Amharic is similar with English in having word stress. However, it seems that Amharic stress pattern is characteristically different from that of English in some respects. For example, Amharic always assigns lexical stress on the penultimate syllable (i.e. the syllable before last) of the word (ibid), while in English stress can fall on the first, middle or last syllables of words (Roach, 2001, Kelly, 2000). In languages such as Amharic where the stress usually falls in the same position in a word, *we cannot say that stress is able to determine the meaning of a word* (Roach, 2001:32). In English,

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however, stress affects the meaning of a word depending on the position of the stress.

Besides, unlike that of English, Amharic lacks any sort of stress rules which distinguish between compound words from phrases (Alemayehu, 1987). By illustration, English distinguishes between 'black bird' /'blækbɜːd/ (compound) and 'black bird' /'blæk 'bɜːd/ (noun phrase) because of their stress, while Amharic doesn't have such patterns in words of the same formation as in between /bằklʷo bʸet/; its English equivalent would rather been pronounced as either 'mule house' with stress on both words to refer to 'house of a mule' while 'mule house' with the first word receiving stress to refer to a name of a village in Addis Ababa.

English word stress is not only variable but also mobile. Having become familiar with the pronunciation of one form of a word, Amharic learners will assume that the stress stays on the same syllable in other forms of the word. It cannot be denied that the learning of word stress in English present a number of difficulties to Amharic native learners because in their native language, Amharic, the incidence of word stress is fixed as words are generally stressed on the penultimate syllable. Word stress is free in English that some words in English are stressed on the first syllable, some on the second syllable, others on the third syllable, and so on. Due to this, learners may unconsciously assume that English has a similar regularity. If Amharic native learners follow the stress pattern of Amharic on to English, we can predict that the following polysyllabic English words would be pronounced all with their primary stress on the penultimate syllable.

/'te-ri-tə-ri/	→	[te-ri-'tə-ri]	/i-lek-'tri-sə-ti/	→	[i-lek-tri-'sə-ti]
'territori'			'electricity'		
/'re-kəg-naiz/	→	[re-'kəg-naiz]	/paː-'ti-sə-peit/	→	[paː-ti-'sa-peit]
'recognize'			'participate'		

Word stress in English sometimes contributes to the word function in the sense that it tends to determine, among other things, whether a

particular word is a noun/adjective or verb (i.e. noun and adjective are stressed on the first syllable and verb is stressed on the second syllable). Because in Amharic, word stress does not underlie grammatical relationship between words, learners may confuse a good many noun/adjective-verb oppositions in their English pronunciation as in the following pairs of words. Assuming the stress assignment of Amharic for two syllable words (i.e. Stress falls on a heavy final syllable in bi-syllabic words (Mullen, 1986), it sounds possible to predict that Amharic learners may always stress the final syllable of such pairs of words no matter the grammatical structure of the words.

Word	Noun/ adjective	Verb	Amharic native's realization
absent	/ˈæbsənt/	/əbˈsent/	/əbˈsent/
contract	/ˈkɒntrækt/	/kənˈtrækt/	/kənˈtrækt/
export	/ˈekspɔːt/	/ɪkˈspɔːt/	/ɪkˈspɔːt/
Object	/ˈɒbʤlkt/	/əbˈʤekt/	/əbˈʤekt/
Record	/ˈrekɔːd/	/rɪˈkɔːd/	/rɪˈkɔːd/

Word stress in English sometimes helps distinguish certain compound words from related noun phrases (adj + n, n + n) and verb plus adverbial collocations. Obviously, Amharic native learners of English would find it difficult to comprehend and use in their English pronunciation such functions of English word stress simply due to lack of such stress function in their mother tongue Amharic. For each such compound word of English below, Amharic native learners may realize it as always putting the stress on each word and therefore compound words will be confused with noun phrases.

Compound	Noun phrase
'blackbird	'black 'bird
'crossword	'cross 'word
'dropout	'drop 'out
'greenfly	'green 'fly
'walkout	'walk 'out

Another important distinction between English and Amharic lies on the factors that cause a syllable to be made or heard as stressed. In other words, Amharic and English seem to differ in terms of how word stress is realized in creating characteristic stress patterns of each language. In English, for example, stressed syllables are marked primarily by making vowels longer and louder plus pitch (O'Connor, 1980; Roach, 2001); while in Amharic syllable stress involves simply saying vowels at a higher pitch (Alemayehu, 1987). Corresponding to such difference in stress realization like between Amharic and English above is often referred to as the distinction between stress-accent and pitch-accent languages (Gimson, 1980; Roach, 2001).

According to English phoneticians, the notion of stress accent of English seems quite relevant to the existence of reduced or unstressed vowel called "schwa". The occurrence of schwa is considered as a natural phenomenon in that if significantly strong accent is placed on a particular single vowel or syllable in a word, other vowels or syllables in the same word become less significant and their reduction process is facilitated (O'Connor, 1980). In addition, it can be said that this way of making stress greatly contributes to creating a stress-timed rhythmic pattern of English (Dalton and Seidlhofer, 1994).

In contrast to English stress patterns, Amharic use of pitch in marking stress (Alemayehu, 1987) without any reduction of unstressed syllables can explain the syllable-timed rhythmic pattern of Amharic; using slightly higher pitch to mark stress does not make a particular vowel or syllable in a word prominent in quality as compared to other vowels or syllables uttered at a slightly lower pitch (Roach, 2001). However, a stressed syllable in English is heard more prominently than unstressed neighbour due to length and loudness of the vowel in it (ibid: 33). Thus, it can be said that the amount of time to say a sentence in Amharic is not restricted to the number of stressed vowels or syllables as in English, but to the number of syllables available.

To illustrate, in an English sentence: *You have to be so early if you want to find a parking*, content words such as 'you', 'have', 'be', 'so', 'early', 'want', 'find' and 'parking' will receive stress and therefore the syllables of all of these words will be heard relatively longer, louder, and with a higher pitch (Roach, 1991). In contrast, the neighboring unstressed syllables of functional words such as 'to', 'if', and 'a' will undergo a reduction process when the vowel quality is modified and the length reduced resulting in the sound 'schwa' /ə/. On the other hand, Amharic native learners may exhibit stress on almost all worlds in the sentence in such a way that each of the syllables would be produced clearly or loudly taking adequate and equal time in their articulation. In other words, all words in a sentence seem to receive stress.

Rhythm: Stress timed vs. syllable timed

According to Roach (2001), the term 'stress-timed/syllable-timed' is used to characterize the pronunciation of languages that display a particular type of rhythm. In stress-timed languages, there is a tendency that stressed syllables recur at regular intervals, regardless of the number of unstressed syllable that intervene in a sentence. In other words, the amount of time it takes to say a sentence in stress-timed language depends on the number of syllables that receive stress, either minor or major, not on the total number of syllables (Gimson, 1980).

On the other hand, it is widely believed that everything which is not stress-timed is syllable-timed (Roach, 2001:86; Gimson, 1980:41). In syllable-timed languages, the syllables are said to occur at regular intervals of time, and the amount of time it takes to say a sentence depends on the number of syllables in the sentence, not on the number of stressed syllables as in stress-timed languages. According to Roach (2001) and Gimson (1980), English is categorized as stress- timed language. For example, it would take approximately the same amount

of time to say the following two English sentences, even though the number of syllables in each sentence differs (ibid).

Birds / eat / worms.

The birds/ will have eaten / the worms.

According to stress-timedness, the intervals between stressed syllables in speech are either equal or at least more equal than the intervals between the nucleus of each successive syllable and the next (O'Conner, 1980). In Amharic, however, each of the equivalent sentences of the English examples above would take different amount of time to complete each of the sentences. The duration of the recordings of each as spoken at normal speed by the writer was measured; the first one took 1.56 sec. while the second one took 2.55 sec. amount of time.

/wƎ/fʷotʃ/t ɨ/la/tɨl/yɨ/bƎ/la/lu/ 9 syllables

/wƎ/fʷo/tʃu/tɨ/la/tɨ/lʷo/tʃun/yɨ/bƎ/lwa/tʃƎ/wal/ 14 syllables

These examples show that the amount of time to say a sentence in Amharic differs depending on how many syllables the sentence has, not how many stressed syllables it contains as in the English examples. As is apparent from the examples above, it seems that Amharic has syllable-timed rhythm, though no one has ever claimed to which rhythm category Amharic lies.

Intonation

Phoneticians describe intonation as the melody of speech, which is to be analysed in terms of variations in pitch our voice makes when speaking (Roach, 2001, 2001:33). It is also looked at as an aspect of language that we are usually only aware of in our NL at a subconscious level. Intonation is used in different ways in different languages (Roach,

2001). Although certain aspects of intonation may be common to many languages, some of the ways in which intonation is used may be specific to particular ones (Ibid).

According to Alemayehu (1987), Amharic and English have some characteristics in common such as final rising intonation pattern as used in Yes-No questions, or final falling as used in information questions, (i.e. WH Questions), statements and imperatives. The difference may be on the degree of pitch changes utilized in creating rising and falling intonation contours and its accentual and attitudinal functions. For example, Amharic seems to use less pitch variation than English in that Amharic mostly employs either high or low tone where low tone is the most common one (Alemayehu, 1987); while in English, rising, falling and a combination between the two significantly change the meaning to be conveyed (Roach, 2001).

English has different pitch functions in uttering a sentence. Naming it after 'accentual function of intonation' in English, which is absent in Amharic, Gimson (1980:264) explains pitch changes occur in conjunction with the major sentence stress (which is usually placed on a stressed syllable in the final content word of an utterance) to convey special meaning of sentences. This pattern is also referred to as marked or contrastive stress.

As Gimson (ibid) describes, *intonation changes are the most efficient means of rendering prominence for a listener those parts of an utterance on which the speaker wishes to concentrate attention.* In this regard, the word carrying the most important meaning, receives primary accent (stress) and pitch changes (nuclear placement) as a cue for signalling prominence. Such accentual function of intonation seems to be lacking in Amharic which uses pitch changes mainly for grammatical functions as a means for distinguishing different types of sentences (e.g. the same sequence of words may, with a falling intonation be interpreted as a statement or, with a rising intonation as a question).

Perhaps, another important way to look at the difference between English and Amharic is to look at the involvement of intonation in both languages in the discourse structure of speech and the psychological state of the speaker. According to Kelly (2000), the link between intonation and the surrounding discourse (i.e. the wider context of a conversation) is very significant in English. Falling tones (which are known as 'proclaiming tone') indicates what is new information between the speaker and the listener, while rising or fall-rise tones (known as 'referring tone') indicates what is shared (ibid: 101). Meanwhile, the function of intonation in English to indicate the emotion and attitude of the speaker is considerably significant in English (Roach, 2001). A single sentence "I think it is time to go now" can be said in 'a happy way, a sad way, an angry way, and so on depending on the pitch employed' (ibid: 35). Amharic does not exhibit such function of English intonation as an essential component of discourse or attitude. An equivalent interpretation of the sentence above is normally said in a falling tone in all circumstances, with no significant clue to the speaker's attitude or emotion towards a situation.

English intonation assumes speakers to segment their speech into syntactic groups as 'you have to be/so early/ if you want /to find/ a parking place' (O'Connor, 1980). A speech of this sentence in English shows a falling pitch shape at the end of each unit or segment while the direction of its pitch changes downward somewhere at the words of 'be', 'early', 'want', 'find', and 'place' which receives stress. This pattern of segmenting or dividing an utterance or longer string of speech is common in English and is known to facilitate listeners' ease of processing and interpreting information (O'Connor, 1980). Those words under the same group or segment are called tone groups or information units.

As Roach (2001:35) puts it, *communicative interaction would be much more difficult without appropriate utilization of intonation.* The fact that Amharic lacks accentual function of intonation, as discussed in the previous section, suggests that Amharic native speakers may fail to

convey special prominence using intonation or to comprehend what is specially conveyed to them. For example, a single sentence *she won't go out with anyone* can convey two different meanings depending on whether it employs a falling or a falling-rising pitch movement: falling pitch movement on 'any' means that 'she will go out with nobody'; while falling-rising pitch movement on 'any' means 'she is careful about whom she goes out with' (Roach, 2001).

Similarly, as a part of its utilization of wider range of pitch contour, English uses shift of nuclear placement position, which is absent in Amharic, as an important clue for special prominence. It may, therefore, be difficult for the Amharic native learner to comprehend special distinction or emphasis attributed to one of the content words receiving pitch prominence among the neighbouring words. In the case of a sentence "I have plans to leave", for example, by shifting nuclear placement, speakers convey different meanings to the listener.

Furthermore, it should be noted that since pitch changes in English can convey not only the meaning of sentences but also the speaker's attitude towards a topic of conversation, narrower use of pitch ranges by Amharic native students in their speech might be (miss) interpreted by native English speakers as a sign of boredom or lack of interest. For example, a simple English sentence "That would be nice" (in response to an invitation, let's say) would normally be said in a falling tone by Amharic native speakers transferring the NL intonation habit. This might be (miss) interpreted as if the speaker is not happy with the invitation. Conversely, while the same sentence is said by the native speaker it may be difficult for the Amharic native to distinguish the speaker's attitude or emotion conveyed through the change of intonation employed towards any of such attitude or emotion of the speaker as 'enormous enthusiasm, mild pleasure, surprise, relief, sarcasm, and boredom amongst other possibilities' (Kelly, 2000:95). In other words, this aspect of intonation, apart from the variety of accentual functions it serves in English, is what the researcher is often worried about during his conversation with the natives. It is not difficult

to imagine how many difficulties and misunderstandings in reality arise during actual productions and interaction between Amharic native learners and native speakers.

Conclusion

This study delved into the contrastive analysis of segmental and supra-segmental features of Amharic and English phonology and it aimed at predicting problem areas of English pronunciation for Amharic native learners.

Pronunciation difficulties for Amharic learners of English may arise when:

- the learners encounter sounds in English that are not part of the sound inventory of Amharic;
- the rules of combining sounds into words in Amharic are different from those in English (i.e., different syllable types); and,
- the characteristic patterns of stress and intonation in English, which determine the overall rhythm or melody of the language, are different from those in Amharic (i.e., pitch accent vs. stress accent and syllable-timed vs. stress-timed).

According to Brown (1987), transfer errors or problems of phonology that SL/FL learners encounter can be categorized under different levels or types as phonemic, phonetic, allophonic and distributional depending on the degree of contrast or similarity between the native language of the students and the target language. Among these, those problem areas which are totally lacking in the native language of the learners are assumed to be of the highest priority so far as their role in communication are concerned (Ibid). As it is frequently emphasized, those features of pronunciation which are not available in the learners' native language will exert far greater difficulty (Jenkins, 2000). On the

other hand, those problem areas resulting from different phonetic or allophonic realization are taken as L_2 accent features without necessarily affecting communication (Jenkins, 2000). Accordingly, the following phonemic and prosodic areas of predicted problems can be considered as focal area of teaching and learning of English pronunciation for Amharic native learners.

1. Interdental fricative consonants /θ/ and /ð/.
2. Low front vowel /æ/
3. Low back vowel /ɒ/
4. Low central vowel /ʌ/
5. Long/short distinctions of vowels
6. All English long vowels and diphthongs
7. Reduction of vowels in to schwa
8. Accentual functions of stress
9. Stress – timed rhythm of intonation
10. Attitudinal function of intonation
11. Initial consonant cluster
12. Three and four final consonant clusters.

Implications

It should be noted, however, that identifying specific pronunciation difficulties for Amharic learners of English does not necessarily lead to the dramatic improvement of their pronunciation, but rather that such knowledge can only constitute a prerequisite for teachers in creating actual teaching activities. In other words, whether pronunciation teaching can become effective or not largely depends on how teachers can utilize such knowledge in designing the teaching materials or activities that help students become aware of the differences between English and Amharic sound systems and improve their pronunciation by themselves (Kelly, 2000). The text books used for the teaching of English pronunciation in Ethiopia are mostly generic and phonological issues specific to particular language groups of Ethiopian EFL learners should no longer remain unattended. Among other things, supplementary materials that assume particular language groups of Ethiopian learners could be prepared. This study only dealt with contrasting English and Amharic, and through it predicted possible difficulty areas. Future research should consider other forms of problems in written language such as spelling errors committed by learners. Interlanguage studies of learners' pronunciation varieties in actual perceptions, productions, and communication across contexts need to be investigated further.

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