

# A HARMONY-LIKE PROCESS IN ASIA MINOR GREEK: PHONOLOGY REALIZES MORPHOLOGY

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## BACKGROUND

Asia Minor Greek (AMG) dialects have been affected by the long-term language contact with Turkish in a way that they have undergone several structural changes at all grammatical levels (Dawkins 1916; Janse 2002, 2009; see also Thomason & Kaufman 1988; Johanson 2002).

- The existence of both a **fusional nominal paradigm** (Greek pattern (1)) and an **agglutinative** one (Turkish pattern (2)), which may even co-exist in the most turkicized varieties:

(1) Fusional declension

	Delmeso	Potamia	Axo
Sg	Nom neka	askeris	lero
Gen	nekas	askerju	leru
Acc	neka	askeri	lero
Pl	Nom nekes	askeri	lera
Gen	--	--	--
Acc	nekes	askerjus	lera
	'woman'	'soldier'	'water'

(2) Agglutinative declension

	Axo	Fertek	Ulaghatsh
Sg	Nom fovas	yerovs	neka
Gen	fovazju	yerazju	nekaju
Acc	fovovs	yerovs	neka
Pl	Nom fovozja	yerozja	nekos
Gen	--	--	nekezju
Acc	fovozja	yerozja	nekos
	'fear'	'old man'	'woman'

- The development of a vowel process in certain AMG dialects, which looks like the vowel harmony that is familiar from Turkish (see also Revithiadou, Van Oostendorp, Nikolou & Filippoulu 2006; Van Oostendorp & Revithiadou 2005; Van Oostendorp 2005):

- (3) a. ðáskal-os      ðáskulos      'teacher' Far, An48:20  
 b. áñem-os      áñomos      'wind' Axo, MK9  
 c. ípn-os      júpnus      'sleep' Sil, Ko35

Basic characteristics of the AMG 'harmony':

- Sensitive to morphological category, i.e. nouns.
- Disyllabic domain; end of the word, between a suffix and a stem.
- It is associated only with the fusional paradigm.**

Questions:

- Why is this harmony-like process confined to the last two syllables of the word?
- Why is it sensitive to morphology?

Sg	Delmeso		Delmeso		Ulaghatsh	
	Nom	gen	Acc	gen	Acc	gen
	papa-s	kerata-s	xerifos	kleftis	xerifos	likos
	papað-ju	keratað-ju	xerifju	kleftju	xerifju	likozju
	papa-Ø	kerata-Ø	xerifo	kleftis	xerifos	likos
	Nom	gen	Acc	gen	Acc	gen
	papað-es	keratað-ja	xerifi	klefti	xerifa	likozja
	--	--	--	--	--	--
	papað-es	keratað-ja	xerifus	kleftju	xerifa	likozja
	'priest'	'snail'	'man'	'thief'	'man'	'wolf'

- The old endings lost their case specialization: Extensive **case syncretism** and **Differential Object Marking** (DOM) neutralized the distinction between nominative and accusative and created number defaults. Significantly, in the singular, nouns looked like having zero exponents for case.

(12) [acc] → [nom] / [\_\_, -plural] (Ulaghatsh, table II)

(13) DOM: [acc] → [nom] / [\_\_, -definite, -plural]

þéke éna løyás (instead of løyó 'hare-SG.ACC') 'He struck a hare' (Delmeso (Dawkins 1916: 94))  
hit-3SG a hare-SG.NOM

The reanalysis was facilitated by the large number of loan nouns of Turkish origin, the declension of which made no nominative – accusative distinction in the singular; the common nom/acc form consisted of the base alone and no case/number exponents (= zero exponent).

## AIMS

- To describe a harmony-like process attested in a group of Asia Minor Greek dialects
- To associate it with the morphological changes these dialects underwent due to interference from Turkish

(4) conservative varieties  
(e.g. Delmeso): absence  
of/restricted agglutination

## FROM FUSION TO AGGLUTINATION

In AMG varieties internal developments as well as language contact with Turkish caused a radical reorganization of the nominal morphological system (Dawkins 1916; Janse 2004; Spyropoulos & Kakarikos 2009; Karatasreas 2011; Revithiadou & Spyropoulos 2012, a.o.). In Cappadocian Greek varieties (CG) this led to the emergence of agglutinative inflectional patterns. CG varieties constitute a continuum as far as this development is concerned:

varieties with mixed nominal morphology (e.g. Misti, Axos): fusion & agglutination

turkicized varieties (e.g. Ulaghatsh): mainly agglutination

(5) Old masculine nouns of the -os declension

	Delmeso	Ulaghatsh
Sg	Nom milos	milo yamos
Gen	milu	miloju yamoju
Acc	milo	yamos
Pl	Nom milus	miloja yamoja
Gen	--	--
Acc	milus	miloja yamoja
	'mill'	'mill'
		'marriage'

(6) Old feminine nouns of the -a declension

	Delmeso	Ulaghatsh
Sg	Nom neka	neka lira
Gen	nekas	nekaju liraju
Acc	neka	neka lira
Pl	Nom nekes	nekes liraja
Gen	--	nekezju (lirajju)
Acc	nekes	nekes liraja
	'woman'	'woman'
		'pound'

The transition from fusion to agglutination reveals a **reanalysis**: the theme vowel of the ending ceases to be a part of the ending and becomes a part of the base/stem.

(7) stem + [ending theme - number/case exponent] → [base stem - theme] + [ending number/case exponent]

(8) [stem mil] + [ending [theme - Ø][number/case - s]] → [base [stem mil][theme - Ø]] + [ending Ø - ju - ja]

or

(9) stem + [ending theme - number/case exponent] → [base stem - [ending theme - number/case exponent]] + [ending number/case exponent]

(10) [stem yam] + [ending [theme - Ø][number/case - s]] → [base yam[ending [theme - Ø][number/case - s]]] + [ending - ju - ja]

The reanalysis was triggered by the loss of the grammatical specialization of the theme vowel or of the whole ending:

- The theme lost its function as a class/word marker: The loss of grammatical gender and the emergence of animacy as a class feature destroyed the coherence of the old inflectional classes: nouns with the same theme vowel in their ending inflected in different ways and vice versa.

## THE AMG 'HARMONY'

Zooming in the AMG harmony-like process:

- (15) a. /petséta/      petjata 'napkin' Sil, Ki85  
 b. /pandeleímonas/      pandeleímanas 'merciful' Sil, Ko51  
 c. /perdikóeira/      perdikóeara 'window-pl' Far, An48:21  
 d. /ðáskalos/      ðáskalos 'teacher' Far, An48:20  
 e. /áñemos/      áñomos 'wind' Axo, MK9  
 f. /kóskino/      kóskunu (o → u) 'sieve' Sil, Ko31  
 g. /áçiro/      ásru 'straw' Liv, DACAMS IE  
 h. /ípnos/      júpnus 'sleep' Sil, Ko35

- The final vowel spreads its [back] and [round] F's on the preceding syllable of the base.
- The process affects only words stressed on the APU or PU syllable.

Van Oostendorp (2005): AMG harmony does not have any of the characteristics of vowel harmony and, furthermore, cannot be efficiently

**Proposal:** The AMG harmony is not a 'borrowed' rule from Turkish but rather a novel phonological process of F-spreading from the theme to the stem: theme and stem share the same F. (See also Postma, Hermans & Van Oostendorp 2006 for a somewhat similar account of A Umblaut in Old High German.)

The process emerged when certain morphological pressures were exercised in the system.

(16) [base stem - theme] + [ending case/number exponent]

- a. ðáskalos      b. petjet a      c. koskin o  
[+rd]      [+bk]      [+rd]  
ðáskulos      petjata      koskuno

- (17) /ðáskalos/      L1C ([+round]<sub>TH</sub> σ<sub>stem</sub>)      IDENT[round]  
a. ðáskulos      \*  
b. ðóskulos      \*\*!  
c. ðáskalos      \*!

→ Stem is a potential licenser because it is a perceptually strong position (for positional privilege, see Steriade 1994, 1995; Beckman 1997, 1998; Zoll 1996, 1997; Walker 2005, 2011, among others)

→ The F-spreading process constitutes a part of the actualization process of the reanalysis.

## CONCLUSIONS

The proposed analysis explains why the process:

- applies only to nouns
- has exceptions (incomplete actualization)
- is bound to a binary domain

→ The F-spreading process is related to language interference not via borrowing of the VH-rule from Turkish (Revithiadou et al. 2006; Van Oostendorp 2005), but rather as a reflection of the changes in the nominal morphology that were facilitated by the language contact with Turkish.

F-spreading constitutes a phonological reflection of a reanalysis in the morphological structure of nouns:

- the theme vowel loses its grammatical function as a class marker and its morphological status as a part of the ending and forms a base constituent with the stem.
- F-spreading is a side effect of this base formation.
- F-spreading is not triggered in agglutinative patterns because the association of the theme vowel with the stem is transparent.

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