

Stress in Saudi Diaspora Uzbek and its relation to stress in Turkish

Hassan Bokhari and Jonathan North Washington
Indiana University

Abstract

This paper presents the first known analysis of the accentual system of Saudi Diaspora Uzbek (SDU).

While an increasingly extensive literature considers the accentual system of Turkish along with many of its nuances, there is little work done on the accentual system of other Turkic languages. The Uzbek accentual system is documented superficially by a number of sources, including Камол (1957), Кононов (1960), and Sjoberg (1963). However, even the existence of SDU does not appear to be documented anywhere, despite SDU being spoken by a rather large community in Saudi Arabia.

This paper considers data from SDU and makes generalizations about its accentual system. The Turkish stress system is used as a point of comparison. Drawing parallels with Turkish elucidates several important points of SDU's stress system; however, attention is drawn to ways in which SDU's stress system differs from that of Turkish.

Like Turkish, SDU has a regular stress pattern, along with a small handful of stems which violate this pattern. There are also exceptional suffixes which affect the regular stress pattern in predictable ways. Like Turkish, these include both monosyllabic and disyllabic suffixes. As with Özçelik's (2012) analysis of Turkish, these exceptional suffixes can be explained by positing an accompanying underlying foot, which the grammar makes trochaic. However, stress occurs on the syllable immediately before disyllabic suffixes in SDU, whereas stress occurs on the first syllable of exceptional disyllabic suffixes in Turkish. This difference in behavior is attributed to a difference in the alignment of feet in the two languages. This approach to an analysis of SDU stress has advantages over other approaches used for Turkish, such as that of Kabak and Vogel (2001) and Inkelas and Orgun (1998), as it allows for attested patterns of secondary stress, does not rely on phonological strata or cophologies, and does not predict the existence of Turkish-like initially-stressed disyllabic suffixes in SDU.

I. Introduction

This paper analyses the stress pattern in Saudi Diaspora Uzbek (SDU), and compares it to the stress pattern of Turkish. While there is a growing body of literature on the accentual system of Turkish, there are only superficial descriptions of the Uzbek accentual system; to our knowledge, there are no formal analyses. Furthermore, there is no known previous documentation even of the existence of SDU.

Saudi Diaspora Uzbek is a set of varieties of Uzbek, a Turkic language, spoken mainly in the midwest part of Saudi Arabia in the region of Hijaz, including the cities of Mecca, Medina, Jeddah, and Taif. The authors estimate the number of speakers to be no less than 60,000. The speakers of this community are mostly descendants of immigrants after the Russian Revolution, people who went on Hajj and stayed, merchants, and recent immigrants from Afghanistan and other countries (sometimes via Turkey). While SDU is actively used among Uzbek communities in Saudi Arabia, there is hardly even mention of its existence outside of these communities. There are no known written sources on the variety, such as linguistic documentation or analyses of any sort.

The stress patterns of SDU and Turkish are very similar, but there are some points where they diverge. The main difference is that Turkish has disyllabic suffixes which exhibit the exceptional pattern of receiving stress on the first syllable, while exceptional disyllabic suffixes in SDU trigger stressing of the previous syllable. The analysis presented in this paper for SDU is much like the analysis of Özçelik (2012) for Turkish, but differs in how an underlying foot is aligned with these exceptional suffixes.

Data for SDU was compiled by examining grammars of Uzbek (Камол, 1957; Sjoberg, 1963; and Кононов, 1960) and comparing their accounts of stress in Modern Literary Uzbek to the pronunciation of the first author, whose is a native speaker of SDU.

Section 2 of this paper will present the data for SDU and Turkish, and section 3 overviews previous analyses of Turkish stress. Section 4 presents the present analysis, and section 5 concludes.

2. The data

Regular stress

In Saudi Diaspora Uzbek, in cases of regular stress, the last syllable of a word, no matter how long or how many morphemes it contains, receives stress.

- (1) [tʰɔwɔ́ɪ] ‘plate’
 [tʰɔwɔ́ɪlár] ‘plates’
 [tʰɔwɔ́ɪlarím] ‘my plates’
 [tʰɔwɔ́ɪlarímdá] ‘on my plates’
 [tʰɔwɔ́ɪlarímdakí] ‘the one on my plates’
 [tʰɔwɔ́ɪlarímdakílár] ‘the ones on my plates’

In Turkish, the pattern is identical. Words with the same glosses follow:

- (2) [tʰabákaʰ] ‘plate’
 [tʰabaklár] ‘plates’
 [tʰabaklarúɰ] ‘my plates’
 [tʰabaklarúmdá] ‘on my plates’
 [tʰabaklarúmdakí] ‘the one on my plates’
 [tʰabaklarúmdakílær] ‘the ones on my plates’

Most SDU stems borrowed from other languages receive regular stress:

- (3) [dímfér] ‘Denver’
 [koloradó] ‘Colorado’
 [aŋqʰará] ‘Ankara’ (from Arabic [aŋqara])

Irregularly stressed stems

Sjoberg (1963, 25) presents some proper nouns that receive exceptional stress in Uzbek, as follows:

- (4) [lutʰúlla] ‘Lutfullah’ (guy’s name)
 [lɔ́la] ‘Lola’ (girl’s name)
 [tɔ́ʃkent] ‘Tashkent’
 [ɔ́lmónija] ‘Germany’

In Saudi Diaspora Uzbek, most of these words receive regular stress (e.g., [tɔ́ʃkánd]), though some names from Arabic may receive exceptional stress:

- (5) [lutʃúlla] ‘Lutfullah’ (guy’s name)
[asadúlla] ‘Asadullah’ (guy’s name)

Sjoberg (1963, 24) and Камол (1957, 204) also present some adverbs and conjunctions borrowed from other languages that receive irregular stress, transcribed below in SDU:

- (6) [albátta] ‘certainly’
[másala(n)] ‘for example’
[ámma] ‘but’
[bázi] ‘some’
[hámma] ‘all’
[lékin] ‘but’
[hózir] ‘now’
[ʃúunki] ‘because’

Additionally there are some adjectives in SDU formed with the Persian prefix /ser/- which are stressed on this prefix: [sérpul] ‘having a lot of money’, [sérujqu] ‘sleeping a lot’. There are also some interrogative words that receive irregular stress: [qájsi] ‘which’, [qándaj] ‘how / what kind’, [námaga] ‘why’. There is no generalisable pattern about the words that receive irregular stress in Uzbek. In many cases, these words preserve the stress of their language of origin.

In Turkish, many place names follow an irregular stress pattern as well. Instead of receiving stress on the final syllable, they receive stress on a heavy antepenult if the penult is light ([án.k^ha.ra], [ʃév.ro.lɛ]); otherwise, the stress falls on the penult ([is.t^hán.bul], [e.dír.nɛ], [a.dá.na]). Place names derived from non-proper nouns mostly follow this pattern ([ba.k^há.ɟak^h], [t^hór.ba.lu], [bé.bɛk]). Some proper names from other languages ([k^hɛ.né.di], [p^ha.p^ha.do.p^hú.los]) also follow this pattern, regardless of their stress in the language of origin, but not all proper names from other languages receive this pattern of irregular stress ([man.dé.la], [bar.bá.ra]). Hence, it is possible to say that there is no consistent generalisable pattern about the accent in these words.

Pre-stressing suffixes

In Uzbek, there is a class of morphemes which primary stress always precedes. The following list enumerates some but not all of them. Many of the morphemes were drawn from Sjoberg (1963), Камол (1957), and Кононов (1960), but not all of their examples are correct in SDU, and so were excluded, and not all the examples provided here are listed by these sources.

- Some postpositions - [nimá ʃʃin] ‘why?’, [keʃʃadán beri] ‘since yesterday’ (note that the preposition gets secondary regular stress)
- The negative verbal suffix -/ma/ - [bɔʃlá-ma-di-m] ‘I didn’t start’, [k^hél-ma-gan] ‘hasn’t come’
- The equative suffixes -/daj/ and -/daqa/ - [ɔltındaj]/[ɔltındaqa] ‘like gold’, [ɔdam-lár-daqa] ‘like people’
- Some derivational suffixes dealing with number: [úʃʃala] ‘three in all’, [ózgina] ‘just a little’
- Some inflectional suffixes dealing with number: the classifier /ta/ [júz ta] ‘one hundred’,¹ [júz-ta-ʃʃa] ‘about one hundred’; the suffix -/ɟa/, as in [júz-lár-ɟa] ‘hundreds’, [júz-ɟa] ‘about a hundred’
- The null copula, as evidenced by the following:²
 - Personal copula particles: [ʃʃirjilɛ-miz] ‘we are beautiful’, [xunák-san] ‘you are ugly’, [ʃʃaq^hir-gán-man] ‘I invited’.
 - Modal particles: [u ʃʃirjilɛ ku] ‘s/he’s beautiful!’ (emphatic/intensifying, used when there’s doubt whether the interlocutor is aware of / sure about the information), [hasán dir] ‘it might be Hassan’

¹ Sjoberg (1963, 25) classifies this morpheme as prestressing, but in Saudi Diaspora Uzbek, this classifier can receive regular stress with some numbers, perhaps varying with intonational or syntactic differences, e.g. [ik^hi tá], [uʃʃ tá], [ɔlt^hi tá], [jeti tá], [sakk^hiz tá], [toqq^hiz tá]. This classifier is interesting to study on its own, but will mostly be ignored in this study because of its unpredictable behavior.

² See Kabak & Vogel (2001, §7) for a complete account of the null copula in Turkish.

(dubitive, used when speaker is unsure of the information), [u ʃiɾɔjliɕ ekan] ‘apparently s/he’s beautiful’ (hearsay) / ‘Wow, s/he’s beautiful’ (surprise at new information).

- Certain conjunctions: [qʰoʃini-m da] ‘my neighbor also’, [motʰor-imiz-gá da] ‘to our car also’,³ [mahammád-u hasán kelifti] ‘Mahammad and Hassan arrived’
- Interrogative particles: [jangí-mi] ‘is it new?’, [kʰel-dí-ŋ-mi] ‘did you come?’, [sán-ʃí] ‘how about you?’
- The relativiser /ki/: [ajt-ti-ki] ‘he said that ...’.
- The personal suffixes of optative and softened imperative forms: [kor-éj-lik] ‘let’s see’, [vɕf-ij-lik] ‘let’s open it’, [kór-sin] ‘let him/her see’; [vɕf-ij-lar] ‘please open it (2pl)’, /bɔʃla-(i)j-lar/ [bɔʃlé-lar] ‘please begin (2pl)’, [tuʃun-ij-lar] ‘please understand (2pl)’
- The general/future tense morpheme /a/: [iʃán-a-man] ‘I believe’, [két-a-san] ‘you leave’, /bɔʃla-j-man/ [bɔʃleman] ‘I begin’.
- Causative morphemes, regular (-/tir/, -/dir/, -/t/) and irregular (-/ir/, -/kaz/, -/kiz/):
 - [qoʃf-ijáp-man] ‘I’m running away’ - [qoʃf-ir-ijáp-man] ‘I’m driving [someone] away’
 - [bɔla kúl-di] ‘the boy laughed’ - [men bɔla-ni kúl-dir-di-m] ‘I made the boy laugh’
 - [múz erí-j-di] ‘the ice melts’ - [múz-zi éri-t-a-man] ‘I melt the ice’
 - [eʃak ol-gán] ‘the donkey died’ - [eʃak-ki ol-tir-gán-man] ‘I killed the donkey’
 - [axmát-niŋ kasal-í ót-ti] ‘Akhmat’s disease spread’ - [axmát kasal-i-ni ót-kaz-di] ‘Akhmat spread his disease’
 - [qiz-lar uʃ-lar-i-ga jét-ti] ‘The girls got home’ - [qiz-lar-ri uʃ-lar-i-ga jét-kiz-di-m] ‘I brought the girls home’

In Turkish there are also quite a few pre-stressing suffixes. The following list was based off of Kabak & Vogel (2001, 328):

- The negative verbal suffix -/mA/ - [baʃlá-ma-du-m] ‘I didn’t start’.
- The -/dʒA/ adverbial suffix - [al-mán-dʒa] ‘in German’
- The coordinator /DA/ - [kom-ʃum da] ‘my neighbor also’.
- The relativiser [ki] - [sana-r-um-ki] ‘I think that ...’.
- Overt (shown in bold) and non-overt copula suffixes - [gyzáel-iz] ‘we are beautiful’, [ʃirkʰin-sin] ‘you are ugly’, [ʃaúr-muʃ-um] ‘I invited’, [ʃoʃúq-kʰæn] ‘when I was a kid’ [hastʰá-j-dum] ‘I was sick’.⁴
- Modal particles - [jeni-mi] ‘is it new?’, [gʲæl-dí-n-mi] ‘did you come?’, [gid-ædʒæk-lær ja] ‘so you know how they’re going to come’
- Instrumental / commutative case /(j)lA/ - [arabá-m-la] ‘with my car’ (note the uncliticised form /ile/, [arabá-m ilè])

Disyllabic exceptional suffixes / stressed suffixes

In Turkish, there is a small class of disyllabic suffixes that have exceptional stress. These suffixes carry stress on their initial syllable, and include only the morphemes -/(j)IndʒA/, -/(j)ÁrAk/, and -/Ijor/.⁵

SDU has no multisyllabic suffixes with initial stress, but it does have disyllabic exceptional suffixes. All disyllabic exceptional suffixes in SDU are pre-stressing. These include -/daqa/ and -/ala/, discussed above.

This paper will not directly deal with what happens when multiple stressed suffixes or an irregular-stressed word and a stressed suffix occur together. It will also not deal with compounds or reduplication. For a discussion on the stress patterns of reduplication in Uzbek, see КОНОНОВ (1957, §55, p. 55).

³ Sjoberg (1963, p. 26) says that the conjunction /ham/ is pre-stressing, but in Saudi Diaspora Uzbek, it is incorporated into the phonological word and receives normal stress, e.g. [qʰoʃini-m ám], [motʰor-imiz-ga jám]. However, there is at least one example in Saudi Diaspora Uzbek where this conjunction is prestressing, i.e. [búnda jam] ‘here also’.

⁴ While the copula itself /j/ is often not overt and is never syllabic when cliticized, the suffix following the copula, one of -/DI/, -/mIʃ/, or -/sA/, acts as the pre-stressing suffix.

⁵ -/Ijor/ only takes exceptional stress in literary registers in Turkish; normally it receives regular stress (Kabak & Vogel, 2001, 332).

3. Analyses of Turkish stress

Early analyses

Irregularly stressed stems

Sezer (1981) presented one of the first accounts of irregularly stressed stems in Turkish. The analysis was summarized by Kaisse (1986) as follows: “mark final syllables extrametrical; at the right edge of the word, form a left-dominant, quantity-sensitive, binary foot.”

In irregularly stressed stems like [pénaltu] ‘penalty’, Inkelas (1994) and Inkelas and Orgun (1998) propose that a trochaic foot is prespecified, in a similar way to prestressing and stressed suffixes (see below). Inkelas and Orgun (1998) treat Sezer stems differently than this kind of stem, positing a cophonology that applies Sezer stress patterns to foreign and place names via a trochaic foot. Because final-stressing place names (e.g., [anadolú]) show regular stress patterns, they specify yet another cophonology to deal with these.

Prestressed suffixes

Lees (1961), as summarised by Kaisse (1986), analyzes pre-stressing suffixes in the following way: all regular words are marked in the lexicon as having word-final stress and regular suffixes are marked in the lexicon as receiving stress, e.g. /^habák-lár-úm-dá-kí-láér/. A rule removes stress from all but the rightmost of a string of stressed syllables, e.g. [^habaklarum^hdakilár] ‘the ones on my plates’. This ensures that the rightmost syllable of a word is stressed, as well as the syllable before a pre-stressed suffix, e.g. /gyzáel-láér-dáén-sin/ [gyzáelláerdáénsin] ‘you are one of the beautiful ones’, since pre-stressed suffixes are not marked as stressed in the lexicon. To prevent syllables after a pre-stressed suffix from receiving stress, a separate rule removes any stress to the right of a suffix that does not receive stress, e.g. /baɟlá-ma-(j)án/ [baɟlámajan] ‘not started’.

Kaisse (1986, 235-236) takes issue with previous theories like Lees (1961), stating that they all require marking prestressed suffixes in some way in the underlying form. Kaisse (1986) instead notes that so-called pre-stressing or pre-stressed suffixes are poorly named because they don’t always cause stress immediately before them, and argues that they are in fact all “clitics placed at the edges of normally affixed words.” Kaisse (1985, 205) shows a pattern of “-en” adverbs (e.g., [náktæn] ‘in cash’, [tekáeffulæn] ‘by surety’, [munhásuran] ‘specially’), originally noticed by Sezer (1983), where stress falls on the penult if it is strong, and on the antepenult if the penult is weak. Kaisse (1985 and 1986) proposes three lexical strata: the first is where feet are assigned to irregularly stressed stems, including the “-en” adverbs; the second is where normal word stress applies, and excludes clitics; and the third includes clitics (i.e., suffixes that are never stressed) and is the domain over which vowel harmony applies. By excluding clitics from the lexical stratum over which stress applies, Kaisse (1986) ensures that stress will occur before the first clitic.

For Inkelas (1994) and Inkelas and Orgun (1998), regular stress occurs via catalexis, where an empty syllable is inserted after the last syllable of a stem and a trochaic foot is formed, as shown in (7a). They posit a cophonology with an underlying foot in pre-stressing suffixes, as shown in (7), where the regularly stressed [tekmeledi] (7a) is contrasted with the form [tekmeleme] (7b), where the negative suffix /mA/ is prespecified as having a trochaic foot.

(7a)	(b)	F
/ tekmele-DI /	/ tekmele-mA /	
[tek.mɛ.le.(di [σ])]	[tek.mɛ(lé.mɛ)]	

This is the first account of Turkish exceptional stress known to have presented a trochaic foot-based analysis.

Stressed suffixes

Not many sources mention stressed suffixes. Inkelas (1994) and Inkelas and Orgun (1998, 371-372) posit an underlying foot in stressed suffixes, as shown in (8),⁶ where the regularly stressed [japadʒák] is contrasted with the form [japarak], where the verbal adverb suffix -(j)ArAk/ is prespecified as having a trochaic foot.

(8a)	(b)
$\begin{array}{c} / \text{jap-(j)AdʒAk} / \\ [\text{ja.pa.dʒák}] \end{array}$	$\begin{array}{c} \text{F} \\ \\ / \text{jap-(j)ArAk} / \\ [\text{ja(pá.rak)}] \end{array}$

Kabak & Vogel (2001)

Regular stress

Kabak & Vogel (2001) present a rule for regular stress assignment (p. 324): stress the final syllable of a Phonological Word (PW). They define a PW as the root along with most suffixes.

Irregularly stressed stems

Kabak & Vogel (2001) argue that the pattern noticed by Sezer (1981) does not account for all irregularly stressed stems. They propose an analysis where the stressed syllable of these stems is simply specified lexically, along with a rule (p. 325) that assigns stress to syllables lexically marked as stress-bearing. Their final stress rule is “Stress a lexically marked syllable; otherwise stress the final syllable of a PW” (p. 329).

Pre-stressing suffixes

Kabak & Vogel (2001) present an analysis of Turkish where many morphemes, including the copula, question marker, and instrumental suffix are labelled in the lexicon as Phonological Word Adjoiners (PWA). These suffixes are “obligatorily excluded from the PW”. Since the PW is always stressed on the last syllable, this ensures that pre-stressing suffixes trigger stress on the previous syllable. An example of this is [baʃ.lá]_{PW}-ma-du-m], where /mA/ is labelled in the lexicon as a PWA.

This approach is unified in that there is only one stress rule for regularly stressed words and pre-stressing suffixes. However, it is also like Kaisse’s (1986) analysis involving lexical strata, where the PW can be seen as the second stratum, and the morphological word can be seen as the third stratum.

Stressed suffixes

While Kabak & Vogel (2001) do not directly address disyllabic stressed suffixes as a class of suffixes, they do notice that /Ijor/ sometimes receives exceptional stress on the first syllable. They deal with this by positing an underlying specification for stress, as with exceptionally stressed words.

⁶ Despite the appearance of the representation in (8b), the foot is not aligned to any particular segment, but is simply specified underlyingly along with the morpheme.

Özçelik (2012)

Regular stress

Özçelik (2012, §2.2) considers regular word-final stress in Turkish to actually be a boundary tone, based on phonetic and cross-linguistic phonological evidence. He accounts for this “final prominence” with a simple rule: “place a boundary tone at the end of a PwD” (p. 25).

Irregularly stressed stems

Özçelik (2012), like Kabak & Vogel (2001), assumes that the stress in irregularly stressed stems is pre-specified.

Pre-stressing suffixes

Özçelik (2012) assumes that pre-stressing suffixes are specified underlyingly with a foot. A rule that aligns the right edge of a foot in the UR with the right edge of a foot in the SR, along with a general specification that foot shape in Turkish must be trochaic, ensures that pre-stressing suffixes (which are all monosyllabic) will be footed as the second and unstressed syllable of the foot in the SR, with primary stress falling on the syllable preceding the suffix, as in /ʃaluʃ-(mA)_F/ [ʃa(luʃ.ma)_F] ‘don’t work’.

Stressed suffixes

Özçelik’s (2012) analysis of stressed suffixes is very similar to that of pre-stressed suffixes, and requires no additional theoretical framework. Özçelik notices that all pre-stressing suffixes in Turkish are monosyllabic and all stressed suffixes are disyllabic. This makes it possible to posit an underlying foot for both classes of suffix, that aligns to the right of the suffix and is trochaic. An example is /ʃaluʃ-(ArAk)_F/ [ʃa.lu(ʃá.rak)_F] ‘while working’.

Comparison to other accounts

Özçelik’s (2012) approach is very similar to that of Inkelas (1994) and Inkelas and Orgun (1998), in that feet are specified underlyingly with exceptional suffixes. However, there are some notable differences: in their analysis, there must be pre-stressing, exceptionally stressed, and regularly stressed cophologies; also, they specify trochaic feet underlyingly, whereas Özçelik (2012) specifies only the presence of a foot underlyingly and the grammar makes it trochaic. The advantage of Özçelik’s analysis is that all suffixes are subject to the same phonological parameters, and the only difference between exceptional suffixes (that is, pre-stressing and stressed suffixes) and regular suffixes is that exceptional suffixes are underlyingly footed. Özçelik’s analysis also explains the absence of stressed (as opposed to pre-stressing) monosyllabic suffixes as well as the absence of iambic disyllabic suffixes.

One advantage of Özçelik’s account over that of Kabak & Vogel (2001) is that, in their account, once a PW is ended with a PWA, there can be no further stress. Özçelik (2012, 41) points out examples of secondary stress, like [dɪnlɛmɛdɪ dɛ] ‘s/he didn’t listen either’, which Kabak & Vogel must treat as having only one stress, since the PW ends before the PWA -/mA/, disallowing further stress assignment after it. In Özçelik’s (2012) analysis there is no such restriction. Other examples of secondary stress that are accounted for in this analysis

are [baʃ(láma)dùm] ‘I didn’t begin’ and [an(láma)du(làrmu)] ‘did they not understand?’ Kabak & Vogel (2001) also have the weakness of Inkelas and Orgun (1998), in that there is nothing preventing the existence of iambic disyllabic stressed suffixes and stressed monosyllabic suffixes.

4. Stress in Saudi Diaspora Uzbek

This paper will take an approach similar to that of Özçelik (2012) in its analysis of stress in SDU, with one difference necessary for SDU.

Regular stress

Like Özçelik (2012) did for Turkish, the present analysis considers regular word-final stress in Uzbek to actually be a boundary tone. While there is currently no good phonetic data available on this phenomenon in Uzbek, the phonological evidence is identical to that in Turkish. This “final prominence” can be accounted for with a simple rule: “place a boundary tone at the end of a PWd” (Özçelik, 2012, 25).

Based on Özçelik (2013, 2014 §3.1), since final prominence is crucial in Turkish for regular words, there can be no trochaic structure in these words; however, having trochees is also an essential part of Turkish grammar. The only other way to get final-prominence with feet in Turkish would be to have a monosyllabic foot; however, foot-binarity is also crucial in Turkish. Per Özçelik’s (2013, 2014) OT account, PARSE- σ is ranked lower than these other constraints, and so final prominence may be achieved by simply applying a boundary tone to the final syllable of a PWd without parsing any syllables into feet. The present analysis will assume that Uzbek grammar is much like Turkish grammar in this respect.

In a word like /tɒwɒɛ-lar-im-da-ki-lar/ ‘the ones on my plates’, there is no footing (be it trochaic or iambic): *[t^hɒwɒɛlarimda(ki.lar)]. Instead, a boundary tone is simply applied to the last syllable: [t^hɒwɒɛlarimdakilár].

Irregular stress

The literature seems to disagree as to whether patterns of irregular stress noticed in Turkish can be accounted for by Turkish-internal phonology or based on the preservation of source-language stress in borrowed words. Instead of coming up with multiple co-phonologies like Inkelas and Orgun (1998) or with multiple phonological strata, like Kaisse (1985), more recent accounts of Turkish, like Kabak & Vogel (2001) and Özçelik (2012), assume that irregularly stressed stems in Turkish are simply underlyingly specified for stress.

Saudi Diaspora Uzbek, much like Turkish, seems to preserve the stress in certain words from Persian and Arabic, but in many cases simply applies regular stress to borrowed words. Much like Özçelik (2012), this analysis assumes that stress can be specified underlyingly, and thus accounts for irregularly stressed stems. For example, /albátta/ is underlyingly marked as having stress on the penultimate syllable, and hence surfaces this way [albátta]. A word like /tɒwɒɛ-lar-im-da-ki-lar/ has no underlyingly marked stress, and so surfaces with regular stress. It is striking that SDU does not have a class of proper nouns with an irregular stress pattern.

Exceptionally stressed suffixes

The analysis presented in this study for exceptionally stressed suffixes in SDU is much like that presented by Özçelik (2012) for exceptionally stressed suffixes in Turkish, except that the alignment between the foot and affix is different.

As mentioned previously, Uzbek and Turkish both have disyllabic morphemes that participate in exceptional stress. In Turkish, these suffixes always receive stress on the first syllable of the suffix, as shown in example (9) for the suffixes *-(j)IndʒA/* and *-(j)ArAk/*.

- (9) a. [gʲæɫ-índʒɛ] ‘when [someone] came’
 b. [ʃʲalɯʃ-úndʒɑ] ‘when [someone] worked’
 c. [gʲæɫ-ɛɾɛk] ‘by coming’
 d. [ʃʲæɫɯʃ-árak] ‘by working’

These forms can be compared to regularly stressed disyllabic morphemes, such as *-(j)AdʒAk/*, as shown in (10).

- (10) a. [gʲæɫ-ɛdʒɛk] ‘s/he will come’
 b. [ʃʲalɯʃ-adʒák] ‘s/he will work’

In SDU, disyllabic suffixes also participate in exceptional stress. In these suffixes, unlike in Turkish disyllabic exceptional suffixes, the stress always precedes the affix. Examples are shown in (11) for */daqa/* and */ala/*.

- (11) a. [tór-ala] ‘four together’
 b. [erkág-daqa] ‘like a man’
 c. [erkag-lár-daqa] ‘like men’

These forms contrast with regularly stressed disyllabic morphemes, as shown for */daki/* in (12).

- (12) a. [koz-dakí] ‘the one in the eye’
 b. [erkag-dakí] ‘the one at the man’

Özçelik (2012) posits a foot that is underlyingly specified together with the morpheme for this class of suffixes in Turkish, e.g. */((j)IndʒA)_F/*. The language’s grammar makes the foot trochaic, resulting in the first of the two syllables of the suffix being stressed, as shown in (13).

- (13) a. [gʲæɫ(ín.dʒɛ)] ‘when [someone] came’
 b. [ʃʲalɯʃ(úɫ.dʒɑ)] ‘when [someone] worked’

Regularly stressed suffixes have no foot specified underlying, and so a regular boundary tone is simply assigned word-finally if there is no foot already present.

Where Turkish aligns the underlying foot in exceptionally stressed suffixes with the rightmost syllable of the affix, SDU aligns the right edge of the foot to the left edge of the affix. This results in the syllable immediately preceding the suffix to be incorporated into the foot, and receive stress via the grammar assigning trochaic stress to feet, as shown in (14).⁷

- (14) a. */tor-(ala)_F/* - [(tó.ra)là] ‘four together’
 b. */erkag-(daqa)_F/* - [er(kág.da)qà] ‘like a man’
 c. */erkag-lar-(daqa)_F/* - [erkag(lár.da)qà] ‘like men’

Note that regular stress is still assigned to the final syllable, which in SDU is not footed. Also note that these final syllables cannot be extrametrical due to this fact. More extreme examples are the words */tor-(ala)_F-sì-nì/* [(tó.ra)_Fla.sì.nì] ‘the four of them (acc.)’ and */erkag-(daqa)_F-lar-nì/* [er(kág.da)_Fla.lar.nì] ‘those that are like a man (acc.)’;⁸ in these examples, if [la] in */ala/* or [qa] in */daqa/* were extrametrical, regular stress would not be able to be assigned to any syllables beyond that one, preventing secondary stress on the final syllables of

⁷ As in (8), the URs in (14) should only be understood to indicate that a foot is specified with the morpheme, and not that it is aligned in any particular way.

⁸ The fact that nominal morphology can follow these suffixes is good evidence that they are not simply free particles, but are in fact bound morphemes.

these words.

Under Özçelik's analysis, since the foot is aligned with the right edge of the affix, monosyllabic exceptional affixes in Turkish become the unstressed syllable of the trochaic foot, and the syllable immediately preceding the affix receives stress, as shown in (15).

- (15) a. [baʃ(lá.ma)] 'don't start'
 b. [ha(sán da)] 'Hassan also'

In SDU the corresponding syllable receives stress, but formally, unlike in Turkish, the rightmost syllable of the foot is aligned with the leftmost syllable of the affix. Since the affix is monosyllabic, footing happens in the same way [on the surface] as in Turkish. Examples matching the Turkish ones in (15) are shown in (16) for SDU.

- (16) a. [baʃ(lá.ma)] 'don't start'
 b. [ha(sán da)] 'Hassan also'

This analysis predicts the absence of initially stressed disyllabic suffixes (like those in Turkish) in SDU.

5. Conclusion

This is the first study known to examine the phonology, or indeed address any aspect of the grammar, of Saudi Diaspora Uzbek. This paper has compared the stress pattern in Saudi Diaspora Uzbek with the stress pattern in Turkish, by suggesting that SDU also underlyingly specifies feet for exceptional suffixes, and that feet in the language are trochaic. Besides the striking absence of an entire class of exceptionally stressed proper names, the main difference between SDU and Turkish is that SDU aligns the second syllable of the foot to the leftmost syllable of exceptional suffixes, whereas Turkish aligns the second syllable of the foot to the rightmost syllable of exceptional suffixes. The account is based on that of Özçelik (2012), which is preferred over other accounts of Turkish stress because it accounts for secondary stress when there's more than one exceptionally stressed suffix, which is true for SDU as well. The resulting account also predicts the absence of initially stressed disyllabic suffixes in SDU, and presents everything as a unified analysis, with no cophologies or lexical strata.

An analysis of SDU stress in Optimality Theory that parallels Özçelik's (2013, 2014) analysis for Turkish is planned; however, since the different-edge alignment constraints that would be necessary to implement our preliminary analysis presented here are disfavored in the literature (cf. McCarthy, 2008, 214), a fairly different approach may be necessary. The authors would also like to examine more complex examples of stress in SDU, such as those involving compounding, reduplication, and secondary stress. Another interesting area of study is what happens with morphemes that can surface either with or without a vocalic nucleus, such as the SDU aorist (-/a/ or -/j/) and regular causative morphemes (-/Dir/, -/t/), which are both pre-stressing, but seem to behave differently in terms of whether the preceding vocalic nucleus or the preceding syllable receives stress; this issue appears not to have been addressed in the literature on Turkish, perhaps because Turkish does not have similar language-internal inconsistencies.

While the analysis presented is not fully developed, the authors hope that it will be a basis for future discussions of Turkic stress, especially SDU and other varieties of Uzbek, and how currently available work on Turkish fits into a wider typological distribution of phenomena.

References

- Inkelas, Sharon (1994). Exceptional stress-attracting suffixes in Turkish: representations vs. the grammar. Utrecht University: Workshop on Prosodic Morphology.
- Inkelas, Sharon and C. Orhan Orgun (1998). Level (Non)Ordering in Recursive Morphology: Evidence from Turkish. In *Morphology and Its Relation to Phonology and Syntax*. Stanford, CA: CSLI. 360-392.
- Kabak, Barış and Irene Vogel (2001). The phonological word and stress assignment in Turkish. *Phonology* 18. Cambridge University Press. 315-360.
- Kaisse, Ellen (1985). Some theoretical consequences of stress rules in Turkish. In *Proceedings of the Chicago Linguistic Society* 21:1. 199-209.
- Kaisse, Ellen (1986). Towards a lexical phonology of Turkish. In *A Festschrift for Sol Saporta*. Seattle: Noit Amrofer. 231-239.
- Камол, Фахри (ed., 1957). *Ҳозирги замон ўзбек тили : лексикология, фонетика, графика ва орфография, морфология*. Тошкент: Ўзбекистон ССР Фанлар Академияси Нашриёти.
- Кононов, А. Н (1960). *Грамматика современного узбекского литературного языка*. Москва: Академия наук СССР.
- Lees, Robert B (1961). *The phonology of Modern Standard Turkish*. Uralic and Altaic Series 6. Bloomington: Indiana University Publications.
- McCarthy, John J (2008). *Doing Optimality Theory*. Oxford: Blackwell.
- Özçelik, Öner (2012). *Representation and acquisition of stress: the case of Turkish*. Doctoral thesis, McGill University.
- Özçelik, Öner (2013). Exceptions in Stress Assignment: Feet in Input. In *Proceedings of NELS 40*, v. II. Amherst, MA: GLSA. 107-120.
- Özçelik, Öner (2014). Prosodic faithfulness to foot edges: the case of Turkish stress. *Phonology* 31, 229-269.