Loan verb adaptation in Greek dialectal variation: A first approach¹

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Abstract

The paper investigates loan verb borrowing and adaptation in the light of the evidence provided by Greek dialectal variation. Examining the mechanisms and paths via which verbs can be borrowed and adapted in Greek dialectal systems, according to Wichmann & Wohlgemuth (2008) typological classification of loan verb accommodation strategies, we argue in favour of the prevailing influence of structural factors (i.e. productivity of the selected pattern, base specifications and phonological equivalences) to the selection of -a- specific accommodation mechanism-s- across dialectal varieties.

1. Introduction

Lexical borrowing as well as adaptation of loans is a favorite topic among linguistic studies, both for theoretical and applied reasons i.e. understanding the nature of language change via the identification of the constraints language is subject to, and using the constraints for the reconstruction of unattested language change and language situations (cf. Haspelmath 2008).

Several claims regarding borrowability have been made the most important of which, for the purposes of the present paper are the following: a) lexical items are more likely to be borrowed than grammatical items and words are more likely to be borrowed than bound morphemes (cf. Moravcsik 1978, Field 2002) and b) different spheres of the vocabulary are borrowed more easily, while others significantly less easily.

According to Hock & Joseph (1996:257) basic vocabulary, referring to essential human activities, e.g., *eat, sleep, do, have, be* is the more resistant sphere. Moreover, it is a general assumption that nouns are borrowed more easily and thus preferentially than other parts of speech (see among others Whitney 1881, Moravcsik 1978, Myers - Scotton 2002), since according to Myers - Scotton (2002: 240), "[...] they receive, not assign, thematic roles", so their insertion in another language is less disruptive of predicate – argument structure"².

In terms of contact, Dawkins(1916:197), focusing on Asia Minor Greek, had already claimed that "[...] verbs are borrowed much less easily than other parts of speech and only appear in any number when the vocabularies of two languages have reached a high degree of fusion...[...] often to the complete exclusion of their Greek equivalents."A more strong thesis is that of Moravcsik (1978: 111) who argues that a "[...] lexical item whose meaning is verbal can never be included in the set of borrowed properties"³.

The aim of this paper is to investigate loan verb borrowing and adaptation⁴ in the light of the evidence provided by Greek dialectal variation (i.e. Pontic, Cappadocian,

¹ The author wishes to thank the Greek State Scholarships Foundation for funding the present work. ² The same claim is made by Van Hout & Muysken (1994) based on the Ouechua language.

³ Additionally, "[...] *if verbs are borrowed, they seem to be borrowed as if they were nouns: the borrowing language employs its own means of denominal verbalization to turn the borrowed forms into verbs before using them as such*" Moravcsik (1975, 1978: 111-112).

⁴ The variety of terms, i.e. loanword adaptation, accommodation, integration, assimilation used in the literature are considered to be synonymous and thus are interchangeable in this study,

Aivaliot). Pontic, Cappadocian and Aivaliot were once spoken in the Ottoman Empire (areas of Northwest Turkey, Cappadocia, and West Turkey, respectively). More particularly, our goal is to examine a) whether there is differentiation in the loan verb adaptation strategies across dialectal varieties from the same language source (i.e. Turkish) and b) whether the observed differentiation could be accounted for in accordance with Wichmann & Wohlgemuth (2008) typological classification of loan verb accommodation strategies.

The paper is organized as follows: assumptions and premises concerning borrowing and accommodation strategies are presented in section 2. Section 3 investigates accommodation strategies of Turkish loan verbs in the dialectal varieties in study, i.e. Cappadocian (section 3.1), Aivaliot (section 3.2.) and Pontic (section 3.3), along with their sociolinguistic settings, emphasizing on the morphological mechanisms attested in each variety. Section 4 concludes with a summary of the main points of this paper focusing on the prevailing influence of structural factors (i.e. productivity of the selected pattern, base specifications and phonological equivalences) on the selection of -a- specific accommodation mechanism-s- across dialectal varieties.

2. Premises on Accommodation Strategies

Wichmann & Wohlgemuth (2008), taking into account the different parameters that have been proposed to account for resistance to borrowing (among others, intensity of contact (Thomason & Kaufman 1988), prestige of the language source and purism Haspelmath (2008)), proposed a typological classification of loan verb accommodation strategies based on data from 60 different languages⁵:

1) The first one is called 'light verb strategy'.

In this case adaptation of the loan word takes place via the use of a light verb like make or do with an 'auxiliary-like function' (cf. Jäger 2004). For example the accommodation of *retire* in Modern Greek of USA migrants from American English through the use of the light verb *kani* 'do' as can be seen under (1) below.

(1) kani	retire	USA migrants Greek	< American English
do. 3SG	retire		
'he/she	retires'	(data fro	om Moravcsik 2003ms.)

2) The second accommodation strategy is the 'indirect insertion' (adaptation by affixation) where accommodation from the source to the target language takes place with the help of an affix which can function, according to the authors, as a verbaliser, a nominaliser or as a marker of a specific verb class. For example, the French loan *maquiller*, adapted in Greek via the use of *-aro* as *macijaro*, seen in the example under $(2)^6$:

(2)	maci <i>j</i> -aro	Greek	< French
	'to make up'		< maquiller

3) The third strategy in Wichmann & Wohlgemuth (2008) classification is the direct insertion (no morphological adaptation). In this case, the loan verb is introduced in the system of the target language with no morphological or syntactic accommodation and it

referring all to the set of formal changes, or the processes by which lexical borrowings become compliant to the system of the recipient language.

⁵ Earlier studies like the one by Muysken (2000) divides the first type into three subcategories, which coincide roughly with Wichmann $\kappa \alpha i$ Wohlgemuth first three types and ignores the fourth one.

⁶ For a more detailed analysis on the adaptation of French and Italian verbal loans in Greek see Anastasiadi- Symeonidi (1994) & Ralli (1995).

can be a verb root or an inflected type. The authors give an example of verb adaptation in Figuig Berber from French, which can be seen in the example below:

Figuig Berber < French (3) i-gõfla [3SG.- be swollen. PERF.] < gonfler 'he is swollen up' 'to swell' (Data from Wichmann & Wohlgemuth 2008)

4) The last accommodation strategy is the inflectional transfer. In this case, the loan verb is not accommodated in the morphology of the target language. On the contrary, it carries its verbal morphology from the language source maintaining its functions in the new system. Example of inflectional transfer is found in Agia Varbara variety of Romani where the borrowed verb type *okursun*, shown under (4), carries its Turkish inflectional marker *–sun*:

(4) Romani (Agia Varvara)	<	Turkish ⁷	
okursun	<	okurmak	
[read.2SG.]	<	okurmak	'to read'
(Data	from	Bakker 200	5:9 in Wichmann & Wohlgemuth 2008)

Wichmann & Wohlgemuth acknowledge the fact that the borrowing pattern which the language target will adopt is related to its structural characteristics. However, they claim that the existence of more than one mechanism proves that the 'structural outcome' cannot be predicted on structural terms. Moreover, they form the hypothesis that the existence of different accommodation patterns in the target language correlates to the degree of exposition to the source language. In this spirit, they propose these strategies to form a hierarchy to be tested, according to which the lowest accommodation grade is related to the light verb strategy, a some how higher grade is marked by indirect insertion while, in the case of direct insertion there is no accommodation effort, acknowledging a special status to it. Finally, they suggest that the relative change in the accommodation strategy used by the target language is related to the relative degree of bilingualism in the source language.

3. Accommodation strategies in the dialects in study

As stated in the introduction, we focus on the adaptation of verb loans in different dialectal systems from the same language source. The language source is Turkish, which is an agglutinative language of the Altaic family and the three dialects in study, Cappadocian, Pontic and Aivaliot, varieties of Greek, which is a fusional language and member of the Indo-European family. Pontic, Cappadocian and Aivaliot were once spoken in the Ottoman Empire (in the areas of Northwest Turkey, Cappadocia, and West Turkey, respectively). After the end of the war between Greece and Turkey in 1922, the dialects continue to be spoken in Greece, within communities of first, second and third generation refugees⁸. Let us see the accommodation mechanisms in use in each dialectal system.

3.1 Cappadocian

⁷ According to Bakker (2005) Turkish loan verbs are inflected with the Turkish suffixes in present and past tense except for the 1.Pl. suffix of the past.

⁸ Pontic is it is still spoken by an unknown number of Pontic Muslims who still live in the same area in Turkey (see Mackridge 1999, Drettas 1999, 2000, Kaltsa and Sitaridou this volume, Michelioudakis & Sitaridou this volume).

Cappadocian⁹ is often used in the literature as a prototypical example of 'heavy borrowing' in terms of Thomason & Kaufman's borrowing scale, referring to 'overwhelming long-term cultural pressure' (Thomason & Kaufman 1988:50). The length and intensity of cultural and linguistic contact led Dawkins to the following statement about Cappadocian dialect "([...*the body ha[d] remained Greek but the soul ha[d] become Turkish...*]"), Dawkins (1916:198). It should be noted that although Cappadocian is a variety of Greek origin and its basic morphological structure is fusional, it displays hints of agglutinative patterns due to language contact with Turkish. More importantly it is the only variety where agglutinative inflectional structures are attested (cf. Dawkins, 1916 and Janse, forthcoming). Lastly, the Cappadocian dialect is subdivided into two basic groups, North and South Cappadocian (cf. Dawkins 1916) and an intermediate one, named Central Cappadocian (cf. Janse forthcoming)¹⁰ showing intra-dialectal divergence.

According to Janse (2001), Turkish loan verbs are completely adapted in the Cappadocian verb system. However, it is not always easy to decide how they are accommodated since, as already stated by Dawkins (1916:129), there seems to be two different forms: 1) by adding –do, -das, -da etc. or 2) –dizo which vary in the different sub-varieties of Cappadocian.

Let's have a closer look at the data following from (5a) to (5d). We can see data from Axo' in (a) and Misti in (b) -belonging to the Central Cappadocian zoneand from Arava'n and Ulagac in (c) and (d) respectively, belonging to the South Cappadocian zone¹¹.

(5)

(a) Cappadocian, Axó <	Turkish	
/ <i>j</i> ola'dizo/ {γιολλαντίζω}	<	yollamak
'to fall sick (for animals)'		'to fall sick (for animals)'
/daγlaˈdizo/ {νταγλαντίζω}	<	dağlamak
'to cauterize'		'to cauterize'
/ <i>j</i> a <i>f</i> a'dizo/ {γιαὄαντίζω}	<	yaşamak
'to live'	(to live'
		Data from Mavrochalyvidis (1990)
(b) Cappadocian, Misti	<	Turkish
/γazaˈdizu/ {γαζαντίζου}	<	kazanmak
'to earn, to profit'		'to earn, to profit'
/γavuˈstizu/ {γαβουστίζου}	<	kavuşmak
'to meet'		'to meet'
/baturˈdizo/ {μπατουρντίζω}	<	bat <i>ı</i> rmak

⁹ Cappadocian was found under Turkish influence for the first time in 11th century after the Seljuk invasion and the subsequently in the 14th century after the conquest of Asia Minor by the Ottoman Turks.

¹⁰ For a more detailed categorization of the Cappadocian varieties into zones see the Appendix.

¹¹ We should notice that in Cappadocian and Pontic the realization of /i/ in -izo, is often subject to the Turkish vowel harmony laws (-*i*zo after a stem with /a/ or / ∂ /, - ∂ zo with /o/ or /u/, -üzo with / \ddot{o} / or / \ddot{u} / and -izo after /e/ or /i/). However, its realization is often different than the Turkish vowel harmony would impose (Dawkins 1916:67) and in many cases the harmony is not observed at all and the realization of the suffix is always -izo (cf. Dawkins 1916:69, Janse forthcoming, Papadopoulos 1955).

'to waste'		'to ruin, to spoil' Data from Kotsanidis (xx)
(c) Cappadocian, Aravaín /benze tizo/ {μπενζεττίζω} 'compare to' /bile dizo/ {μπιλεντίζω} 'to sharpen' /bindir dizo/ {μπιντιρντίζω} 'to put sb on an animal's back'	~ < < <	Turkish bezentmek 'compare to' bilemek 'to sharpen' bindirmek 'to embark' Data from Fosteris & Kesisoglou (1950)
(d) Cappadocian, Ulagaç /araˈdu/ {αραντού} 'to seek, to look for' /biri ktu/ {μπιρικτού} 'to get together' /ja/aˈdu/ {γιαὄαντού} 'to live'	~ ~ ~	Turkish aramak 'to seek, to look for' birikmek 'to get together' yaşamak 'to live' Data from Kesisoglou (1951)

Looking at the examples above and reinterpreting these observations in terms of morphological constituents and accommodation strategies, as shown in the previous section, we could say that there is a variation in terms of accommodation mechanisms across the different sub-varieties of Cappadocian.

Axo, Aravan and Misti seem to accommodate Turkish loans through the attachment of *-izo* suffix to an inflected Turkish verbal form (the third singular of the Past), i.e. through the indirect insertion strategy as shown in (6a):

(6) a.	da <i>j</i> ad~	+ -izo	\rightarrow	da <i>j</i> a'dizo (Class I verbs)
b.	da <i>j</i> ad~	+ -0	\rightarrow	da <i>j</i> a'do (Class II verbs)
	< dayan-dı-Ø.Past.3.S.			'to stand'
	'to stand'			(adapted from Janse 2001:477)

Turkish verb loans in this case become part of the first verb inflectional class, which contains stems bearing stress and non systematic allomorphy for the perfective aspect forms (cf. Ralli 1988, 2005). We should notice, that *–izo* is a very productive suffix in different varieties of Greek, and it is systematically used for the accommodation of Turkish loans.

On the other hand, in Ulağaç, a different accommodation strategy seems to be active, since in that case, no affix comes into use¹². In this case, there is a clear preference for the direct insertion strategy, since Turkish verb loans accommodate directly -with no overt marker- to the second inflectional class containing stems

 $^{^{12}}$ The addition of -o, is categorized as a direct insertion mechanism, since inflectional suffixes are category neutral and no element marks the category of verb.

which bear no stress and show a systematic allomorphic pattern, described by (Ralli 1988, 2005) as $X(a) \sim Xi^{13}$. Accommodation can be seen in (6b):

Even though the mechanism is different, in the former case indirect insertion, while in the latter direct insertion, as already noticed by Janse (2001) in a different vein, structural factors in both cases play crucial role to the selected strategy. More specifically, adaptation can be accounted for in terms of equivalence between the Turkish and the Greek definite past and due to the fact that the Turkish past, *dayadi* for example, coincides with the Greek perfective stem. Additionally, variation between the two schemata is triggered by the fact that this perfective allomorphic stem in *-i* can be part both of *daya'do* and *daya'dizo* as shown in (7):

(7) dayan-di- \emptyset \rightarrow da'jadi-s-a 'to stand'. Past.3S. da'jadi-s-a 'to stand'.Past.1S. => da'a 'd-izo (Adapted from Janse 2001: 477)

It is Indeed the case that, in general, Greek verbs both in -o and -iz(o) have the same allomorph, i.e \sim Xi, for the perfective aspectual value. You see in the examples that follow under (8) the underlined allomorphs of $zo\gamma ra'fizo$ and $a\gamma a'po$, sharing the same \sim Xi pattern, i.e. $zo\gamma rafi$ and $a\gamma api$:

(8) zoγra fizo	zo γrafi-s-a	(Class I verb)
'to paint'.1SG.PRES.	<u>zografi~</u> PERF.ASPECT.1SG.PAST.	
aγa po	a γapi-s-a	(Class II verb)
'to love'.1SG.PRES	<u>aγapi~</u> PERF.ASPECT.1SG.PAST.	

In other words, we could say that the phonological and structural equivalence of the loan verb form with the allomorphic stem for the perfective aspectual value can account for the different patterns. However, the question arising is whether the showing preference towards a different accommodation schema in the different sub-varieties could be interpreted in terms of contact, supposing in other words that Ulagaç variety is more heavily influenced by Turkish than the other varieties just mentioned or if the selected pattern is the one favoured in structural terms.

It is true that Ulaga $_{c}$ and the other South Cappadocian varieties -especially the Southeast (Ulaga $_{c}$ and Semendere) are more heavily influenced from Turkish. According to Dawkins 1916: 209) in this zone "*the turkish element is at its strongest*". This observation could serve as a strong argument in favour of the typological hierarchy proposed by the Wichmann & Wohlgemuth since, at least so far, where the Turkish influence is said to be more intense, a different accommodation mechanism (i.e. direct and not indirect insertion) is active.

However, the situation is not really so uniform. Examples of Turkish verbal loans in other Cappadocian sub-varieties, do not seem to verify this thesis. The available data from the other Cappadocian varieties are not uniform either. Direct

¹³ Following Ralli (1988, 2005), X(a) form characterizes paradigms of an imperfective aspect (present, imperfect and future continuous paradigms), while the Xi form those of a perfective aspect (aorist and simple future paradigms).

insertion strategy is in use in some varieties belonging to the North Cappadocian subgroup which is not considered to be so heavily influenced by Turkish-, as can be seen in the examples from Anaku (9) and Floyita (10), as opposed to Malakopi (11) and Delmeso (12) where indirect insertion, through *-izo* is active.

 (9) Anaku /alu'do/ {αλουντώ} 'to take, to get' /kapa'do/ {καπαντώ} 'to close, to shut' /<i>j</i>arul'do/ {γιαρουλντώ} 'to split, to tear' 	< < <	almak 'to take, to get' kapatmak 'to shut' yar <i>ı</i> lamak 'to divide, to split' (Data from Costakis 1964)
 (10) Floyita /baʒər'do/ {μπαγκ[ə]ρdώ} < 'to cry out' /t/əjər'do/ {τσ[ə]γ[ə] ρντώ} 'to call' /kapa to/ {καπατώ} 'to close, to shut' 	bağirr < <	nak 'to cry out' çağirmak 'to call' kapatmak 'to shut' (Data from Dawkins 1916)
 (11) Malakopi /ba/la dizu/{μπασ λαντίζου} 'to begin' /<i>j</i>urul dizu/ {γιουρουλντίζου} 'to be tired' /düsün düzu/ {ντ[ü]σ[ü]ν.ντ[ŭ]ζα 'to think, to consider' 	< < 00}	bašlamak 'to begin' yurulmak 'to be tired' < düsünmek 'to think, to consider' (Data from Dawkins 1916)
 (12) Delmesos /anla 'dəzo/ {ανλαντ[ə]ζω} 'to understand' /ara 'dəzo/ {αραντ[ə]ζω} < 'to seek' /batər 'dəzo/ {μπαt[ə]ρντ[ə]ζω} 'to dip' 	< arama <	anlamak 'to understand' !k 'to seek' bat <i>i</i> rmak 'to dip' (Data from Dawkins 1916)

The examined data show that a typological hierarchy of mechanisms in terms of intensity of contact and bilingualism cannot account adequately for the observed divergence and further investigation is necessary in the systems of the different sub-varieties of Cappadocian in order to account for it, something that was not possible till now since the available data are not equally ample for all the different varieties. However, it seems that further investigation of the available – productive structural schemata in each sub-variety could shed some light to the observed divergence.

3.2 Aivaliot

To broaden the picture, let us now turn to the Aivaliot dialect. Asia Minor populations speaking the Aivaliot dialect, although living in a purely Turkish environment, (in the gulf of Ayvalik and today's Cunda in West Turkey), from the end of the 16th till the beginning of the 20th century, never undergone a heavy structural pressure. On the contrary, due a Sultan's decree (at the 17th century), they enjoyed administrative and religious autonomy which provided them homogeneity and constrained the Turkish-Greek contact only on the level of commercial and administrative contact and not on the every-day one. It's worth mentioning that very few women spoke Turkish, while men used it only in trade and administration, when necessary, as opposing to Cappadocian, where bilingualism was extremely spread.

Given these, adaptation of loan verbs from Turkish in Aivaliot can be seen in the examples below:

(13)

(13)	
/kazaˈdizu/ {καζαντίζου} & /kazaˈdo/ {καζαντώ}	< kazanmak
'to earn, to become rich'	'to earn'
/da <i>j</i> a'dizu/ {νταγιαντίζου} & /da <i>j</i> a'do/ {νταγιαντώ}	< dayanmak
'to stand, to sustain'	'to stand, to sustain'
/sasir'dizu/ {σασιρντίζου} & /sasi'rdo/ {σασιρντώ}	< saş <i>ı</i> rmak
'to lose one's head'	'to lose one's head'
/axtarˈdizu/ {αχταρντίζου} & /axtarˈdo/ {αχταρντώ}	< aktarmak
'to turn sth upside down'	'to carry, to transfer'
/katsir dizu/ {κατσιρντίζου} & /katsir do/ {κατσιρντώ	b} < ka <i>ç</i> irmak
'to escape, to get away'	'to escape, to get away'
(Data from the Laboratory of M	CD [Iniversity of Patras]

(Data from the Laboratory of MGD, University of Patras)

What can be seen from the examples above is that in Aivaliot, there is systematic alternation between the two different accommodation schemata in use, e.g. *kaza'dizu & kaza'do* 'to earn, to become rich'. In the case of -iz(o) the indirect insertion mechanism is active, since there is an overt affix accommodating the loan verbal form, while in the case of -o, the direct insertion mechanism, where the loan verb form is adapted with no overt morphological marker to the 2nd inflectional class. In structural terms, alternation between the two schemata can be accounted for on the basis of the phonological and structural equivalence of the perfective allomorphs of -iz(o) and -o verbs, shown in (13) above (see also Ralli 2009b for a similar claim).

In terms of the Wichmann & Wohlgemuth (2008) hypothesis, alternation among different schemata should be accounted for in terms of increasing degree of bilingualism or more intense contact. But could this be the case, especially if one takes into account that Aivaliot cannot be placed so high in the hierarchy of contact as let's say Cappadocian? In our view, we cannot talk about 'strong intense contact' in terms of Thomason & Kaufman (1988), not at least as strong as in the case of Cappadocian, where agglutinative structures can be found.

On the contrary, our claim is that, alternation between the two different strategies cannot be interpreted in terms of increase in the intensity of contact. The system of the dialect offers support favoring a structural interpretation, more specifically competition between the two processes, (affixation in the case of *-izo* and zero derivation in the case of -o) resulting in their alternation. It is crucial to notice that this alternation between the two processes is observed not only on the level of loan verb adaptation but on native stems as well (cf. Melissaropoulou & Ralli 2007, Melissaropoulou 2007, Ralli 2009a). In (14) below we can see instances of alternation between *-izo* and *-o* forms in native stems:

(14)	δrastse 1 -izu 'to lope'	{δραστσελ-ίζου} &	δrastse1-o	{δραστσελ-ώ}
	zima t-izu 'to scald'	{ζιματ-ίζου} &	zima t-o	{ζιματ-ώ}
	x√um'dr-izu 'to neigh'	{χλιουμντρ-ίζου} &	x√um'dr-o	{χλιουμντρ-ώ}
	fruka 1-izu 'to sweep'	{φρουκαλ-ίζου} &	fruka 1 -o	{φρουκαλ-ώ}
	mirmi δ-izu 'to shudder'	{μυρμηδ-ίζου} &	mirmi 8-0	{μυρμιδ-ώ}
	gu ts-izu 'to groan'	{γκουτσίζου} &	gu 'g-o	{γκουγκ-ώ}

In several cases, as can be seen in the examples following in (15) the forms in –*o* have prevailed in Aivaliot, for example *zvo* instead of *zvino*, providing further evidence in favor of the increasing productivity of –*o* verbs, since according to Ralli (2009a) the leveling of verbs with various irregular allomorphic stems according to the X(a) ~ Xi pattern establishes a uniform stem-allomorphy pattern, and optimizes lexical representations by increasing their conformity to the system.

(15) zvo (zv(a) ~ zvi) instead of zvino (zvin ~ zvi)
'to put out, to blow out, to turn off'
fto (ft(a) ~ fti) instead of ftino (ftin ~ fti)
'to spit'
arpo (arp(a) ~ arpi) instead of ar pazo (arpaz ~ arpaγ)
'to catch'

3.3 Pontic

Lastly, Pontic was also in a long term contact with Turkish, since it was as well spoken, already well established according to Browning 1991¹⁴, from the 12th century till the exchange of populations in 1923, in a Turkish environment, in Northwest Turkey. However, we cannot talk about heavy 'overwhelming long-term cultural pressure', as in the case of Cappadocian, since Pontic people were functioning for many centuries, as a closed community living on the borders, fighting with Turkish nomads and maintaining to a greater extent their homogeneity.

The vast majority of loans in all different sub-varieties of Pontic¹⁵ are accommodated via the indirect insertion strategy as well, but with preference for

¹⁴ For further details cf. Browning (1991:170-171).

¹⁵ Manolis Triandafyllides ([1938] 1981:288)) proposed a tripartite categorisation of Pontic in zones: a) the zone of Oinoi, b) the zone of Trebizond and c) the zone of Chaldia, acknowledging that

another suffix, i.e. $-evo^{16}/^{17}$ (cf. Papadopoulos 1955:144). See the examples under (16) below:

(16) <i>/j</i> ara′evo/ {γιαραεύω} < 'to be of use, to serve' <i>/j</i> ola′evo/ {γιολαεύω} <	'to be of use, to serve'
'to send, to see sb off' /zaifla'evo/ {ζαϊφλαεύω} 'to slim' imzala'evo {ιμζαλαεύω} 'to sign'	 'to send, to see sb off' zayflamak 'to slim' imzalamak 'to sign'
to sign	(Data from Tsopouridis 2002)

What is really interesting is that in several cases both the nominal and the verbal stem are borrowed from Turkish. See the examples under (17) below:

(17)		
/ <i>j</i> arala'(e)fkome/{γιαραλάυ(ε)κ	ομαι} <	yaralanmak
'to get injured / hurt'		'to get injured / hurt'
/ <i>j</i> ara/ {γιαρά}	<	yara
'wound'		'wound'
/imzala'evo/ {ιμζαλαεύω}	<	imzalamak
'to sign'		'to sign'
/imza/ {ιμζά}	<	imza
'signature'		'signature'
/kamp <i>f</i> ila evo {καμψιλαεύω}	<	kam <i>çı</i> lamak
'to lash'		'to lash'
/kamp <i>f</i> in/ {καμψίν}	<	kam <i>çı</i>
ʻlash, strap'		ʻlash, strap'

What is particularly interesting in Pontic is the fact that *-evo* is not used only in loan verb accommodation, but (it) is systematically combined with nominal bases of Turkish origin to form verbs with no verbal equivalents, like those seen under (18):

(18)							
/xuzmetevo/	{χουζμετεύω}<	/xuˈzmet/	{χου	ζμέτ}	<	hizm	iet
'to serve'				'serv	vice'		
/γai pevo/ {	{γαϊπεύω}	< /ya	ip/	{γαϊτ	τ}	<	kay <i>ı</i> p

this zone was more influenced from Turkish and shared common characteristics with Farasiot. Cf. Triantafyllides (1938) and Kontosopoulos (2001) for a more detailed classification of Pontic in dialectal zones and sub-varieties.

¹⁶ According to Papadopoulos (1955:144) and Tsopouridis (2002), in the areas of Kotiora and Nikopoli *-evo* is realized as *-avo*, due to coarticulation of /a/ and /e/ vowels, e.g. *zai'flavo* instead of *zaifla'evo*.

 17 There is a really restricted number of verbal forms suffixed with –*izo*, which have a free variant in –*evo* as well. E.g. /tae <code>h-izo/ {taeviζω} & /tae <code>h-evo/ < dayanmak</code></code>

'to stand'

'to stand'

'to disappear'	'out of sight, away, missing'			
/zabu nevo/ {ζαμπουνεύω}	< /zaˈbuŋs/ {ζαμπούν'ς} < zebun			
'to be slim, stenghtless'	'slim, strengthless'			

The most important pattern as far as -evo's behavior with respect to loans is concerned, is the fact that both the nominal and the verbal loan forms are accommodated in Pontic through the use of -evo to form verbs. Crucially, the same base -both nominal and verbal- is found in Pontic to be attached to -evo suffix in order to form a verb. Taking into account the fact that loan nouns are more easily borrowed and from that viewpoint they precede verbal loans, it's not so untenable to presume that in the case of Pontic generalization of an existing schema, i.e. affixation with -evo, took place to accommodate verbs through the addition of -la-, an element which was frequent in verbal loan bases but not to nominal ones. However, there are no historical sources available one could use to test the hypothesis.

In the examples that follow in (19) we can see instances of the same stem, both nominal and verbal, attaching to *-evo*. The difference, in the two different kinds of bases is marked in Pontic, through the use of *-la*-¹⁸, a Turkish suffix which is used productively to form verbal bases from nominal ones (c.f. Kornfilt 1997:453, 455).

(19)

/suva 'evo/ {σουβαεύω} & /suvax <u>la</u> 'evo/ {σουβαχλαεύω} <	s <i>i</i> va			
'to plaster'	'plaster'			
Note: the corresponding Turkish verb is s <i>r</i> vamak				
/cevezevo/ {κεβεζεύω} & /ceveze <u>le</u> vo/ {κεβεζελεύω} <	geveze			
'to chatter'	'chatty'			
Note: the corresponding Turkich work is governed; strate				

Note: the corresponding Turkish verb is gevezelik etmek

In some cases this *-la-* suffix, which is recognized as a marker accommodating verbal stems, expands a) to other Turkish loans which are not verbal, which do not have verbal equivalents with *-la-*, (20a) and b) crucially to Greek bases as well (20b), as can be seen in the examples below:

(20)

 a) /pəli <u>læ</u>evo/ {παλληλαεύω} 'to imprint, to stamp' /rezilæ'efkume/ {ρεζιλαεύκουμαι 'be held up to ridicule' 	< } <	/pælis/ {πἀλ 'clean, eviden /rezil/ {ρεζίλ 'ridicule'	t' 'clean, evident'
b) /cenur <u>la</u> ′evo/ {καινουρ-λα-εύω} 'to renew'	<	/cenuræ/ 'new'	{καινούρä}
/sira <u>la</u> 'evo/ {σειραλαεύω}	<	/si ra/ {σειρά	}
'line up, arrange in rows'		'row'	(
/nani <u>la</u> 'evo/ {νανιλαεύω}	<	/nani/	{νάνι}
'to lulle'		'sleep'	

¹⁸ Cf. Dawkins (1916:130) and Janse (forthcoming) for some marginal examples with *–lan-* turkish suffix marking reflexiveness in Cappadocian.

These data offer a clear counterexample to the general claim made by Moravcsik (1975, 1978: 111-112) that, if verbs are borrowed, they seem to be borrowed as if they were nouns, or to its moderate version of underspecified insertion by Wichmann & Wohlgemuth (2008). On the contrary, Pontic seems to expand the same mechanism used for the verbalization of Turkish nominal bases to the accommodation of verbs, i.e. the Turkish verbal marker *–la-.*

Lastly, we should notice that the use of *-evo* suffix is found in the other varieties in study as well. Both in Cappadocian and Aivaliot, nominal bases of Turkish origin -fully adapted in the dialectal system- form verbs when attached to *-evu /evyu (<-evo)* suffix. Examples can be seen under (21) below:

(21) Aivaliot

(21) Invalide /zabu hevγu/ {ζαμπουν-εύγου} 'to fall sick'	<	/zaˈbu <i>ɲ</i> s/ {ζαμπούν'ς} 'sick'	< zebun		
/bata levyu/ {μπαταλεύγου}	<	/bata Λ s/ {μπατά λ 'ς}	< battal		
'to disuse, to destroy' /χadzi revyu/ {χατζιρεύγου}	<	ʻof no use' /xaˈzir/ {χαζίρ}	< haz <i>ı</i> r		
'to prepare, to get ready' /murda revγu/ {μουρνταρ-εύγου 'to be/to get dirty')} < _	ʻready' /mur'daris/ {μουρντάρη ʻdirty'	ς} < murdar		
(22) Cappadocian (Axơ, Araván, Misti, Ulağa <i>ç</i>)					
/xuzu revu/ {χουζουρ-εύου}	<	huzur {χουζούρ}	< huzur		
'to have a long lie-in'		'lie-in'			
/saka tevu/ {σακατ-εύου}	<	sakatis	< sakat		
'to cripple'	(cripple'			
/xardzi′evu/ {χαρτζι-εύου}	<	xardzi	< harsi		
'to spend'		'expense'			

In our view, this choice is not accidental but is due to the fact that *-evo* in Greek is in general very productively combined with nominal bases to form verbs.

4. Conclusions

To conclude, we would say that we have examined loan verb accommodation mechanisms from Turkish in three different varieties of Greek. Dialectal data show variation between the mechanisms of direct and indirect insertion. This variation, which according to Wichmann & Wohlgemuth (2008) typological classification of loan verb accommodation strategies could be associated with sociolinguistic factors (i.e. intensity of contact and a higher degree of bilingualism) cannot, solely, account adequately neither for the cross-dialectal nor for the intra-dialectal divergence.

The sub-varieties of Cappadocian, which are considered as an instance of 'overwhelming long-term cultural pressure' (Thomason & Kaufman 1988:50) show a diverging behaviour. The Aivaliot dialect, which cannot be placed as high as Cappadocian in terms of Thomason and Kaufman scaling of intensity of contact, exhibits variation between the two strategies. In Pontic, which in terms of contact could be placed in an intermediate position, not so high as Cappadocian, but definitely higher than Aivaliot, indirect insertion strategy is in use, with a different suffix, i.e. -evo which is used productively not only for the accommodation of verbs but for the verbalization of nominal bases of Turkish origin as well, often with the addition of -la- affix.

Without ignoring the crucial role of the intensity of contact and the degree of bilingualism for the adoption of loan verbs, we claimed that structural factors, i.e., phonological and structural equivalences, the notion of productivity and the competition among the existing processes could account both for the preferred mechanism and the alternation between different strategies – schemata.

More particularly, we have seen that alternation between the two different mechanisms cannot be interpreted as a case of heavier pressure in Aivaliot from Turkish, but proves to be a generalized schema involving competition between zero derivation and affixation with *–izo*, triggered by a strong tendency towards the establishment of a uniform stem-allomorphy pattern aiming at the optimization of lexical representations Ralli (1988, 2009a). Surprisingly, this alternation is not found -at least systematically- in Cappadocian, a phenomenon which merits further investigation, with enrichment of data from all different subvarieties. Lastly, in Pontic no alternation of schemata is observed. In this case, the dialectal data offer an extra counterexample to the thesis that loan verbs are entering the system of the target language as nouns or underspecified (Moravcsik 1975, 1978, 2003) since, in Pontic the same suffix, i.e. *-evo* with the addition of *-la*-is used to mark verbal loans, while in the other varieties, a different suffix is used to verbalize nominal bases of Turkish origin.

However, we should say that this study is only in the beginning. More systematic research and enrichment of data, both from Turkish and from other source languages is needed in order to test where there is variation when a) the typological features of donor and / or recipient language change and b) when the language contact situation changes. In our long-term goals are a cross-dialectal typology of verbal borrowing patterns as well as a typological hierarchy of social, grammatical and lexical factors affecting the borrowability of verbs. What is proven though, at least so far, is within the spirit of Singh thesis that, although history decides the change, it is the grammar that will decide which road it will take (Singh, 1996 2008).

5. References

- Anastasiadi- Symeonidi, A. (1994). *Neological Borrowing in Modern Greek* [Νεολογικός Δανεισμός της Νεοελληνικής. Thessaloniki.
- Andriotis, N.P. (1948). The linguistic variety of Farasa [Το γλωσσικό ιδίωμα των Φαράσων]. Athens: Ikaros.
- Bakker, Peter. (2005). Intertwining and Michif. Paper presented at the Romanisation Worldwide Conference. Bremen, 5-9 May 2005.
- Browning, R. (1991). *Medieval and Modern Greek* [Η ελληνική γλώσσα, μεσαιωνική και νέα]. Greek translation M. N. Konomi. Athens: Papadimas.
- Costakis, A. (1964). *Le Parler Grec d'Anakou*. Athènes: Centre d'Études d'Asie Mineure.
- Dawkins, R. (1916). *Modern Greek in Asia Minor.* Cambridge: Cambridge University Press.
- Drettas, G. (1999). The Greek –Pontic dialectal group [Το ελληνο-ποντιακό διαλεκτικό σύνολο]. In A.-F. Christides (in collaboration with M. Arapopoulou and G. Giannoulopoulou) (ed.), *Dialectal enclaves of the Greek Language* [Διαλεκτικοί θύλακοι της ελληνικής γλώσσας]. Athens: YPEPTH & Center for the Greek Language
- Drettas, G. (2000). Marques de *focus* en grec commun et en pontique. *Studies in Greek Linguistics* 1999, 122-131.

- Field, F. (2002). *Linguistic Borrowing in Bilingual Contexts.* Amsterdam / Philadelphia: John Benjamins Publishing Company.
- Fosteris, D. & Kesisoglou, I.I. (1950). *Vocabulary of Aravani* [Λεξιλόγιο του Αραβανί]. Athens: French Institute of Athens.
- Haspelmath, M. (2008). Loanword typology: Steps toward a systematic cross-linguistic study of lexical borrowability. In T. Stolz, D. Bakker & R. Salas Palomo (eds.) Aspects of language contact: New theoretical, methodological and empirical findings with special focus on Romancisation processes. Berlin/New York: Mouton de Gruyter, 43-62.
- Haugen, E. (1950). The analysis of linguistic borrowing. *Language* 26: 210 231.
- Hock, H. & B. Joseph. (1996). *Language History, language Change and Language Relationship.* Berlin: Mouton de Gruyter.
- Jäger, A. (2004). The cross-linguistic function of obligatory 'do'-periphrasis. Paper presented at the 2004 Conference of the Australian Linguistic Society. Available at http://66.249.93.104/search?q=cache:xcVAbVnhYrEJ:dspace.library.usyd.edu.au:8080/bit stream/123456789/111/1/ALS-20050630-AJ.pdf+loan verbs&hl=en. Accessed at 2010-04-13, 5:59 pm.
- Janse, M. (2001). Morphological Borrowing in Asia Minor. In G. Aggouraki, A. Arvaniti, J.I.M. Davy, D. Goutsos, M. Karyolaimou, A. Panagiotou, A. Papapavlou, P. Pavlou, A. Roussou (eds.), Proceedings of the 4th International Conference on Greek Linguistics. (Nicosia, 17-19 September 1999). Thessaloniki:University Studio Press, 473-479.
- Janse, M. (forthcoming). "Cappadocian". In Tzitzilis (ed.) The Greek language and its dialects [Η ελληνική γλώσσα και οι διάλεκτοί της]. Thessaloniki.
- Kaltsa M. & Sitaridou I. (2010). Topicalization in Pontic Greek. *Paper Presented at the* 4th *International Conference of Modern Greek Dialects and Linguistic Theory* (Chios, June 11-14 2009).
- Kesisoglou, I.I. (1951). *The dialectal variety of Ulağaç* [Το γλωσσικό ιδίωμα του Ουλαγάτς]. Athens: French Institute of Athens.
- Kontosopoulos, N. (2006). Modern Greek Dialects and Idioms [Διάλεκτοι και ιδιώματα της νέας ελληνικής]. 4th Edition. Athens: Grigori Editions.
- Kornfilt, J. (1997). *Turkish. Descriptive Grammars.* Routledge: London and New York.
- Kotsanidis, L. (xx). *The dialect of Misti Cappadocia* [Το γλωσσικό ιδίωμα του Μιστί Καππαδοκίας]. Kilkis: Gnomi Kilkis-Paionias.
- Mackridge, P. (1999). Grekophony in the area of Ofi (Pontus) [Η ελληνοφωνία στην περιοχή του Όφη (Πόντος)]. In A.-F. Christides (in collaboration with M. Arapopoulou and G. Giannoulopoulou) (ed.), *Dialectal islands of the Greek Language* [Διαλεκτικοί θύλακοι της ελληνικής γλώσσας]. Athens: YPEPTH & Center for the Greek Language, 25-30.
- MacMachon, A. (1994). Understanding Language Change. Cambridge: Cambridge University Press.
- Mavrochalyvidis, G. (1990). *Axo Cappadocia* [Η Αξό Καππαδοκίας]. Monography 2nd volume. Athens: O., P. & A. Mavrochalyvidi.
- Melissaropoulou, D. (2007). Word Formation in the Asia Minor Dialect of Kydonies and Moschonisia (Aivaliot) [Μορφολογική περιγραφή και ανάλυση του Μικρασιατικού ιδιώματος Κυδωνιών και Μοσχονησίων: η παραγωγή λέξεων] Unpublished PhD Dissertation. University of Patras.
- Melissaropoulou, D., Ralli, A. (2007). The verbal system of the Asia Minor Dialect of Kydonies and Mosxonisia [Το ρηματικό σύστημα της διαλέκτου των Κυδωνιών και Μοσχονησίων».]. In P. Kitromilides and P. Michailaris (eds.) *Proceedings of the fifth International History Conference "Mitilene and Aibali: A mutual dealing in North-Eastern Aegean Sea*" (6-9 October 2003, Mytilene). Athens: National Research Institute, 203-211.
- Michelioudakis, D. & Sitaridou, I. (2010). Syntactic micro-variation in Pontic: Dative constructions. Paper Presented at the 4th International Conference of Modern Greek Dialects and Linguistic Theory (Chios, June 11-14 2009).
- Muysken, P. (2000). *Bilingual Speech. A Typology of Code-Mixing*. Cambridge: Cambridge University Press.
- Myers-Scotton, C. (2002). *Language Contact: Bilingual encounters and grammatical outcomes.* Oxford: Oxford University Press.
- Moravcsik, E. (1975). Borrowed verbs. *Wiener Linguistische Gazette* 8, 3-30.
- Moravcsik, E. (1978). Universals of Language Contact. In J. H. Greenberg et al. (eds.), *Universals of human language, vol. 1 Method and Theory*. Stanford, CA: Stanford University Press, 93-122.
- Moravcsik, E. (2003). "Borrowed Verbs". Ms.

- Mougeon, R. and E. Beniak. (1989). Language contraction and linguistic change: The case of Welland French. In N. C. Dorian (ed.) *Investigating obscolence: Studies in language contraction and death.* Cambridge: Cambridge University Press, 287-312.
- Myers-Scotton, C. (2002). Language Contact: Bilingual encounters and grammatical outcomes. Oxford: Oxford University Press.
- Papadopoulos, A. (1955). *Historical Grammar of the Pontic Dialect* [Ιστορική γραμματική της ποντικής διαλέκτου]. Pontic Archive, Appendix 1. Athens: Committee for Pontian Pontic Studies.
- Poplack, S., Sankoff, D. and C. Miller (1988). The social correlates and linguistic processes of lexical borrowing and assimilation. *Linguistics* 26:47-104.
- Ralli, A. (1988). *Eléments de la morphologie du grec moderne: La Structure du Verbe.* Unpublished Ph.D. thesis, University of Montreal.
- Ralli, A. (1995). Structure et forme des emprunts français dans la langue grecque. *Europe Plurilingue* 7, 77-85.
- Ralli, A. (2005). *Morphology* [Μορφολογία]. Athens: Patakis.
- Ralli, A. (2009a). "Morphology meets Dialectology: insights from Modern Greek dialects". *Morphology* 19, 87-105.
- Ralli, A. (2009b). "Morphology in Language Contact: Verbal Loanblend formation in Aivaliot". Paper presented at the Conference *Morphologies in Contact*, Bremen, October, 1-3 2009.
- Singh R. (1996). *Linguistics Theory, Language Contact and Modern Hindustani.* New York: Peter Lang.
- Singh, R. (2008). 'Language Contact'. Lecture given at the Master Program "Comparative Linguistics and Language Variation" Department of Philology, University of Patras, May, the 15th 2008.
- Thomason, S. G. & Kaufman, T. (1988). *Language Contact, Creolization and Genetic Linguistics.* Berkeley: University of California Press.
- Triantafyllides, M. [1938] (1981). Completed Work. 3rd vol., Modern Greek Grammar. Historical Introduction. Thessaloniki: Institute of Modern Greek Studies [Manolis Triantafyllides Foundation].
- Tsopouridis, T. (2002²). Lexicon of the Pontic Dialect [Λεξικό Ποντιακής Διαλέκτου]. 2nd volume, from Pontic to Modern Greek (1st edition 1998). Θεσσαλονίκη: Tsopouridis editions.
- Weinreich, U. (1968²). *Languages in Contact* (1st edition 1953). The Hague: Mouton.
- Whitney, W. (1881). On mixture in language. *Transactions of the American Philosophical Association*, 12:1-26.
- Wichmann, S., Wohlgemuth, J. (2008). Loan verbs in a typological perspective. In T. Stolz, D. Bakker & R. Salas Palomo (eds.), Aspects of Language Contact. New Theoretical, Methodological and Empirical Findings with Special Focus on Romancisation Processes. Berlin/New York: Mouton de Gruyter, 89-121.
- Van Hout, R., P. Muysken. (1994). Modeling lexical borrowability. *Language Variation and Change*, 6 (1): 39-62.

Appendix

Subgroupings of Cappadocian

North Cappadocian

- Northwest Cappadocian
 - ✓ Silata
 - ✓ Anakú
 - ✓ Floyitá
 - ✓ Malakopí
- Northeast Cappadocian
 - ✓ Sinasós
 - ✓ Potámya
 - ✓ Delmeso

Central Cappadocian

- ✓ Axó
- ✓ Mistí

South Cappadocian

- Southwest Cappadocian
 - ✓ Araván
 - ✓ Ferték
- Southeast Cappadocian
 - ✓ Ulağáç
 - ✓ Semenderé

(From Janse forthcoming)