Turkish comparatives: the status and semantic contribution of the adverb *daha* and beyond

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1. Introduction**

This little treatise primarily aims at presenting (a small part of) the insights gained from a large-scale empirical study on comparatives and other related comparison constructions in the Turkish language, a topic which - to the best of my knowledge - has never been explored in a systematic fashion, before. In the course of this study, I interviewed a substantial number of Turkish native speakers on a sample of more than 250 sentences each in order to obtain a thorough amount of positive and negative evidence alike on the (un) availability of different comparison constructions and the specific shape that these take in this particular language. Doing so, I not only checked for those comparison constructions that are traditionally considered to be basic, that is the comparative (Mary is taller than Peter.), the superlative (Mary is (the) tallest.), the equative (Mary is as tall as Peter.) and the positive (Mary is tall.), but I also investigated a number of related constructions including (among many others) noun phrase internal comparatives (Mary bought a more expensive car than Peter.), differential comparatives (Mary is two inches taller than Peter.), comparatives based on antonyms (Peter is shorter than Mary.), less comparatives (Peter is less tall than Mary.), direct comparison with a degree (Mary is taller than 1.70m.), subcomparatives (The table is higher than the door is wide.), direct measure phrase constructions (Mary is 1.82m tall.), degree questions (How tall is Mary?), as well as too and enough constructions (Mary is too tall to sleep on this sofa./Mary is tall enough to reach the upper shelf.).1 At the same time, I tested for the occurrence of negative island effects ('Mary is taller than Peter isn't.) and potential scopal ambiguities ([The draft is ten pages long.] The article is required to be exactly five pages longer than that.; allowing for both, an exactly-15-pages-in-total interpretation as well as a minimal requirement reading, cf. Heim 2001:224). Of course, such an extensive data study reveals numerous fascinating details, many of which would undoubtedly deserve a presentation of their own,

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- 1 Turkish examples for many of these different types of constructions will be given in subsections two and three below. For additional Turkish data, and in particular for negative evidence on those constructions that are absent from the Turkish language, I'd like to refer the interested reader to Beck et al. 2009: 59f and Hofstetter 2009.

but for spatial limitations, I should like to focus on the exact status and the semantic role of the adverb *daha* in Turkish comparatives only, in what follows, given that this certainly constitutes one of the most controversial issues in the existing literature on comparison in Turkish. More precisely, the following subsection two deals with the question of whether or not the use of this adverb is always obligatory in Turkish comparatives and states under which circumstances exactly *daha* can possibly be omitted. The ensuing third subsection then elaborates on the specific semantic contribution this adverb makes within a Turkish comparison construction. Next, section four argues that, apart from its use in comparatives, *daha* also comes with a basic temporal meaning and shows that such polysemies frequently arise in other languages, too and that from a diachronic point of view, this temporal meaning usually precedes the denotation this adverb takes on in comparatives, and ultimately, the cognitive relations that link these different meanings to each other are examined as well. Section five finally concludes this paper and also formulates several desiderata for future research within this linguistic area.

2. The status of daha in Turkish comparatives – obligatory or optional?

As a matter of fact, there is considerable disagreement in traditional grammar books on the status of the adverb daha in comparatives in the Turkish language: Whereas it is sometimes considered to be a totally obligatory element, indispensable to the formation of comparatives (cf. e.g. Bozkurt 1987: 21 or van Schaaik 1996: 213), most grammarians actually stress its largely optional status (Cimilli & Liebe-Harkort ²1979: 37, Ersen-Rasch 1980: 141, Göksel & Kerslake 2005: 199, Kissling 1960: 129, Kornfilt 1997: 417, Lewis ²2000: 51, Underhill 1976: 225), often, however, without specifying when exactly this adverb can be left out and when no such omission is possible. In this respect, my empirical investigation offered perfectly clear-cut results: In the vast majority of cases, the use of the adverb daha is indeed not compulsory at all, irrespective of the particular subtype of comparative construction one is dealing with, as can be seen from the ordinary adjectival comparative in (1a), the adverbial comparative in (2), the noun phrase internal comparative in (3), the comparative featuring an antonym in (4), the differential comparative in (5), the X times comparative in (6) or direct comparison with a degree in (7), all of which have been accepted unanimously with and without daha alike by my Turkish informants:

(1a)	Maria	Peter'den	(daha)	uzun.2
	Mary	Peter:ABLATIVE	(DAHA)	tall
	'Mary is taller than Peter.'			

² For the time being, I shall abstain from assigning a proper English gloss to *daha* and simply leave it at that, instead, because the exact meaning this expression conveys with comparatives also happens to be quite controversial and will be closely examined in section three, below, at the end of which I shall eventually suggest an adequate gloss for it, too.

- (2) Maria Peter'den (daha) sesli şarkı söyledi.³ Mary Peter:ABLATIVE (DAHA) loud sing:PAST 'Mary sang louder than Peter.'
- (3)Maria'nın Peter'den (daha) hızlı bir Peter: ABLATIVE Mary:GENITIVE (DAHA) fast one/a arahasi var car:POSSESSIVE have 'Mary has got a faster car than Peter.'
- (4) Maria Peter'den (daha) kısa. Mary Peter:ABLATIVE (DAHA) short 'Mary is shorter than Peter.'
- (5) Maria Peter'den iki santim (daha) uzun.
 Mary Peter:ABLATIVE two centimetre (DAHA) tall
 'Mary is two centimetres taller than Peter.'
- (6) Maria'nın kitabı Peter'in book:POSSESSIVE Peter:GENITIVE Mary:GENITIVE kitabından hes kat (daha) uzun.4 book:POSSESSIVE.ABLATIVE five (DAHA) time long 'Mary's book is five times as long as Peter's book.'
- (7) Maria bir metre yetmiş santimden (daha) uzun. Mary one/a metre seventy centimetre:ABLATIVE (DAHA) tall 'Mary is taller than 1.70m.'

The only case where insertion of *daha* is really obligatory is constituted by comparatives that lack a standard term in the ablative case such as (8a), where omission of this adverb does not render the corresponding sentence ungrammatical (cf. [8b]), but where the overt comparative meaning is lost altogether: Whereas (8a) clearly expresses an explicit comparison, for instance to a standard that has been made salient in the context immediately preceding this statement, (8b) represents a positive construction only involving an implicit comparison to the comparison class at hand, say, the average size of

³ I intend the term 'adverbial comparative' merely as a description of the syntactic function that the element *sesli* performs in this sentence, given that in the Turkish language, adjectives and the corresponding adverbs often do not overtly differ in form, anyway.

⁴ At first glance, it might look surprising that this construction is included within this set of comparatives, since in English-like languages, this meaning is usually expressed by a comparison construction that is fundamentally equative rather than comparative in nature, as indicated by the English translation of (6). In contrast to this, Turkish displays a basic comparative-like construction, here, just like many Romance languages, as illustrated with the French equivalent of sentence (6) in (i) below:

⁽i) Le livre de Marie est cinq fois plus long que celui de Pierre. the book of Mary is five time more long than that of Peter

an adult woman or that of a ten-year-old child, depending on the respective comparison class to which *Maria* belongs:

(8a) Maria daha uzun. (8b) Maria uzun. Mary DAHA tall Mary tall 'Mary is taller.' 'Mary is tall.'

I therefore draw the general conclusion that the adverb *daha* is usually optional in Turkish comparatives, unless the standard term of the comparison is not overtly realised.

3. The semantic contribution of daha in comparison constructions

Just like its syntactic status as an optional or obligatory element, the semantic contribution the adverb daha makes in a Turkish comparative construction has also been the matter of a heated controversy in existing literature on comparison in this language. The three most widespread positions on this issue can be summarised as follows: (i) Daha represents a purely optional expression not affecting the overall meaning of the comparative at all (cf. e.g. Underhill 1976: 225); (ii) this adverb constitutes the comparative marker as such that can, but does not have to be phonologically realised (hence its omissibility; cf. Cimilli & Liebe-Harkort 21979: 37 or Göksel & Kerslake 2005: 198, among many others); (iii) daha makes a semantic contribution of its own, acting as an intensifier (cf. Jaklin Kornfilt, who talks of an "intensifying effect" (Kornfilt 1997: 220) in this respect, and Geoffrey L. Lewis, who has it that "daha ... may be inserted for emphasis" [Lewis ²2000: 51]). With the latter option, it often remains highly unclear what type of intensifier daha should be considered as, there being at least two plausible possibilities to take into account: It could either be an element operating on the differential itself, in which case it would correspond to much/considerably in the English (9) below, or else, daha could constitute a norm-relating expression on a par with English still in (10), stating that Peter is already fairly tall compared to other individuals within the same comparison class such as for example that of grown-up men:

- (9) Mary is much/considerably taller than Peter.
- (10) Mary is still taller than Peter.

Obviously, these different positions adopted make quite incompatible predictions about the distribution of *daha*, in that the first two predict there to be no difference in meaning in sentences with and without this adverb whatsoever (except for cases where an overt standard is missing, as discussed in section two above), whereas approach (iii), depending on its exact implementation, makes us expect *daha* to be licensed either only in cases where the differential is large enough or alternatively, whenever the overall degree to which the entities involved in the comparison possess the property in question is sufficiently high.

Manipulating individual contexts, I first tested the validity of these predictions on the basis of sentence (1a) (repeated from above for the reader's convenience), as illustrated in (11) below,

(1a)	Maria Peter'den Mary Peter:ABLATIVE 'Mary is taller than Peter.'	(daha) (DAHA)	uzun. tall	
(11)			daha	daha
	context 1: Mary: 1.62m; Peter: 1.60m [small overall size & small differential]:		\checkmark	*
	context 2: Mary: 1.62m; Peter: 1. [small overall size & large difference		\checkmark	*
	context 3: Mary: 1.92m; Peter:	\checkmark	\checkmark	
	context 4: Mary: 1.92m; Peter: 1.8 [large overall size & large differe		\checkmark	\checkmark

from which two main insights can immediately be gained: First of all, while the test sentence without *daha* is likewise acceptable in all four contexts, this does not hold for the sentence including *daha*, showing that there is a clear difference in meaning, so that positions (i) and (ii) described above should definitely be abandoned in favour of the third. Secondly, what seems to matter for compatibility with *daha* is not really the size of the differential itself, but rather the overall size of the items of comparison (*Maria* and *Peter*, in this case), which clearly suggests analysing this adverb in comparatives as a norm-relating intensifier equivalent to English *still* and not as an element operating on differentials. Testing example (12) in a similar fashion (cf. (13) below) led to exactly parallel results, in view of the fact that once again, (12) with and without *daha* evidently differs in meaning and that once more, it is the absolute prices of the entities compared and not the size of the difference separating them that accounts for the potential (non-)occurrence of this adverb, thus underlining its status as a norm-relating intensifier:⁵

(12)	Maria'nın	arabası	Peter'in	
	Mary:GENITIVE	car:POSSESSIVE	Peter:GENITIVE	
	arabasından	(daha)	pahalı.	
	car:POSSESSIVE.ABLAT	ΓIVE (DAHA)	expensive	
	'Mary's car is more expe	car.'		
(13)			daha	daha
	context 1: Mary's car: 2,	,800 €		
	[low overall price & sma	\checkmark	*	
	context 2: Mary's car: 2,	000 €		
	[low overall price & large		$\sqrt{}$	*

(40)

⁵ For lack of space, I confine myself to just these two exemplary cases, here, even though in the actual study, many more scenarios and test sentences were checked revealing precisely the same results as described above.

Moreover, two additional arguments can be adduced in favour of analysing *daha* as a norm-relating intensifier rather than as an element operating on differentials: First, this adverb is fully compatible with canonical expressions operating on differentials as such, as can be seen from the perfectly impeccable status of (14), which would be completely unexpected under a differential-operating approach, given that *daha* would then have to compete for the same syntactic slot as *çok*, leading to ungrammaticality, as depicted for the English and German equivalents in (15) and (16), respectively:

- (14) Maria Peter'den çok daha uzun.

 Mary Peter:ABLATIVE much DAHA tall
 'Mary is much taller than Peter'.
- (15) Mary is considerably much taller than Peter.
- (16) *Maria ist wesentlich/erheblich viel größer als Peter.

 Mary is considerably much tall:ER than Peter intended as: ''Mary is considerably much taller than Peter.'

Second, the adverb *daha* can even be combined with explicit differentials themselves (cf. (5), once more repeated from above), that, however, never tolerate co-occurrence with elements operating on them, but which are rather in complementary distribution with these, as can be seen from the totally ungrammatical status of the English and German counterparts given in (17) and (18):

- (5) Maria Peter'den iki santim (daha) uzun.
 Mary Peter:ABLATIVE two centimetre (DAHA) tall
 'Mary is two centimetres taller than Peter.'
- (17) *Mary is two inches considerably taller than Peter.
- (18) *Maria ist zwei Zentimeter wesentlich/erheblich größer als Peter.

 Mary is two centimetre considerably tall:ER than Peter intended as: '*Mary is two centimetres considerably taller than Peter.'

In sum, I therefore conclude that in Turkish comparatives, the adverb *daha* is neither an element not affecting the overall meaning at all, nor the comparative marker, nor an expression operating on differentials, but rather a norm-relating intensifier, that should be glossed accordingly (cf. (1b) below):

(1b) Maria Peter'den daha uzun.

Mary Peter:ABLATIVE still tall
'Mary is still taller than Peter.'

4. Temporal meanings with norm-relating expressions

4.1. Norm-relating intensifiers from a cross-linguistic perspective

As a matter of fact, the Turkish adverb *daha* is by no means limited to the norm-relating function it performs in comparative constructions discussed so far, but it also appears with a temporal meaning elsewhere, in this language, as shown in the question in (19) or the declarative sentence in (20) in an exemplary fashion:

- (19) Onu daha bekliyor musunuz?
 he:ACCUSATIVE still wait:PRESENT question_particle:2PLURAL
 'Are you still waiting for him?' [Underhill 1976: 227]
- (20) Orhan daha gelmedi.
 Orhan still come:NEGATION.PAST
 'Orhan hasn't come yet.' [ibid.]

Interestingly enough, similar polysemies also exist in many other languages, where adverbs typically used for intensificational purposes in comparatives in the sense described in section three above, at the same time often come with a basic temporal meaning, too. In this context, observe for instance that the English adverbs still and yet allow for both, a norm-relating intensifying meaning as well as a temporal interpretation, as illustrated in (21a) versus (21b) and (22a) as opposed to (22b), respectively, and essentially the same is also true for German noch (cf. [23]), the French adverb encore (24) and even both corresponding Spanish adverbs aún (25) and todavia (26), all of which display an analogous polysemy:

- (21a) Returning to the spot next day, he heard the sound still louder than before. (norm-rel.)
- (21b) When I first came to London, Piccadilly still had its goat. (temporal) (Oxford English Dictionary, s.v.]
- (22a) The thought ... gave a yet deeper colour of carnation to her complexion. (norm-rel.)
- (22b) I have yet printed off but 72 pages. (temporal) [Oxford English Dictionary, s.v.]
- (23a) Es ist heute noch wärmer als gestern.
 it is today still warm:ER than yesterday
 'Today, it is still warmer than yesterday.' (norm-rel.)
- (23b) Er hat noch nie gewonnen.
 he has still never won
 'He has never won yet.' (temporal)
 [Deutsches Universalwörterbuch (Duden), s.v.]

- (Elle (24a)est encore moins patiente que moi patient:FEMININE she is still less than me 'She is still less patient than me/I am.' (norm-rel.)
- (24b) Vous êtes encore là?
 you are still here
 'Are you still here?' (temporal)
 [Le Petit Robert, s.v.]
- (25a) Este es aún mejor. this is still better 'This (one) is still better.' (norm-rel.)
- (25b) Aún llueve.
 still rain:3SINGULAR
 'It is still raining.' (temporal)
 [Pons Großwörterbuch Spanisch, s.v.]
- todavía hermano (26a)Fuan es más aplicado que suIuan is still more hard-working than his brother 'Juan is still more hard-working than his brother.' (norm-rel.)
- (26b) Está durmiendo todavía.
 is sleep:PRESENT_PARTICIPLE still
 '(S)He is still asleep.' (temporal)
 [Diccionario de la lengua española (Real Academia española), s.v.]

Note, that the Turkish data are of particular interest in this respect, given that Turkish is a genetically unrelated language: While one might argue for a random development within Germanic and Romance or even the whole group of Indo-European languages in view of data like (21) to (26), Turkish *daha* suggests that this phenomenon is in fact much more pervasive than that and that it might after all be indicative of closely related underlying cognitive concepts, rather than being a matter of pure coincidence or mutual influences within a given group of languages. As a next step, I should like to pursue precisely this issue further, by taking a closer look at the historical development of the respective polysemies.

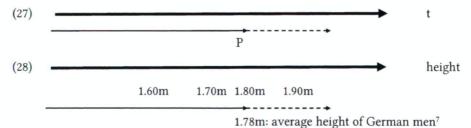
4.2. The historical picture

A brief diachronic investigation on the basis of etymological dictionaries shows right away that for the most part, the temporal meaning of these adverbs was attested much earlier than the norm-relating one in comparatives. This holds for English *still* (cf. Barnhart 1988: 1068, Onions 1966: 869 and Simpson & Weiner ²1989: volume XVI, 696) as well as for German *noch* (cf. Pfeifer ²1993: 927f), French *encore* (cf. Rey 1992: 688), Spanish *aún* (cf. Gómez de Silva 1985: 519) and also for Spanish *todavía* (cf. Corominas 1961: 71). As far as English *yet* and Turkish *daha* are concerned, the situation is somewhat more complex, albeit for very different reasons: With the former, it just so happens that both meanings were present in Old English and thus in the oldest (documented) stage of this

language, already (cf. Simpson & Weiner ²1989: volume XX, 736), so that it is no longer possible to tell which one preceded which, and with the latter, I just haven't got the relevant information, because, in spite of quite some efforts made, I could not get hold of a comprehensive Turkish etymological dictionary, the lack of which represents a most unfortunate gap in the documentation of this language, justly criticised in Laut 2000: 184f. Crucially observe, however, that neither yet nor daha constitutes a counterexample featuring a development in the opposite direction, but that instead, I simply lack reliable data, and if I was to make a guess, I should definitely assume that with these two adverbs, the temporal meaning was found prior to the intensifying one, too. The general pattern, then, is one of "Bedeutungsaufbau" (Blank 1997: 119ff), where a linguistic sign associated with one or several meanings adopts an additional meaning on top of the one(s) existing beforehand. Of course, normally such new meanings do not just come about in a purely accidental fashion, but their emergence is oftentimes triggered by a close cognitive relation between the original meaning(s) and the one that gets added, metaphors and metonymies being particularly productive in this respect (cf. the statistical evaluation in Koch & Marzo 2007: 280 and also Blank 1997: 157, Koch 2008, Taylor 1989: 124 and Ullmann ²1964: 212, all of which stress the predominance of metaphoric and/or metonymic relations in linguistic change). In the next subsection, I therefore envisage examining the cognitive relations involved in the polysemies displayed by daha-like adverbs in detail.

4.3. Cognitive relations linking temporal and norm-relating meanings

The basic cognitive relation linking the temporal meaning of adverbs like *daha* to the norm-relating intensifying denotation attested in comparative constructions is undoubtedly one of similarity, as is generally taken to be typical of metaphors: Just as this adverb (and its equivalents in many other languages) expresses in its temporal use that an action, a state, etc. continues beyond a certain point P in time made salient by the utterance context, as sketched in (27) below,⁶ in its norm-relating use, it states that the compared entities possess the property in question up to a particular point on the scale of a measurable dimension and actually exceed it (cf. [28]), so that a sentence like (1b) means for instance that *Peter* reaches at least the average height of, say, adult men, as determined by the respective comparison class, *Maria* being even taller than that.



6 For a detailed discussion of temporal readings of focus particles, cf. König 1991:in particular section 7; on temporal readings of German *noch*, cf. Löbner 1989 and for English *still*, Ippolito 2007.

⁷ This is the standard height of German men according to the website of the *Statistisches Bundesamt Deutschland*, consulted on January 11th, 2011.

In addition, there is a transfer from one conceptual domain to another, namely from a temporal scale to one of a different nature, and such a transfer also represents a characteristic feature of metaphors in general. At the same time, it is highly plausible that apart from this basic metaphor, a metonymic relation helped stimulating the appearance of the new, norm-relating meaning, given that there are also cases where *daha* conveys this norm-relating meaning precisely within a fundamentally temporal context as exemplified in (29) below:

(29) Dün tren bugünden daha geç/erken geldi.
yesterday train today:ABLATIVE still late/early arrive:PAST
'Yesterday, the train arrived still later/earlier than today.'

Having discovered a basic metaphoric connection that is arguably supported by a metonymic relation as well, between the original, temporal and the additional, norm-relating meaning of *daha*-like adverbs, I want to put forward the following two hypotheses: First, if there is indeed such a striking metaphoric and/or metonymic relation between the original and the new meaning component and these two are the most frequent relations involved in linguistic change (cf. the discussion and references in subsection 4.2. above), it is to be expected that similar polysemies, even if these are not absolutely universal, exist in many other languages as well. And second, it is very likely that from a diachronic point of view, the norm-relating function of these adverbs first appeared in combination with temporal comparatives, before the pattern spread to perfectly atemporal ones later on. Of course, I cannot finally settle these issues here, but these hypotheses allow me at least to raise clear-cut claims for verification or falsification in future linguistic research.

Conclusion and outlook

This little treatise has made three main points about the adverb daha in Turkish comparative constructions: Firstly, it has been shown that this element is obligatory only in those Turkish comparatives that are used without an overt standard term. Secondly, in all comparatives featuring an explicit standard of comparison in the ablative case, daha has been argued to constitute a norm-relating intensifier, rather than a semantically vacuous element, the comparative marker as such or an expression operating on differentials. And thirdly, this article has elaborated on the fact that Turkish daha displays exactly the same polysemy as English still and yet, German noch, French encore or Spanish aún and todavía, the historical development of which has also been taken into consideration just like the cognitive relations involved.

At the same time, a number of desiderata for future research within this linguistic domain have come about: From a typological perspective, it would be interesting to investigate which other languages also make use of adverbs that are ambiguous between a temporal and a norm-relating meaning. From a diachronic point of view, it might be insightful to check to which extent, in these other languages, the temporal meaning also preceded the norm-relating one, and whether the latter really first appeared in the context of temporal comparatives, as has been speculated in section 4.3.

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