

## The Other Consonant in Turkish Prefixal Reduplication: A Working Paper

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### 1. Introduction

In Modern Standard Turkish, certain adjectives can be intensified by a reduplicative prefixing process which copies the initial CV of the stem and adds a third consonant. The prefix is stressed. Main word stress falls on the prefix, and stem stress is reduced:

a.	kará	'black'	kápkarà	'jet black'
b.	temíz	'clean'	tértemíz	'spotless'

(Note the 'leftstress' pattern of Turkish stress placement, as opposed to the 'rightstress' pattern of substantives and certain phrases.)

Studies of this process have attempted to explain the selection of the consonant introduced by reduplication on one basis or another: sonorancy, place of articulation, major class features, etc. In general, the predictive identification of the new consonant has resisted all attempts at explanation. It is clear that the novel consonants are limited to m, r, p, and s (in other words, neutralized to one nasal, one liquid, one continuant and one non-continuant obstruent). But a given stem-initial consonant does not invariably cooccur with a given prefix final consonant: thus we find belli → besbelli 'obvious → unmistakably obvious', but beyaz → bembeyaz 'white → snow white'. It is well known, though, that all V-initial adjectives reduplicate with Vp, as in açık → apaçık 'open → wide-open'. A test conducted with six native speakers of Turkish by Beck (1975) suggests that there is no productive rule governing the choice of the new prefix consonant, although there are general limits within which a choice of new consonant is determined. Underhill (1980) notes that there are only about 50 or so adjectives that reduplicate in this manner, and that new forms cannot be made. Beck's study, however, suggests that speakers are quite willing to create new forms on the spot, but are not always in agreement as to what the novel consonant should be.

Perhaps a more interesting question concerning the shape of these morphemes is this: why should the form of the prefixes be CVC- at all? Turkish generally avoids consonant clusters and tends toward an optimal CV syllable structure with certain well-defined

CC sequences permissible in various syllabic positions and across syllable boundaries. It is of course uncontroversial to suggest that Turkish may have different constraints on the sequencing of consonants word-internally versus across morpheme boundaries. But the question is not whether Turkish has this or that sequential phonotactic constraint, but why it should have developed one particular strategy of reduplication and not another. Even if ..sm.., ..pk.., etc. sequences can occur across morpheme boundaries, they do not necessarily occur there. Why should Turkish reduplication not be of the form kara → kakara, temiz → tetemiz, or, alternatively kara → kapakara, temiz → teretemiz, etc.?

It is of interest to note that there are some adjectives for which the reduplicative form is CVCV-, i.e., which have a copied vowel inserted after the new consonant; there are also a few adjectives that take a reduplicated form in CVCVC. I will briefly comment on these forms as well.

The main proposal of this paper is that at the nonsurface level of phonological representation the reduplicative prefix (henceforth, REDUP) is a separate word. This accounts for the fact that the prefix is closed with a C, since there is a morpheme structure condition (MSC) in Turkish requiring virtually all native monosyllables to end in a C: the analysis also provides an explanation for the retracted stress pattern.

## 2. REDUP as Word: MSC Evidence

First, consider the data showing that Turkish monosyllabic morphemes end in C. There are no monosyllabic N, Adj, or Adv of the form CV. There are some CVV monosyllables, but they are all derived from forms in underlying CVC. (Alternatively, it may be incorrect to view Turkish long vowels as monosyllabic.)

There are exceptions such as enclitics (ve 'and') and bound suffixes which cannot possibly be analyzed as separate words for a number of reasons (such as -de LOC). Interestingly, those suffixes which abstract analyses (such as Dobrovolsky 1975 or Özkaragöz 1980) suggest are preceded by an internal word boundary or have a higher predicational status are either CVC (-mi) or are suffixes which show characteristics of separate words (stress precedes them) but which are harmonically bound to the preceding stem (mi 'INT', me 'NEG'). Other systematic exceptions include the recently invented names for letters of the alphabet (a, be, ce, ge, de, etc), a few borrowed words such as bu 'smell', ma 'water'; specialized words such as se 'three at dice'; the subset of demonstrative pronouns bu, su and o, which are morphophonemically

bu(n), su(n) and o(n), and the native word su 'water', which is morphophonemically su(y).

Otherwise, substantive (N or Adj) and adverbial monosyllables in Turkish are of the form

ip, at, ak, göz, beş, üç, yem, on, el, var, etc....

and substantival or adverbial monosyllables like \*pa, \*te, \*ka, \*me, etc. cannot be found.

### 3. REDUP as Adverb

There is evidence supporting the claim that the reduplicative 'word' is an adverbial.

I shall claim that the reduplicative prefix is in essence an intensifier of the same type as the nonreduplicative adverbial intensifier çok 'very'. Çok intensifies substantive or adverbial forms:

- c. çok iyi 'very good'
- d. ipiyi 'very good'

but not reduplicated forms:

- e. \*çok ipiyi

(The latter can be produced nonseriously, which demonstrates its anomalousness. One of the six subjects in Beck's study accepted çok for REDUP to a certain extent, but not in a clearly patterned way.) This complementarity of distribution and general equivalence of meaning suggests an equivalence of function between these elements.

Comparative and superlative usage is also complementary with reduplication. Note:

- f. daha iyi 'better'
- g. en iyi 'best'

but not

- h. \*daha ipiyi
- i. \*en ipiyi

I will consider çok to be a 'relative intensifier' or first degree of comparison, and REDUP to be an 'absolute intensifier'.

There is a parallel in English with the use of other intensifiers like darn/damn. One rarely hears *\*?very darn/damn good* although *pretty darn/damn good* is acceptable. (Interestingly, *not very damn good* is acceptable, but this is a separate issue.) The same can be said of intensifiers like super: *a super day* is acceptable, while *\*a very super day* is not. The parallel I am calling attention to is not exact: but it seems to be the case that the very intensifier in English cannot occur with all other intensifiers.

In Turkish, there is a difference in emphasis between using çok and using the REDUP to intensify, but it is not the difference between 'very' and 'too'. (This distinction—when it is made in Turkish at all—employs another word: for a succinct discussion, see Underhill, (1980:62-63.) REDUP appears to be an 'absolute intensifier' in that it cannot occur with the unmarked intensifier çok (nor with other degree adverbials like birçok 'quite a few' or biraz 'a few').

#### 4. Why Leftstress?

I now turn to a consideration of the fact that these REDUP forms show the leftstress pattern with reduction of the stem stress. At first, one might be tempted to hypothesize that some sort of stress retraction is taking place. Stress retraction seems to be associated semantically in Turkish with 'emphatic' forms; cf. the parallel in the vocative, which shows a process of retracting stress to the left until it lands on the first closed syllable of the word, or on the first syllable of the word if no closed syllable intervenes (Foster 1969:252), (Zimmer 1970). Incidentally, I think this classification of the retracting stress as 'vocative' is debatable; the same, generally 'emphatic' retraction phenomenon is common to other languages as well (the closed syllable condition aside); cf. French, which also shows this retraction: garson → garson!

There is an even more compelling reason for the appearance of the word-initial retracted stress in these forms. The stress pattern of these forms is simply that of compounds. The leftstress with reduction pattern is parallel to that of compound nominals like él çantası 'handbag', ş banka 'commercial bank' or compound adverbials such as güle güle 'faretheewell' or güzel güzel 'beautifully', all of which are leftstressed with stress reduction on the right. An analysis of REDUP forms as consisting of underlying separate words provides a natural rationale for the appearance of the compound stress pattern.

Note that these leftstressed nominal and adverbial compounds are different in kind both phonologically and semantically from the partial rightward reduplication of the type čoYuk moYuk 'children and all that', on which the stresses fall pretty evenly.

## 5. Derivation

The derivation of the REDUP forms that I am proposing here reflects an intersection of predictable and partially predictable elements which are best represented as separate underlying words. The logic of this derivation is (tentatively) as follows:

Grammatical Prerequisite: Intensify adjective of REDUP class.

1. copy #CV or #V to create intensifier; insert word-final boundary;
2. close form with a C according to MSC for separate words;
3. assign branching node labelled ADV PHRASE above REDUP and ADJ;
4. assign word stress to REDUP form and adjective by rule;
5. assign compound stress (leftstress) to the newly created adverbial;

Indented rules apply to all lexical items in the language whose structural description (SD) is met. This approach thus reveals a clear distinction between rules which are specific to the reduplication process and those which are more general and which the reduplication process supplies with appropriate forms.

As indicated above, there are existing analyses of Turkish which have proposed underlying forms (UFs) with word-internal word boundaries. These reduplicative forms provide another set of data which support these abstract 'isolating' analyses of Turkish, though admittedly the details of removing word-internal word boundaries are not yet satisfactorily worked out.

## 6. REDUP in CVCV or CVCVC

I think it is likely that the REDUP forms may be losing their underlying separate word status for some speakers. The fact that the new consonant is quasi-predictable is evidence of this.

Additionally, the more the internal word boundary is felt to weaken in these forms, the more alternate forms we can expect, as the constraint on C-final monosyllables will no longer be operative. It will be interesting to see if a metrical or autosegmental analysis might provide some rationale for the alternative forms.

Contrary to this view, there is no doubt that there is still productivity involved in the production of these forms. As noted above, native speakers are willing to attempt new forms. Another indication that this process is still felt to be productive is supplied by bilinguals. The English-Turkish bilingual children of a colleague of mine in Turkey were fond of creating intensive reduplicated adjectives in English such as 'wimwonderful' on the Turkish pattern. It seems to me that the separate word status of the REDUP element is connected with productivity; for those speakers who analyse REDUP forms as frozen, there is less likelihood of productivity than for speakers who analyze it as a separate word. (Of course, even frozen forms may provide a basis for productive analogies, a problem which makes the status of the words produced by the bilingual children less clear.)

If we accept the word boundary analysis as the correct characterization of the REDUP phenomenon, it provides us with some explanation for why speakers disagree on which words can be reduplicated in this manner. Those for whom the reduplicated forms have no internal boundary (who view them as unit morphemes) probably also have a restricted class of these words in their lexicons; those who are still performing the word boundary analysis are more given to productive innovation.

References

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