

DECLASSIFYING TURKISH “PRE-STRESSING” SUFFIXES*

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Our goal in this paper is to provide a syntactic account of the stress behaviour of certain Turkish suffixes (with apparently exceptional stress) by proposing a novel analysis of the syntax of these suffixes and the mapping of syntactic structures into phonological domains.

1. Introduction

It has been observed in the literature that certain Turkish suffixes violate the regular word-final stress pattern. Some examples of such suffixes are given in (1):

- (1) a. “Pre-stressing” clausal suffixes¹:
ki complementizer; *-(y)ken* ‘when’: adverbial complementizer
- b. “Pre-stressing” verbal suffixes:
Agreement suffixes; *-mI* Yes/No question marker; *-mA* verbal negator²

These suffixes have been treated as a homogeneous class (cf. van der Hulst & van de Weijer 1991, Kabak & Vogel 2001, Inkelas & Orgun 2003, Newell 2004); they have often been referred to as “pre-stressing”, because independently of their position, the stress falls on the syllable preceding them.

Descriptively, some of these suffixes are verbal, some clausal, some nominal, and a couple derive adjectives and adverbs. In this paper, after briefly discussing the (fully, finitely) clausal “pre-stressing” suffixes, we concentrate on the verbal ones, as they are the most numerous, and, more importantly, are the most challenging empirically and theoretically.

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¹ We do not take these to be genuine suffixes but rather enclitics. For the sake of convenience, we are extending the term “suffix” to these elements following a good deal of literature.

² We follow here general Turkological practice in indicating segments that undergo assimilation processes by using capital letters; in particular, capital letters for vowels indicate vowels that undergo Vowel Harmony for backness and rounding. Note that the “pre-stressing” agreement suffixes are analyzed in this paper as complex forms involving a copular clitic; cf. section 3.

We argue that these suffixes do not form a homogeneous class and that their similar stress pattern is an epiphenomenon. While some disparate suffixes will be unified, other apparently similar suffixes will be shown to need distinct syntactic analyses, while yielding similar stress effects.

2. Clausal Suffixes

The “clausal suffixes” in (1a) belong either to the stem’s complement clause, or to a higher head, i.e. to a separate phrasal domain altogether (see footnote 1). Therefore, the fact that they belong to separate stress domains is not surprising at all. Examples of these two “suffixes” and their corresponding structures are given in (2). We are using an acute accent to mark primary stress and a grave accent to mark secondary stress where needed.

- (2) a. Duy-**dú**-m [CP **ki** [Oya opera-ya gid-ecek]]
 hear-PAST-1.SG. **that** Oya opera-DAT go-FUT
 ‘I heard that Oya will go to the opera.’
- b. Oya [[kitap ok**ú**-r_{CP}]-**ken**_{PP}] uyu-yakal-dı
 Oya book read-AOR-**while** sleep-‘fall’-PAST
 ‘Oya fell asleep while reading (a) book(s).’

It is worth noting that these “clausal suffixes” are the only ones among the “pre-stressing suffixes” that do not undergo Vowel Harmony, as shown in (2), where the so-called “pre-stressing suffixes” exhibit front vowels after a preceding back vowel, thus violating Vowel Harmony in Turkish. This shows that they are not only outside the (smaller) domain of stress, but even outside the (larger) domain of Vowel Harmony. This is totally expected given the clausal nature of these morphemes.

In the following sections we turn to a discussion of the verbal suffixes.

3. Agreement Suffixes

There are a large number of (apparently) verbal agreement suffixes (our Group A), traditionally characterized as pre-stressing, which attach to most *simple* tenses, as shown in (3). It should be noted that we have posited a null copula in these forms, an issue we will return to in the ensuing discussion.

- (3) Group A agreement suffixes: “Pre-stressing” agreement markers with simple verbal tenses (limited to 1. and 2. Persons)

	Future	Aorist	Reported Past
1.SG.	gid-ecéğ- ϕ-im	gid-ér- ϕ-im	git-mış- ϕ-im
2.SG.	gid-ecék- ϕ-sin	gid-ér- ϕ-sin	git-mış- ϕ-sin
1.PL.	gid-ecéğ- ϕ-iz	gid-ér- ϕ-iz	git-mış- ϕ-iz
2.PL.	gid-ecék- ϕ-siniz	gid-ér- ϕ-siniz	git-mış- ϕ-siniz
	go-FUT-COP-AGR	go-AOR-COP-AGR	go-RP-COP-AGR

There is another group of verbal agreement markers shown in (4) (our Group B), which are regular with respect to stress, and attach to two forms: the simple past, and the simple conditional.

- (4) Group B agreement suffixes: “Regular” agreement markers with simple verbal tenses (no copula):

	Definite Past	Conditional (stem <i>gid</i> ‘go’)
1.SG.	git-tí- m	git-sé- m
2.SG.	git-tí- n	git-sé- n
1.PL.	git-tí- k	git-sé- k
2.PL.	git-ti- níz	git-se- níz
	go-PAST-AGR	go-COND-AGR

To account for the apparently distinct stress behaviour of Group A and Group B suffixes in (3) and (4), we follow Kornfilt’s (1996) claim that Group A suffixes are not “pre-stressing” and in no way exceptional³. Rather, they are affixed to a (phonologically null) copula which introduces its own domain with respect to stress. Under this view, the contrast between (3) and (4) with respect to stress follows from the fact that the forms in (4) involve a single stress domain, while the ones in (3) involve two stress domains with main stress falling on the leftmost domain in line with regular phrasal stress in Turkish (cf. Lees 1961, Kornfilt 1996). Kornfilt’s (1996) claim that Group A and B suffixes have distinct affixation domains may also explain their distinct shape. More importantly, it paves the way for an account of a number of other syntactic and morphological phenomena. The most striking of these behaviours are illustrated below.

The examples in (5) illustrate what is known as suspended affixation. While the agreement suffix can be suspended in a conjoined structure involving most simple tenses exemplified by the future in (5a), it cannot be suspended in a similar construction involving the simple past or the conditional tense as shown in (5b).

³ This claim follows Lees (1962), where the same essential claim was made, but with less detail, fewer relevant phenomena, and less argumentation, leading to a less spelled out proposal.

- (5) a. Suspended Affixation in simple tenses:
 [[oku-yacák] ve [anla-yacák]]- ϕ -sin
 read-FUT and understand-FUT-COP-2.SG.
 ‘You will read and understand.’
- b. Not possible without copula:
 *[[oku-du] ve [anla-dı]]-n
 read-PAST and understand-PAST-2.SG.
 Intended reading: ‘You read and understood.’

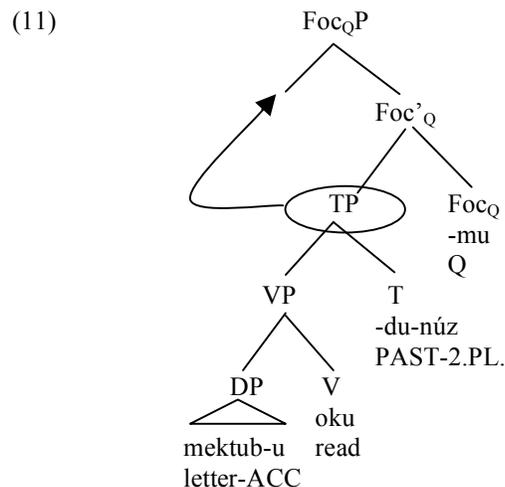
To account for the facts in (5), we follow Kornfilt’s (1996) claim about the affixation of Group A suffixes to a (phonologically null) copula. This copula introduces its own domain with respect to not only stress (as discussed above) but also suspended affixation illustrated in (5a). In fact, as shown in (6), the same type of phenomenon is found with straightforward copular constructions involving nominal and adjectival predicates. The parallel between (5a) and (6) provides further motivation for the analysis of the agreement suffixes as attached to a copula.

- (6) a. [[yorgun] ve [hasta]]- ϕ -sin
 tired and sick-COP-2.SG.
 ‘You are tired and sick’
- b. [[yorgun] ve [hasta]]-y-dı-n
 tired and sick-COP-PAST-2.SG.
 ‘You were tired and sick’

Finally, further support for the idea that the Group A forms in (3) (as opposed to the Group B forms in (4)) involve a complex structure with two separate domains comes from affixation by the Yes/No question marker. As shown in (7), while the question marker appears after Group B suffixes, it appears before Group A suffixes (in apparent violation of the word’s integrity). Kornfilt’s (1996) account of the Group A suffixes being affixed to a null copula provides an explanation for this phenomenon as well. Under this view, the form in (7a) is complex with the future morpheme demarcating a participle, a cliticization site for the Yes/No question marker. The form in (7b), on the other hand, is not complex, i.e. the simple past is verbal (as opposed to participial), the past morpheme does not introduce a cliticization site and as a result the cliticization of the question marker would violate the (simple) word’s integrity.

- (7) a. [[gid-ecék]-mi]- ϕ -siniz] vs. *[[gid-ecék]- ϕ -siniz]-mi]
 go -FUT-Q-COP-2.PL. vs. go-FUT-COP-2.PL.-Q
 ‘Will you go?’

case of DPs, and focalized reduced clauses⁴ in the case of the verbal domain to its specifier, which is accompanied by prosodic prominence. The relevant structure and corresponding movement for the example in (9) is given in (11).



5. Negation

The verbal negation marker *-mA* is another “pre-stressing” suffix as shown in (12).

- (12) köpeğ-i gez-dır-me-di-niz
 dog-ACC walk-CAUS-NEG-PAST-2.PL.
 ‘You didn’t walk the dog’ (i.e. ‘You didn’t let/make the dog walk’)

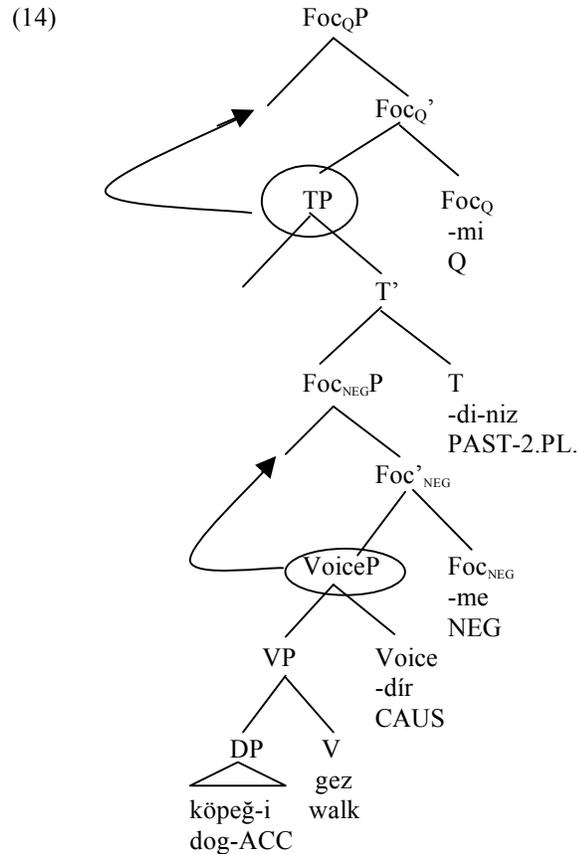
To account for the stress behaviour of the negation marker we propose that it is in a second focus head: a position lower than the question marker’s focus position in the verbal domain (when focalizing reduced clauses; cf. footnote 4). This low focus position explains the verbal negator’s adjacency to “voice” morphemes such as the passive and the causative markers in (12). This negation/focus head attracts the negated predicate to its specifier, accompanied by prosodic prominence. (On the connection between negation and questions/focus, see Klima 1964, Lasnik 1974, Haegeman and Zanuttini 1991, Haegeman 1995, Rizzi 1996, among others.)

This account captures both the *similarity* between the verbal negator and the question marker as (“pre-stressing”) focus markers and their *different* positions. When both the negation marker and the question marker are present (in negative questions), the negation marker is closer to the verbal root and the

⁴ The exact nature of the reduced clause transcends the concerns of this paper; we shall therefore not take a stand on this issue here, and we use TP for convenience.

stress falls before the negation marker, as shown in (13), and as predicted by our analysis. The structure and corresponding movements for (13) are given in (14).

- (13) köpeğ-i gez-dir-me-di-niz-mi
 dog-ACC walk-CAUS-NEG-PAST-2.PL.-Q
 ‘Didn’t you walk the dog?’ (i.e. ‘Didn’t you let/make the dog walk?’)



In addition to the verbal negator $-mA$ discussed above, there is another negator in Turkish, the non-verbal negator *değil*, which behaves differently from the verbal negator $-mA$ both with respect to stress and Vowel Harmony. While the verbal negator $-mA$ is both “pre-stressing” and harmonizing, the non-verbal negator *değil* is neither “pre-stressing” nor harmonizing. This is shown in (15).

- (15) [köpeğ-i gez-dir-miş] **değil**-siniz
 dog-ACC walk-CAUS-PERFECT **NEG-2.PL.**
 ‘It is not the case that you walked the dog’

We take *değil* to be a clausal negator, thus outside the domains of stress and Vowel Harmony. In this respect *değil* behaves like the “clausal suffixes” discussed in section 2. We leave a closer study of *değil* for future research.

6. Conclusion

We have provided an account for the apparently pre-stressing behaviour of certain clausal and verbal suffixes in Turkish. We have shown that in the case of the “clausal suffixes”, their pre-stressing behaviour is the result of their syntactic position outside the clausal domain of the material preceding it. We have argued that the so-called pre-stressing agreement suffixes (our Group A) are really involved in a biclausal structure, thus motivating their stress behaviour. We have provided independent syntactic and morphological support for this analysis. Finally, we have proposed that the negation and question markers each head a focus projection, attracting the focused constituent to their specifier, accompanied by prosodic prominence.

We have thus provided a deeper understanding of the stress facts and the relation between syntax and prosody in Turkish. Further work is needed to explore the above proposals, in particular with respect to the syntactic and prosodic behaviour of negators in Turkish and across languages.

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