Greek dialects in Asia Minor

Accentuation in Pontic and Cappadocian

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In this paper, we discuss the relation between morphological structure and prosodic form in two Greek dialects of Asia Minor: Pontic and Cappadocian. Both dialects underwent a change at all levels of grammar under the influence of Turkish. Emphasis is on the gradual transition from fusional to agglutinative morphology displayed primarily by several dialectal groups of Cappadocian. We show that this morphological development had a profound impact on the accentual behavior of the dialects in question. A comparative analysis of both dialectal groups sheds light on some interesting aspects of the phonology-morphology interface such as the relation between type of morphology and mode of accentuation.

Keywords: lexical accent, fusion, agglutination, edgemostness, compositionality

1. Introduction

In this paper we examine Pontic and Cappadocian, two Greek dialects of Asia Minor. These dialects developed in isolation from the rest of the Greek-speaking world and, in that process, underwent the influence of Turkish. Pontic was spoken by the Greek inhabitants of the coastline of the Black Sea. Cappadocian was a neighboring dialect spoken by the Greek population of the mountainous area that extends from the Euphrates to the Black Sea. In fact, the mutual relation of the idioms of twenty or so villages together make up what has been called here ‘Cappadocian’. We will examine three dialectal groups of Cappadocian: (a) Delmeso and Potámia, (b) Axo, Mistí, Aravan, and (c) Ulaghatsh and Semenderé.

The linguistic resemblances between Pontic and Cappadocian are so striking that there is no doubt that they at one time formed a continuous linguistic area. However, social conditions in the villages of this vast geographical area must also be taken into consideration. Most of the villages had a mixed Greek, Armenian and Turkish population. The Turkish influence on the dialects is stronger in Ulaghatsh and Semenderé, because there the Turkish population was large and increasing. The economical and social ties between villages played an important role in determining the linguistic profile of each dialect. In general, Cappadocian dialects appear to be more turkified than Pontic ones. Both dialects stopped being spoken in that area after the expatriation of the Greek population from Asia Minor at the beginning of the 1920s. Nowadays, Pontic is spoken in villages of Macedonia and Thrace, and some areas of the Caucasus. Cappadocian is almost extinct.

As expected, the mixed ethnic character of the villages had a profound impact on the development of the local dialects. In this paper we explore how each dialect counterbalances two opposing forces: Greek, the mother language, and Turkish, the target language. More specifically, we will show that Pontic is linguistically affiliated with Greek whereas Cappadocian displays signs of disengagement from the mother language due to the pervasive influence of Turkish. Forces of assimilation to the target language are exerted at all levels of grammar but the focus will be on the morphological and phonological levels.

At the morphological level, two modes of morpheme combinatorics are operative in the dialects in question: fusion and agglutination. We regard a morphology as predominantly fusional if the addition of inflectional elements to a lexical root results in a word form where there is no one-to-one mapping between a particular affix and a particular grammatical function. If, on the other hand, word formation results in a construction where the relation between form and function is transparent, then the mode of word formation is agglutinative. Though no language is exclusively of one type or the other, the distinction is still relevant for understanding the structure of complex words.¹ Fusional morphology originates in the dialects under discussion from Greek whereas agglutinating morphology originates from Turkish. Each dialect finds a unique way to combine the two conflicting systems. More precisely, word formation is exclusively fusional in Pontic, and predominantly agglutinating in Cappadocian c. Cappadocian a and b, on the other hand, develop a mixed system of inflection. In these dialects, fusion, agglutination and a third, hybrid system, which combines properties from the other two, are actively involved in the formation of inflectional paradigms.

Interestingly, Greek as well as Turkish exert influence on the prosodic system of these dialects. Both languages are lexical accent systems (Inkelas 1999, Revithiadou 1999). That is, morphemes carry lexically prespecified information on the possible position of stress prominence. The two languages differ, however, in the principles they employ for the resolution of competing accents. Greek opts for *compositionality*, a morphoaccentual principle that assigns prominence to accents belonging to morphemes which are important in morpho-syntactic structure, i.e. heads (Revithiadou 1999). Compositionality is one of the principles that govern the prosody-morphology interface. Turkish, on the other hand, selects *edgemostrness*, a principle that assigns prominence to accents standing at or near a word edge (Inkelas 1999). Edgemostrness is a purely metrical concept. Compositionality and edgemostrness play a crucial role in determining the accentual identity of the dialects under investigation. We will see that dialects closer to Greek, such as Pontic, have compositional accentuation, whereas dialects susceptible to the Turkish influence, such as Cappadocian c, adopt an edge-oriented mode of stress assignment. The interesting cases are the dialects with mixed (fusional and agglutinating) paradigms. As expected, agglutinating forms follow the Turkish stress pattern whereas fusional ones are affiliated with a hybrid, edge-oriented system of accentuation.

A comparative analysis of these novel data also leads to significant findings not only about the development of Greek dialects but also the nature of lexical accent systems. We claim that edge-oriented lexical accent systems are numerically preferred due to the natural incompatibility of edgemostrness with mechanisms that determine word structure. Since edgemost systems are not subject to morphological conditioning they can freely combine with any type of morphology. Thus, words of any morphological type can have directional stress. In contrast, we entertain the hypothesis that compositional accentuation is dependent on specific modes of morpheme combination. The analysis is couched in the theoretical framework of Optimality Theory (Prince & Smolensky 1993, McCarthy & Prince 1994, et seq).

The paper is organized as follows: Section 2 offers background information on lexical accents and the phonological principles of compositionality and edgemostrness. This section ends with a brief review of Greek and Turkish morphology and phonology. In Section 3, we present and analyze the facts from Pontic. In Section 4, we introduce the three dialectal groups of Cappadocian and provide an analysis for each one of them. Finally, Section 5 offers some thoughts about the relation between type of morphology and mode of accentuation, and concludes this paper.

DEP(accent): A lexical accent of the output must have a correspondent in the input.

b. *on position of accents*

NOFLOP(accent) (Alderete 1999, 2001): Corresponding accents must have corresponding sponsors and links.

Formally, MAX(accent) penalizes the deletion of a lexical accent and DEP(accent) the addition of a lexical accent. For example, MAX(acc) is violated when the inherent accent of a morpheme does not surface in the output, /σ́σ-σ/ → [σσσ]. On the other hand, DEP(acc) is violated when, for instance, a suffix acquires the floating accent sponsored by a root, e.g. /σσ'-σ/ → [σσσ́]. In this abstract example, the accentless suffix acquires an accent which was not lexically present. Depending on how they are ranked, these constraints account for the presence or absence of lexical accents in a language. NOFLOP(accent) militates against the deletion or movement of association lines. It simply demands that lexical accents remain faithful to their lexical association. It is violated when an accent moves from one syllable to another, e.g. /σ́σ-σ/ → [σ́σ σ].

Lexical accent systems have generally been regarded as ‘complex’ or even ‘irregular’, and one may wonder what their functionality could be. Lexical accents identify morphemes and as such are useful for the learner/speaker in parsing complex words. The fact that lexical accents may be either linked or floating, and that other principles, such as ‘dominance’, eventually determine the actual location of the prominent accent, does not contradict the notion that they are important cues at the interface of phonology and morphology. This will become clear in the discussion of the accentual systems of Greek and its dialects.

2.2 Compositionality vs. edgemostness

As mentioned in the introduction, two major principles resolve conflicts between accents: *compositionality* and *edgemostness*. Let us start from the most familiar one, edgemostness. This is a phonological principle which simply states: “strengthen the left-/rightmost element in a domain (e.g. word, phrase)” (Prince 1983:20), where ‘strengthen’ should be interpreted as ‘associate with the strongest position in the metrical grid’. Edgemostness is almost exclusively associated with unbounded stress systems. For instance, in quantity insensitive unbounded systems, main stress consistently falls on a syllable at or near an edge (left/right) of the word. In quantity sensitive unbounded systems, main stress falls on the left-/rightmost heavy syllable, and in the absence of heavy syllables, on the left-/rightmost light syllable. Each of the four combinations of

left-/rightmost in the aforementioned statement corresponds to attested languages (Hayes 1995, Walker 1996, Baković 1998). In Kwakw'ala (Boas 1947, Hayes 1995), for example, main stress falls on the first heavy syllable, or by default, the rightmost syllable, just as in Turkish stress falls on the leftmost lexical accent, defaulting to the last syllable in accentless words. We conclude that the algorithm for stress assignment in lexical accent systems is formally identical to the one involved in other stress systems. Given that different levels of prominence have been acknowledged (Prince 1983, Selkirk 1984), one can assume that lexical accents are gathered on their own level. Leftmost accent means simple 'the first element' on that level. At the next level, the position of primary word stress is decided. In an accentless word, for instance, rightmost orientation picks out the final syllable as more prominent. In an accented word, rightmost directionality picks out the rightmost peak of the highest level. We will see two edgemost constraints in action: $X_{MOST}(acc)$ and $Y_{MOST}(Pk)$, where X and Y do not necessarily represent opposing edges.

- (4) *edgemost constraints* (Prince & Smolensky 1993, Baković 1998)
- a. X_{MOST}(accent): Align (Accent, X, PrW, X)
- b. Y_{MOST}(Pk): Align (Pk, Y, PrW, Y)

Assuming that accents (i.e. inherent peak prominences) are gathered on their own grid level, (4a) picks out the x-most element in that level. In the abstract example we give in (5), the leftmost accent is selected, (5a). (4b), on the other hand, applies to input strings that have different degrees of hierarchical articulation and ensures that the y-most peak will stand out as the most prominent, as illustrated in (5b). If there are no inherent peak prominences on the grid, the constraint will choose the y-most (in our example, rightmost) peak as the most prominent in the prosodic word (PrW), (5c).

- (5)
		*		PrW prominence	
	* <*>	* <*>	*	inherent prominence	
	* * * *	* * * *	* * * *		
a.	$\sigma \sigma - \sigma \sigma$	b.	$\sigma \sigma - \sigma \sigma$	c.	$\sigma \sigma - \sigma \sigma$

Edgemostness is not the only metrical principle operating in the world's languages. Often stress assignment requires the co-operation of the phonological and morpho-syntactic components. Compositionality is a morpho-accentual principle at the interface between different modules of the grammar. It basically states that for each morphological mode of combination M there is a prosodic mode of combination P that assigns prosodic structure to the complex

constituent that M creates (Revithiadou 1999, based on Montague 1973). Thus, in compositional systems, morphology and phonology go hand-in-hand to build up the metrical structure of a word. One instantiation of compositionality is head dominance, that is, assignment of prominence to morphological heads. In the ensuing sections we will discuss this type of accentuation in detail. In a comprehensive interface theory that allows phonology to communicate with morpho-syntax, it is only natural for compositionality to choose different modes of expression. For instance, stress often aims at highlighting the morphological constituents of words. In Sibuṭu Sama, a language of the southern Philippines (Allison 1979), secondary stress signals the beginning of each morpheme in a word, e.g. *pina-bissaláhan* ‘to be persuaded’ (Kager 1999: 144). Combinations of these two functions are also common. For instance, in Dutch and other Germanic languages, Level I morphology is head-based, e.g. *koning-in* ‘queen’, whereas Level II morphology is morpheme demarcating, e.g. *drink-bàar* ‘drinkable’ (cf. Van der Hulst 1981, Booij 1995, Kager 2000, Van Oostendorp 2000, among many others). Pertinent to our discussion is the compositional constraint HEADFAITH(acc), segregated into HEADMAX(acc) and HEADDEP(acc). This is a type of positional faithfulness constraint (Beckman 1997, 1998) which promotes faithfulness to lexical accents of heads.

- (6) *head faithfulness constraints* (Revithiadou 1999)
 - a. HEADMAX(accent): A lexical accent of a morphological head in the input has a correspondent in the output.
 - b. HEADDEP(accent): A lexical accent of a morphological head in the output has a correspondent in the input.

These three sets of constraints will play a crucial role in the analysis of the dialects examined in this paper.

To conclude, compositionality, in its different appearances, is a principle that translates morphological constituency into accentual form. Edgemostness, on the other hand, serves to demarcate some edge of the word (or phrasal) domain in its entirety.

2.3 Greek and Turkish: A survey of contrasts

Greek is a language with fusional morphology. Words minimally consist of a root and an inflectional suffix, e.g. [[anθrop]-os] ‘man-NOM.SG.’² In the nominal suffix /-os/ two morpho-syntactic features such as number and case are fused into one form. Elaborate morphological structures are created when

derivational suffixes are added to the root, e.g. [[[anθrop]-ak]-os] ‘little man’, [[[[poδ]-ar]-úkl]-a] ‘big foot’. The concatenation of affixal material to the root creates a series of multiply embedded, hierarchically organized domains, as shown in (7). The most embedded domain is the root. The root expands with the help of derivational suffixes into a larger constituent, called the stem. The inflection is added to assign to the stem its morpho-syntactic features.

(7) *morphological structure of a Greek word*

The vowel /-o-/ is treated as part of the inflection and not as part of the root/stem. Regarding the vowel /-o-/ as part of the root/stem would require setting up a truncation rule to explain that the vowel is lost. Compare the following forms:

(8) *fusional morphology in Greek*

a.	anθrópu	/anθrop-u/	* /anθropo-u/	‘man-GEN.SG’
b.	anθropinós	/anθrop-in-os/	* /anθropo-in-os/	‘human’
c.	anθropákos	/anθrop-ak-os/	* /anθropo-ak-os/	‘little man’

In the above examples, we would have to assume that the thematic vowel /-o-/ is always truncated, which considerably complicates the description. Also the fact that the vast majority of suffixes are vowel-initial indicates that what used to be a thematic vowel in the older forms of the language has been reanalyzed as part of the suffix. For a more detailed discussion of this aspect of Greek morphology, we refer to Revithiadou 1999. Additional information on Greek morphology can be found in Philippaki-Warbuton 1970, 1976, Ralli 1986, 1988, 1993, 1994, 1998, et seq, Anastasiadi-Symeonidi 1986, 1992, et seq, and references cited therein.

Greek is a trochaic, bounded system: the scope of primary stress is limited to the last three syllables of the word (*3σ-window*). There is no evidence for the presence of secondary stress in the standard dialect (Arvaniti 1991, but cf.

Malikouti-Drachman & Drachman 1981 for a different view). Greek accentuation has been the focus of attention in many studies such as Joseph & Philip-paki-Warburton 1987, Malikouti-Drachman & Drachman 1989, Drachman & Malikouti-Drachman 1999, et seq, Ralli & Touratzidis 1992, Arvaniti 1991, and references cited therein.

In Revithiadou 1999, it is argued that the relatively ‘free’ occurrence of stress is an indication of the presence of lexical accents in the underlying representation of morphemes.³ Thus, the differences in the accentuation of *ánthropos*, *fantáros*, *uranós*, are attributed to the variability in the underlying representation of the roots. The root /fantár-/ has a linked underlying accent, the root /uran’-/ has a floating lexical accent, whereas the root /anθrop-/ is unaccented. Unaccented roots are stressed by default on the antepenultimate syllable, unless the inflection has an accent. In the latter case, the accent of the inflection is prominent, e.g. *anθrópu* /anθrop-’u/ ‘man-GEN.SG’, *thalasón* /thalas-ón/ ‘sea-GEN.PL’.

Given that word formation is carried out by elaborate rules of morpheme combinatorics, complex outputs emerge where often more than one morpheme in a word has inherent accentual properties. A conflict between input accents arises when the language imposes the requirement of having only one prominent element per word. We propose that in this case the accent of the ‘morphological head’ of the word wins. Although the notion of headedness is not unproblematic, we take it here to refer to the constituent of the word that determines morpho-syntactic category, gender and class (Zwicky 1985, Scalise 1988a,b, Anderson 1992, Ralli 1993, 1994). For most languages, this implies that inflectional suffixes are not heads.⁴ To illustrate with an example, in the word *stafídon* /stafíð-ón/ ‘raisin-GEN.PL’, root-accent supersedes suffix-accent because the root is the head. That accentual dominance is not just a property of roots is shown by words like *stafíénjon* /stafíð-énj-ón/ ‘of raisin-GEN.PL’ where the root loses to the accent of the derivational suffix. In the complex construction, the derivational suffix is the determinant of the morpho-syntactic category of the word. In both cases, therefore, the accent of the morphological head is the winner. If the head lacks an accent, e.g. /thalas_H-a/, /prakt-or_H-as/, stress is by default on the antepenultimate syllable, e.g. *thalasa* ‘sea’, *práktoras* ‘spy’, unless an accented morpheme occurs in the word.⁵ To conclude, accentuation in Greek is *compositional*. Prosody communicates with morphology and picks out the accent sponsored by the most important morpheme: the head.

In Revithiadou 1999, the predominance of accents belonging to heads is claimed to be a special case of positional faithfulness. It is simply a matter of

ranking HEADFAITH(acc) above simple FAITH(acc),⁶ and the constraint that assigns word stress in the absence of accents, dubbed here DEFAULT.⁷ The default stress in Greek is antepenultimate, e.g. *krokóðilos* ‘crocodile-NOM.SG’. Malikouti-Drachman & Drachman 1989 and Drachman & Malikouti-Drachman 1999 analyze this stress pattern with extrametricality of the last syllable and a trochaic foot at the right edge of the word. The constraint ranking for Greek stress is summarized in (9) and a few examples follow in (10).

(9) *ranking for accentuation in Greek*

HEADFAITH(acc) >> FAITH(acc) >> DEFAULT

(10) *accentuation in Greek*

a.	/stafid _H -ón/	stafídon	‘raisin’
	/stafid-ín _H -i/	stafidíni	‘raisin pulp’
	/romándz _H -ón/	romándzon	‘romance’
	/romándz-áð _H -ón/	romandzádon	‘romance’
b.	/krokodil-os/	kro(kóði)los	‘crocodile’

High-ranking of HEADFAITH will always give priority to the accent of the head (10a). In the absence of a prespecified peak prominence (=lexical accents), antepenultimate stress takes over (10b).

Turkish stress has long been discussed in the literature (Lees 1961, Sezer 1981, Hayes 1981, Inkelas 1999, and references cited therein). Here, we follow Inkelas 1999 and focus mainly on the part of word stress that relies heavily on lexical accents. A few preliminary remarks on Turkish morphology are in order before we delve into the details of lexical stress assignment.

The morphology of Turkish is agglutinating. Each morph expresses a unique morpheme. This one-to-one correspondence between form and meaning contrasts Turkish with fusional languages like Greek where one form can express more than one morpho-syntactic feature (e.g. case and number). Orgun 1996 and Inkelas & Orgun 1995, 1998, propose a segregation of Turkish suffixes into levels, based on both phonological and morphological evidence. Suffixes belonging to the same level form a flat structure which, in turn, adjoins to a host to create a branching construction. One argument in support of the flat structure of affixal material is suspended affixation. Suffixes that belong to the same group cannot be suspended separately from each other, e.g. *k'edi-ñer-im ve k'opek'ñer-im* / **k'edi-ñer ve k'opek'ñer-im* ‘cat and dog-PL-1SG.POSS’ (Orgun 1996: 123). According to the authors, the most important characteristic of Turkish morphology is the absolute lack of ordering among different suffixal groups. Suffixation applies recursively, and, consequently, the flat suffixal

‘islands’ can occur in more than one position in a word. The recursive structure of a Turkish word is depicted in (11).

- (11) *morphological structure of a Turkish word*
(based on Inkelas & Orgun 1998:370)

According to Inkelas & Orgun, PL and 2PL.POSS form the suffixal group 3, whereas GEN, ABL and, most probably, the suffix /-ki/ form group 4. The numbers refer to the closeness of the group to the root. Another suffixal island (group 2) is composed of passive, aspect and negative affixes and often intervenes between the root and group 3. The authors also argue that each suffixal group is associated with its own *cophonology*. Thus, the criteria for defining each group are morphological (e.g. suspended suffixation) as well as phonological. Suffixes that form a flat structure subscribe to the same cophonology. Notice that the suffixal groups are not always ordered with respect to each other. The PL and CASE suffixes apply recursively before and after other suffixal clusters.

According to Inkelas (1999), some roots and suffixes have lexically pre-specified accentual properties.⁸ Since stress is culminative, only one accent may surface. In Turkish, the accent located closest to the leftmost edge of the word is the winner. In (12a), the root /pendžére/ is accented and the suffixes are pre-accenting: /'-(y)lE/, /'-mI/. Primary stress, however, is on the root. With an unaccented root, the leftmost accent, sponsored by the suffix /-(y)lE/, surfaces: *patlidžán-la-mi* /patlidžan-'(y)lE-'mI/ 'eggplant-INSTR/COM-INTERR'. In the absence of accents, default stress is on the final (rightmost) syllable: *arabá* 'car', *araba-lár* 'car-PL'.

- (12) *a few Turkish words*
a.	pendžére	‘window’
b.	pendžére-yle	‘window-INSTR/COM’
c.	pendžére-yle-mi	‘window-INSTR/COM-INTERR’

The above examples verify the unbounded nature of stress: accents prefer the left edge of the word whereas the default prefers the right. We conclude therefore that *edgemoſtneſs* is the principle that controls accentuation in Turkish.

We propose an analysis of the lexical accent system of Turkish along the following lines. First, we assume that FAITH(acc) is ranked high enough to allow inherent accents to surface. Second, following Halle & Vergnaud 1987 and Van der Hulst 1984, 1999, we maintain the distinction between levels of metrical structure. As explained in Section 2.1, lexical accents are prespecified peak prominences. One level up in the grid is the level where the location of word stress is decided. The described layered structure is depicted in (13).

- (13) *accentuation in Turkish*

Inherent peak prominences are projected on the grid and the language-specific algorithm picks out the leftmost one (13a). The selected accent also heads the prosodic word. If none of the morphemes in a word has an accent, the rightmost stress-bearing unit becomes the head of the prosodic word (13b). The conflicting directionality of lexical stress in Turkish is grasped by the edgemost constraints **RIGHTMOST(Pk)**: Align (Pk, R, PrW, R) and **LEFTMOST(acc)**: Align (Accent, L, PrW, L), ranked as follows:

- (14) *ranking for accentuation in Turkish*
 FAITH(acc), LEFTMOST(acc) >> RIGHTMOST(Pk)⁹

To conclude, Greek is a language with fusional morphology and compositional accentuation, whereas Turkish is a language with agglutinative morphology and edge-oriented accentuation. Both languages have lexical accents. The table in (15) summarizes their most important characteristics.

(15) *comparative table for Greek and Turkish*

	morphology	lexical accents	dominance	default
Greek	fusional root-DerS ₁ ...DerS _n -InflS	A, PA, PrA	head accent	APU
Turkish	agglutinative root-suff ₁ -suff ₂ ...suff _n	A, PrA	leftmost accent	final

With this information as a background, we can now move on to the presentation of the dialects under investigation, starting from Pontic, the dialect which appears to be closest to Greek.

3. Pontic: Data and analysis

Pontic is the dialect once spoken by the Greeks of the Black Sea. Nowadays the dialect is spoken in villages of Macedonia and Thrace by the second and third generation of Pontian Greeks. The data presented in this paper are taken from Papadopoulos 1955 (P), Christoforidis 1986 (C), Drettas 1997 (D) and Tso-pouridis 1998 (T). All forms appearing on the text have been checked with (first generation) native speakers of Pontic who live in Pieria (Central Macedonia). We primarily focus on the nominal and adjectival forms. We would like to offer a comparative examination of word stress in the dialects of Asia Minor but the poor description of verbal morphology in Cappadocian does not allow us to extend our research to this grammatical category.

Pontic is also a fusional system. Words are composed minimally of a root and an inflection (16a), and maximally of a root, a derivational suffix, and an inflectional ending (16b).

(16) *Pontic words*

- a. yínék-a ‘woman-NOM.SG (fem)’ (P41)
 ánthrop-os ‘man-NOM.SG (masc)’ (P46)
- b. yínek-ot-ós ‘woman-like-NOM.SG (adj.masc)’ (T447)
 anθrop-ót-æ ‘humanity-NOM.SG (fem)’ (T392)

The innovation of Pontic is the generalized use of the derivational (diminutive) suffix /-iu/ and /-ion/ for the formation of genitive singular and plural (17a–b), respectively, and the use of the element /-(V)δ-/ for the formation of the plural paradigm (17c). A root augmented with the element /Vδ/ is an

allomorphic variant of the simple root which occasionally appears in derivation, e.g. *popaðánt(i)* /popað-ant_{DerS}-i_{InflS}/ (D121) ‘the generation (descendants) of a priest’, /*popaðækón* /popað-æ-on/ ‘priest’s salary’ (T647), and in neuter counterparts of feminine nouns, e.g. *níf-æ* (fem) ~ *nífád-in* (neuter) ‘bride’ (T609).

(17) *genitive and plural forms*

a.	anθropí-(u), anθróp-(u) ¹⁰	‘man-GEN.SG (masc)’ (P46)
	yonatí-(u)	‘knee-NOM.SG (neut)’ (P47)
b.	γinek-íon	‘woman-GEN.PL’ (P41)
	anθrop-íon	‘man-GEN.PL’ (P46)
c.	nífád-es	‘bride-NOM.PL (fem)’ (< níf-æ NOM.SG) (D124)
	popád-es	‘priest-NOM.PL (masc)’ (< popá-s NOM.SG) (D118)
	γitonád-es	‘neighbor-NOM.PL (masc)’ (< γítón-as NOM.SG) (D118)

Unlike Cappadocian, which uses the constituent /*(V)δ-*/ to incorporate Turkish words into the language, Pontic incorporates most Turkish loans directly into the fusional declension:

(18) *assimilated Turkish loans*

a.	sevtjá	‘love-NOM.SG (fem)’ (C169)
b.	tepúr(i), tepúrja	‘sieve-NOM.SG/NOM.PL (neut)’ (T697)
c.	otá, otáðas	‘room-NOM.SG/ACC.PL (fem)’ (T621)
d.	otaðópon	‘small room-NOM.SG (neut)’ (T621)

Stress can occur on any syllable of the word, as shown in (19a–b). The vowels /i, u/ delete in the weak position of a trochaic foot (*trochaic shortening*): *de(skálu)* [ðeskál] ‘teacher-GEN.SG’. It is not clear whether the primary stressed foot is the only foot in the word. Papadopoulos (1995:32) maintains that polysyllabic words have secondary stress, but there was no audible rhythmic stress in the speech of our consultants. Papadopoulos also provides forms such as *esxóresa* /esixoresa/ ‘I forgave’, *eryó* /eriyó/ ‘I shiver’ (P18), *kóftne* /kóftune/ ‘they cut’ (P72), where *i, u*-trochaic shortening hints at exhaustive footing: *(esi)(xóre)sa*, *(eri)(yó)*. Unfortunately, he also lists many words where deletion is expected to apply but doesn’t, e.g. *skotinós*/**skotnós* (P19) vs. *ekrátne* /ekrátina/ (P96). The inconsistencies of the grammar together with the findings of our personal research cause us to refrain from drawing definitive conclusions about the existence of secondary stress in the dialect. For this reason, we chose not to indicate secondary feet in our representations.

(19) *stress in inflected words*

a. initial stress

δέskal-onos	'teacher-GEN.SG' (D119)
έmorf-esa	'beautiful-NOM.SG (adj.fem)' (P32)
έ-γراف-ame	'we were writing' (P32)

b. stress in other positions

i. romé-os	'Greek-NOM.SG (masc)' (D119)
romé-onos	'Greek-GEN.SG (masc)' (D119)
armén-ts < /armén-is/	'Armenian-NOM.SG (masc)' (D120)
	<i>i-deletion</i>
armén < /armén-u/	'Armenian-GEN.SG (masc)' (D120)
	<i>u-deletion</i>
ii. palal-ésa	'crazy-NOM.SG (adj.fem)' (T627)
palal-ós	'crazy-NOM.SG (adj.masc)' (D119)
palal-ú	'crazy-GEN.SG (adj.masc)' (D119)
iii. δeskál < /δeskál-u/	'teacher-GEN.SG (masc)' (D119)
	<i>u-deletion</i>
kir-ú	'master-GEN.SG (masc)' (D121)

Since there are no weight distinctions in the language, the 'freedom' in the position of stress must be attributed to the presence of lexical accents. Let us first have a closer look at the stress patterns of the words in (19b). Stress can occur in the penultimate or ultimate syllable, but there is no way to predict this unless we assume that the position of stress is lexically prespecified. Indeed, the roots in (19bi) have an underlying linked accent, /romé-, armén-/ , whereas the root in (19bii) has an underlying floating accent, /papal'-/ which eventually surfaces on the inflection. That the accent is a property of the root and not the inflection is supported by the fact that the suffix /-os/ (NOM.SG), for instance, appears as stressed in the latter forms but not in the former. Since this is systematic in the language (e.g. *ánthropos* 'man', *vukólos* 'shepherd', *petinós* 'rooster', etc.), we have no valid reason to assume that the same suffix has accented, pre-accenting and post-accenting allomorphs. The differences in stress must be attributed to the different accentual representations of roots. However, not all roots have accents. The roots in (19biii), for instance, are both unaccented (cf. *δέskalonos* (19a), *δέskalos*, *kírts* < /kir-is/). With these roots the inherent properties of suffixes have a chance to emerge. The suffix /-u/ (GEN.SG of the *os*-class nominal paradigm) is pre-accenting, *δeskál(u)*, whereas the suffix /-u/ (GEN.SG of the *is*-class paradigm) is accented, *kirú*. To conclude, morphemes in Pontic have the following inherent accentual patterns:

- (20) *patterns of lexical accents in Pontic*
a.	accented	romé-	-ú _{is-class}
b.	post-accenting	palal- ¹	
c.	pre-accenting		¹ -u _{os-class}

The same set of words also offers strong clues as to which accent prevails in the competition. The form *palalú* is quite informative. The root is post-accenting and the suffix pre-accenting but final stress suggests that the accent of the root finally supersedes the accent of the suffix. The competition is visualized in (21).

- (21) *post-accenting root and pre-accenting suffix*

Looking at (21), either of two hypotheses could hold: (a) *edgemoſtneſs*: rightmoſt accent wins, (b) *compoſitionality*: root accent wins. This form alone cannot ſhed any light on the problem. In order to get a definitive answer we muſt compare (21) with the form *armenú* in (19bi). The word *armén(u)* is compoſed of two accented morphemes: /armén-ú/. Under the edgemoſtneſs-hypotheſis (‘rightmoſt accent wins’), we would have expected **armenú*, which is of courſe ungrammatical. Since this hypotheſis fails, compoſitionality muſt be at play.

The prevalence of root accent is not categorical becauſe accented derivational ſuffixes outweigh accents ſponsored by roots, as ſhown in (22). Notice that in the conſtructions below the derivational ſuffixes change the morphoſyntactic category (22a-c) and/or the claſſ and gender (22d) of the baſe, hence they qualify as heads. The ſubſcript indices indicate the intrinsic accentual properties of morphemes.

- (22) *ſtreſs in derived words*
a.	ɣinek-ot _{PA} -ós	‘woman-like-NOM.SG (adj)’ (T447)
	/ɣinék _A -a/	‘woman (noun.fem)’
b.	pikr-aſé _A -a	‘bitterneſſ-NOM.SG (noun.fem)’ (P134)
	/pikr _{PA} -ós/	‘bitter (adj)’
c.	ipomon-etik _{PA} -ós	‘patient-NOM.SG (adj)’ (P139)
	/ipomon _{PA} -í/	‘patience (noun.fem)’
d.	arap-í _A -a	‘Arabia-NOM.SG (fem)’ (T410)
	/aráp _A -is/	‘Arab (noun.maſc)’

The data diſcuſſed ſo far converge towards a compoſitional analysis of Pontic accentuation. Head accent prevails over accents ſponsored by other morpholog-

ical constituents. In the absence of accents, stress is initial: *ḗskalonos* (vs. *ḗskálu*) ‘teacher-GEN.SG’. Unlike standard Greek, Pontic lacks the three-syllable-window restriction. The constraint LEFTMOST(Pk): Align (Pk, L, PrW, L), ranked appropriately, guarantees initial prominence. Inherent accents surface because the constraint that demands input-output correspondence of lexical accents, namely FAITH(acc), dominates the constraint that blindly favors prominence of the leftmost syllable of the prosodic word, that is, LEFTMOST(Pk). High-ranking of HEADFAITH(acc) ensures that in a competition the right accent will be selected. In short, the ranking for Pontic stress is HEADFAITH(acc), FAITH(acc) >> LEFTMOST(Pk).¹¹ Now, let us have a look at the analysis of some representative examples, starting with the most straightforward case, the accentuation of *arapía* (23).

(23) *accentuation of words with two accents*

input: aráp-, -í, -a	HEADFAITH(acc)	FAITH(acc)	LEFTMOST(Pk)
<*> * a. ara(pía)			**
* <*> b. a(rápi)a	*!	*	*
<*> <*> c. (ára)pia	*!	**	

Candidate (23b) loses because top-ranking of HEADFAITH promotes the accent of the derivational suffix-head. The winning candidate scores the most violations of LEFTMOST. From the rank it occupies, this constraint is unable to exercise any influence in the selection of the output.

We move on to somewhat more involved cases such as the accentuation of the word *ḗskál(u)* (19biii). As mentioned before, pre-accentuation is the result of the existence of floating accents. These accents, free of the limiting effects of NOFLOP(acc), which restricts accents to their lexically prespecified positions, have the potential to associate with stress-bearing units of non-sponsors. In an extreme case, we would expect them to lodge on some edge of the prosodic word. However, the vast majority of floating accents show a strong preference for the syllable preceding or following the sponsoring morpheme. The locality of accents, manifesting itself as pre- or post-accentuation, is a long-lasting puzzle for many theorists working on this topic. It falls outside the scope of the present paper to give a detailed account of this issue. We refer the interested

reader to Revithiadou (in progress) for a across-the-board examination of pre- and post-accenting patterns. For the purposes of the discussion here, we present a simplified version of the basic idea.

As mentioned in Section 2.1, lexical accents designate morphemes. We claim that this is done either by designating the morpheme they belong to or by designating other morphemes. Some languages (e.g. Salish) prefer all accents to be linked to their sponsors whereas others tolerate unlinked accents. In the latter case, the observation is that the accent will be located on a preceding or following morpheme. Suppose that in the word $[[[\text{root}] \text{suff1}] \text{suff2}]$, *suff1* has an unlinked accent. Cross-linguistic research has shown that this accent will be located either at the left edge of *suff2* (post-accenting, e.g. Russian, Greek) or at the right edge of the root (pre-accenting, e.g. Turkish, Hebrew, Greek).¹² Whether the accents are located at the edge of a domain that excludes the sponsor (pre-accentuation) or a domain that includes the sponsor (post-accentuation) is a language-specific choice.¹³ In formal jargon, this idea is expressed with the alignment constraints in (24).

(24) *alignment for pre- & post-accentuation*

- a. ALIGN-L (Accent_{Cⁱ}, L, C_j, L) where $j = i + 1$ (result: PA)
- b. ALIGN-R (Accent_{Cⁱ}, R, C_j, R) where $j = i - 1$ (result: PrA)

(24a) states that the left edge of the accent of constituent C^i must be left-aligned with constituent C^j , which follows C^i . Similarly, (24b) maintains that the right edge of the accent of constituent C^i must be right-aligned with constituent C^j , which precedes C^i .

Having said this, we can now proceed to the accentuation of the word *deskál(u)*. The root is unaccented, hence HEADFAITH is irrelevant. On the other hand, the accent of the suffix is not sacrificed; it surfaces on the root in violation of HEADDEP(acc). Thus, the latter constraint must be ranked below FAITH(acc). In sum, the ranking for Pontic accentuation is shaped as follows: HEAD-MAX(acc), FAITH(acc), ALIGN-R >> HEADDEP(acc), LEFTMOST(Pk). The tableau in (25) exemplifies the accentuation of *deskál(u)*. We abstract away from the constraints on trochaic shortening which give surface $[\delta\text{eskál}]$.

(25) *accentuation of words with pre-accenting suffix*

input: δeskal-, -'u	HEADMAX(acc)	ALIGN-R	HEADDEP(acc)
* a. δε(skálu)			*
* b. δeska(lú)		*	

Since Pontic exhibits both pre-accenting and post-accenting morphemes, we must assume that ALIGN-L is also at play. Interestingly, it is ranked above ALIGN-R because all roots and derivational suffixes with floating accents surface as post-accenting. ALIGN-L has no effect on inflectional suffixes because no constituent follows inflectional suffixes in Greek. Consequently, ALIGN-R takes over. It must be noted that ALIGN-L and ALIGN-R are crucially ranked below NOFLOP(acc) because linked accents do not move leftwards.

Finally, LEFTMOST(Pk) is effective only in forms containing absolutely no inherent accents. If there is no input accent, however, the default constraint on stress assignment prevails. (26) illustrates the accentuation of the word *δέσκαλονος*.

(26) *accentuation of words with no accents*

input: δeskal-, -onos	LEFTMOST(Pk)
a. δέσκαλονος	
b. δeskalónós	*!*

To complete the discussion on Pontic accentuation, we must address a case which is problematic for our analysis. As stated earlier, Pontic borrowed the (diminutive) suffixes /-iu, -ion/ from derivational morphology to form GEN.SG and GEN.PL, respectively. These suffixes always attract stress: *yínek-íon* /yínék-íon/ 'woman-GEN.PL' (P41), *armen-íon* /armén-íon/ 'Armenian-GEN.PL' (D120). Under the analysis proposed here, they do not qualify as heads, therefore their dominance is unexpected. We have no other solution but to treat them as exceptions and have the morpheme specific constraint FAITH(-íu, -íon) top ranked.

At this point, the presentation and analysis of Pontic is completed. The constraint ranking for Pontic accentuation is summarized in (27).

4. Cappadocian: Data and analysis

In this section we examine the Cappadocian dialects. We divided these dialects into three groups. The criteria used for this division are both morphological and phonological. The first group comprises the dialects of Delmeso and Potámia. These dialects preserved the fusional morphology of Greek. At the same time, a new, hybrid model of word formation which combines both fusional and agglutinating characteristics comes to light. With respect to prosody, there is a tendency to establish relations with Turkish. The second dialectal group consists of the dialects of Axo, Mistí and Aravan. In these dialects, the hybrid type of morphology gains ground at the expense of fusion. In parallel, a purely agglutinating model of word formation makes its appearance. As expected, these radical changes do not leave prosody unaffected. Finally, the dialects of the third group, namely Semenderé and Ulaghatsh, are Greek-based versions of Turkish. As we will see in a while, these dialects exhibit strong ties with Turkish both at the morphological and the prosodic level.

Our source for Cappadocian is Dawkins 1916 (D). Unfortunately, he lists very few complex (derived, compound) words and we were not able to retrieve more from the texts provided at the end of his grammar. The description of the verb is also scanty and prevents us from developing a clear picture of this morphological category. The reader who is interested in Cappadocian, and especially, cliticization is also referred to Janse 1996, 1998, and references cited therein.

4.1 The dialects of Delmeso and Potámia

A great deal of the vocabulary in group a is Greek but there are also plenty of Turkish words. These dialects preserve the Greek declension of *os*-class nouns (the others were lost) and the distinction of genders. (28) lists examples from the densely populated *os*-declension. It should be mentioned that (a) GEN.PL is lost, and (b) next to the standard GEN.SG suffix /-u/ and ACC.PL suffix /-us/, the suffixes [-jú] (< /íu/) and [-jús] (< /íus/), respectively, are also used.

(28) *fusional os-class nouns*

a. Delmeso (D95)

Sg	‘man’	‘man’ (Turkish root)	‘mouse’
NOM/ACC	áθropos	xerífos	pondzikós
ACC	áθropo	xerífo	pondzikó
GEN	aθróp(u)	xerifjú	pondzikú
Pl			
NOM	aθróp(i)	xeríf(i)	pondzikí
ACC	aθrópus & aθropjús	xerifjús	pondzikús

b. Potámia (D96)

Sg	‘devil’	‘man’	‘shepherd’
NOM/ACC	δjávolos	áθropos	piǵtikós
ACC	δjávolo		piǵtikó
GEN	δjavól(u)	aθróp(u) & aθropjú	piǵtikjú
Pl			
NOM	δjavól(i)		piǵtikíð(i)
ACC	δjavólus		piǵtikús, piǵtikjús

A new, hybrid model of word formation makes its appearance mainly to accommodate words of Turkish origin, (29). The morpheme /(V)ð-/ is used as a connective to assist the conjunction of vowel-ending Turkish roots with Greek inflections. Roots ending in consonants take the suffixes without the connective.

(29) *Delmeso: hybrid (V)δ-class nouns of Turkish origin*

-V, -Vs roots	NOM/ACC.SG	GEN.SG	NOM/ACC.PL	
	qaiɣjá-s	-aδ-jú	-éd-ja	‘rock’ (D110, 322)
	ɣjavrú	-úδ-ja		‘son, child’ (D306, 308)
	meivá	-aδ-jú		‘fruit-tree’ (D312)
	qarə ¹⁴	-əδ-jú	qarəδ-ja	‘woman’ (D110, 304)
	ðltsú	-uδ-jú		‘scale’ (D326)
	aqlulú	aqluδ-jú		‘clever’ (D110)
	quɣí		-íδ-ja	‘well’ (D110)

-C roots	NOM/ACC.SG	GEN.SG	NOM/ACC.PL	
	güzél	-jú	-ja	‘beautiful’ (D304)
	deŋgí	-dʒjú		‘lake’ (D308)
	qafés	-fjú		‘cage’ (D312)
	seráix		seráiy-ja	‘palace’ (D324)

With respect to stress, the dialects are lexical accent systems. At first sight, stress can occur anywhere in a word and syllable structure plays no role in determining its exact position. There is a strong preference for final stress perhaps due to the vast presence of Turkish words. No convincing evidence in support of trochees was found. Unstressed /i, u/ delete in word final position regardless of the location of primary stress.¹⁵ Polysyllabic verbal forms demonstrate the unbounded character of stress, e.g. *Delmeso ráftsiní/ka* ‘I was sewing’ (D133), *Potámia erxútomeste* ‘we are coming’ (D142).

A closer look at the examples in (28) reveals that morphemes can be unaccented, /aθrop-, δjavol-/ , /-os, -o/, or have an inherent accent. In the latter case, they can be accented /xeríf-/ , /-jú, -jús/, pre-accenting /-í, -íu, -íus/, and post-accenting /podʒikí-, píftikí-/ . Unlike Greek and Pontic, the resolution of accent competition is edge-oriented: when accents compete, the rightmost one wins. In the absence of accents, we must agree that word prominence is initial because words like *δjávolos* and *áθropos*, composed of unaccented morphemes, have initial stress. Notice, however, that the leftmost orientation of default neutralizes the opposition between initially accented roots and roots stressed by default on the initial syllable.

Lexical accents surface because FAITH(acc) is ranked higher than LEFTMOST(Pk). If there is no prespecified peak prominence(=lexical accent) in a word, LEFTMOST(Pk) assigns primary stress to the initial syllable by default. We proposed a distinction of levels of metrical structure. Lexical accents are

prespecified peak prominences projected on the grid and must be distinguished from prosodic word prominence. In a word, there can be more than one inherent peak prominence but only one stress prominence. LEFTMOST(Pk) naturally conflicts with RIGHTMOST(acc) which selects the rightmost accent from a series of accents. There are, in other words, two edgemost constraints with conflicting directionality: one refers to peak prominence and the other refers to word stress prominence. The ranking FAITH(acc), RIGHTMOST(acc) >> LEFTMOST(Pk) guarantees that accents are given priority to default. HEAD-FAITH(acc) is obviously low ranked, and hence inert. Having said this, we can now give the tableau for the accentuation of *xerifjú*.

(30) *accentuation of words with two accents*

input: xerif-, -jú	FAITH(acc)	RIGHTMOST(acc)	LEFTMOST(Pk)
<div> <div> </div> <div> </div> </div> ⟨*⟩* a. xerifjú	*		**
<div> <div> </div> <div> </div> </div> *⟨*⟩ b. xerifju	*	*	*

The selection of the optimal candidate is pretty straightforward. Both candidates share one violation of FAITH but only the first one preserves the rightmost accent.

The accentuation of unaccented words, e.g. *ḡjávolos*, is pursued as in Pontic (cf. tableau (26)). The ranking responsible for stress assignment of fusional words in Cappadocian a is provided in (31). Notice that this edge-based system has the same default directionality as Pontic.

(31) *ranking for accentuation of fusional words in group a*
 FAITH(acc), RIGHTMOST(acc) >> LEFTMOST(Pk)

The treatment of Turkish words is an engaging enterprise. We assume that there is an independent Turkish stratum with its own *cophonology* (Inkelas, Orgun & Zoll 1994, Pater 1994, Inkelas & Orgun 1995, Itô & Mester 1995a,b). Words of Turkish origin enter the dialects bringing with them the accentual rule of the mother language: default stress is final, e.g. *qará*, *qaráḡjú*; *güzél*, *güzéljú*. The blocking of final stress in *qaráḡja*, *güzélja* is attributed to morpheme-specific syllable extrametricality or, even better, the pre-accenting status of the suffix /-ja/. Recall that Turkish displays pre-accenting suffixes. Unfortunately, Dawkins gives only one example of an inherently accented Turkish word

combined with the pre-accenting suffix /-’ja/: *seráix-seráiyja* /seráiy-’ja/ (29c). This form indicates that the accent of the root prevails. However, we need more evidence in order to substantiate this analysis.

To conclude, the hybrid morphological system, developed to accommodate words of Turkish origin, is associated with a different cophonology. We name this phonological subsystem *cophonology 2* in order to distinguish it from the cophonology associated with fusional words (*cophonology 1*, see (31)).

In cophonology 2, FAITH(acc) dominates RIGHTMOST(Pk). As mentioned above, the data we have at our disposal do not allow us to make any further claims about the directionality of prominence in accent competition. This issue will be clarified in Section 4.2.2 where additional facts from other Cappadocian dialects are discussed. The tableau in (32) illustrates the accentuation of the word *güzélja*. This word is composed of an unaccented root and a pre-accenting suffix. Let us mention that ALIGN-R is also active because unlinked accents surface on constituents preceding the sponsor.

(32) *accentuation of words with one accent (cophonology 2)*

input: güzel-, -’ja	FAITH(acc)	ALIGN-R	RIGHTMOST-(Pk)
* a. güzélja			*
⟨*⟩ b. güzéljá	*!	*	

To summarize, in dialectal ‘group a’ two strata co-exist. In the first stratum, words are formed according to the fusional model and are associated with cophonology 1, whereas in the second stratum, words are formed according to the hybrid model and are associated with cophonology 2. This division is depicted in (33).

(33) *Group a: morphological subsystems and their cophonologies*

Delmeso, Potámia	
F-morphology (Greek)	<i>Cophonology 1 (hybrid)</i> FAITH(acc), RIGHTMOST(acc) >> LEFTMOST(Pk)
H-morphology (Turkish)	<i>Cophonology 2</i> FAITH(acc), ?-MOST(acc) >> RIGHTMOST(Pk)

It should be pointed out that cophology 1 shares the directionality of default stress with Pontic and rightmostness with Turkish. Final stress in Turkish is probably translated in Cappadocian as rightmostness of accents. In this respect, one can safely claim that cophology 1 is a hybrid system.

4.2 The dialects of Aravan, Axo and Mistí

4.2.1 *Morphological models.*

The dialects of this group exhibit a complex system of inflection which makes use of three different models of word formation. We start with Aravan. In this dialect, the gender distinction is almost extinct (Dawkins 1916:209), although occasionally we come across a few feminine (e.g. *peerá*, *níf(i)*) and neuter forms (e.g. *fitó*). GEN.PL has also been lost. Several words of Greek origin display hybrid formations in some cells of the paradigm (34a–b). The fundamental characteristic of hybrid morphology is the presence of the (V)δ-connective between the root and the inflection. Note that intervocalic /δ/ surfaces as [r] in this dialect. Turkish words follow the same model of declension (34c). The paradigms are based on Dawkins's personal notes and recordings. He often mentions that empty cells reflect accidental gaps in his recordings.

(34) *Aravan: hybrid Vδ-nouns*

		NOM	ACC	GEN	NOM/ACC	
a.	final stress	nefalós	-ó	-or-jú	-ór-ja	'belly-button' (D105)
		fitó		-or-jú	-ór-ja	'vineyard' (D107)
		peerá			-ár-e	'mother-in-law' (D114)
b.	initial stress	úrano		-or-ju		'sky' (D105)
		skóljo		-or-ju	-or-ja	'comment?' (D107)
		métapo		-or-ju	-or-ja	'forehead' (D107)
		níf(i)			-ár-es	'bride' (D115)
c.	Turkish	geledží		-ir-jú		'word' (D111)
		aqulú		-ur-jú		'clever' (D330)
		tsanó		-ar-jú		'stupid' (D330)

We postpone till later the discussion of the morphological segmentation of the forms in (34), and first complete the presentation of all models of word formation in this group.

The picture becomes even more perplexing if we have a look at the paradigms in (35) from Aravan and the dialects of Mistí and Axo. In Aravan, several Greek words of various prosodic shapes developed, next to fusional, parallel agglutinative counterparts. Moreover, in Mistí and Axo, some *os*-class nouns are declined according to the fusional model and others according to the

agglutinating model. Dawkins states that the speakers add the suffixes /-ju/ and /-ja/ to the nominative of *os*-class nouns just like Turkish does by adding /-lEr/ and /-lIn/. Thus, the genitive of *áropos* is *áropozju* ‘man-GEN.SG’ (with intervocalic voicing of /s/).

(35) *fusional and agglutinative morphology*

a. Aravan (D104)

‘man’			
Sg			
NOM		áropos	
ACC		áropo	
GEN		aróp(u) ¹⁶	áropozju
Pl			
NOM/ACC		aróp(i)	áropozja
GEN			
‘shepherd’		‘winter’	
Sg			
NOM	tsobános		ximós
ACC	tsobáno		ximó
GEN	tsobán(u)	tsobánozju	ximú
Pl			
NOM/ACC	tsobán(i)		ximózja
	tsobanjon		

b. Axo

i. fusional morphology (D100)

	‘teacher’	‘gypsy’	‘king’
Sg			
NOM/ACC.INDEF	djáskalos	dzingjános	vafiljós
ACC.DEF	djáskalo		vafiljó
GEN	djaskál(u), djaskaljú	dzingjáno	vafiljú

Pl			
NOM	djaskál(i)	dzingján(i)	vafiljí
ACC	djaskaljús, djaskál(?)	dzingjanjús, dzingján(?)	vafiljús

ii. agglutinative morphology (D100)

NOM/ACC.SG	NOM/ACC.PL	
djákos	djákozja	‘deacon’
fóvos/fóvo	fóvozja	‘fear’
γámos/γάmo	γάmozja	‘wedding’
tíxos/tíxo	tíxozja	‘wall’

c. Mistí

i. fusional morphology (D101)

	‘man’	‘shepherd’
Sg		
NOM/ACC.INDEF	árapus	piťtikós
ACC.DEF	árapu	piťtikó
GEN	arapjú	piťtikú
Pl		
NOM	aróp(i)	piťtitsí
ACC	arapjús, aróp(?)	piťtitsí

ii. agglutinative morphology (D102)

NOM/ACC.SG	GEN.SG	NOM/ACC.PL	
γámus	γámuzju	γámuzja	‘wedding’
kómbus	kómbuzju	kómbuzja	‘knot’
kapnós	kapnoyjú	kapnóyja	‘smoke’
layós	layoyjú	layóyja	‘hare’
pexerós		pexeróyja	‘father-in-law’

As evidenced from the above data, a substantial part of the Greek declension has been reformed according to the model of Turkish word formation. The morphological material is Greek but put together in exactly the Turkish way. The Greek NOM.SG form *áropos* in Aravan and *djákos* in Axo are taken as the base for the formation of other forms of the paradigm, yielding *áropozju*

(GEN.SG) and *djákozja* (NOM/ACC.PL), respectively. This contrasts with the fusional paradigms found in the same dialects, e.g. *áropos-aróp(u)* in Aravan and *djáskalos-djaskaljú* in Axo, where the roots /arop-/ and /djaskal-/ constitute the basis of word formation. There is a detailed discussion in Dawkins, who underlines the similarities in the formation of Cappadocian and Turkish words. His example in (36) comes from the dialect of Ferteke which is very similar to the dialects of our group:

(36) *Greek and Turkish agglutination in parallel* (Dawkins 1916: 114)

NOM.SG	GEN.SG	NOM.PL	GEN.PL	
qəz	qəz-ən	qəz-lar	qəz-lar-ən	‘woman’
néka	néka-ju	nék-es	nék-ez-ju	

As expected, words of Turkish origin follow the agglutinating model: e.g. in Axo *odá, odáyja* ‘oda.SG-PL’ (D111), *laqərdə, laqərdáyja* ‘word.SG-PL’ (D111), *omufús, (q)omofúyes* ‘neighbor.SG-PL’ (D108). According to Dawkins (1996: 111) genitive forms in /-ju/ probably exist but were not found in his notes.

To sum up, three morphological subsystems co-exist in Aravan: fusional, hybrid, agglutinative, and two in Mistí and Axo: fusional, agglutinative. The fusional subsystem is strictly limited to words of Greek origin as opposed to the agglutinating and hybrid subsystems which have elements from both the mother and the target languages. The comparative table in (37) reviews the morphological structure of some representative examples.

(37) *comparative view of morphological models in Cappadocian b*

a. F-morphology	árop-os (35a) árop-o aróp-(u) aróp-(i)	dʒɪŋgján-os (35bi) dʒɪŋgján-(i) dʒɪŋgjan-jús
b. H-morphology	métapo (34b) métapo-r-ju métapo-r-ja	nefaló-s (34a) nefaló nefalo-r-jú nefaló-r-ja geledʒí (34c) geledʒi-r-jú

c. A-morphology	áropos (35a)	layó-s (35cii)
	áropoz-ju	layo-γjú
	áropoz-ja	layó-γja
		odá
		odá-γja

F-words are composed of a root and an inflectional element. We take the vowel /o/ in *áropos* to be part of the inflection. [For arguments see Section 2.2.] In the H-model (37b), on the other hand, the vowel of the inflection is preserved throughout the paradigm. The persisting presence of the vowel /o/ strongly suggests that the vowel, part of the inflectional component in the fusional model, is here part of the root, e.g. /nefalo-/. This constituent forms the base to which inflectional endings are further added, e.g. /nefaló-s/. With vowel initial endings the connective -δ- (surfacing as [r] in Aravan) is inserted, e.g. *nefalo-r-jú*. One can easily discern the desire to imitate the structure of the Turkish word. The total parallelism in the structure of Greek and Turkish H-words, (37b), confirms our original hypothesis that the restructuring of the Greek root progressed according to the Turkish archetype. At the same time, the forms in (37b) bring out the similarities between H- and A-type of morphology. In A-morphology, the constituent structure of Greek *os*-words is radically changed. The word *áropos* is not decomposable into smaller constituents. NOM.SG forms constitute now the *base* to which inflectional elements of case (i.e. genitive) and number (i.e. plural) are added.

To conclude, within the same dialect we have the parallel existence of three subsystems each one imposing its own rules and principles on word formation. This means that often the same lexical item exhibits different internal structure depending on the morphological model used for the formation of its inflectional paradigm. (38) presents the morphological structure of the word *áropos* according to the three models of word formation.

(38) *from fusion to agglutination*

Despite its apparent lack of economy, the complex morphological network of Cappadocian b verifies once again the stratified organization of the grammar.

In the next section we will address the question as to how each morphological model subscribes to a specific phonological subsystem (cophonology).

4.2.2 Cophonologies

There are a few prosodic characteristics shared by all dialects of this group. First, post-stressed /i, u/ delete in word final position, and second, stress is unbounded, e.g. Mistí *stékumisti* ‘we are standing’ (D140), Axo *erúdonmeste* ‘we are coming’ (D142). As anticipated, words display different stress patterns depending on the morphological paradigm they belong to. Let us start with the fusional forms. For ease of exposition we repeat some representative examples in (39).

(39) *accentual patterns of fusional forms*

a. ‘teacher’	b. ‘gypsy’	c. ‘king’
/djaskal-/ _{UnA}	/dʒingján-/ _A	/vafili¹-/ _{PA}
djáskal-os _{UnA}	dʒingján-os _{UnA}	vafilj-ós _{UnA}
djaskál-(i) _{PrA}	dʒingján-(i) _{PrA}	vafilj-í _{PrA}
djaskal-jús _A	dʒingjan-jús _A	vafilj-ús _A

The free position of stress can only be accounted for by means of lexical accents. Three accentual types of morphemes exist: accented, pre-accenting and post-accenting. The words in (39) illustrate all possible combinations of lexical accents. The winner is always the rightmost accent, e.g. *dʒingjanjús* /dʒingján-jús/. Default stress has the opposite orientation, e.g. *djáskalos*. In other words, the fusional subsystem is associated with *cophonology 1* (see Section 4.1, (33)). We will not go into the specifics of the analysis here since the examples are completely analogous to the corresponding fusional examples from the dialects of Delmeso and Potámia. What is important to remember is that, so far, fusional words in all Cappadocian dialects are associated with cophonology 1: FAITH(acc), RIGHTMOST(acc) >> LEFTMOST(Pk).

Words following the agglutinating and hybrid paradigms, on the other hand, present a different accentual picture. Take a look at the examples in (40) and (41).

(40) *accentual patterns of agglutinating forms*

NOM/ACC.SG		GEN.SG	NOM/ACC.PL
a. áropos	‘man’ (D104)	áropoz-ju	áropoz-ja
b. tsobános	‘shepherd’ (D104)	tsobánoz-ju	fibíkoz-ja
fibíkos	‘conical hill’ (D105)	fibíkoz-ju	kalóyjoroz-ja
kalóyjoros	‘monk’ (D105)	kalóyjoroz-ju	

c	layós	‘hare’ (D102)	layo-γjú	layó-γja
(41) <i>accentual patterns of hybrid forms</i>				
	NOM/ACC.SG		GEN.SG	NOM/ACC.PL
a.	úrano	‘sky’ (D105)	úrano-r-ju	úrano-r-ja
	skóljo	‘comment?’ (D107)	skóljo-r-ju	skóljo-r-ja
	métapo	‘forehead’ (D107)	métapo-r-ju	métapo-r-ja
b.	nefalós	‘belly-button’ (D105)	nefalo-r-jú	nefaló-r-ja
	geledzi	‘word’ (D111)	geledzi-r-jú	
	aqulú	‘clever’ (D330)	aqulu-r-jú	

Only forms with final stress in NOM/ACC.SG display mobile stress, as shown in (40c) and (41b). One may wonder why only finally-stressed forms lose stress to GEN.SG but preserve their stress when combined with the NOM/ACC.PL suffix -/ja/. Other roots have stable stress throughout the paradigm. We propose that the default accentuation in A- and H-type words is final, in total compliance to the Turkish stress rule. Final stress is disrupted when a morpheme with inherent accentual properties occurs in a word. Such morphemes can be roots, as in (40a-b) and (41a), or suffixes, as in (40c) and (41b). In the latter examples, we take penultimate stress to originate from the pre-accenting suffix /-‘ja/. When two competing accents meet in a word, the leftmost one wins. This explains the stress stability of words with accented roots, e.g. *úranorja* < /úrano-r-‘ja/.¹⁸ In conclusion, H-morphology and A-morphology are associated with *cophonology* 2. This is in complete agreement with our findings from the examination of ‘group a’ dialects. Interestingly, the data from the second dialectal group help us complete the analysis of *cophonology* 2. In competition, the leftmost accent is designated the winner. The diagram in (42) portrays the stratal organization of the morphological and phonological components of the dialects in question.

(42) *Group b: morphological subsystems and their cophonologies*

Aravan	Mistí, Axo	
F-morphology	F-morphology	<i>cophonology</i> 1 FAITH(acc), RIGHTMOST(acc) >> LEFTMOST(Pk)

H-morphology		<i>cophonology 2</i>
A-morphology	A-morphology	FAITH(acc), LEFTMOST(acc) >> RIGHTMOST(Pk)

We now complete the examination of Cappadocian dialects with the presentation and analysis of the third dialectal group in Section 4.3. As will be seen, the morphological and phonological profile of this group is Turkish. Only the material is Greek.

4.3 Ulaghatsh and Semenderé

In the last two dialects, the Turkish element is at its strongest: (a) Turkish loan words are frequent, (b) verbal suffixes mostly come from Turkish, and (c) word order is purely Turkish. Apparently, the dialects gave way as a vernacular to Turkish. Besides a few words formed according to the fusional paradigm, e.g. Ulaghatsh *dáskalis*, *daskaljú*, *dáskalja* ‘teacher’ (D102); Semenderé *árupus*, *arupjú*, *aróp(i)* ‘man’ (D103), the rest of the vocabulary is based on the agglutinating model (43). Accentuation of course follows the same route.

- (43) *agglutinative morphology*
 - a. Ulaghatsh

	NOM/ACC.SG	GEN.SG	NOM/ACC.PL	
Greek	líkos		líkozja, líkja	‘wolf’ (D102)
	mítropos		mítropozja	‘church-warden’ (D102)
	yámos		yámozja	‘wedding’ (D102)
	kanís	kanizjú	kanízja	‘person’ (112)
	psalía	psalíaγju	psalí(a)γja	‘scissors’ (D114)
Turkish	qarəndzá	qarəndzayjú	qarəndzáγja	‘ant’ (D110)
	qaryá	qaryayjú		‘crow’ (D110)
	devedzís	devedzi(γj)a		‘camel-driver’ (D111)
	qardáf	qardafjú	qardáf(j)a	‘brother’ (D112)

b. Semenderé

Greek	NOM/ACC.SG	GEN.SG	NOM/ACC.PL	
	aféndis/aféndi	afendjú	aféndizja	‘master’ D112
	yámbus		yámbuzja	‘groom’ D103
	skórtu	skórtuyju	skórta	‘garlic’ D107

The table in (44) visualizes the relation between the morphological and phonological component in this dialectal group:

(44) *Group c: morphological system and its cophonology*

Ulaghatsh, Semenderé	
A-morphology	<i>cophonology 2</i> FAITH(acc), LEFTMOST(acc) >> RIGHTMOST(Pk)

4.4 Review

The table in (45) offers a global picture of the morphological and accentual organization of the languages/dialects discussed in this paper.

(45) *review of all dialects*

Cell 1: Greek, Pontic	
<i>Compositional</i> HEADFAITH(acc), FAITH(acc) >> DEFAULT (Greek) HEADFAITH(acc), FAITH(acc) >> LEFTMOST(Pk) (Pontic) <i>F-morphology</i>	
Cell 2: Cappadocian a	
<i>Edgemost-C1</i> FAITH, RIGHTMOST(acc) >> LEFTMOST(Pk) <i>F-morphology</i>	<i>Edgemost-C2</i> FAITH, LEFTMOST(acc) >> RIGHTMOST(Pk) <i>H-morphology</i>

Cell 3: Cappadocian b	
<i>Edgemost-C1</i> FAITH, RIGHTMOST(acc) >> LEFTMOST(Pk) <i>F-morphology</i>	<i>Edgemost-C2</i> FAITH, LEFTMOST(acc) >> RIGHTMOST(Pk) <i>H- & A-morphology</i>
Cell 4: Turkish, Cappadocian c	
<i>Edgemost-C2</i> FAITH(acc), LEFTMOST(acc) >> RIGHTMOST(Pk) <i>A-morphology</i>	

Three distinct modes of accentuation are active in the dialects under investigation. One is compositional and two are edge-based. The edgemost systems differ in the directionality of accent resolution and the default. Consequently, we distinguish between Edgemost-Cophonology 1 and Edgemost-Cophonology 2. Each accentual system is affiliated with a morphological model but not in a one-to-one fashion. In Cappadocian, Edgemost-C2 is associated with H-morphology and A-morphology, and Edgemost-C1 is associated with F-morphology. In Pontic, accentuation is compositional. We conclude from the above that compositionality is strictly bound to F-morphology whereas edgemostness freely occurs with all three patterns of word formation. The uneven distribution of these two modes of accent resolution calls for a principled explanation. This task is undertaken in the following section. First, we show that the numerical prevalence of edgemost systems is already predicted by our analysis. Second, we argue that it is only natural for edgemost accentual models to subscribe to any type of morphology because they are not grounded on interface principles. Finally, we entertain the idea that certain manifestations of compositionality are more compatible with morpheme combinatoric mechanisms which result in multiply embedded, hierarchically organized domains such as those built up by the fusional system of Greek and Pontic.

5. Compositionality vs. edgemostness revisited

In our analysis of lexical accent systems, we proposed the following four constraints: FAITH(acc), HEADFAITH(acc), XMOST(acc) and YMOST(Pk) (where X

and Y stand invariably for left and right). Permutation of these constraints results in the stress typology in (46).

(46) *gross typological instantiations of stress systems*

<p>a. Compositional Lexical Accent System: Head accent wins; otherwise any accent surfaces; otherwise default on Ymost syllable. HF>>F>>X>>Y HF>>X>>F>>Y HF>>F>>Y>>X F>>HF>>Y>>X F>>HF>>X>>Y <i>total: 5/24 rankings</i> <i>examples: Pontic, Russian</i></p>	<p>b. Edgemoſt Lexical Accent System: Xmoſt accent wins; otherwise default on Ymoſt ſyllable. F>>X>>HF>>Y X>>F>>HF>>Y F>>X>>Y>>HF X>>HF>>F>>Y F>>Y>>X>>HF X>>F>>Y>>HF F>>Y>>HF>>X <i>total: 7/24 rankings</i> <i>examples: Turkiſh, Cappadocian</i></p>
<p>c. Compositional ſtreſs ſystem: Head accent wins; otherwiſe, default on Ymoſt ſyllable. HF>>X>>Y>>F HF>>Y>>X>>F HF>>Y>>F>>X X>>HF>>Y>>F <i>total: 4/24 rankings</i> <i>examples: Arvanitika</i></p>	<p>d. Unbounded ſtreſs ſystem: ſtreſs is on Ymoſt ſyllable. Y >> {F, X, HF} <i>total: 8/24 rankings</i> <i>examples: Kwakw'ala, French, Finnish</i></p>

This table ſums up all logically poſſible rankings of our ſet of constraints. Fortunately, many individual rankings produce identical accentual ſystems. Thus, four diſtinct patterns of ſtreſs ſystems are predicted to exiſt, all of which are empirically atteſted. Interestingly, the factorial typology already leaves a ſtatistical imprint on the outcome. Thus, 8/24 rankings reſult in unbounded ſtreſs ſystems, 7/24 rankings reſult in lexical accent edgemoſt (unbounded) ſystems, 5/24 rankings reſult in compoſitional lexical accent ſystems and only 4/24 rankings reſult in compoſitional ſystems of a diſtinct form. The ſucceſs of our analysis reſides in the fact that it correctly predicts (unbounded) ſtreſs ſystems to be more popular than lexical accent ſystems, and, among the

members of the latter category, the edge-oriented ones to be numerically favored over the compositional ones.

Besides the statistical preference for edge-based stress, the wider distribution of directional lexical accent systems can be attributed to the fact that edgemostness is not subject to morphological conditioning. It is, in essence, ‘blind’ to morphological modes of combination. Consequently, edgemost systems can freely affiliate with any type of morphology. The question that arises now is whether compositionality, which is an interface principle, has a natural predisposition for a specific mode of word formation. Based on the facts we have examined so far, this hypothesis seems to find some empirical support. As mentioned earlier, only fusional systems (e.g. Greek, Pontic) exhibit compositional stress. Still, the evidence we have at our disposal is too scarce to draw any definitive conclusions. It is worth exploring, however, as a plausible hypothesis.

As mentioned in Section 2.2, compositionality states that for each type of morphological mode of combination *M* there is a prosodic mode of combination *P* that assigns prosodic structure to the complex constituent created by *M*. The mapping between prosody and morphology is expressed as head dominance or morpheme demarcation depending on whether prosody interprets structural relations between morphemes (e.g. head vs. dependent) or morphological constituency (e.g. root vs. affix). In both cases, stress primarily aims at highlighting a specific element in a morphological domain. The notion of domain therefore seems to be crucial for head-based manifestations of compositionality. As shown in (47), the morphological mode *M* combines morphemes into layered, hierarchically organized structures. A derivational suffix joins the root to form the constituent *stem*. An inflectional suffix is further added to create a more complex structure, the constituent *morphological word*.

(47) *layered structures in Greek (fusional morphology)*

It is possible that ‘head dominance’ is sensitive to layered, hierarchically arranged configurations like the one in (47). The reason could be that the prosodic mode *P* traces and interprets head-dependent relations that hold between elements which belong to the same, multiply stratified domain.

Following the same line of reasoning, one might argue that the recursive morphology of Turkish, which does not form domains in the sense that is relevant here, is incompatible with head-based accentuation. In Section 2.3, we explained that complex words are created on the basis of recursive concatenation of suffixal groups adjoined to a host (Orgun 1996, Inkelas & Orgun 1998). Each suffixal group consists of several suffixes which together form a flat structure. These smaller, island-like domains are added to the root creating the branching structure depicted in (48). Keep in mind that suffixal islands are not strictly ordered with respect to each other and that often word formation rules apply recursively. [See Section 2.3, example (11).]

(48) *recursive structure in Turkish (agglutinative morphology)*

It is clear that domain formation in Turkish follows a different set of rules. This type of morphology does not create an ideal environment for head-based modes of accentuation. On the contrary, it either favors the association of each sub-domain with a different cophology or promotes modes of accentuation which ignore constituent structure completely (e.g. *edgemostness*). It has been shown (Inkelas, Orgun & Zoll 1994, Orgun 1996) that in Turkish both possibilities are exploited.

A more comprehensive account of the relation between morphological structure and prosodic form will have to await a thorough study of scope relations in morphology. Future research will also shed light on the exact factors that assisted the development of the agglutinating system in the Greek dialects of Asia Minor. Is it possible that accentuation was once compositional in Cappadocian, as it is in Pontic? And if yes, what led it to change to edgemostness? These and similar questions will remain unanswered until we develop a better understanding of other aspects of the phonology-morphology interface in Greek and its dialects.

Notes

1. In this paper we adopt a lexicalist view on morphology (among others, Kiparsky 1982, Selkirk 1982, Lieber 1992). Affixes as well as lexical stems are considered to be morpheme pieces which relate phonological form with meaning and function. We leave open the issue of whether the hierarchical location of affixes is determined by syntactic operations (Halle & Marantz 1993) or by the subcategorization frames carried by each affix (Lieber 1992).
2. The following abbreviations are used in glosses: abl(ative), acc(usative), adj(ective), com(itative), def(inite), fem(inine), gen(itive), instr(umental), interr(ogative), masc(uline), neut(er), nom(inative), poss(essive), prf:prefix, sg: singular, pl: plural, suff(ix); PrA: pre-accenting, PA: post-accenting, A: accented, UnA: unaccented, SBU: stress-bearing units. Following the standard tradition, uppercase letters are used to represent underspecified segments in Turkish morphemes.
3. Cf. Ralli 1988, Ralli & Touratzidis 1992 for a similar, morphologically-based analysis of Greek stress.
4. Still, a distinction must be drawn between inherently relational, or ‘weak’ inflectional suffixes (agreement, case, tense, etc.) and inherently independent, or strong inflectional suffixes (mood, aspect, causative, etc.). This rather pre-theoretical terminology is adopted here to express the difference between suffixes that participate in syntactic dependency relations and those that do not. The former type of suffixes formally mark a relation between two syntactic constituents. For instance, agreement encodes the relation between a verb and its argument, and nominative case encodes the relation between a subject and a tensed verb. Moreover, these suffixes lack inherent semantic content. The function of the latter type of suffixes, on the other hand, is not to facilitate the realization of a particular relation between two constituents. Accordingly, in some languages they occur as independent words with a full semantics. On the basis of this disparity, one could explore the possibility of making a morpho-syntactic distinction according to which ‘strong’ suffixes are *heads* but ‘weak’ suffixes are not.
5. Under a cyclic analysis, all accented derivational suffixes are treated as cyclic and all accented inflectional suffixes as non-cyclic. Unaccented derivational suffixes are also non-cyclic because (a) they never attract stress, and (b) they give way to accented inflectional suffixes, e.g. *praktóron* /prak-tor-‘on/ ‘spy-GEN.PL’. This account, however, misses the generalization grasped by head dominance. (Cf. Revithiadou 1999 for details.) The same arguments against cyclicity hold for Pontic.
6. HEADFAITH and FAITH do not in principle conflict with each other. Head accent will surface as long as DEFAULT is dominated by faithfulness. The conflict between positional and simple faithfulness in (9) is established by intervening constraints which are left out of the present discussion.
7. The constraints that comprise DEFAULT are: NONFIN (Prince & Smolensky 1993): The head of the PrW should not be final >> HdFt-L (Prince 1983, Baković 1998): ALIGN (PrW, R, HEAD(PrW), R).

8. Inkelas proposes that a trochaic foot is pre-assigned to a morpheme. See Alderete 1999, 2001 and Revithiadou 1999 for arguments against a foot-based representation of inherent accentual properties.
9. NoFlop(acc) dominates Leftmost(acc) because lexical accents are not pushed to initial positions, e.g. *péndzére!***péndzere*.
10. Gen.sg of *os*-class nouns has three variants: /-’u/, /-onos/, /-íu/. The variant /-onos/ seems to be preferred. We are not aware of any phonological or morphological restrictions in their distribution.
11. TROCHEE (Feet have initial prominence) (Prince & Smolensky 1993, Kager 1999) is also top ranked. FTBIN (Feet are binary) is low ranked in Greek, e.g. *xo(rós)* ‘dance’. The position of PARSE- σ (Parse syllables into feet) (Prince & Smolensky 1993) in the constraint system is undetermined due to the unsolved problem of secondary stress.
12. Some languages have either pre-accenting or post-accenting morphemes, and others, like Greek, have both.
13. Morphological constituency is also relevant. For example, pre-accenting roots never occur in words of the structure [prf[[root]suff]] but they do occur in words of the structure [[prf root]suff] (Kiparsky 1987). Consequently, an accent can land on a hosting morpheme provided it is adjacent to the sponsor and they belong to the same domain. This requires a slight reformulation of the constraints in (24). The simplified version of alignment presented here does not affect the analysis in any crucial way.
14. We follow Dawkins’s transcriptions of the word forms. His /ə/ stands for the high back unrounded vowel often transcribed as [u] or [i].
15. We found only one example in Dawkins’s grammar where /i/ deletes in word medial position: *rótsa* /rot̪sa/ ‘I asked’ (D137).
16. Word final /i, u/ are deleted in all Cappadocian dialects. In addition, unstressed /o/ raises to [u] in the dialect of Misti.
17. For ease of exposition we constructed this example on the basis of the H-model of word formation.
18. Under an Output-output correspondence account (Burzio 1994, Benua 1995, 1996, Kenstowicz 1996, among others), one could argue that stress stability in (40) and (41) results from paradigmatic relations between lexical forms. This analysis fails to explain, however, why stress shifts take place only in the GEN.SG of the ultimately stressed forms, e.g. *layoyjú* and not elsewhere.

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Περίληψη.

Αυτό το άρθρο πραγματεύεται τη σχέση μορφολογικής δομής και προσωδίας σε δύο Ελληνικές διαλέκτους της Μικράς Ασίας: την Ποντιακή και την Καππαδοκική. Πρόκειται για διαλέκτους που δέχτηκαν την επιρροή της Τουρκικής σε διάφορα γραμματικά επίπεδα. Έμφαση, όμως, δίνεται στη σταδιακή μετάβαση από την κλιτική στη συγκολλητική μορφολογία, την οποία επιδεικνύουν κυρίως διαλεκτικές ομάδες της Καππαδοκικής. Υποστηρίζεται ότι αυτή η εξαιρετικά ενδιαφέρουσα μεταρρύθμιση δεν άφησε ανεπηρέαστο το φωνολογικό τομέα. Οι διάλεκτοι που αναπτύσσουν συγκολλητική μορφολογία υιοθετούν το τονικό παράδειγμα της Τουρκικής. Η συγκριτική εξέταση και ανάλυση αυτών των διαλεκτικών ομάδων ρίχνει φως σε διάφορες πτυχές αλληλεπίδρασης φωνολογίας-μορφολογίας, όπως, για παράδειγμα, τη σχέση μορφολογικής τυπολογίας και μεθόδου τονισμού.