

# ON COPULAR CLITIC FORMS IN TURKISH\*

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## O. Introduction:

This paper argues for a novel classification of the morphology in a canonical agglutinative language, namely Turkish, in some respects. I argue here that what has traditionally been described as true agglutination is actually due to cliticization. While true agglutination exists as well, it is distinct from cliticization. I look here at verbs exclusively and discuss cliticized forms of the inflected copula as well as some other clitics that attach to verbs at cliticization sites. If the analysis proposed here is correct, Turkish has only two genuinely verbal simple finite forms: the definite past and the conditional. All other tense-aspect-mood inflections are actually inflections of the copula and not of the main verb.

### 1. Presentation of main arrays of facts concerning so-called simple verbs:

It is a well-known fact that among the various simple finite verb forms in Turkish, two behave differently from the others in two respects. The definite past and the conditional take somewhat different subject agreement suffixes than the other simple finite verb forms, and they are regular with respect to word-level stress, while the other simple verb forms are exceptional in this respect. I will refer to the definite past and the conditional as "genuine" verbal forms and to the other simple verbal forms as "fake" or "copular" forms, for reasons which will become clear in the course of the exposition and which form the core of the analysis to be proposed in this paper.

Let us first look at the genuine finite verbal forms, one a tensed form, the other one marked for the conditional mood. The agreement suffixes are boldfaced, and the primary word-level stress is marked with an accent sign.

#### (1) Genuine verbal forms:

<u>Definite past:</u>		<u>Conditional:</u>	
1. sg. git-tí	<b>-m</b>	git-sé	<b>-m</b>
2. sg. git-tí	<b>-n</b>	git-sé	<b>-n</b>
3. sg. git-tí	<b>-Ø</b>	git-sé	<b>-Ø</b>
1. pl. git-tí	<b>-k</b>	git-sé	<b>-k</b>
2. pl. git-ti	<b>-níz</b>	git-se	<b>-níz</b>
3. pl. git-ti	<b>-lér</b>	git-se	<b>-lér</b>
'go-Past	<b>-Agr.'</b>	'go-Conditional	<b>-Agr.'</b>

Note that the word-level accent in all of these forms is on the last syllable. This is the location of regular stress. Phonological words in Turkish bear final stress, irrespective of their length and irrespective of the weight of the final syllable. Let us now turn to the "fake" simple tenses.

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(2) "Fake" tenses; these consist of participle + inflected copula sequences under the present analysis; for reasons that will become clear later on, I am assuming here that the copula in these forms is in the present tense and hence null, since in Turkish, as in a variety of other languages, the present tense copula happens to be null:

<u>Future:</u>	<u>Reported past:</u>
1. sg. gid-ecéğ- $\emptyset$ -im	git-miş- $\emptyset$ -im
2. sg. gid-ecék- $\emptyset$ -sin	git-miş- $\emptyset$ -sin
3. sg. gid-ecék- $\emptyset$ - $\emptyset$	git-miş- $\emptyset$ - $\emptyset$
1. pl. gid-ecéğ- $\emptyset$ -iz	git-miş- $\emptyset$ -iz
2. pl. gid-ecék- $\emptyset$ -siniz	git-miş- $\emptyset$ -siniz
3. pl. gid-ecék- $\emptyset$ -ler (or: gid-ecek-lér)	git-miş- $\emptyset$ -ler (or: git-miş-lér)
'go-Fut.- <u>Cop.Pres.</u> -Agr.'	'go-RP- <u>Cop.Pres.</u> -Agr.'

Aorist:

1. sg. gid-ér- $\emptyset$	-im
2. sg. gid-ér- $\emptyset$	-sin
3. sg. gid-ér- $\emptyset$	- $\emptyset$
1. pl. gid-ér- $\emptyset$	-iz
2. pl. gid-ér- $\emptyset$	-siniz
3. pl. gid-ér- $\emptyset$	-ler (or: gid-er-lér)
'go-Aor.- <u>Cop.Pres.</u> -Agr.'	

Comparing the agreement suffixes of this group with those of the previous group, we see that the suffixes for both the singular and the plural second person as well as for the first person plural are different in the two paradigms. (The difference in the suffixes for the first person singular can be attributed to a low-level phonological rule, deleting the initial vowel of the suffix after a directly preceding vowel.)

Perhaps more interestingly, the stress properties of the two groups are different, as well. In the "fake" verbal forms, stress is never final (with the exception of the third person singular form, where the agreement suffix is null).<sup>1</sup>

In traditional descriptions, the agreement suffixes of the second group are characterized as exceptional with respect to stress. Such exceptional suffixes (of which there are a number) do not receive word stress when they are in word final position.

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<sup>1</sup>A further exception to this generalization are the parenthesized forms for the third person plural, where we observe regular final stress. These forms actually constitute the standard pronunciation, while the forms with non-final stress are innovative, colloquial forms, obviously representing an attempt of native speakers to homogenize the paradigm completely. It should be noted that the suffix for the third person plural is itself an exception within the paradigm of subject agreement suffixes. It does not resemble any of the other suffixes either in shape or structure. Note that the first and second plural suffixes have a person and a number subpart; this is not the case for the third person plural suffix. The shape of that latter suffix is identical to that of the inherent plurality marker on nouns:

(i) kitap 'book' kitap - lar 'books'

It appears to be obvious, then, that the agreement paradigms "borrowed" this suffix from the nominal marking system. It should be noted that this suffix is regular with respect to stress in its function as an inherent plurality marker. This obviously influences its behavior in this respect in the standard dialect, when used as a third person plural agreement marker. More will be said about this point after the basic analysis of these forms will have been presented.

Rather, the syllable immediately preceding such an exceptional suffix receives word level stress. This can be illustrated via the verbal negative suffix **-mA**:<sup>2</sup>

- (3) a. uyú!  
sleep (Imper.)  
'Sleep!'
- b. uyú - **ma**!  
sleep-**Neg.** (Imper.)  
'Don't sleep!'

Where such an exceptional suffix is not in word final position, the primary word level stress that precedes it remains "trapped" in its position; in other words, no word final primary stress is possible in such examples; where the sequence following the exceptional suffix does not include yet another exceptional suffix and is rather long, a secondary or tertiary stress is found on the last syllable:

- (4) uyú-ma-yabil-ir  
sleep-Neg.-Abil.-Aor.  
'She might not sleep', 'she is able to not sleep'

Otherwise, the proximity of the primary stress appears to block the occurrence of non-primary stresses:

- (5) a. uyu - dú  
sleep-Past  
'(he) slept'
- b. uyú - **ma** - dı  
sleep-**Neg.**-Past  
'(he) didn't sleep'

I claim in this paper that the agreement suffixes of the second group are not exceptional. Rather, they are regular. Both their shape, different from that seen in the first group, and their behavior with respect to word level stress are an automatic consequence of the fact that they are actually affixed to a copula (to be more exact, to a copula in the present tense, as will be argued later). It can be shown easily that the agreement paradigm of the "fake" finite verbs and of the present tense copula are the same. To see this, compare the boldfaced agreement forms in all the columns of (2) with the agreement forms of the present tense column in (6) below. If so, the apparent verbal stems that precede the agreement suffixes in the second group are not genuinely finite verbal stems, but rather are adjectival, i.e. they are participles. If this claim is correct, only very few simple verbal forms in Turkish are genuinely finite: the definite past and the conditional are the most productive forms among those, and their paradigms were seen earlier, under (1).

In order to motivate this claim, it is necessary to first describe copular forms that are, indeed, clearly copular.

## 2. Copular constructions in general:

The following examples illustrate a variety of tenses (and one mood, the conditional) of the copula, using a clear-cut, morphologically underived adjective:

<u>(6) Present tense:</u>	<u>Reported past:</u>	<u>Definite past:</u>	<u>Conditional:</u>
1. sg. hastá-yım	hastá-y-mış-ım	hastá-y-dı-m	hastá-y-sa-m
2. sg. hastá-sın	hastá-y-mış-sın	hastá-y-dı-n	hastá-y-sa-n

<sup>2</sup>In this paper, I shall follow general Turkological practice in indicating segments that undergo a variety of assimilation processes by using capital letters. Capital letters for vowels indicate vowels that undergo vowel harmony (VH) for backness and rounding, while capital letters for consonants indicate consonants that undergo assimilation in voicing.

3. sg.	hastá(-dır) <sup>3</sup>	hastá-y-mış	hastá-y-dı	hastá-y-sa
1. pl.	hastá-yız	hastá-y-mış-ız	hastá-y-dı-k	hastá-y-sa-k
2. pl.	hastá-sınız	hastá-y-mış-sınız	hastá-y-dı-nız	hastá-y-sa-nız
3. pl.	hastá(-dır)-lar	hastá-y-mış-lar	hastá-y-dı-lar	hastá-y-sa-lar
	'sick-Agr.'	'sick-Cop.-RP-Agr.'	'sick-Cop.-P.-Agr.'	'sick-Cop.-C.-Agr.'

The status of /y/, the palatal glide, is not the same everywhere in the examples listed in (6). In the first column, i.e. in the present tense, the copula is zero. This is not unusual; in Slavic and Semitic languages, we find the same phenomenon, namely that the copula, otherwise overt, is zero in the present tense. The palatal glide which we see in the first singular and plural forms is inserted to break up a vowel cluster; informally, I state this as follows:

(7)  $\emptyset \rightarrow y / V \_ V^4$

This is a well-motivated process, since it can be shown easily that the language does not tolerate vowel clusters in general. Space limitations make it impossible to motivate this rule further; this will be done in future work.

In contrast, the boldfaced palatal glide we see in the other columns in (6), i.e. in the two past tenses and in the conditional mood, *is*, I claim, the copula. We shall see the significance of this distinction in a moment. For the time being, it suffices to point out that this assumption is necessary in order to explain why we have contrasts as those seen between the second person forms of the present tense versus the conditional copular examples in (6), repeated here for the reader's convenience:

(8)	<u>Present tense</u>	(9)	<u>Conditional</u>
2. sg.	hastá-sın/*hastá-y-sın		hastá-y-sa-n
2. pl.	hastá-sınız/*hastá-y-sınız		hastá-y-sa-nız

The /y/ which we do find in the first person forms of the copular present tense in (6) is only found between vowels; its occurrence is due to the rule in (7); it is motivated on phonological grounds exclusively. On the other hand, the /y/ which I analyze here as the copula is found preceding consonants; its occurrence is certainly not due to the rule in (7). To formulate a special phonological rule for its insertion after a vowel and before a consonant, as is done in many traditional works, would be an objectionable move on two grounds: 1. it would complicate the grammar, since we do need the rule in (7) in any event, and the supposed insertion rule in question would effect the same change as in (7), but in a different phonological environment; 2. the supposed insertion rule would not be phonologically motivated, since vowel-consonant sequences are perfectly acceptable in Turkish, indeed are favored phonotactically; hence, the insertion of a non-syllabic segment before another non-syllabic segment would be non-motivated at best, and ill-motivated at worst, since

<sup>3</sup>The clitic -DİR will be discussed later on. It is used optionally in the third person singular and plural agreement forms of the present tense copula. It most generally, but not necessarily, has epistemological functions, which will be mentioned later in the text. While this clitic is used more often with non-verbal adjectives than with verbal (i.e. participial) ones, the fact that it is found at all in the "fake" simple finite verb forms and not with the "genuine" ones, as we shall see later, also argues in favor of the analysis advanced here.

<sup>4</sup>It is possible that the environment of this rule has to be limited further to a special boundary site, thus to something like: /V#\_V, whereby # would characterize a general cliticization site, as opposed to +, the general morpheme boundary within "simple" words, on the one hand, and ##, the boundary between full-fledged words. I leave this question open for further research.

consonant sequences in Turkish are, while existent, marked sequences phonologically; 3. the supposed /y/-insertion rule would derive the ungrammatical forms in (8)—unless the rule would be barred from applying in present tense copular forms; but this move would obliterate the rule's status as a *phonological* rule altogether.

An additional argument for this distinction in analyzing the two types of occurrences of the palatal glide as well as for analyzing the second type of palatal glide in these forms (i.e. the boldfaced /y/ in (6) and (9)) as the copula is the existence of corresponding strong (i.e. free) forms, which exist for all copular forms, with the exception of the present tense:

(10)	<u>Reported past:</u>	<u>Definite past:</u>	<u>Conditional:</u>
1. sg.	hastá <b>i</b> -miş-im	hastá i-di-m	hastá <b>i</b> -se-m
2. sg.	hastá <b>i</b> -miş-sin	hastá i-di-n	hastá i-se-n
3. sg.	hastá <b>i</b> -miş	hastá i-di	hastá <b>i</b> -se
1. pl.	hastá <b>i</b> -miş-iz	hastá i-di-k	hastá <b>i</b> -se-k
2. pl.	hastá <b>i</b> -miş-siniz	hastá i-di-niz	hastá <b>i</b> -se-niz
3. pl.	hastá <b>i</b> -miş-ler	hastá i-di-ler	hastá <b>i</b> -se-ler
	'sick Cop.-RP-Agr.'	'sick Cop.-P.-Agr.'	'sick Cop.-C.-Agr.'

The high front unrounded vowel /i/ in these forms is clearly best analyzed as the copula. These forms are, in present-day Turkish, used in official, formal registers, while their cliticized versions as illustrated in (6) belong to less formal, colloquial registers, but they are "taking over" the language as a whole, which can be seen from acquisition and dialect studies. Clearly, the palatal glide is the cliticized version of the high front unrounded vowel in the "free" forms of the copula, and thus analyzing the glide as a cliticized copula becomes more motivated after having observed the free copular forms. On the other hand, the fact that there don't exist free copular forms in the present tense argues that the palatal glide in the cliticized copular present tense is not the copula; if so, the copula in that form is, as I claimed, simply null.

These analyses also explain the stress facts in a principled way. Note that the stress in the examples of (10) is always on the final syllable of the adjective, i.e. it precedes the copula. This is as expected; the copula is a "weak", unstressed element, and the adjective receives regular, word-final stress. After cliticization, we find exactly the same stress facts. I suggest here that word-level stress is determined before cliticization and is not "redone" after cliticization has taken place.<sup>5</sup> (I shall return to this issue in the concluding section of this paper.) If so, we explain the apparent exceptional behavior of stress not only in (6), but also in (2), since the proposal in this paper is that there is a copula "hidden" between the (apparent) simple tense suffixes and the agreement suffixes. I shall address the question of why the copula is "hidden" in (2), rather than overt as in (6) when discussing so-called complex tenses and other complex finite verb forms.

### 3. Complex verbal forms:

<sup>5</sup>In contrast, phonological rules that determine the feature composition of segments apply after cliticization; these would be for instance sandhi rules and vowel harmony. The different application of the latter rule to cliticized versus non-cliticized copular forms can be seen by comparing (10) to (6); in (10), we see front harmony, triggered by the copula /i/, but in (6), we see back harmony, triggered by the last vowel of the stem, namely [a].

Another instance in the language where cliticized copular forms are observed are so-called complex tenses (or, more appropriately, complex verbal forms, since the conditional can be one component in these forms). A representative sample is presented in the next set of examples:

(11) So-called **complex tenses**: (A representative sample)

Future past:

1. sg. gid-ecék-ti-m

2. sg. gid-ecék-ti-n

3. sg. gid-ecék-ti

1. pl. gid-ecék-ti-k

2. pl. gid-ecék-ti-niz

3. pl. gid-ecék-ti-ler (or: gid-ecek-lér-di)

'go-Fut.-P.-Agr.'

Future reported past:

gid-ecék-miş-im

gid-ecék-miş-sin

gid-ecék-miş

gid-ecék-miş-iz

gid-ecék-miş-siniz

gid-ecék-miş-ler (or: gid-ecek-lér-miş)

'go-Fut.-RP-Agr.'

At first glance, the relevance of the complex verbal tense/mood forms to the issue of cliticized copular forms is not obvious, since there is no palatal glide in these examples. However, there exist corresponding "free" forms that do involve the unbound, "strong" form of the copula, i.e. the high front unrounded vowel /i/:

(12) Future past:

1. sg. gid-ecék i-di-m

2. sg. gid-ecék i-di-n

3. sg. gid-ecék i-di

1. pl. gid-ecék i-di-k

2. pl. gid-ecék i-di-niz

3. pl. gid-ecék i-di-ler (gid-ecek-lér i-di)

'go-Fut. Cop.-P.-Agr.'

Future reported past:

gid-ecék i-miş-im

gid-ecék i-miş-sin

gid-ecék i-miş

gid-ecék i-miş-iz

gid-ecék i-miş-siniz

gid-ecék i-miş-ler (gid-ecek-lér i-miş)

'go-Fut. Cop.-RP-Agr.'

Given the existence of the forms in (12), it is reasonable to analyze the synonymous forms in (11) as cliticized versions of the copular forms in (12), which, in turn, are analyzed as consisting of participles and the copula, the latter inflected for tense and agreement, in parallel to the simple adjective+inflected copula sequences we saw in (10). If (11) is parallel to (6), on the other hand, the cliticized form of /i/, i.e. the palatal glide /y/, appears to be missing.

To solve this dilemma, I propose a rule of glide deletion between consonants. The participial forms in (11) end in consonants, and the tense suffixes on the copula begin with consonants. Informally, this rule is stated as follows:

(13) /y/ --> Ø / C \_\_ C

This is a well-motivated rule, given the marked nature of consonant clusters in Turkish; more specifically, we have to consider that the palatal glide cannot occur as the second member in the coda of a syllable, nor can it be part of a consonant cluster in the onset of a syllable.

This rule applies in all the other complex tenses or tense-mood combinations, as well:

(14) Past (def.) perfective:

1. sg. git-miş-ti-m

2. sg. git-miş-ti-n

3. sg. git-miş-ti

1. pl. git-miş-ti-k

Past (reported) perfective:

git-miş-miş-im

git-miş-miş-sin

git-miş-miş

git-miş-miş-iz

2. pl. git-**mış**-ti-niz  
 3. pl. git-**mış**-ti-ler (or: git-miş-lér-di)  
 'go-Perf.-P.-Agr.'

(15) "Strong" forms corresponding to (14):

Past (def.) perfective:

1. sg. git-**mış** i-di-m  
 2. sg. git-**mış** i-di-n  
 3. sg. git-**mış** i-di  
 1. pl. git-**mış** i-di-k  
 2. pl. git-**mış** i-di-niz  
 3. pl. git-**mış** i-di-ler (git-miş-lér i-di)  
 'go-Perf. Cop.-P.-3Agr.'

(16) Future conditional:

1. sg. gid-**ecék**-se-m  
 2. sg. gid-**ecék**-se-n  
 3. sg. gid-**ecék**-se  
 1. pl. gid-**ecék**-se-k  
 2. pl. gid-**ecék**-se-niz  
 3. pl. ?gid-**ecék**-se-ler (or: gid-ecek-lér-se)  
 'go-Fut.-C.-Agr.'

(17) "Strong" forms corresponding to (16):

Future conditional:

1. sg. gid-**ecék** i-se-m  
 2. sg. gid-**ecék** i-se-n  
 3. sg. gid-**ecék** i-se  
 1. pl. gid-**ecék** i-se-k  
 2. pl. gid-**ecék** i-se-niz  
 3. pl. gid-**ecék** i-se-ler (or: gid-ecek-lér-se)  
 'go-Fut. Cop.-C.-Agr.'

In all of the complex forms listed above that result from cliticization of the inflected copula in (15) and (17), i.e. in the examples in (14) and (16), the copula first cliticizes as /y/, which then deletes between consonants, according to the rule in (13)—an independently well-motivated rule, as discussed above. As seen earlier, the word accent falls to the left of the cliticization site; it is irrelevant whether the clitic copula shows up overtly or not.

Analyzing complex finite verb forms as involving an inflected copula is not altogether novel, even though this analysis is not widely accepted. For example, Underhill (1976) and Lewis (1975) characterize these forms by referring to the copula, even if not very explicitly so, while Johanson (1971) is representative of the more prevalent traditional approach in Turkish studies by analyzing the rightmost tense-aspect-mood suffixes as special markers, with functions (slightly) different from those in simple forms. Crucially, in Johanson's analysis (and in the approach he represents) those special markers which are the rightmost tense-aspect-mood suffixes are not identified as inflections on the copula, but rather as special inflections on the main

- git-**mış**-miş-siniz  
 git-**mış**-miş-ler (or: git-miş -lér-miş)  
 'go-Perf.-RP-Agr.'

Past (reported) perfective:

- git-**mış** i-miş-im  
 git-**mış** i-miş-sin  
 git-**mış** i-miş  
 git-**mış** i-miş-iz  
 git-**mış** i-miş-siniz  
 git-**mış** imiş-ler (git-miş -lér i-miş)  
 'go-Perf. Cop.-RP-Agr.'

Perfective conditional:

- git-**mış** -se-m  
 git-**mış** -se-n  
 git-**mış** -se  
 git-**mış** -se -k  
 git-**mış** -se -niz  
 ?git-**mış** -se -ler (or: git-miş-lér-se)  
 'go-Perf.-C.-Agr.'

Perfective conditional:

- git-**mış** i-se-m  
 git-**mış** i-se-n  
 git-**mış** i-se  
 git-**mış** i-se -k  
 git-**mış** i-se -niz  
 git-**mış** i-se -ler (or: git-miş-lér i-se)  
 'go-Perf. Cop.-C.-Agr.'

verb. The formal similarity between these sets of suffixes and the corresponding ones found in simple verbal forms would then be coincidental.<sup>6</sup>

What is more markedly novel about the proposal I am making in this paper is that some of the simple finite verb forms (i.e. those illustrated in (2)) are actually complex, if I am correct, in the sense that they consist of a participial main verb and an inflected copula; more specifically, the copula is in these instances in the present tense and is inflected for subject agreement.<sup>7</sup> There are two reasons for assuming that in these instances, the copula is in the present (or, rather, in the general, so-called "aorist") tense, and thus null. One is that in the simple forms, all the tense-aspect-related meaning is contributed by what I am calling the participle, and there is no other component of meaning which we can identify; therefore, it is sensible to say that the copula should be in the most "unmarked", general tense-aspect form, which is the present/aorist.

This consideration ties into the second reason for assuming that the copula here is in the present tense: if the copula were in any of the other tense-aspect-mood forms, even if abstractly, we would expect it to be realized as the palatal glide. However, we see that this segment doesn't show up in any of the forms of (2). Notice that our glide-deletion rule in (13) would not apply in these contexts, because in some of these examples, the hypothesized /y/ would not be in interconsonantal position, and we would expect it to surface. To illustrate, let us look at the first and second persons in the singular of the reported past:

(18) Hypothetical forms for the reported past:

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<sup>6</sup>This appears not to be disturbing to the proponents of the traditional view, however, since that approach does not regard the shape of these suffixes in the two groups as identical, given that the palatal glide is not identified as the copula in that approach, but rather as part of the "special" suffixes. There are two reasons for preferring the analysis advanced here to this traditional analysis: 1. the tense-aspect-mood suffixes found in the simple verb forms are sufficiently similar to those found in the complex forms to attribute their similarity not to coincidence, but to inherent identity; slight differences in function can then be attributed to their different positions in the word; 2. the formal difference between the two sets of suffixes concerns the palatal glide, which shows up in the complex forms but not in the simple forms. This segment is the same as that found in copular forms found with clear-cut adjectives and nouns; indeed, all of these tense-aspect-mood suffixes are the same as those found with adjectives and nouns. Therefore, the most insightful analysis is one where those suffixes are identified as the same ones, and hence the glide is identified as the copula in *all* instances.

Another traditional approach views the /y/ as a simple phonological "buffer". I reject this analysis here, due to the reasons explained in the text when motivating my own phonological rules (7) and (13): the palatal glide must be the copula in those instances where I have analyzed it as such, because in just those environments its occurrence is not phonologically motivated; in other words, there is no *phonological* reason why /y/ should be needed as a "buffer" in all (and just) those instances where I have identified it as the copula.

<sup>7</sup>Lees (1962) is the only instance that I am aware of in the literature where a proposal similar to mine is made. (Lees mentions in that paper an even earlier analysis of his, proposed in Lees (1961), but he views his later approach as superior.) Space considerations preclude an in-depth discussion of his proposal here. Suffice it to say that Lees does not advance arguments for his proposal as I do here, since his main aim is a different one from mine: to derive all of the different agreement paradigms and all the personal pronouns from a unique source. His proposal about the different agreement paradigms shown here under (1) and (2) is made only in that context and in passing. The specifics of his analyses are also different from mine; e.g. instead of my rule (7), he assumes the palatal glide to be part of the (underlying) representations of the agreement morphemes; the rules (which are numerous and quite complicated) which he needs to derive *all* of the agreement paradigms as well as the morphologically unbound personal pronouns from one unique source are not general and are not constrained by any universal principles. Other differences between Lees's approach and mine will be addressed in future work.



- 1.sg. \*git-miş-y (-abstract tense)-im  
 2.sg. \*git-miş-y(-abstract tense)-sin  
 'go-RP-Cop.(-abstr. tense)-Agr.

Note that the palatal glide is preceded by a consonant in both examples, while it is followed (in "concrete" phonetic representation) by a vowel in the first example. The second example would not be problematic, since rule (13) would delete the /y/, given that it is between two consonants there. However, that same rule would not be applicable to the first example, and therefore, the assumption that there is an overt copula there would lead to ungrammaticality. I conclude, therefore, that there are good reasons to claim that, while the so-called simple verbal forms illustrated in (2) do include a copula, that it is the present-tense null form of the copula that we find here. Hence, the null form for the copula that I had posited without discussion in (2) is justified.

#### 4. Preliminary summary of claims:

To recapitulate, I have made the following claims so far:

1. The copula in the present tense for both the strong and clitic forms is null; otherwise, the copula is *i* in the strong forms and *y* in the clitic forms. The *y* found in the first person singular and plural in the present tense is only phonologically conditioned, i.e. inserted between vowels; the *y* in all other forms is the copula, which is deleted between consonants.
2. The domain of VH is the word; the domain of stress is the "small word", i.e. the domain preceding the clitic (provisional).
3. The so-called simple verb forms are, with the exception of the definite past and the conditional, actually participles which are the complements of the copular clitic; this explains 1. the apparent exceptional nature of the agreement suffixes with respect to stress as well as 2. the systematically different shapes of the agreement morphemes of the simple verbal forms, and 3. the fact that the "exceptional" agreement suffixes are also found with clear-cut copular forms whose complements are adjectives and nouns, as well as with so-called "complex" verb forms, whose rightmost tense-aspect-mood suffixes as well as agreement suffixes are attached to the copula.

I now turn to additional evidence for the basic claim made here concerning the "exceptional simple" verb forms, i.e. that those consist of a main verb participle and an inflected copula.

#### 5. Additional evidence:

##### 5.1. Differences between verbal and nominal negation:

Turkish has different negation forms for verbs and for non-verbal categories. The verbal negation is the suffix **-mA**, while the non-verbal negation is the free morpheme *değil*:

- (19) a. git-**me**-yeceğ-im  
 go-Neg-Fut.-1.sg.  
 'I will not go'
- b. git-**me**-di -m  
 go-Neg-Past-1.sg.  
 'I did not go'
- c. git-**me** -se -m  
 go-Neg-Cond.-1.sg.

'If I do not go' ('If I were not to go')

In all of these examples, the negation morpheme is attached to the root, which is verbal in all instances; it is irrelevant which tense-aspect suffixes follow the negation suffix.

Contrast this pattern of negation with the non-verbal one:

(20) hasta **değil**-im

sick **Neg.**-1.sg.

'I am not sick' ('It is not the case that I am sick')

We may analyze this free negation morpheme as a negative inflected copula, or as a negative operator to which the null present tense copula is attached, with the copular inflections for tense-aspect-mood and agreement. It is not necessary to take a stand on this question for the purposes of this paper. Suffice it to say that the absence of tense-aspect-mood suffixes on this negation morpheme signals the present—or rather the general, aorist—tense, in parallel to the "regular" copula.

What is interesting for our purposes here is the fact that we find this non-verbal negation form after the tense-aspect suffixes in (2), but not after those in (1). In other words, those forms which I claimed to be participles rather than genuinely finite verbal forms can be followed by this copular negation element, but the true finite verbal forms cannot be followed by this element, a fact which straightforwardly follows from my analysis:

(21) gid-ecek **değil**-im

go-Fut. **Neg.**-1.sg.

'I will not go' ('It is not the case that I will go')

Again, what is important here is what precedes the negation element; what follows it is irrelevant:

(22) gid-ecek **değil**-miş-im

go-Fut. **Neg.**-Rep.Past-1.sg.

'It is said that I will not go' ('It is said that it is not the case that I will go')

The contrast with genuine tenses is clear and robust:

(23) \*git-se **değil**-im

go-Cond. **Neg.**-1.sg.

Intended reading: 'If I were not to go' ('It is not the case that if I were to go...')

(24) \*/?? git-ti **değil**-im

go-Past **Neg.**-1.sg.

Intended reading: 'I did not go' ('It is not the case that I went')

The meaning of these ungrammatical forms is well-formed. The reason for the ungrammaticality is a categorial mismatch; the copular negator needs a non-verbal, i.e. an adjectival or nominal complement, rather than a purely verbal one.<sup>8</sup>

## 5.2. Possible locations for the Q-clitic:

<sup>8</sup>Actually, the free negative element can also follow full-fledged clauses:

(i) bugün erken kalk -tı -m **değil**, erken-den iş -e bile git-ti -m  
today early get up-Past-1.sg. **Neg.** early-Abl. work-Dat. even go-Past-1.sg.

'It is not (only) the case that I got up early today, I even went to work early'

Note, however, that in such constructions the CP-complement of the negator has to be complete, i.e. it has to have agreement morphology, which the ungrammatical examples in the text do not have, i.e. those examples have verbal complements of the negator, not full CP-complements. This contrast also shows that this negator is not a raising predicate.

Another argument for my analysis of the Turkish so-called simple verbal forms as complex forms involving participles and the inflected copula is based on the placement of the Yes/No question clitic. This clitic shares two behaviors of the copular clitics considered so far: 1. it does not receive word-final stress, but rather causes the preceding syllable to be stressed; 2. it undergoes VH.<sup>9</sup> This clitic can negate a whole proposition or the verb, when it is attached to the verb, while it can also attach to focused constituents. Here, I consider its behavior when it is attached to the verb.

Interestingly, when this clitic attaches to so-called simple verb forms, it treats the tense-aspect suffixes differently. While it is found after the tense-aspect suffixes and before the agreement suffixes in the forms illustrated in (2), it cannot do so in the forms we saw in (1); there, the question clitic must follow the agreement suffixes:

- (25) gid-ecék-mi-siniz?  
go-Fut.-Q-2.pl.  
'Will you go?'
- (26) \*/??gid-ecék-siniz-mi?
- (27) git-ti-níz-mi?  
go-Past-2.pl.-Q  
'Did you go?'
- (28) \*git-ti-mi-niz?  
go-Past-Q-2.pl.

While the future tense suffix belongs to the forms we saw in (2), the definite past tense suffix is one of the forms exemplified in (1). This different behavior of the question clitic is not surprising under the analysis advanced in this paper, since I claim that the forms of (2) are actually complex, while those in (1) are genuinely simple. A focusing clitic like the question clitic cannot cliticize by being inserted into a genuinely simple form, as it would be in (28); however, it can cliticize at a sight of general cliticization, as the boundary between the participle and the copula would be, if my analysis is correct, and this is seen in (25).<sup>10</sup> Not surprisingly, the same pattern as in (25) and (26), i.e. attachment of the question focus clitic after the participle and before the copula (in my analysis) can also be seen in constructions whose copular character is more obvious, as in (29) and (30), where the inflected copula has a simple adjectival complement, and in (31) and (32), an instance of a so-called complex verbal form, where the main verb is participial, and the copula is inflected not just for agreement, as in (25)-(26) and (29)-(30), but also for tense-aspect-mood:

- (29) hastá-mı-sınız?  
sick -Q -2.pl.  
'Are you sick?'

<sup>9</sup>Turkish orthography treats this clitic as an independent word by writing it separately from the preceding stem with which it harmonizes. Given that copular clitics are written together with the preceding stem, the orthographic convention concerning the Yes/No question clitic is obviously arbitrary; I will therefore treat this form as part of the phonological word.

<sup>10</sup>The ungrammaticality of forms like (26), i.e. the impossibility of affixing the question clitic to the inflected copula in those instances, must be due to a kind of minimality principle, which would state that such clitics must be placed on the smallest possible domain, which would be the participle rather than the finite form in these examples, where there is a participle. However, in forms as those in (1), where there is no complexity, i.e. where there is no boundary between participle and finiteness suffixes, the smallest possible domain is the full word, and this is where the clitic attaches.

- (30) \*/??hastá-sınız-mı?  
sick-2.pl.-Q
- (31) gid-ecék-mi-y-miş-siniz?  
go-Fut.-Q-Cop.-Rep.Past-2.pl.  
'Is it said that you were going to go?'
- (32) \*gid-ecék-miş-siniz-mi?  
go-Fut.-Rep.Past-2.pl.-Q

Contrasting forms to these verbal agreement affixes are nominal agreement forms, and I now turn to a discussion of those.

### 5. 3. Nominal agreement forms are not exceptional with respect to stress:

In (1) versus (2), we saw two somewhat similar, but nevertheless distinct verbal agreement paradigms. We saw that the shapes of some of those suffixes are different across paradigms, and we also discussed their different behavior with respect to stress.

Another agreement paradigm, again somewhat similar to the other two, yet distinct, is found with nouns. This is illustrated in the following example set:

- (33) kitab-**ím**  
book-1.sg. 'my book'  
kitab-**ín** 'your book'  
kitab-**í** 'her book'  
kitab-**imíz** 'our book'  
kitab-**iníz** 'your (pl.) book'  
kitap-**larí** 'their book'

We note here that these agreement morphemes are not exceptional with respect to word stress; they all receive word-final stress, which is the regular stress pattern of the language. In this respect, they behave like the forms in (1), which I claimed to be genuinely simple, and not like the forms in (2), which I proposed are actually complex forms. Indeed, there is no reason to claim that there is complexity in these nominal inflected forms; there is no "hidden" copula here, and thus the smallest domain to which word-level stress is assigned is indeed the complete word.

The same facts are observed with "nominalized" verbs, i.e. verb forms which correspond roughly to English gerunds and which typically head subordinate clauses in complex constructions in Turkish; (34) illustrates the so-called factive nominal form, while (35) illustrates the factive nominal for the future tense:

- (34) git-tiğ -**ím**  
go-FN-1.sg. 'my going'  
git-tiğ-**ín** 'your going'  
git-tiğ-**í** 'her going'  
git-tiğ-**imíz** 'our going'  
git-tiğ-**iníz** 'your (pl.) going'  
git-tik-**lerí** 'their going'
- (35) gid-eceğ -**ím**  
go-Fut.FN-1.sg. 'that I will go' or '(the place) that I will go to'  
gid-eceğ-**ín** 'that you will go' or '(the place) that you will go to'  
gid-eceğ-**í** 'that she will go' or '(the place) that she will go to'  
gid-eceğ-**imíz** 'that we will go' or '(the place) that we will go to'  
gid-eceğ-**iníz** 'that you(pl.) will go' or '(the place) that you(pl.) will go to'

gid-ecek-lerí 'that they will go' or '(the place) that they will go to'

It is especially instructive to compare the last set of examples to the simple future tense in (2). The shape of the simple, "finite" future tense suffix is the same as that of the future factive nominal. However, the agreement suffixes that the future tense suffix takes are different in (2) than in (35), and those agreement suffixes are "exceptional" with respect to stress in (2), but they are regular in this regard in (35). The reason for these differences is simple: the agreement suffixes in (2) are not directly attached to the main verb, but to the copula. The copular agreement paradigm is distinct from other paradigms, whether verbal or nominal, hence the distinctions among the shapes of the agreement morphemes. Furthermore, given that the agreement suffixes are attached to the copula, they do not belong to the stress domain of the main verb, which ends with the tense-aspect-mood suffixes that delimit the participle, which I have posited for those forms. In the nominal forms, just like in the genuinely simple verb forms in (1), there is no participle, nor is there a copula; therefore, there is one large stress domain, which is the whole word; therefore, the agreement suffixes, which are the last elements in that large word, receive regular final stress.

I now turn to the behavior of yet another clitic, which we had briefly seen when introducing copular agreement morphemes: the clitic **-DIr**, which I shall call "epistemological clitic" or "epistemological copula".

#### 5.4. "Epistemological" copula:

While this element can be used as a "regular" present tense copula for third persons without any particular epistemological impact, it is mostly used to convey the sense of a definitive utterance or of a statement with very high probability:

(36) git-mış -tir  
go-PastPart.-Ep.Cop.

'She has definitely left' or 'It is most probably the case that she has left'

This clitic can attach to just those tense-aspect-mood suffixes which, according to the analysis I have proposed here, delimit participles, but it cannot attach to those suffixes which I claim do not form participles, but rather are part of a genuine finite verb. The example above is a past participle, and it is well-formed. The epistemic copula can also attach after the future tense (participle) suffix and the present progressive (participle) suffix:

(37) gid-ecék -tir  
go-Fut. -Ep.Cop.

'She will definitely leave' or 'It is most probably the case that she will leave'

(38) gid-ıyor<sup>11</sup> -dur  
go-Fut. -Ep.Cop.

'She will definitely leave' or 'It is most probably the case that she will leave'

What is important for our purposes is the fact that the epistemic copular clitic cannot attach to the definite past and to the conditional suffixes:

(39) \*git-tí -dir

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<sup>11</sup>It is a matter of controversy whether the present progressive suffix is stressed on its first or second vowel. Lees (1961) marks the first vowel of this suffix as bearing primary stress. This is certainly true in careful, official speech, in poetic readings etc., but the second vowel seems to bear stress in less careful pronunciation. Since this question is peripheral for our purposes, I do not pursue it any further.

go-Past      -Ep.Cop.

Intended reading: 'She definitely left' or 'It is most probably the case that she left'

(40) \*git-sé      -dir

go-Cond.      -Ep.Cop.

Intended reading: 'If she definitely leaves' or 'If she most probably leaves'

Since the copula takes only non-verbal complements, it shows up with after those suffixes which forms participles under the analysis advocated in this paper, but it cannot show up with those suffixes that head genuinely finite verbal forms.

It should also be mentioned that there is yet another form which cannot appear with the epistemic copula; this is the aorist:

(41) \*gid-ér      -dir

go-Aor.      -Ep.Cop.

Intended reading: 'She definitely leaves' or 'It is most probably the case that she leaves'

As we saw in (2), the aorist is one of the tense-aspect-mood suffixes that does form, under my analysis, a participle and thus involves an inflected copula. If so, it should also take the epistemic copula, just like the other suffixes in (2), but it doesn't. This fact appears to pose a problem for my analysis. However, the problem is only apparent. The temporal function of the epistemic copula is that of the present tense, or rather of the general, aorist tense, and it adds to that its epistemic function. The aorist suffix cannot be followed by another suffix which has, albeit in part, the same function (for some discussion of a principle against morpheme sequences with the same function, see Kornfilt 1986). The regular present tense copula is null and thus does not violate the principle in question. What is important for the purposes of the present paper is the fact that the ungrammaticality of (41) is due to different reasons than the ungrammaticality of (39) and (40).

#### 5.5. Suspended affixation:

I now address another set of facts which also argues in favor of the main point in this paper, namely that some of the so-called simple finite tense forms are actually complex. These facts concern a phenomenon which is called "suspended affixation" in Lewis (1975) and is observed in coordinate constructions. The observation concerns the fact that in some coordinate constructions, but not all, some of the suffixes that are expected to show up on both conjuncts may optionally show up only on the last conjunct but have scope over the whole coordinate construction. The following examples illustrate this phenomenon.

- (42) a.      hasta ve yorgun - du - m  
              sick and tired    -Past-1.sg.  
              'I was sick and tired' ('(I was) sick and I was tired')
- b.      hasta-y -dı -m ve yorgun - du - m  
              sick-Cop.-Past-1.sg. and tired    -Past-1.sg.  
              'I was sick and I was tired'

The example in (42)b. is a coordination where both conjuncts are inflected for tense-aspect-mood and agreement. The example (42)a. illustrates suspended affixation; the tense-aspect-mood and agreement suffixes are overtly expressed on the last conjunct only. Note that we are dealing with a copular construction whose complement is a predicate adjective; the "bare" conjunct in the example with suspended affixation is the predicate adjective.

In the next grammatical examples of suspended affixation, we have, as the "bare" conjunct, apparent simple tensed finite verbs. All of these grammatical examples involve tense-aspect suffixes which we first encountered in (2) and which, as I claimed, actually form participles rather than genuine finite tensed verbs:

- (43) gel -miş ve git-miş-tir  
 come-Perf. and go-Perf.-Ep.Cop.  
 'She has definitely/most probably come and gone'
- (44) gel -ecek ve gid-ecek-tir  
 come-Fut. and go-Fut.-Ep.Cop.  
 'She will definitely/most probably come and go'
- (45) gel -miş ve git-miş-im  
 come-Perf. and go-Perf.-1.sg.  
 'I am said to have come and gone'
- (46) (kitab-ı) oku-yacak ve anla -yacak-sın  
 book-Acc. read-Fut. and understand-Fut.-2.sg.  
 'You will read and understand the book'
- (47) gel -iyor ve gid-iyor -um  
 come-Pres.Prog. and go-Pres.Prog.-1.sg.  
 'I am coming and going'

Even less surprisingly, we find grammatical examples with suspended affixation that involve so-called complex verbal forms. Here, in a sequence of tense-aspect-mood suffixes, the first such suffix clearly heads a participle and can thus form a bare conjunct in a coordination with suspended affixation:

- (48) gel -miş ve git-miş-ti-m  
 come-Perf. and go-Perf.-Past-1.sg.  
 'I had come and gone'
- (49) (kitab-ı) oku-yacak ve anla -yacak-sa-n  
 book-Acc. read-Fut. and understand-Fut.-Cond.-2.sg.  
 'If you will read and understand the book'

The examples make clear that it is irrelevant which type of suffix the tense-aspect-mood suffix on the fully inflected last conjunct belongs to, i.e. if that suffix belongs to those illustrated in (1) or (2) (I shall somewhat modify this statement shortly). What is important is the kind of suffix we see on the bare conjunct. If that suffix is of a type that cannot head a participle, but rather is a suffix that forms a genuine finite verb, then suspended affixation cannot take place:

- (50) \*(kitab-ı) oku-sa ve anla -sa -n  
 book-Acc. read-Cond. and understand-Cond.-2.sg.

Intended reading: 'If you read and understand the book'

- (51) \*(kitab-ı) oku-du ve anla -dı -n  
 book-Acc. read-Past and understand-Past-2.sg.

Intended reading: 'You read and understood the book'

Why should there be such a distinction between the two sets of tense-aspect-mood suffixes? Consideration of the next sets of examples will help us formulate the appropriate generalization:

- (52) \*(kitab-ı) oku ve anla -sa -n  
 book-Acc. read and understand-Cond.-2.sg.

Intended reading: 'If you read and understand the book'

(53) \*(kitab-1) oku ve anla -dı -n  
book-Acc. read and understand-Past-2.sg.

Intended reading: 'You read and understood the book'

(54) \*(kitab-1) oku ve anla -mış -sın  
book-Acc. read and understand-Rep.Past.-2.sg.

Intended reading: 'You are said to have read and understand the book'

(55) \*(kitab-1) oku ve anla -yacak -sın  
book-Acc. read and understand-Past -2.sg.

Intended reading: 'You will read and understand the book'

(56) \*(kitab-1) oku ve anlı -yor -sun  
book-Acc. read and understand-Pres.Prog. -2.sg.

Intended reading: 'You are reading and understanding the book'

(57) \*(kitab-1) oku ve anla -r -sın  
book-Acc. read and understand-Aor. -2.sg.

Intended reading: 'You read and understand the book'

In these sets of ungrammatical examples, the first, bare, conjunct is the simple verb root. The inflected last conjunct has the full array of "simple" tense-aspect-mood forms—both of the "genuine" verbal type illustrated in (1) and of the "fake", copular type illustrated in (2). The reason for the ungrammaticality, I suggest, is that suspended affixation is fully grammatical only if the bare conjunct is a "small word", i.e. is a potentially complete form which can be the complement of the copula.<sup>12</sup> The simple verb root is clearly not a complete form in that sense; it cannot function as a participle by itself, and it cannot be the complement of a copula. Likewise, the bare conjuncts which are headed by the genuine tense-aspect suffixes of (1) are also not complete forms in the relevant sense, because they, too, cannot be participles, and they cannot be complements of the copula. All of these forms must receive their inflections directly, and they are not complete without their inflections.

The only forms that can "suspend" their inflections are forms that never receive those inflections directly anyway, because those inflections actually attach to the copula and not to the main verb. Thus, adjectives and participles can show up as bare conjuncts in the relevant coordinate constructions, since they are never *directly* inflected, but only via the intermediary of a copula. I suggest that the grammatical instances of suspended affixation in copular constructions and constructions involving verbal elements that appear to be finite main verbs is a coordination of adjectives or participles, with the inflected copula cliticized to the coordinate structure.<sup>13</sup> In other

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<sup>12</sup>I am considering here only suspended affixation in verbs and in copular constructions. Inflected nouns also exhibit suspended affixation, but I shall not consider such constructions here; thus, the generalization in the text is intended to hold for verbal and copular constructions only. A more general approach to the phenomenon must await further research.

<sup>13</sup>The question might arise here whether such cliticization might not violate the Coordinate Structure Constraint of Ross (1967), given that the inflected copula attaches to the rightmost conjunct only. This question might be answered by confining the CSC to purely syntactic rules only, thus leaving cliticization outside of the realm of genuinely syntactic constraints. Alternatively, if the CSC is taken to govern processes like cliticization, phenomena like suspended affixation can be taken to argue in favor of a derivation whereby full clauses conjoin, and the "missing" inflectional elements on the bare conjunct(s) are deleted by backward gapping, as proposed in Wilder (1994). If the latter approach is adopted, such gapping would have to be confined to



words, suspended affixation is nothing else but the cliticization of the inflected copula to just those complements that it is allowed to cliticize to in general, with the only difference that these complements are conjoined. This analysis allows all of the grammatical instances of suspended affixation that we saw earlier, while it immediately predicts the ungrammaticality of all the unacceptable examples we saw above, because the latter are categories that we have shown independently as not being able to act as complements of a copula.

#### 5.6. So-called simple tenses used as participial forms elsewhere:

Yet another piece of evidence in favor of claiming that there is a dichotomy among the apparent simple verbal inflected forms just along the lines that I have suggested here comes from the fact that, while some of the so-called simple tenses can be used as modifying participles in DPs, not all can:

(58) yorul-muş çocuk  
 tire -Part. child  
 'The tired child' ('The child who has gotten tired')

(59) kitab-ı oku-yacak kız  
 book-Acc. read-Fut. girl  
 'The girl who will read the book'

(60) oku-r kişi  
 read-Aor. person  
 'A person who reads'

All of these forms exhibit modifying participles that are headed by suffixes that we saw in (2), and which I claimed form participles rather than genuine finite verbs. Those suffixes that we saw in (1) and which do head genuine finite verbs cannot be used in this way, i.e. cannot function as modifying participles:

(61) \*oku-du kişi  
 read-Past person

Intended reading: 'The person who read'

#### 6. Conclusions and further questions:

This paper has proposed that a large area of morphology in Turkish, a canonical agglutinative language, is actually agglutinative only in part. A number of tense-aspect-mood markers as well as predicate-subject agreement markers that have traditionally been thought to be verbal suffixes have been argued to be actually suffixes attached to the copula. I have also argued for the existence of that copula in Turkish, by no means a generally accepted view. The site of cliticization of the inflected copula onto the main verb has been shown to be the site of a variety of morphosyntactic and morphophonological phenomena which cannot take place at sites of true agglutination. If this characterization of Turkish morphology is correct, the language has much more in common with more familiar, non- (or less) agglutinative languages: it has only partially inflected participles of the main verb, it has a copula, and a number of inflection markers that are specifically copular rather than genuinely verbal.

While the inflected copula can, as was illustrated in the paper, occur in free, i.e. unbound, forms, it generally cliticizes to the main verb. I propose, for the time being tentatively, that this process takes place in PR rather than in the syntactic component,

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deleting suffixes on the copula only, leaving "complete" bare conjuncts behind. I shall not take a stand on this issue of the structure of these coordination, since this question is only tangential to my purposes here.

properly speaking. Thus, the syntactic phrase structure trees with their lexical and functional projections of the main verb and of the copula are separate. Morphological inflection which is truly agglutinative is the result of head-to-head movement, while inflection which is due to cliticization is the result of PR-movement of the copular trees down to the main verb trees. Stress is determined within each separate tree. Hence, in homogeneously agglutinative trees, we have regular word-final stress. In composite trees, which are in part the result of cliticizing the copula, we have regular final stress on the last syllable of each agglutinative domain. In phrases in Turkish, the leftmost primary stress "wins", i.e. primary stresses in the words after the first word in the phrase are reduced. The same happens after cliticization, thus explaining the fact that the main verb participle, which is the first agglutinative domain in a composite word, bears domain-final stress, but that stress is not word-final.

There appears to be one problem with this account, posed by phonological observations: why is there non-primary, reduced word-final stress in such composite words? The answer lies in a fact which has been mentioned earlier in passing: when a non-primary stress is too close to the primary stress, it is deleted altogether. How close is "too close"? I leave this question to future research. However, this answer to the apparent problem to the approach in this paper, despite its vagueness, seems to be on the right track, since non-primary word-final stress is, indeed, to be found in composite words that are long.

If stress in a composite word is determined in independent domains, then why is it that VH treats the whole word as one single harmony domain? The answer to this is that it cannot be otherwise. The values for the backness and rounding features of all regular suffixes, irrespective of whether they are derivational or inflectional and irrespective of their category features, are not specified; these two values are determined by VH, depending on the values of the harmony domain which spread from the initial vowel of that domain. In a non-cliticized inflected copula, these values spread from the copula [i]. However, we saw that after cliticization, the [i] becomes a non-syllabic segment, namely the palatal glide [y]. As a non-syllabic element, [y] cannot determine VH-features. Therefore, the features of the vowels in the domain of the host of cliticization, namely of the participle, determine those of the vowels in the domain of the cliticized inflections of the copula by spreading into the copular domain. This spreading is possible, since, as the result of cliticization, the inflected copula has lost its initial word boundary.

Another problem is posed by the observation that certain participles appear to have somewhat different meanings or functions in "simple" forms than they have in composite forms, while my approach predicts that they should have the same meanings and functions in all instances, since they would be participles in all cases. Actually, there is only one form that has this property: main verb predicates which bear the suffix **-mİş** as their only tense-aspect-mood suffix have the meaning of reported past; however, when the main verb with this suffix is in a composite form, the same **V-mİş** sequence is simply a past participle, without the evidential function. This observation has been taken by some to argue that these are two different suffixes (cf. Johanson 1971), or that the latter directly attaches to the main verb, while the former is indeed a copular form (cf. Lewis 1975, Underhill 1976). In my analysis, there is only one such suffix, and it always attaches to a copula, not to a main verb.

While recognizing this problem, I do not think that it should lead us to abandon my analysis, which, as this paper has shown, explains in a motivated and principled way a large variety of phenomena which, at first glance, appear to be unrelated and unmotivated. The approach advocated here does not preclude a satisfying explanation to the problem at hand. The ultimate generalization relevant to this problem is to be found in the order of inflectional suffixes. If we assume that there is a universal order of affixes, and that there are universals governing the relationships between affixes and their syntactic and morphological functions (cf. Cinque 1996), we can express the differences between certain occurrences of given morphemes. In this particular instance, I would propose that the evidential must be an "outer" morpheme, one of the last affixes in a sequence, and close to agreement, if the language has it. This is easy to see if a word has many suffixes. However, if the word has very few suffixes, the evidential will appear to be close to or attached to the stem of the verb, while still actually being an "outer" affix—hence the effect of an evidential suffix in an apparently "simple" finite verb. But when such a suffix is not an "outer" suffix, i.e. when it is followed by a variety of other tense-aspect-mood suffixes, it cannot be an evidential, and it fulfills its other function, namely one of forming participles.

I will conclude with one last question. The analysis proposed here claims that Turkish has only two genuinely verbal forms: the definite past and the conditional—the one a tense marker, and the other a mood marker. Why should just these two forms be singled out by the language? I have no real answer to this question at this point. I would like to suggest, however, that despite appearances to the contrary, this *is* a natural class. It is the definiteness of the definite past which is grouped together here with the conditional. In other words, the two verbal suffixes express two opposite, basic modalities: definite/indicative and conditional.

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