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The Pronunciation of <-ED> in Coda Clusters in Somali-Accented English

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Clements and Keyser (1985, p. 28) note that the most prevalent syllabic structure found in world languages is the CV pattern, that is, a single Consonant followed by a single Vowel. English far exceeds this minimal requirement by allowing up to four consonants in the coda. This heavy coda structure clashes with the simple Somali CV (C) syllable structure. This paper investigates aspects of the pronunciation difficulties experienced by Somali speakers when the past tense suffix /d/ is added to English verbs whose roots end in CVC. The heavy coda cluster that results from such an affixation leads to frequent instances of phonological interference. Phonological and acoustic data are presented to account for why Somali speakers have a hard time with verbs whose codas ends with /p/, /t/, and /k/.

INTRODUCTION

The goal of this paper is to try and provide answers to the following questions:

> When people learn that I know something about the Somali language, the two most frequently asked questions are, 'Why do they add an [i] to the end of their words?' and 'Why do they pronounce all past tense verbs with [tɪd]'? (Lindsey 2006, p. 62)

I have been asked the same questions more times than I could count. I have also heard Somali speakers of various proficiency levels make the same mistakes in my college classrooms, on television, and in the streets. Being an African and also being a professor of linguistics, people naturally expect me to know the answer to these questions and to provide a remedy for these pronunciation woes. The relentlessness of the questions and the pervasiveness of the errors have finally convinced me "to do something about it." So, I have added aspects of Somali-accented English phonology to my research agenda. This paper is the first installment of a number of papers that seek to account for Somali English. The present investigation focuses almost exclusively on the pronunciation of the suffix <-ed>[1] when it is attached to verbs whose codas consist of only one consonant.

GENERAL BACKGROUND ON THE SOMALI LANGUAGE

Linguists classify Somali as an Afro-Asiatic language. They further sub-classify it as a Cushitic language. The Cushitic family is divided into three main families:[2] North Cushitic, Central Cushitic, and East Cushitic. Somali, along with Afar and Oromo, belongs to the East Cushitic branch. It is generally agreed that there are three major dialects of Somali:[3] the northern dialect, the southern/coastal dialect, and the central dialect. The former is also referred to as Common Somali or Standard Somali. The coastal dialect is known as Benadir, and the central dialect is called "Maay-maay." It is next to impossible to find out the exact number of Somaliphones in the world. Abdullahi (2000, pp. 20-21) cautiously gives the following figures: 9,500,000 speakers in Somalia proper, 3,500000 speakers in eastern Ethiopia, 500,000 in northern Kenya, and 250,000 in Djibouti. Almost 20 years ago, there were approximately 14 million Somaliphones in the Horn of Africa. However, because of the civil war that has been raging since the 1980s, there are thousands of Somalis in many parts of the world. By the 1990s, more than 16,000 Somalis lived in the Twin Cities of Minneapolis and Saint-Paul (Abdullahi 2000, p. 22). Current estimates of Somalis in Minnesota vary from 60,000 to 80,000.[4] Admittedly, there are more Somalis in south-central Minnesota than anywhere else in the world except in the Horn of Africa.

Overview of Somali Consonant Inventory

I will dispense with a balanced treatment of the phonological systems of English and Somali. I favor Somali in this overview because I assume that basic facts about English phonology are known to the reader. However, this is not so for Somali. Consequently, much of the focus in this section will be on elementary aspects of Somali phonology. The bulk of the information comes from Saeed (1999, pp. 7-51).[5]

At first glance, the Somali consonant chart is similar to that of English in many respects. Both languages share a great number of stops, namely /t, k, ʔ, b, d, g/. However, one English consonant that is conspicuously missing in Somali is /p/. More will be said about this sound shortly. Somali has other stops that English lacks, specifically /ɖ, ɢ/. In the fricatives column, the two languages share four consonants /f, s, ʃ, h/. The notable English fricatives that are absent in Somali are /v, θ, ð, ʒ/. The Somali fricatives / χ, ħ, ʕ/ do not exist in English. English has two affricates /tʃ/ and /dʒ/ but Somali only has the voiceless affricate /tʃ/. The English nasal /ŋ/ is also absent from the Somali inventory. The two languages have the liquids /l, r/. However, the two sounds have different places and manners of articulation in the two languages. The Somali /l/ is a retroflex according to Saeed, whereas /l/ is an alveolar in English. Similarly, /r/ is an alveolar trill in Somali whereas it is an alveopalatal approximant in English.

Table 1. Somali Consonant Chart

	Bilabial	labiodental	Alveolar	Palatoalveolar	Retroflex	Velar	Uvular	Pharyngeal	Glottal
Stops Voiceless			t			k			ʔ
Stops Voiced	b		d		ɖ	g	ɢ		
Fricatives Voiceless		f	s	ʃ			χ	ħ	h
Fricatives Voiced								ʕ	
Affricates Voiceless				ʧ					
Nasals	m		n						
Trill			r						
Lateral					l				
Glides	w			j					

Just by looking at the similarities and the differences, proponents of the Contrastive Analysis Hypothesis and the Markedness Theory would predict that there would be a significant amount of negative phonetic transfer. This prediction is actually born out when one listens to Somali English. The case of [p] readily stands out and has been analyzed acoustically by Conway (2008). A contrastive analysis would also make the wrong prediction that since [t] is a voiceless alveolar stop in both languages, it would be positively transferred from Somali to English. Nothing could be further from the truth. Our study will show that Somalis have a hard time pronouncing [t] when it occurs in the coda.

Overview of Somali Vowel Inventory

Somali vowels form a perfect symmetry along two criteria. For the front vs. back series, Saeed (1999, p. 11) lists five vowels for each category. These 10 vowels are split equally between [+ATR] and [-ATR] (Advanced Tongue Root). Table 2 summarizes the salient features of the vocalic system of the language.

Table 2. Somali Vowel Chart

Height	Front	Back	[+ATR]	[-ATR]
High	[i, ɪ]	[u,ʊ]	[i, u]	[ɪ, ʊ]
Mid	[e, ɛ]	[o,ɔ]	[e, o]	[ɛ, ɔ]
Low	[æ]	[ɑ]	[ɑ]	[æ]

Classifying vowels in any language is a challenge. The same is true for Somali. The exact number of Somali vowels and their classifications is disputed.[6]

Numerous sociolinguistic studies have made note of the fact that vowels are the primary carriers of accents. However, since the pronunciation of vowels is outside of the scope of our inquiry, nothing more will be said about them except to report the following impressionistic findings:

> Somali and English share a number of the same vowel phonemes and diphthongs. Because of this, problems with pronunciation will not likely come because a student can't produce the vowel in question (Lindsey 2006, p. 47).

Conway (2008, p. 29) concurs with this assessment by stating the following:

> English vowels should not be problematic for Somali ELLs in the way consonants are. The Somali front and back vowel series are more marked than English vowels. The one aspect that might cause an issue for a Somali speaker is learning the English pattern of lengthening a vowel before a voiced final stop or fricative.

Preliminary Observations about Somali Voiceless Stops

There are many phonotactic constraints concerning the distribution of Somali consonants and vowels that are worth investigating. However, the consonants [p, t, k] receive the lion's share of attention in this paper because they cause the most trouble to Somali speakers, especially when they occur in English syllable codas. In fact, it does not take long for a casual listener of Somali-accented English to realize that many speakers have difficulties with these voiceless stops.

The difficulty that Somalis have with the sound [p] comes as a surprise to many speakers of North American English. First, the sound [p] occurs frequently. Whitney (2004) lists it as the 15th most frequent sound in English. Secondly, from the point of view of articulatory phonetics, it does not take much effort to close the lower and upper lips and blurt out a <p>. Thirdly, [p] occurs in 89 percent of the languages of the world. So, to untrained ears the difficulty that

Somalis have with [p] is baffling. However, Somali is not alone among African languages in its lack of [p]. In fact, Clements and Rialland (2005, p. 26) report that [p] is missing from the phonemic inventory of 63.2 percent of North and East African languages. The pronunciation of [p] is particularly troublesome when it occurs at the beginning of English words. So, a word such as <pop> [pʰɑ̄p̄] may sound like [b̥ɑb̥] in the ears of a native speaker of American English while a Somali speaker thinks that he/she is saying [pʰɑ̄p̄]. Conway (2008, p. 58) did a Voice Onset Time (VOT) analysis of Somalis' pronunciation of initial [p] and found that both beginners and intermediate ELL students voice [p]. A reproduction from her thesis (p. 56) provides us with the following VOT scores for [p] and [b] in word-initial, medial, and final positions:

Table 3. The VOT of [p] and [b] in Somali (from Conway, 2008)

N0	Segments	Initial	Medial	Final
1.	[p]	34 / 71 ms[7]	50 /60 ms	72 /60 ms
2.	[b]	33 / 66 ms	54 /42 ms	65 /60 ms

VOT (Voice Onset Timing) analysis is a method used by phoneticians to determine if a particular sound is voiced or voiceless. Voiced sounds are produced when the vocal cords come closer together and the air molecules that pass through the glottis causes them to vibrate. For voiceless sounds, the vocal cords are further apart, and so the air molecules pass through freely without causing any vibration. VOT is the time lag between when the vocal cords start vibrating and the release of any stop consonant. It is calculated in milliseconds. This method allows linguists to determine if a stop consonant is voiced or voiceless. For voiced stops, the time gap between the vibration of the vocal cords and the release of the stop is less than 20 ms. Ladefoged (2006, pp. 146-7) shows that in some languages, for voiced consonants, vocal cords start vibrating much earlier, resulting into a negative VOT, as is the case of Sindhi where the VOT for [d] is -130 ms. For voiceless consonants, the VOT is longer because the vocal cords don't start vibrating until the articulation of the next voiced segment. Baart (2010, p. 91) suggests that when the VOT is around 30 ms or longer, we begin to see the formation of aspiration. If, however, the VOT is around 20 ms, Ladefoged opines that the consonant is most likely an unaspirated stop. Furthermore, Ladefoged (2001, p. 128) notes that a typical aspirated English [p] lasts about 60 ms whereas [b] lasts between 10-15 ms. Table 3 shows that there is not a substantial difference between word-initial [p] and [b] in Somali-accented English as far as VOT is concerned.

As it turns out, Americans' perception of Somali's pronunciation of [p] as [b] is born out acoustically. A Somali [p] does not sound like a [p] to an American ear. Studies reported by

Ferrand (2007, p. 267) indicate that Americans' perception of [p] and [b] is categorical. A sound is perceived as a [p] in a word initial position if its VOT is between 40 to 60 ms. Presumably, even six-month old children born to parents who are native speakers of American English can categorically distinguish [p] from [b] on the basis of VOT values. So, even though Somalis think that they are saying [p], the sound that they are producing is perceived by speakers of American English to be [b]. Saeed (1999, p. 8) helps us understand why. In Somali, /b/ is automatically devoiced to [b̥] when it occurs word-initially. Since Somali does not have the /p/ phoneme, speakers tend to use [b̥] to replace the English [p]. However, to a speaker of American English [b̥] is closer to [b] than it is to [p] because it falls short of the 40 ms threshold. Another aspect of the Somali VOTs in Table 3 needs comments. The segments [p] and [b] are acoustically perceived as different because there is a difference of at least 40 ms between the two. However, when we compare the VOTs of these two segments across levels of proficiency, in all cases, the difference is less than 15 ms. This means that, VOT does not correlate with proficiency. In other words, the speech of a Somali who was born outside of the USA or emigrated after puberty will be accented when it comes to producing [p] and [b], irrespective of the environments in which these two segments are found. This assessment is true even for my Somali students who are doing their master degrees in linguistics.

The next troublesome sound is [t]. It is the second most frequent sound English after [ɪ]. According to Whitley (2004) [t] occurs in 97.5 percent of world languages. It exists both in English and in Somali. However, its distribution is severely limited in Somali; it cannot occur in a syllable-final position. Right away one can anticipate the pronunciation difficulties that Somali speakers face when producing the English [t] in syllable codas. These challenges become most obvious when the suffix <-ed> is attached to a voiceless consonant and it is pronounced as [t].

The third most difficult voiceless stop that Somalis are confronted with when speaking English is [k]. It ranks 9th in frequency in English. Worldwide, it is found in 96.5 percent of languages. However, like [t], [k] does not occur in the coda of Somali syllables. This is what Saeed (1999, p. 9) has to say about its distribution:

> [k] is a voiceless velar plosive, orthographically *k*. As with the *t/d* pair, it has a more restricted distribution than the corresponding voiced plosive *g*, occurring only at the beginning of syllables. It is always pronounced fortis and with aspiration, and does not weaken intervocalically, e.g. [k^{h}] in *kàalay* V `come!', *túke* N `crow'.

As will be seen right below, these distributional constraints underscore the pronunciation challenges that Somalis face when they attempt to pronounce the past tense suffix <-ed> at the end of words. We have limited our inquiry to verb roots with a single coda so as not to muddy the situation even further. Though our study is limited in this regard, the conclusions apply to verbal roots with two or three coda clusters.

Overview of Somali Syllable Structure

Since Kahn's (1980) ground-breaking work on English syllables, it has become customary to diagram syllables as follows:

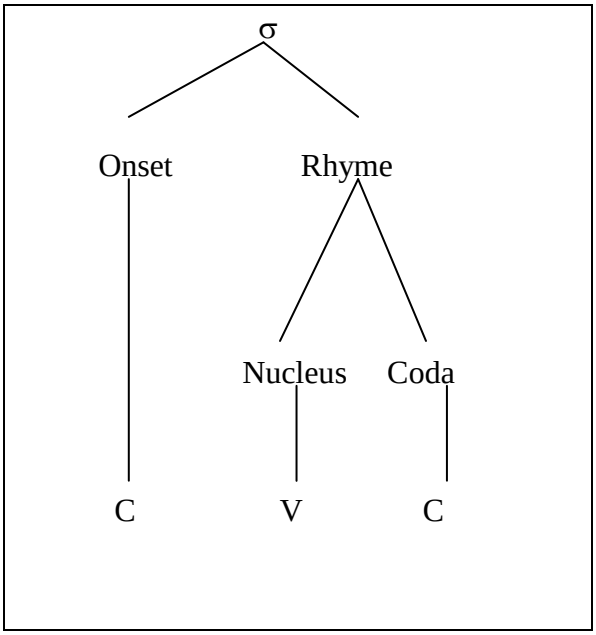

Figure 1. Syllable diagram

Somali has open syllables, that is, syllables that end in a vowel; and closed syllables, those that end with a consonant. Somali has two types of open syllables: CV and CVV syllables. Nothing further will be said about open syllables because they are not of interest to us in the present study. As for closed syllables, there is only one type in Somali, namely CVC. According to Clements and Keyser (1983, p. 28) all languages have the syllable type CV. However, not all languages have syllables that end in a coda. Somali happens to be one of the few African languages that have a CVC syllable structure. When a language has a coda, the resulting syllable can be either heavy or light, (Gordon nd., pp. 2, 5, 27). As for Somali, Orwin (1996, pp. 54, 63) is unsure whether the coda makes the syllable heavy or not. Information gleaned from Saeed (1999, pp. 7-23) seems to suggest that only the following consonants [b], [f], [d], [ɖ], [g], [s], [l], [r], [n], [χ] and [h] can occur in the coda. In addition to [t] and [k], the sounds [m] and [tʃ] are not allowed in the coda. Another very important phonotactic constraint that has consequences for the pronunciation of the suffix <-ed> is that Somali does not allow two consonants in the coda.

The Past Tense Suffix <-ed> and Its Allomorphs

With the background information about the Somali language is in place, let's focus on the suffix <-ed> and its various pronunciations in English. Most phonologists assume that the underlying

phonemic form of the past tense suffix is /d/. Thus, it is customary to state three morphophonological rules for the correct pronunciation of <-ed>. The three allomorphs are [d], [t] and [ɪd] [8] respectively.

The rule for the pronunciation of the inflectional suffix <-ed> is stated as follows:

/d/ → [t] / [+cons, -voice,] ———

The rule stipulates that /d/ is pronounced as [t] when it occurs after a voiceless consonant. Thus, if a verb root ends with the consonants [p, f, k, s, ʃ, tʃ], and if the suffix /d/ is added to it, the coda of the past tense verbal stem will be pronounced as follows:

Table 5. Voiceless Consonants + /d/

English CVC + /d/			**Illustrations**
[p]	+ /d →	[pt]	<help> → <helped>
[f]		[ft]	<surf> → <surfed>
[k]		[kt]	<book> → <booked>
[s]		[st]	<kiss> → <kissed>
[ʃ]		[ʃt]	<fish> → <fished>
[tʃ]		[tʃt]	<reach> → <reached>

The second rule for pronouncing the past tense is stated as follows:

Ø → [ə] / [+cons, +alveolar, -nasal, +stop] ———

This rule states simply that if a verb root ends with the consonants [t] and [d] and the past tense suffix <-ed> is added, the resulting form will be pronounced either as [tɪd] or [dɪd].

Table 6. Alveolar Stop + /d/

English CVC + /d/		Illustrations
[t]	+ /d → [tɪd]	<treat> → <treated>
[d]	+ /d → [dɪd]	<dread> → <dreaded>

The last rule is usually stated as an elsewhere rule, meaning that if the last consonant is neither of the above, then the past tense suffix <-ed> is pronounced /d/ when the verb ends with voiced consonants, namely, [b, v, g, z, ʒ, ʤ, m, n, l]. (For the purpose of this rule, the semi-vowels /j/ and /w/ behave like consonants when the suffix /d/ is added to verbal roots.) In such cases, the resulting pronunciation rule is as follows:

/d/ → [d] / [+cons, +voice,] ———

Table 7. Voiced Consonants + /d/

English CVC + /d/		Illustrations
[b]	+/d → [bd]	<rob> → <robbed>
[v]	+/d → [vd]	<love> → <loved>
[g]	+/d → [gd]	<log> → <logged>
[z]	+/d → [zd]	<buzz> → <buzzed>
[ʤ]	+/d → [ʤd]	<judge> → <judged>
[m]	+/d → [md]	<comb> → <combed>
[n]	+/d → [nd]	<tan> → <tanned>
[l]	+/d → [ld]	<call> → <called>

Weight Sensitive Explanation of Somali Pronunciation

Lindsey's (2006, p. 62) work has validated my auditory perceptions of Somali pronunciations of <-ed>. She has extensive experience with Somali ELL pronunciation not only as a teacher at the Saint Cloud Technical College in Saint Cloud, Minnesota, but also as someone who has written an MA thesis on the subject. The following sample is gleaned from various examples given in her document:

Table 8. Illustration of Somali Pronunciation of <-ed>

N0	Words	English	Somali
1.	<jumped>	[ʤ͡ʌmpt]	[ʤ͡ʌmpɪd][9]
2.	<walked>	[wɑkt]	[wɑkɪd]
3.	<kissed>	[kɪst]	[kɪsɪd]
4.	<treated>	[tritɪd]	[tritɪd]
5.	<begged>	[bɛgd]	[bɛg]

Of the three allomorphs of <-ed> discussed, Somalis are successful in pronouncing only [tɪd] and [dɪd], as in the words <treated> and <dreaded>. When the inflectional past tense suffix is pronounced [d] or [t] after a consonant, Somali speakers often have trouble pronouncing it accurately. Attempts will be made in the next two sections to explain why.

Coda Cluster Simplification

The reason Somali speakers cannot produce sequences of Voiceless Consonants + <-ed> or Voiced Consonants + <-ed> has to do with syllable weight. The only attested heavy syllable in Somali is CVV, as in the word in *kàalay* (`come!'). Somali experts are unsure whether Somali CVC syllables should be classified as light or heavy. Even if later studies were to determine that the coda in CVC is heavy, this would not contradict the claim that heavy codas in English are problematic for speakers of Somali. In metrical and autosegmental phonology, a distinction is often made between heavy syllables and super-heavy syllables. The heaviness scale for codas is illustrated as follows: VCCCC > VCCC > VCC > VC (Goldsmith 1990, p. 115). According to Saeed (1999, p. 16) there is not a single word in Somali whose root ends with two consonants. A word such as <dhagxán> (stones) is syllabifified as <dhag•xán>. Consequently, English VCC

clusters such as those mentioned in Table 7 are too heavy for Somali ELL speakers who tend to systematically simplify them. Such simplifications rely heavily on two strategies: the deletion of one of the co-occurring consonants or the insertion of a vowel between the two consonants.

Coda Cluster Simplification by Epenthesis. Coda cluster simplification by epenthesis may occur elsewhere in Somali-accented English. However, it is used overwhelmingly when, after adding <-ed> to a verbal root, the resulting coda is pronounced [pt], [kt] or [st], as shown in Table 5. This is particularly true when the speaker is aware that a past tense suffix must be used for past actions or events. In such instances, the vowel [ɪ] is inserted to fulfill the morphophonological requirement of tense. A rule-interaction account for this process may be exemplified by the pronunciation of <jumped> as follows:

Table 9. Derivational Processes

Phonological Processes	English	Somali
1. Underlying Representation	/ʤʌ̠mp/	/ʤʌ̠mb/
2. /p/ Devoicing	NA	ʤʌ̠mb̥
3. Past Tense Affixation	ʤʌ̠mp+d	ʤʌ̠mb̥+d
4. Affix Devoicing Assimilation	ʤʌ̠mpt	NA
5. /ɪ/ Epenthesis	NA	ʤʌ̠mb̥ɪd
6. Phonetic Realization	[ʤʌ̠mpt]	[ʤʌ̠mb̥ɪd]

Such a process of rule interaction may account for why [ɪ] is inserted whenever the past tense suffix is to be realized as [pt], [kt] or [st] in the coda. Or one may ignore this explanation altogether as too speculative and claim that the Somali pronunciation is caused by a spelling-pronunciation interference. But Lindsey (2006, p. 58) refutes the latter explanation:

> Some may argue that in both of the above cases of error, students are merely reading what they see. For example, when Somalis encounter the word <kissed> they read it as they see it, thereby producing [kɪsɪd]. This may be a valid point; however, I believe that this is not the case for most Somali speakers. Many English speaking Somali are not literate in English or Somali, and yet they still make these errors. Many of the examples

> that I have cited in this section have not come from a reading study but rather from informal conversation with my Somali students. Thus, reading would not be a factor in these instances.

Coda Cluster Simplification by Deletion. Epenthesis is not the only pronunciation strategy that Somali speakers use to simplify two-consonant coda clusters. They frequently resort to deletion in order to avoid weighty codas. More often than not, this happens when the last consonant of a verbal root is voiced, as in Table 7. For instance, Lindsey (2006, p. 54) reports that her students pronounce <begged> as [bɛg] instead of [bɛgd]. This is particularly true of speakers who are not yet strongly aware of the importance of the suffice <-ed> as a marker of the past tense. Conway (2008, p. 65) reaches essentially the same conclusion:

> Final /d/ was difficult for both groups to voice [pronounce]. Not one of the beginners was able to voice final /d/. Intermediates also had more difficulty voicing word-final /d/ than those of the other two positions [word-initial and between two vowels]. This is a characteristic that occurred with /b/ as well. It could be that because Americans tend to aspirate word-initial phonemes; Somalis have picked up the emphasis on word-initial phonemes, but not the subtlety of the word-final position.

Cisse-Admuson (2009, pp. 68-9) who has experience teaching Somalis at the elementary level and also at the post-secondary level reports that the deletion of the past tense <-ed> is the subject of constant complaints by teachers:

> This is a common complaint of teachers of Somali ELLs, especially since grammatical information is often carried by suffixes. Somali ELLs often drop the past tense verb ending *–ed* as in *asked* and the plural *-s* as in *cars* because once the suffix is applied, a consonant cluster is formed in the rhyme of a syllable. In fact, consonant clusters in the rhymes of syllables never occur in Somali … Thus, for Somali learners of English, a language in which it is possible to have multiple consonant phonemes in a syllable's onset and rhyme, English syllables beginning and ending with multiple consonants can be especially difficult.

There is no consensus on the level of proficiency at which cluster simplification becomes less of an issue for Somali speakers. Lindsey (2006, p. 54) claims that "consonant cluster simplification by deletion strategies are used primarily by beginning students. As students progress to the intermediate level (where most of my students are), they tend to not simply delete their consonant clusters. This has been confirmed by other ELL teachers of Somali who rarely speak of consonant cluster deletion as a serious problem."

However, my observations of Somali-accented English show that speakers at various levels of proficiency engage in cluster simplification. Many Somali first year and sophomore students enroll in my courses and I hear some of them simplify their coda clusters. It may be that teachers pay less attention to consonant cluster simplification in the coda in face-to-face interactions because other grammatical features in the discourse environment provide enough redundancy. If a temporal adverb such as "yesterday" occurs in the utterance, the listener is sufficiently situated to ignore the lack of <-ed>. It should be noted right away that final cluster simplification has been attested in the speech of ELL speakers from a variety of linguistic backgrounds. It is also a prevalent feature in pidgins and creoles. Labov (1998, p. 381) advises teachers of AAVE speakers to pay attention to the end of words because codas tend to be simplified in their speech too. Wardhaugh (2007, p. 186) also notes that consonant cluster simplification by deletion occurs in white nonstandard English.

CONCLUSION

The morpheme <-ed> has been singled out for study because the mispronunciation of inflectional suffixes is frowned upon by native speakers in almost every society. Inflectional morphemes occur with high frequency in all languages. According to Pinker (1999, pp. 124-5), the higher their frequency, the more irregular their form; and yet societies expect their members to acquire these irregular forms and use them accurately. Deviations from established inflectional morphology paradigms are not easily condoned and people who flout these norms may suffer sociolinguistic consequences for their non-conformity. Wardhaugh (2007, pp. 5, 8) explains why:

> We will see that there is considerable variation in the speech of any one individual, but there are also definite bounds to that variation: no individual is free to do just exactly what he or she pleases as far as language is concerned. You cannot pronounce words any way you please, inflect or not inflect words such as nouns and verbs arbitrarily, or make drastic alternations in word order in sentences as the mood suits you. [...] Hudson (1996, p. 12) says that we may be impressed by the amount of agreement that is often found among speakers. This agreement goes well beyond what is needed for efficient communication. He particularly points out the conformity we exhibit in using irregular forms, e.g., *went* for the past tense of *go*, *men* as the plural of *man*, and *best* as the superlative of *good*. This irregular morphology is somewhat inefficient; all it shows is our conformity to rules established by others.

The mispronunciation of <-ed> in the coda is a strong marker and has even become stereotypical of Somali-accented English. Wardhaugh (2010, p. 148) defines these terms as follows:

> A marker does carry with it social significance. In fact, markers may be potent carriers of social information. People are aware of markers, and the distribution of markers is clearly related to social groupings and to style of speaking. A stereotype is a popular and, therefore conscious characterization of the speech of a particular group.

Armed with the information presented in this paper, ELL teachers of Somali students can now develop pedagogical strategies to improve this aspect of Somali pronunciation. Drills that focus on coda clusters should be part of the pronunciation curriculum. Such a deliberate effort will go a long way toward reducing linguistic prejudice, which as Wardhaugh (2007, p. 117) points out, "is a fact of life, a fact we must recognize."

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NOTES

[1] The following transcription conventions are used throughout the paper: […] represents actual pronunciation, the convention <…> is for the orthographic form, and /…/ indicates the phonemic (abstract) form.
[2] Abdullahi (2000 , pp. 19-20) questions the existence of a South Cushitic family.
[3] Abdullahi (2000 , pp. 24-25) notes that there are two schools of thoughts on the number of dialects in Somalia. The Italian School led by Moreno (1955) has identified dozens of dialects whereas the School of Oriental and African Studies led by Andrzejewski (1971) maintains that there are only three dialects.
[4] The information is taken from www.somalijustice.org retrieved on 9/10/2009. However, this figure cannot be independently confirmed. A search for an official statement about the number of Somalis in Minnesota has been fruitless. There is no Somali-specific data at the MN Demographic Center. The US Census website does not provide any information either. A Minnesota Public Radio article September 9, 2009 at http://news.minnesota.publicradio.org/features/200202/04_williamsb_africans/somalis estimates the number of Somalis in Minnesota to be 15,000.
[5] The consonant chart in Saeed (19, p. 7) omits the places of articulation. This piece of information has been supplied by comparing Saeed's chart with the IPA chart at http://weston.ruter.net/projects/ipa-chart/view/keyboard/. Moreover, Saaed does not follow the IPA convention of listing voiceless consonants before listing their voiced counterparts. My adaptation of Saeed's chart complies with the IPA.
[6] The chart of Somali vowels that is presented here is based on Edmondson, Esling, and Harris's acoustic study (n.d, pp. 9-10). I prefer it to Saeed's (1999) classification because there appears to be a number of problems with his classification. For instance on p. 11 he divides the vowels into two series front vs., back, but on p. 12, he presents a chart in which there are three central vowels.
[7] The first number is the average for beginning students and the second the average for intermediate students.
[8] Some native speakers realize it as [ɔd].
[9] Without the benefit of a VOT analysis, Lindsey may have mistaken the devoiced [b̥] for a [p] and the devoiced [g̊] for a [k].

REFERENCES

Abdullahi, M. (2000). *Le Somali, dialectes et histoire*. Thèse de Philospphae Doctor (Ph.D.). Faculté des Arts et des Sciences, Département de Linguistique. Université de Montréal, Canada.

Admuson-Cisse, A. (2009). *The effects of pronunciation on Somali spelling errors*. MA Thesis. Saint Cloud State University: St. Cloud, MN.

Baart, J. (2010). *A field manual of acoustic phonetics*. Dallas, Texas: International Academic Bookstore.

Clements, G. & Rialland, A. (2005). Africa as a phonological area. Retrieved September 1st, 2009. http://www.orthographyclearinghouse.org/Paper.pdf.

Clements, G. & Keyser, S. (1985). *CV phonology: A generative theory of the syllable*. Cambridge, MA: The MIT Press.

Conway, E. (2008). *An analysis of Somali pronunciation errors*. M.A Thesis. Hamlin University, Saint Paul, MN.

Edmondson, J., Esling, J. & Harris, J. (n.d.) *Supraglottal cavity shape, linguistic register, and other phonetic features of Somali*. Retrieved September 1st, 2009. http://www.ling.uta.edu/~jerry/somali.pdf.

Ferrand, C. (2007). *Speech science: An integrated approach to theory and clinical experience, 2nd Edition*. New York, NY: Pearson.

Goldsmith, J. (1990). *Autosegmental and metrical phonology*. Cambridge, MA: Basil Blackwell, Inc.

Gordon, Matthew. (n.d). *Weight-by-position adjunction and syllable structure*. Retrieved September 1, 2009. http://www.linguistics/edu/faculty/gordon/weightbypos.pdf.

Kahn, D. (1980). *Syllable-based generalizations in English phonology*. New York, NY: Garland Press.

Ladefoged, P. (2006). *A course in phonetics, 5th edition*. New York, NY: Thomson-Wadsworth.

Ladefoged, P. (2001). *A course in phonetics, 4th edition*. New York, NY: Harcourt College Publishers.

Labov, W. (1998). Recognizing Black English in the classroom. In D. D. Oaks (Ed.) *Linguistics at Work: A Reader of Applications*, pp. 360-386. New York, NY: Harcourt College Publishers.

Lindsey, M. (2006). *An ELL teacher's guide to Somali-English interlingual phonology*. MA Thesis. Saint Cloud State University: St. Cloud, MN.

Orwin, M. (1996). A moraic model of the prosodic phonology of Somali. In *Voice and Power*, ed. Hayward and I.M. Lewis. ALC Supplement 3: 51-71.

Pinker, S. (1999). *Words and rules: The ingredients of language*. New York, NY: Basic Books.

Saeed, J. (1999). *Somali*. Philadelphia: John Benjamins Publishing Company.

Wardhaugh, R. (2010). *An Introduction to Sociolinguistics*, 6th *edition*. Malden, MA: Blackwell Publishing.

Wardhaugh, R. (2007). *An introduction to sociolinguistics, 5th Edition*. Malden, MA: Blackwell Publishing.

Whitley, S. (2004). *The phonicon: A multimedia digital encyclopedia of the sounds of the world's languages*. CD Rom. Dallas, Texas: SIL International.