STRATEGIES AND PATTERNS OF LOAN VERB INTEGRATION IN MODERN GREEK VARIETIES[1]

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Abstract

This paper investigates loan verbs in Modern Greek dialects, the typology of their accommodation strategies and the factors governing their use and distribution. More precisely, it examines how verbs from typologically different languages are integrated in a variety of systems of the same recipient language, that is Modern Greek, and what the constraints that determine the choice of a particular integrating strategy and a specific integrating element taken from a range of competing affixes are. It shows that there is more than one recurrent pattern and strategy which is employed by Modern Greek dialects to accommodate loan verbs, sometimes within the same variety, the selection of which depends on native morphological characteristics of the Greek verbal system, a certain phonological and structural compatibility of the languages in contact, as well as the degree of contact and the speakers' socio-linguistic attitude towards the dominant language. It aims to contribute to the general research on loan verbs, makes inductive generalizations, and addresses the general issue of cross-dialectal loanword studies.

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1. General premises

Along the lines of Wohlgemuth (2009: 67, 85), I consider as loan a verb that is introduced in a target (or recipient or replica) language, which keeps its verbal nature, in that it functions as a full verb, possibly after some phonological and/or morphological adaptation, and has a semantic meaning that resembles in certain aspects the meaning of the corresponding item in the source (or donor or model) language.

As already noted by Whitney (1881), languages do not accommodate loan verbs in a uniform, universal way. Whichmann & Wohlgemuth (2008) and Wohlgemuth (2009) have shown that there exist different loan-verb integration patterns and strategies not only cross-linguistically but also within a single recipient language. In this spirit, the purpose of this study is twofold: (a) to describe the diversity of these techniques in a wealth of varieties of the same recipient system which have been affected by typologically different languages; (b) to discuss the factors which constrain their use as well as those inducing the choice of a particular affix as integrating element, when another affix from a repertoire of competing affixes might potentially assume the same function.

By examining data from ten different varieties of Modern Greek (hereafter Greek), including dialects and heritage systems, I show that verbal loans can be accommodated according to three different integration strategies: direct, indirect and light verb use, in the sense of Wohlgemuth (2009) and Whichmann & Wohlgemuth (2008). In these works, in the direct strategy, the loan verb undergoes only slight phonological modification before being introduced in the recipient language, the indirect strategy presupposes the presence of an overt integrating element, and the use of a light verb constitutes a less elaborate manner to adapt verbs. The Greek data reveal that the same donor can affect the varieties of a recipient system in divergent ways:

(a) the same recipient -sometimes one of its varieties- can incorporate foreign verbs by using more than one integration strategy;
(b) in indirect strategy, the integrating element originates from a range of competing affixes;
(c) phonological and structural compatibility between languages in contact may be a determining factor facilitating transfer of functional elements, while structural incompatibility may lead to the adoption of a light verb;
(d) bilingualism and profound knowledge of the dominant language, which usually leads to heavy borrowing, may also be the cause of an

     elaborate accommodation of loans with the use of native integrating elements;

(e) verb borrowing might affect the native morphology, since the reanalysis of loan elements may prompt their amendment as active functional ones of the recipient's morphological system.

More specifically, I demonstrate first that in a morphologically rich language like Greek, native word-formation properties, such as the preference for deriving words from stem bases, play a significant role into framing the output of loan elements (loan verbs in our case). Second, the choice of a particular integrating element can be determined either by the different degree of productivity of native affixes, behaving as possible integrating elements, or by a certain structural and phonological similarity with the donor. Third, the degree of contact and the speakers' socio-linguistic attitude towards the donor may lead to the adoption of a less or more elaborate integration strategy, depending on the case, regarding loan verbs.

    The data are drawn from a corpus containing 1,000 verbal loans of a variety of Greek-based systems, most of which come from the archive of the Laboratory of Modern Greek Dialects (LMGD, www.lmgd. philology.upatras.gr) of the University of Patras. The Greek varieties are typologically different from the donor languages and their loans originate from the agglutinative Turkish, the semi-analytical Romance and the analytical English. The integrating systems are the fusional, or rather fusional, Asia Minor Pontic, Cappadocian and Aivaliot, Lesbian, Cretan, Cypriot, Heptanesian, Griko, Greek-American and Cypriot-English. Occasionally, I also take into consideration Standard Modern Greek (SMG) showing that borrowing has enriched its morphological system.

    The next sections of the paper are structured as follows: firstly, I give a sketchy introduction for each variety and classify the loan verbs according to their integration strategy, that is, indirect, direct and light-verb use. A tentative analysis and justification of each strategy is provided, while the adoption of a specific pattern is discussed next. Some effects for the verbal system of Standard Modern Greek due to verb borrowing constitute the topic of the subsequent section, and the paper concludes with a brief summary of the findings and the relevant bibliography.

2. Greek dialectal varieties and data

2.1 The dialects: some general information

2.1.1 Asia Minor dialects: a brief overview

The once Byzantine areas of Pontus, situated in the Black sea region, Cappadocia, in South-central Turkey, and Kydonies (simply called "Aivali"), in Western Turkey, became parts of the Ottoman Empire since the 14th or 15th century, depending on the case.[2] As a result, their Greek-based varieties, Pontic, Cappadocian and Aivaliot, exhibit many contact-induced features from Turkish, predominantly on the vocabulary and to a lesser extent on the structural level, while retaining a number of shared characteristics with other Greek varieties of both the Greek mainland and Asia Minor (see, among others, Papadopoulos 1955, 1958 and Oikonomidis 1958 for Pontic, Dawkins 1916 and Janse to appear for Cappadocian, Sakkaris 1940 and Ralli forthcoming for Aivaliot).

The end of the war between Greece and Turkey in 1922, and the exchange of populations enforced by the Lausanne treaty in 1923, led to the subsequent massive movement of Greek-speaking Asia Minor people to mainland Greece, the Aegean islands and elsewhere, where they settled in various dialectal enclaves.[3] Nowadays, Pontic speakers can be found all over Greece, but mainly in the areas of Macedonia and Thrace, hints of Cappadocian are still spotted in Macedonia, while Aivaliot[4] is relatively well recovered on the island of Lesbos. From all three dialects, Pontic[5] is the best preserved, while Cappadocian is rather extinct, spoken by only few dozens of people originating from the Central Cappadocian village of Misti (Kotsanidis 2006).

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[2] Note that, from all three areas, Cappadocia was the first to be exposed to Turkish, since, before the Ottomans, it was already conquered by the Seljuk Turks after the defeat of the Byzantine army in the battle of Manzikert (1071).

[3] Descendants from these refugees can also be found in America and other parts of Europe.

[4] See the oral corpora of LMGD, selected during an expedition to the island of Lesbos in 2002.

[5] Interestingly, Pontic is still widely spoken in certain dialectal enclaves in the western part of the Trebizond area (Tonya and Of), by Muslim Pontics, who were exempted from the population exchange. This variety is usually called Muslim Pontic (Mackridge 1990) or Romeyka. Pontic can also be found in certain areas of Georgia and the Northern Caucasus, where the 19th century emigration had led to the establishment of Pontic communities (Tobaidis 1996).

It is important to stress that contact between Greek and Turkish represents an instance of interaction between two typologically different languages: the fusional Greek and the agglutinative Turkish. However, only Cappadocian displays traces of agglutination on both the nominal and the verbal system (cf. among others, Dawkins 1916, Janse 2004, to appear, Karatsareas 2011). This can be explained by the fact that, in Cappadocia, Greek was in a situation of regressive bilingualism; Turkish was the dominant language of the political authorities, being spoken by the overwhelming majority of population in all aspects of life (Vryonis 1971: 457-459). As a consequence, in some communities, a total turkicisation was reported to have taken place by the end of the 19th century (Sarantidis 1899: 126; Dawkins 1916: 11, 14, 18). Although affected by Turkish, Pontic shows a number of archaic features, typical of earlier stages in the history of Greek, which are detected on all levels, phonology, structure and vocabulary (Manolessou and Pantelidis 2011). As for Aivaliot, it is worth noting that it is genetically parent to Lesbian (Sakkaris 1940), since a large majority of the Aivaliot population originated from the island of Lesbos who moved there at the end of the 16th century in order to avoid Ottoman persecutions. Both Aivaliot and Lesbian belong to the group of Northern Greek dialects, which show high-vowel deletion and mid-vowel raising in unstressed position, as illustrated by the following examples:[6]

(1) Standard Modern Greek   Aivaliot/Lesbian
    spíti   spit   'house'
    kutí   kti   'box'
    forá   furá   'time'
    lemós   limós   'neck'

All three dialects show intra-dialectal variation. For Pontic, there is no systematic classification of this variation, but according to Papadopoulos (1955), Oikonomidis (1958) and Kontosopoulos (1994) the main varieties seem to be those of Amisos, Chaldia, Inepolis, Kerasounta, Kotyora, Matsouka, Nikopolis, Of, Santa, Sourmena and Trebizond. They are identified on the basis of high-vowel deletion (see also (1)) and the retention of a word final *-n* in the singular number of neuter nouns (e.g. *γalan* 'milk') and the accusative singular of masculine (e.g. *popan* 'priest') and feminine ones (*jinekan* 'woman'). Following Dawkins (1916), Cappadocian is subdivided into two basic groups, North- and South

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[6] In this paper, examples are given a broad phonological transcription and stress is noted only if necessary.

Cappadocian, while for Janse (to appear), there is also an intermediate one, namely Central Cappadocian. South Cappadocian is the variety which displays most contact features, mainly agglutination in both verbs and nouns. As for Aivaliot, it is distinguished in two basic varieties, the variety spoken in the town of Aivali (nowadays Ayvalik) and the surroundings before 1922, and that of the island of Moschonisi (nowadays Cunda).

Since the subvarieties of each system do not diverge as far as verb borrowing is concerned, I will simply refer to the dialectal groups as Pontic, Cappadocian and Aivaliot.

2.1.2 Lesbian

As already noted, Lesbian resembles Aivaliot in many respects, in that both varieties belong to the group of Northern Greek dialects. Most of the borrowed items originate from Turkish, but there are also loans from Italo-Romance[7], since before the Ottoman occupation (1462), and for two centuries (1355-1462), Lesbos was governed by the Genovese Gatelusi family (Paraskevaidis 2005). The Genovese governors were not as despotic as the Venetian rulers of Cyprus and Crete (see below), but during their dominion, and with the exception of the upper class, the Greek inhabitants of the island did not receive any education. Crucially, in the course of the Genovese period, several Italo-Romance verbs entered the vocabulary, mainly from Venetian, which was used in trade as a kind of lingua franca in all Greek islands ruled by Venetian and Genovese families.

2.1.3 Cretan

Like Lesbian, Cretan, the dialect of the island of Crete, displays a blend of Italo-Romance (Venetian) and Turkish loans (Pangalos 1955, Kontosopoulos 1994).[8] For more than four centuries (1211–1669), Crete was governed by Venice. In spite of the fact that Venice proved to be a despotic ruler, the island experienced an impressive bourgeoning of the arts, due to contact with the Italian renaissance, which was mainly depicted in literature and painting (Maltezou 1988). However, from the beginning of the 17th

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[7] In this paper, the term "Italo-Romance" refers to Venetian, Standard Italian and the local Romance varieties of South Italy.

[8] Nowadays, Cretan is also spoken in Western Turkey by Muslim refugees who were forced to abandon Crete in 1924, following the Lausanne treaty (1923). Traces of Cretan can be found in Syria (Hamidie), where Cretan populations settled in the 19th century in order to avoid Ottoman persecutions.

century, the literary flourishing was abruptly stopped when the island
became part of the Ottoman Empire.

2.1.4 Cypriot

Cypriot represents a good example of a linguistic system affected by
several typologically different languages, depending on the period and the
control of Cyprus by French rulers (12th – 15th c.), Venetians (15th -16th c.),
Ottomans (16th – 19th c.) and English (19th - 20th c.). Most of borrowed
items originate from Venetian and Turkish, while very few French loans
are still in use, a vast majority being replaced by Venetian ones during the
Venetian dominion (Dendias 1923). As for loan words from English, they
are recent formations, most of them dating from the 20th century.

2.1.5 Heptanesian

Heptanesian shows many features from contact with Venetian, due to the
Venetian rule for a long period that goes from the end of 14th to mid-19th
century, but also from contact with Standard Italian, the official language
used in administration and education since the 16th century (Fanciullo
2008).[9] During this period, Venetian and Italian remained the dominant
language of the upper class of the Ionian islands. However, peasants and
people of the lower class kept communicating in Greek (Salvanos 1918).
The contact effects on Heptanesian are mostly visible in the vocabulary,
and to some extent in phonology (mainly in intonation) and morphology
(e.g. introduction of certain affixes). Many loanwords of Italo-Romance
origin are items related to registers of trade, administration, culture, and
social life. In contrast, basic vocabulary items and terms referring to
nature, religion, and emotions have remained Greek. Nowadays,
Heptanesian is being slowly abandoned by its speakers and is dying out
under the pressure of SMG.

2.1.6 Grekanico

The Greek speaking dialectal enclaves in Italy are located in Puglia (area
of Salento, the so-called "Grecia Salentina") and Calabria (Bovese area).
The dialect (the so-called "Grekanico") competes with both the local Italo-

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[9] According to Fanciullo (2008), from the 16th century, a sort of diglossia was used
in the Republic of Venice. Italian was the language of administration, while
Venetian was the variety used for daily communication. This situation was also
transferred to areas ruled by Venice, among which, the Ionian islands.

Romance varieties and Italian, the official language of the state (Fanciullo 2001, Manolessou 2005). Grekanico in Calabria (called also "Greco" or "Bovese") presents a rapid decrease and Katsoyannou (1995) has reported that in mid-nineties there were no more than 500 native speakers left, while several villages were deserted. In contrast, in Puglia, the variety (the so-called "Griko") seems to be resisting, although native competence has been rather confined to elderly people. Today, there are about nine Griko-speaking villages, where speakers communicate in the dialect mostly in family (Profili 1985).[10]

Griko and Greco display a number of differences (see, among others, Rohlfs 1933, 1997; Karanastasis 1997). However, these differences are not significant in order to consider Griko and Greco as different dialectal systems; they constitute varieties of the same dialect. Crucially, there is no divergence in the way the two varieties adopt Italo-Romance verbs, since, as shown below, they both use the same integration strategy and integrating element. For the purposes of this paper, I will restrict my attention to Griko.

2.1.7 Heritage languages

In this paper, I also take into consideration two Greek-based heritage languages, which have been heavily affected by English, that is, Cypriot-English and Greek-American. The reason for this choice lies in the fact that they both diverge in their loan-verb integration as compared to the Greek dialects under investigation. Cypriot-English (Karatsareas p.c.)[11] and Greek-American are spoken by second- and third-generation members of the Greek-Cypriot community of London and by the Greek immigrant descendants living in the States. These heritage speakers are dominant in English and use Cypriot-Greek or Greek-American either in family or in order to communicate with other members of their community. Both systems display a vast number of contact phenomena on every level, vocabulary, phonology, morphology and syntax, and they share the same integration strategy as far as verb borrowing is concerned.

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[10] See Profili (1985), Telmon (1992), Katsoyannou (1995) and Manolessou (2005) for details about the socio-linguistic situation in the Greek-speaking areas of South Italy.

[11] The data under (13) are drawn from corpora collected by P. Karatsareas within the framework of the British Academy project "The development of heritage grammars in present-day London: the case of Cypriot Greek".

2.2 The data

In what follows, I list indicative examples from all nine varieties, drawn from written sources, personal archives and the LMGD database. There are data from: Aivaliot, Lesbian and Cretan (affected by two different languages, Italo-Romance and Turkish); Cypriot (influenced by three languages, French-Provençal, Italo-Romance and Turkish); Pontic, Cappadocian, Griko, and the two heritage varieties (affected by only one language, that is, Pontic and Cappadocian by Turkish, Griko by Italo-Romance, and Cypriot-English and Greek-American by English). It will become clear that although these dialectal systems have the same base, that is Greek, they use different accommodation strategies for integrating loan verbs. As argued below, these strategies do not depend on the dominant language these varieties are in contact with and one particular variety can employ more than one way to accommodate borrowed verbs.

The target examples are given in the first person singular of the present tense -the overtly realized infinitive being lost from the Greek language during the Hellenistic period (ca 3rd c. BC – 3rd c. AD)- while the source types are listed either in the third person singular of the past tense, or in the infinitive, depending on the case. For clarity reasons, in the indirect insertion cases, I provide a segmentation of the word-internal structure in both the source and the target language and indicate the integrating element in a separate column (section 2.2.1). This element originates from a number of native competing affixes and varies from dialect to dialect. Its instantiation shows that an accommodation pattern may vary, even when the same integration strategy, in this case the indirect one, cuts across more than one variety of the same language.

2.2.1 Integration by indirect insertion

(2) Aivaliot/Lesbian (Ralli 2012a, LMGD)

Loan	Turkish (3SG PAST)[12]	Integrator
burd-iz-u[13]	bur-dı	-iz-
'to twist'		

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[12] In this paper, abbreviations in glosses are: 1SG=first person singular, 3SG=third person singular, 1PL=first person plural, 3PL=third person plural, AOR=aorist, IMPERF=imperfective, INF=infinitive, INFL=inflection, PAST=past, PERF=perfective, PRES=present.

[13] Due to mid-vowel raising (see (1)), the inflectional ending -o (first person singular) has become [u] in unstressed position.

davrand-iz-u   davran-dı
'to behave badly'
zurlad-iz-u   zor-lan-dı (zor 'stress, strain')
'to force, stretch'

(3) Cappadocian (Dawkins 1916, LMGD)
    Loan   Turkish (3SG PAST)   Integrator
    deld-iz-o   del-di   -iz-
    'to perforate with words' 'to say'
    bitird-iz-o   bitir-di
    'to finish'
    patlad-iz-o   pat-la-dı (pat 'kind of noise')
    'to burst, explode'

(4) Cretan (Pangalos 1955)
   Loan   Turkish (3SG PAST)   Integrator
   jerad-iz-o   yara-dı   -iz-
   'to be worth of'
   kand-iz-o   kan-dı
   'to sweeten'
   davrand-iz-o   davran-dı
   'to be particularly active'

(5) Cypriot (Hadjipieris 2015)
(5)a. Loan   Turkish (3SG PAST)   Integrator
    alikot-iz-o   alıko-dı   -iz-
    'to stop'
    jaralat-iz-o   yara-la-dı   (yara 'wound')
    'to wound'
    kazand-iz-o   kazan-dı
    'to become rich'

(5)b. (Dendias 1923)
    Loan   French (3SG SIMPLE PAST)   Integrator
    fin-iaz-o   fin-it   -iaz-
    'to finish'
    mantin-iaz-o   maint-int
    'to maintain'
    protest-iaz-o   protest-a
    'to protest'
    soufr-iaz-o   souffr-it
    'to suffer'

(6) Pontic (Papadopoulos 1955)

Loan	Turkish (Infinitive)	Integrator
xazirla-ev-o	hazır-la-mak (hazır 'ready')	-ev-
'to prepare'		
tokun-ev-o	dokun-mak	
'to insult'		
ta(γ)ut-ev-o	dağıt-mak	
'to scatter/disperse'		

(7) Griko (Ralli 2012b)

Loan	Salentino/Italian (Infinitive)	Integrator
kunt-e(v)-o	kunt-áre	-e(v)-[14]
'to narrate'		
nutrik-e(v)-o	nutric-are	
'to feed'		
resc-e(v)-o	riusc-ire	
'to succeed'		

The examples above constitute loanblends in Haugen's (1950) terms, in the sense that foreign and native elements are mixed together. In our case, Greek and foreign elements are identified as follows: (a) verb bases are either Turkish or Romance (Italo-Romance or French), depending on the dominant system which has been imposed on the recipient language; (b)

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[14] In Griko, *-ev-* has lost its final /v/ due to a phonological law which erases voiced fricative consonants in intervocalic position (Karanastasis 1997: 34-35):

(i) Griko   vs. SMG

leome	leγome	'we say'
strao	stravos	'twisted'
simai	simaδi	'mark'

/v/ surfaces if followed by a consonant, as is the case of the past tense (aorist), where the stem ending in /v/ is combined with the perfective aspectual marker *-s-*. As further noticed by Karanastasis (1997: 34), the cluster /vs/ becomes by assimilation /fs/, and ultimately /ts/, being subject to the so-called "tsitacism" phonological phenomenon.

(ii)   Griko
  a. kore-o
     dance.IMPERF.PRES-1SG
     'I dance'
  b. korev-s-a   -> korefsa -> koretsa
     dance-PERF-PAST.1SG
     'I danced'

inflectional endings are always Greek, since verbs in all Greek-based varieties follow the native morphological pattern which requires a stem to be combined with an inflectional affix in order to become a word (Ralli 2005); (c) integrating elements originate from a repertoire of competing denominal affixes belonging to the target language[15]; (d) foreign affixes may sometimes be transferred together with the base, as for instance, the Turkish denominal verbalizer *-la-* (see (2), (3), (5a) and (6)) and the past tense marker *-DI-* (see (2-4) and (5a)). Finally, it is worth pointing out that the transferred material is not always of the same type: Pontic and Griko adopt bare stems, while Aivaliot, Lesbian, Cappadocian, Cretan, and Cypriot opt for the third singular past tense form. As explained in section 3, the choice of a particular verbal type seems to be a correlation of two factors: the recipient's morphological tendency to create deverbal words on the basis of the perfective stem and a certain phonological and structural compatibility of the systems involved in contact.

2.2.2 Integration by direct insertion

(8) Aivaliot/Lesbian (Ralli 2012a, LMGD)

(8)a.	Loan	Turkish (3SG PAST)
	dajad-o	dayan-dı
	'to bear, endure'	
	savurd-o	savur-dı
	'to overthrow'	
	sasird-o	şaşır-dı
	'to be at a loss'	

(8)b.	Loan	Venetian (Infinitive)
	sirver-n-u	serv-ir[16]
	'to serve'	
	salter-n-u	salt-ar
	'to jump'	
	ariver-n-u	arriv-ar
	'to arrive'	

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[15] The main Greek derivational suffixes which productively form verbs out of nouns and adjectives are the following: *-iz-* (e.g. *arx-iz-o* 'to begin' < *arxi* 'beginning'), *-(i)az-* (e.g. *lek-iaz-o* 'to stain' < *lek-es* 'stain'), *-ev-* (e.g. *xor-ev-o* 'to dance' < *xor-os* 'dance'), *-on-* (e.g. *laδ-on-o* 'to oil' < *laδi* 'oil'), *-en-* (e.g. *anas-en-o* 'to breath < *anasa* 'breath').

[16] Venetian infinitival endings are deprived of the word final -e (compare Italian *arrivare* with Venetian *arrivar*).

(9) Cappadocian (Dawkins 1916)

Loan	Turkish (3SG PAST)
γapt-o	kap-dı
'to catch'	
jard-o	yar-dı
'to break'	
paγurt-o	bağır-dı
'to yell'	

(10) Cretan (Pangalos 1955)

(10)a.
Loan	Turkish (3SG PAST)
dajad-o	daya-dı
'to resist/support'	
sakind-o	sakın-dı
'to shun'	

(10)b.
Loan	Venetian (Infinitive)
avizer-n-o	avis-ar
'to inform'	
pater-n-o	pat-ir
'to suffer'	
ajutar-o	aiut-ar
'to help'	

(11)   Cypriot (Hadjipieris 2015, Dendias 1923)

(11)a.
Loan	Turkish (3SG PAST)
avlat-o	avla-dı
'to seduce'	'to hunt/pursue'
savurt-o	savur-du
'to overthrow'	
joklat-o	yok-la-dı
'to control'	

(11)b.
Loan	Venetian (Infinitive)
trattar-o	tratt-ar
'to offer'	'to treat'
siγurar-o	assigur-ar
'to ensure'	
netar-o	net-ar
'to clear'	

(12) Heptanesian (Ralli 2012b, LMGD)

    Loan   Venetian (Infinitive)

    δesponer-o   dispon-er /despon-er

    'to dispose'

    fiorir-o   fior-ir

    'to blossom'

    imitar-o   imit-ar

    'to imitate'

    jarbujar-o   ingarbugi-ar

    'to confuse'

The data from (8) to (12) show that the presence of an integrating element originating from a derivational affix is not always necessary to facilitate transfer from the source language to a Greek-based system. Crucially though, once adopted, all loans assume overt inflection. However, along the lines of Wohlgemuth (2009), an inflectional ending cannot be treated as integrating element if its presence is compulsory in the recipient system, as is the case in Greek. Interestingly, a thorough comparison of Turkish borrowings in Aivaliot (2, 8a), Lesbian (2, 8a), Cappadocian (3, 9), Cretan (4, 10a) and Cypriot (5, 11a), listed under the indirect and the direct insertion strategies, reveals that the target system may sometimes adopt both strategies, and, occasionally, for the accommodation of the same verb. In section 3, I suggest that alternating forms of loan verbs, that is, with or without an integrating element, may occur if an appropriate morphological context allows their realization.

    Note now that while Turkish verbal loans are subject to either the indirect or the direct insertion strategy, or even to both, with the exception of Griko (7), Italo-Romance verbs are adopted by the other dialects without the use of an integrating suffix, unless the -n- in the Lesbian (8b) and Cretan (10b) examples is treated as such.[17] Sociolinguistic reasons will be evoked for this discrepancy, referring to the degree of contact and the speakers' resistance to innovation (see section 3).

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[17] In section 3.2.7, I claim that -n- is an aspectual marker and, as such, it should not be treated as an integrating element.

2.2.3 Integration with the use of a light verb

(13) Cypriot-English (Karatsareas p.c.)

Loan	English (Infinitive)
kamno marinate	to marinate
kamno resurrect	to resurrect
kamno record	to record

(14) Greek-American (personal archive)

Loan	American English (Infinitive)
kano frai	to fry
kano board	to board
kano search	to search

This study would not have been complete if I did not mention an entirely different strategy which is adopted for verbs transferred from English to two heritage languages, Cypriot-English and Greek-American, as shown in (13-14).[18] Speakers of these systems seem to follow a less elaborate manner to integrate verbal loans by combining the English verb with the Greek auxiliary verb *kano* (*kamno* in Cypriot) 'to do'. As a result, the compulsory Greek inflection is entirely assumed by *kano*, while the form of the English verb remains invariable. In the following section, I will propose that both linguistic and extra-linguistic factors seem to lie behind this behavior.

3. Discussion

3.1 The light verb use

What first follows from the data in section 2 is that foreign verbs which are transferred to Greek varieties are not integrated in the same manner: those which originate from Turkish and Romance are subject to either indirect or direct insertion or even to both strategies; in contrast, for the transfer of English verbs, Cypriot-English (13) and Greek-American (14) resort to the use of a light verb. The obvious question seeking an answer is what may be the reason behind this disparate comportment. A suggestion that the difference in the adoption of an integration strategy may be due to the degree of contact and bilingualism seems to be untenable, since before

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[18] The structure *kano*+English verb also appears in Greek Canadian. See Maniakas (1990) for details.

1924 (that is, before they moved to Greece), Cappadocian speakers mastered the dominant language in a rather similar way as today's Cypriot-English and Greek-American ones. In other words, Cappadocian speakers were either fully bilingual or better skilled in Turkish, as Cypriot-English and Greek-American speakers are with respect to English. However, Cappadocians accommodated Turkish verbs in a more elaborate manner than the latter do with the English verbs. I believe that this different performance is primarily due to intra-linguistic factors, namely to the inflectional (in)compatibility between the languages in contact, and secondarily to extra-linguistic ones, that is, to the degree of language awareness. In the Greek-Turkish pair, the two languages diverge in the way they built their inflectional structures -Turkish is agglutinative while Greek is fusional- but they both share a rich inflection with overt exponents. Therefore, once Turkish verbs are borrowed, the Greek speakers, who are fully aware of the compulsory presence of inflection in both the donor and the recipient, tend to inflect them by adopting a direct or an indirect strategy. The same pertains to the Griko case and the inflectionally rich Romance as far as verbs are concerned, when Romance serves as the donor language. On the contrary, since English is inflectionally poor, although genetically parent to Greek (both are Indo-European), heritage speakers opt to mark inflection on the Greek native light verb *kano (kamno* in Cypriot-English), being conscious of the significant distinctness as far as inflection in the two languages is concerned. In this way, heritage speakers respect the Greek morphological tendency to explicitly inflect verbs and, by leaving the borrowed verb to preserve its source form, they also obey the English property of a non-overtly realized inflection. Thus, the degree of language consciousness must have played a crucial role: on the one hand, for heritage speakers into adopting a light verb for the integration of the inflectionally poor English verbal loans and, on the other hand, for Cappadocians into embracing another strategy for the accommodation of Turkish loans, which would be in compliance with the rich inflection of Turkish verbs.

Intriguingly, and contrary to what have been said about the accommodation of English verbs in heritage languages, few instances of frequently used English verbs in SMG[19] (and sometimes in Greek-American) undergo indirect insertion by assuming a suffix *-ar-* as integrating element:

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[19] There is no accurate information available for the accommodation of English verbs in Cyprus (Andreou, p.c.).

(15) SMG   English (Infinitive)   Integrator

   park-ar-o   to park   -ar-
   spik-ar-o   to speak
   muv-ar-o   to move

As explained in section 3.3, *-ar-* comes from an allogenous exaptation (Ralli 2012a; Gardani ms), according to which the infinitival Italo-Romance marker *-ar(e)* has been transformed into a derivational suffix which serves to create verbs out of foreign bases, mainly nominal but also verbal. The reason why the use of *-ar-* has been extended to some English-based verbs in SMG could be related to the speakers' tendency to avoid complexity by extending an existing pattern to verbal loans which are part of the common vocabulary. In fact, as shown in section 3.3, the *-ar-* pattern has been established in SMG as the most productive one for the derivation of denominal verbs originating from a foreign base, independently of the source language type.

3.2 The other strategies

As already mentioned in section 2.2, the output form of loans integrated by indirect or direct insertion consists of an adopted part and a native part. The adopted part can be:

- a stem, that is, the part of the word without the inflectional ending (see Pontic and Griko in (6-7));
- an entire inflected word which gets reanalyzed into a stem in order to receive the Greek inflection (see Aivaliot/Lesbian (2,8), Cappadocian (3, 9), Cretan (4, 10), Cypriot (5, 11), Heptanesian (12);
- an affix, that is, *-la-* and/or *-DI* (Aivaliot (2), Cappadocian (3), Pontic (6), Cretan (4, 10a), Cypriot (5a, 11a)), and *-ar(e)* (Aivaliot/Lesbian (8b), Cretan (10b), Cypriot (11b) and Heptanesian (12)).

The native part can be:

- a derivational affix, that is, *-iz-* in Aivaliot/Lesbian Cappadocian, Cretan and Cypriot, *-e(v)-* in Pontic and Griko and *-iaz-* in Cypriot;
- an inflectional affix (in all dialects from (2) to (12)).

Exploring the examples of indirect insertion, such as those from (2) to (7), it is worth repeating that: (a) the source form may be either an infinitive or

the third person singular of the past tense, and (b) the integrator originates from a common native verbalizer, which is taken from a range of competing verbal suffixes in Greek (see footnote 15 for details). In Aivaliot/Lesbian (2), Cappadocian (3), Cretan (4) and Cypriot (5a), Turkish third person singular forms of the past tense are accommodated with the suffix *-iz-*, while Cypriot (5b) accommodates those from French with the help of the verbalizer *-iaz-*; in contrast, Pontic (6) and Griko (7) select the verbalizer *-ev-* to adapt infinitives of Turkish and Italo-Romance origin, respectively. Therefore, two crucial questions arise:

- What makes certain forms to be more privileged than others?
- What prompts a particular affix to be endorsed as an integrating element?

I argue below that the adoption of specific foreign forms and the selection of native integrating elements are constrained by the recipient's endogenous morphological properties as well as by a certain structural and phonological compatibility between the systems in contact.

For methodological purposes, I will first examine the integration of Turkish verbs with or without the use of the integrator *-iz-*.

3.2.1 The *-iz-* integrator

As shown in 2.2.1, and further illustrated in (16), the Turkish loans originate from the third person singular of the past tense. Nonetheless, once transferred, the inflected types are reanalyzed as stems.

(16)a. Aivaliot/Lesbian   Turkish PAST.3SG
         burd-iz-u 'to twist'   <   bur-dı
   b. Cappadocian
         deld-iz-o 'to perforate'   <   del-di
   c. Cretan
         alikot-iz-o 'to stop'   <   alıko-dı

The reanalysis procedure authorizes the loans to combine with the Greek verbalizer *-iz-* and the proper verbal inflection in order to meet the requirements of native Greek morphology, according to which derivational suffixes are added to stems and all verbal forms carry overt inflection.[20]

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[20] Note that there is a fusion between the /I/ of the Turkish *-DI-* and the initial /i/ of *-iz-*, since the Modern Greek phonology does not allow double or long vowels. Moreover, sometimes, there is a certain difference in meaning between the word of the donor and the corresponding loan of the recipient.

First, a possible motivation for the adoption of Turkish past tense forms may be found in the key feature of Greek morphology to build deverbal derivatives on the basis of the perfective stem, which generally appears in both the aorist (past) and the perfective future paradigms, and it is usually called "aorist" stem.[21] This is a diachronic tendency, pointed out by Hatzidakis (1905-1907) and repeated ever since (see, among others, Mackridge 1985: 106; Janse 2004: 477), which accounts for the formation of deverbal nouns starting from the Hellenistic period. I assume that molding a verbal loan with the help of a derivational suffix could also be considered as a kind of derivational process, something which would justify the adoption of the Turkish past form.

Second, it is a common assumption that the third person singular is generally the most frequent form in borrowing (see Matras 2009: 158). In addition, in our case, this is the only form of the Turkish past paradigm without an overt inflectional ending denoting the features of person and number.[22] Therefore, compared to the other paradigmatic forms, it is the most unmarked and easiest to be reanalyzed as a stem.

Third, a certain degree of phonological similarity between the Turkish past tense forms and the Greek aorist (perfective) stem forms seems to determine the selection of -iz- from the repertoire of Greek verbalizers including -ev-, -on-, -iaz-.[23] In fact, as shown in (17), both forms end in /I/.

(17)a.   Turkish   b. Greek
           sev-mek 'to love'   xoriz-o 'to separate'
PAST.3SG sev-di   '(s)he loved'   xori-se[24] '(s)he separated'

I would like to suggest that the outcome of this phonological similarity has triggered an analogy process in terms of Kuryłowicz (1949), which has contributed to the emergence of loanblend verbs in -iz-. Thus, it excluded the creation of those containing a different verbalizer, that is, -ev-, -on- -iaz- or -en-, whose past perfective (aorist) stems do not end in -i, as illustrated in (18).

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[21] See also Ralli (2012a) and Bağrıaçık et al. (2015) for the same proposal.
[22] Compare the past tense paradigmatic forms of the Turkish verb sev-mek 'to love': sevdi-m 'I loved', sevdi-n 'you loved', sevdi '(s)he loved', sevdi-k 'we loved', sevdi-niz 'you loved', sevdi-ler 'they loved'.
[23] See also footnote 15.
[24] [z] of -iz- is deleted in front of [s].

(18)   -iz-   -ev-   -on-   -iaz-
3SG PRES xor-iz-i   xor-ev-i   laδ-on-i   paramiθ-iaz-i
      '(s)he separates' '(s)he dances' '(s)he oils' '(s)he tells stories/lies'

          -en-
          anas-en-i
          '(s)he breaths'

3SG AOR xor-i(z)-se   xor-ep-se   laδ-o(n) se   paramiθ-ia(z)-se[25]
      '(s)he separated' '(s)he danced' '(s)he oiled' '(s)he told stories/lied'

           anas-an-e
           '(s)he breathed'

Nevertheless, it is worth stressing that, with the exception of *-en-* which generally selects Greek bases, these suffixes can serve as integrators for the formation of denominal verbs containing a Turkish nominal base. Consider the following Aivaliot/Lesbian examples, drawn from Ralli (forthcoming):

(19) Aivaliot/Lesbian   Nominal loan   Turkish
      xuzur-ev-u   <   xuzur   huzur
      'to relax'   'relaxation'
      xaram-iz-u   <   xaram   haram
      'to waste something'   'illegal'
      tsul-iaz-u   <   tsol   çul
      'to stale'   'cloth of no value' 'type of cloth used for
                                                   horses and donkeys'

These examples show that restrictions such as those mentioned above for the integration of foreign verbs do not apply to verbs built on the basis of foreign nominal words. I suppose that this different behavior between the two categories is due to the fact that while source verbs are directly transferred to the target language - where they undergo integration – nominal items have already become part of the target's vocabulary before serving as bases for verb formation. As a result, verb formation on the basis of nominal loans follows the rules of native Greek morphology. That is, similarly to native Greek nouns, nominal loans, can become verbs after

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[25] In accordance with footnote 24, [n] and [z] of *-on-* and *-iaz-*, respectively, are deleted before [s], while [v] of *-ev-* is changed into [p].

being combined with a productively used denominal verbalizer, the choice of which is rather ad hoc.

3.2.2 Direct insertion of Turkish loans

Additional support to the hypothesis that the almost identical stem-final vowel in Greek and Turkish in the past perfective context had an impact on the form of verbal loans comes from the borrowing of Turkish verbs via the direct insertion strategy (8a, 9, 10a, 11a), that is, without the presence of a verbalizer. Structurally, these verbs differ from those subject to indirect insertion in two points: (a) they lack the verbalizer *-iz-* and (b) they inflect according to inflection class II (ICII), while those in *-iz-* belong to inflection class I (ICI). Note that for Greek native verbs, the basic difference between the two inflection classes lies on the presence of a systematic stem-allomorphy pattern $X(a) \sim Xi$, which defines ICII verbs, while its absence demarcates those of ICI (cf. Ralli 2006, 2009), as the following examples depict.

(20)a. ICI anav-i '(s)he lights up' versus   anap-se 'she lighted up'
    b. ICII aγapa-i '(s)he loves'   versus   aγapi-se 'she loved'

However, the class difference is neutralized in the perfective context (e.g. in the aorist) as far as ICI verbs in *-iz-* are concerned, which appear to share an identical stem final vowel with those of ICII, as shown in (21).

(21)a. 3SG PRES ICII verb aγapa-i '(s)he loves' versus
        3SG AOR aγapi-se 'she loved'
    b. 3SG PRES ICI verbs in -iz- xoriz-i '(s)he separates' versus
        3SG AOR xori-se '(s)he separated'

Therefore, it should not be particularly surprising that the accommodation of verbs borrowed from Turkish could occur not only by indirect insertion (with the help of the verbalizer *-iz-*), but also via the direct one, that is, with no verbalizer, since both strategies employ a more or less similar verbal type, the third person singular of the past tense ending in /I/. In fact, in almost all dialects, and in all grammatical contexts and communicative situations, there are Turkish verbal loans displaying two alternating types with no difference in meaning:

(22)a. Aivaliot/Lesbian   Turkish 3SG PAST
        axtard-iz-u / axtard-o 'to overthrow' <   axtardı

   b. Cretan
     dajad-iz-o / dajad-o   'to resist'   < dajadı
   c. Cypriot
     avlat-iz-o / avlat-o   'to hunt'   < avladı

3.2.3 The *-la-* formative

At this point, it is important to point out that the adopted Turkish forms are not internally analyzed by the Greek speakers, since: (a) the Turkish past tense marker *-DI-* does not show in structures comprising Greek native verbs, and (b) the loan form is not limited to the past perfective (aorist) context, as for instance, the following Lesbian/Aivaliot forms illustrate.

(23) Lesbian/Aivaliot
     axtardíz-u / axtard-ó   'I overthrow'
     axtárd(i)-sa   'I overthrew'
 θa axtardíz-u / axtard-ó   'I will be overthrowing'

Therefore, the adoption of *-DI-* forms does not imply a structural borrowing (pattern borrowing in terms of Sakel 2007). In contrast, the transfer of another marker, *-la-*, which is employed to create denominal verbs in Turkish, may be considered as an instance of structural borrowing, since *-la-* can be used -although not very productively- by most dialects affected by Turkish in order to build denominal verbs from non-Turkish bases. Compare (24a) and (24b-d):

(24)a. Turkish
     zor-la-mak   < Turkish zor
     'to force'   'difficult'
     hazır-la-mak < Turkish hazır
     'to prepare'   'ready'

   b. Aivaliot/Lesbian
     piru-lad-iz-u   < Greek pir
     'to become red'   'fire'
   c. Pontic
     furtun-la-ev-o   < Italian fortuna
     'to acquire a fortune'   'fortune'
   d. Cappadocian
     pat-lad-iz-o   < pat 'sound of noise' (onomatopoeia)
     'to get rough/mad'

I would like to propose that the -*la*- adoption has become possible because of a certain structural compatibility between Turkish and Greek with respect to denominal verbal forms. In fact, there is some similarity between Turkish and Greek derivative verbal structures to contain a stem, followed by a verbalizer, and ultimately inflection, as exemplified in (25):

(25)a. Turkish hazır-la-mak   'to prepare' < hazır   'ready'
   b. Greek   etim-az-o   'to prepare' < etim-os 'ready'

Crucially, the -*la*- borrowing shows that the adoption of a functional element is possible when two languages in contact share a certain structural similarity, even if they are of divergent typology in inflectional terms -Turkish is agglutinative while Greek is fusional. This runs against the so-called "strong retentionist" view (see, among others, Meillet 1921), according to which, in a contact situation, structural borrowing is achievable if the structures of the two languages are fully compatible. Nevertheless, I do not maintain that this constitutes evidence in favor of the radically opposite "anything goes" hypothesis (or "diffusionist" approach) adopted by Thomason (2001) and Matras (2009), among others, who claim that in borrowing, everything seems to be possible. In fact, even in Cappadocian, the most heavily affected variety by Turkish, there are native Greek structures which seem to be resisting change, such as the nominative plural of neuter nouns (see also Karatsareas 2011). In my view, under intense contact, structural borrowing for a specific phenomenon is likely to occur if, for this phenomenon, there is a certain structural compatibility between the languages involved in contact. Therefore, I opt for a rather "weak retentionist" view, as proposed by Jakobson (1938).

   Lastly, the -*la*- stem formation in both Lesbian/Aivaliot (24b) and Cappadocian (24d) must be further commented because it appears augmented by a -*d*-, which reminds of the Turkish -*DI*- past tense suffix, in spite of the fact that the verbs of (24b,d) do not originate from Turkish. I would like to propose that, since in the donor language the -*la*- verbs build their past tense in -*DI*-, adopting -*la*- in the recipient language analogically assigns a Turkish-like form to non-Turkish denominal verbs, like those of (24). In this vein, but contrary to these dialects, Pontic does not shape its -*la*- denominal verbs (24c) with -*d*- because, as shown in (6) and explained in section 3.2.4, it does not borrow past tense forms, but integrates bare stems, that is, stems without the -*DI*- marker.

3.2.4 The *-ev-* integrator

By looking at Pontic and Griko now, and contrary to the dialects which adopt *-iz-* as an integrating element, one realizes that, in these varieties, the integrator is not *-iz-*, but *-ev-*, another Greek derivational suffix. This variation from one Greek variety to another cannot be due to the different type of donor, since Pontic and Griko employ the same integrator in order to accommodate their loans, in spite of the fact that Pontic borrows verbs from Turkish and Griko from Italo-Romance. I would like to suggest that it relates to properties inherent to the recipient system, such as the degree of productivity of verb-forming operations, as well as to the degree of socio-linguistic conservatism displayed by the speakers of each particular dialect.

First, as attested in dictionaries (e.g. Karanastasis 1997 and Rohlfs 1933 for Griko and Papadopoulos 1955 for Pontic), the formation of native verbs with *-ev-*[26] is particularly productive in both Griko and Pontic, more than that with *-iz-* which prevails in the other dialects. This may be due to the fact that, compared to the other varieties, Pontic and Griko show a very conservative character, preserving a considerable number of Ancient Greek features (see, for instance, works by Manolessou and Pantelidis 2011 for Pontic and by Rohlfs 1997, Caratzas 1958 and Karanastasis 1997 for Griko). *-ev-* derivation belongs to these features since it was a very productive process in Classical Greek (5th–4th c. BC), as stated by Chantraine (1945: 244). Therefore, there is good reason to believe that Griko and Pontic have followed a parallel development into adapting verbal loans in their systems, by using as integrator the more archaic but still frequent derivational suffix *-ev-*, while the other varieties employ the relatively recent productive *-iz-* verbalizer (Browning 1969).

I further suggest that the presence of *-ev-* sheds light on the selection of the bare stem loans in Griko and Pontic, because verb stems in *-ev-* do not display any phonological similarity with Turkish and Italo-Romance stems, as far as the final vowel of the third person singular of the past tense is concerned:

(26) Pontic   Turkish
        krem-iz-o 'to throw'   yık-mak
        ekremp-se '(s)he threw'   yık-tı

(27) Griko   Italo-Romance (Salentino)

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[26] About the /v/ deletion, see footnote 14.

kunt-e(v)-o   'to count'   kunt-are
kunt-et-se[27] '(s)he counted' kunta-u or kkunta-tu/e

To conclude, productivity can ascribe a verbalizer to the category of those assuming the function of integrating element. In addition, a possible dissimilarity between the final vowel of Turkish and Greek stems is likely to serve as a barrier for the activation of the native Greek mechanism which produces deverbal forms on the basis of the past perfective stem. I should also stress that the Pontic and Griko cases advocate the significant role that the stem constituent has in Greek morphology, as base for word-formation purposes.

3.2.5 Absence of integrator in Italo-Romance loans

Another interesting divergence regarding verbal loan integration, irrespectively of the particular donor, is witnessed between Griko and the other Greek varieties which have adopted Italo-Romance verbs, that is, Aivaliot/Lesbian, Cretan, Cypriot and Heptanesian: their speakers follow a different path, as depicted in (8b), (10b), (11b) and (12), where the infinitival word as a whole, that is, both the stem and the ending (-*ar(e),* -*er(e), -ir(e)*)[28], is retained.

     In order to interpret this discrepancy, and in accordance with Ralli (2012b), I would like to evoke the vital contribution of socio-linguistic factors, suggesting that intense contact can explain not only heavy borrowing, as pointed out in Thomason and Kaufman's (1988: 67) seminal work, but also a possible resistance to it. I believe that the Griko speakers, who had and have high competence skills in Italo-Romance (Salentino and Standard Italian), have tried to restrict heavy borrowing by hellenicizing Italo-Romance verbs as much as possible with the help of a verbalizer, the very productively used derivational suffix -*ev*-. Being well aware of the Italian -*are*, -*ere, -ire* as infinitival markers, they subtracted inflection from the verb and replaced it with the Greek suffix. In contrast, speakers of Aivaliot/Lesbian, Cretan, Cypriot and Heptanesian, who had either a low command of Italo-Romance or no command at all during the Venetian or Genovese regime, did not seem to have any difficulties into importing the infinitive as a whole, and hellenicizing it with the addition of the appropriate inflectional endings. In other words, I propose that in a language-contact situation, high bilingualism may trigger, but also forbid

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[27] [v] has become [t] in front of [s].
[28] The final /e/ of the Italo-Romance infinitival marker does not appear in Venetian verbs. See footnote 16.

the amount and type of the transferred material, along the lines of Enrique-Arias (2010: 97) who has reached to a more or less similar conclusion for another contact situation, involving Spanish and Catalan in Majorca.

Note now that following a different path, I could assume that Griko speakers structurally analyze the verbal types and select to borrow stems, instead of word forms, because of the endogenous linguistic properties of the donor language:[29] it has been mentioned in several works (e.g. Calabrese 1993; Ledgeway 1998) that Southern Italian dialects, among which Salentino, do not display an extensive use of infinitives, as the example in (28) clearly depicts.

(28)   Salentino: lu Karlu ole ku bbene krai
            lit. Il Carlo vuole che viene domani
              'Carlo wants to come tomorrow'

Therefore, limited access to infinitival forms might have led the Griko speakers to borrow Italo-Romance stems. In the same spirit, frequent access to Venetian infinitives made the Greek speakers of the other dialects to borrow and hellenicize the entire infinitival words, since contrary to Southern Italian dialects, Venetian, like other Northern Italian dialects, has preserved the infinitival forms.

Although promising, this hypothesis seems to fade by evidence drawn from the incorporation of Turkish verbs in Pontic (6), where, in spite of the fact that infinitives are frequently used in Turkish, the dialectal speakers choose to adopt bare stems. For an illustration, consider the following examples consisting of a Turkish stem, the Greek-based integrator -*ev*- and the Greek inflectional ending:

(29)   Pontic   Turkish infinitive
         γazan-ev-o   <   kazan-mak
         'to earn'   'to earn, profit'
          axtar-ev-o   <   aktar-mak
          'to overturn'   'to relocate/transfer'
         pašla-ev-o   <   başla-mak
         'to begin'   'to begin'

I suppose that the same resistance towards Turkish by the socio-linguistically conservative Pontic speakers has incited them to analyze the verb types, leading to rejection of the inflectional material and retention of

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[29] I am indebted to Franco Fanciullo for this suggestion.

only the Turkish stem. Nonetheless, for the Griko case, I would be tempted to assume that the absence of infinitival forms in Salentino may have served as additional support for the analysis of borrowed verbs and the adoption of the bare stem.

3.2.6 The -*iaz*- integrator

The adoption of Romance loans in Cypriot is particularly intriguing: on the one hand, Cypriot has borrowed verbs from Italo-Romance (Venetian) by using the direct insertion strategy (11b), as depicted in section 2.2.2. On the other hand, borrowing a different type of Romance verbs, that is, those from French (Provençal), has been achieved with the help of an integrating element, the verbalizer -*iaz*-, attached to the third person singular form of the simple past tense (5b). Again, I would like to propose that this peculiar situation is due to the interplay of linguistic and socio-linguistic factors. First, although true that -*iz*- has become the most productive Greek verbalizer in the last centuries (Browning 1969), verbal derivation in -*iaz*- was particularly productive in Medieval Cyprus, as stated by Hatzidakis (1905: 305). Since high productivity has already been proposed to constitute a decisive factor for the selection of an integrating element among a number of competing affixes (see section 3.2.4), it is not surprising that, during the Lusignant rule (from 12th to 15th c.), Cypriot accommodates French verbs with the use of -*iaz*-. However, in the subsequent period (15th – 16th c.), Italo-Romance verbs entered the Cypriot vocabulary via the direct insertion strategy, that is, by preserving the infinitival form and receiving only the Greek inflectional ending. In my opinion, the different behavior of loan verb integration in this particular situation should be searched in the different socio-linguistic context. According to Dendias (1923: 157), during the French regime in Cyprus, there was a revival of the Greek culture, and the Greek language was taught at schools. As a consequence, when borrowing occurred, loan words were heavily hellenicized by the Cypriot speakers, who could reanalyze the French words into stems and combine them with the Greek integrating suffix -*iaz*- and the Greek inflectional ending. In contrast, during the Venetian period, schools were closed. I, thus, assume that educational deficiency led the speakers to borrow the Venetian infinitives without proceeding to further reanalysis.

   That the socio-linguistic context is critical for the adoption of a specific strategy in loan verb accommodation gets further support by the fact that, even during the French rule and because of a flourishing trade with Venice, Venetian verbs had also entered the Cypriot vocabulary as verbs

in -*iaz*-. The example *siɣur-iaz-o* 'to make sure' (Venetian *sicurar*), provided by Hatzidakis (1905: 304), adds substantial proof to this suggestion.

3.2.7 -*ern*- in Aivaliot/Lesbian and Cretan

As shown in section 3.2.4, the prevalence of stem as a word-formation base in Greek morphology finds its absolute confirmation in Pontic (6) and Griko (7), where loan verbs are internally analyzed and only stems are retained. It is further substantiated by the dialectal data of Aivaliot/Lesbian (8b) and Cretan (10b) (occasionally by Cypriot data too), where the infinitival Italo-Romance loans are not simply reanalyzed as stems, as is the case with the other dialects affected by Venetian, but the -*ar-/-er/-ir* forms appear altered into -*ern*- ones containing a formative -*n*- and a change of the vowel /a/ into /e/.

Historically, it should be mentioned that, in the early middle ages (ca 6th-12th c.), the insertion of -*n*- between the imperfective (usually called "present") stem ending in -*o*- and the inflectional ending had become a very productive process in Greek (Browning 1969); it assisted the Ancient Greek contract verbs in -*oo*: to transform their perfective stem into -*on*-, and change conjugation by shifting from ICII to ICI:

(30)   Ancient Greek diló-o: (ICII)   → SMG   δilón-o (ICI)
                        declare-PRES.1SG
                        'I declare'

Browning (1969: 70) also states that the productivity rate of -*n*- had increased around the 12th century, to such an extent that -*n*- was responsible for the reformulation of many native imperfective stems on the basis of the aorist ones (stems used in the perfective context). Thus, assuming that, in the dialects under examination, the adopted Italo-Romance infinitives were first reanalyzed as perfective stems (so as to be combined with the appropriate inflectional endings), it would be reasonable to suppose that, during the 14th and 15th centuries, they were reshaped into -*ern*- ones, in order to be used in the imperfective contexts. In fact, nowadays, in both Lesbian and Cretan, Italo-Romance verbal loans preserve their original form in -*ar*- in the perfective context (e.g. in the aorist), while the -*ern*- form appears in the imperfective context (e.g. in the

present tense).[30] Furthermore, according to Hatzidakis (1905: 287-288), analogy must have also contributed to the final shaping of the -ern- form. For him, the appearance of [e] before the consonant cluster [rn] was triggered analogically to Greek native verbs in -ern-, like *δerno* 'to beat' or *ferno* 'to bring', the form of which was *dero:* and *phero:* in Ancient Greek.

It is of major importance to specify that, in the medieval period or even before, -n- did not have the status of a derivational suffix, since it did not fulfill the basic criteria of such a functional element. For instance, contrary to other verbal suffixes (e.g. -ev-, -iz-), it was not used to build new items (items belonging to a new grammatical category). Therefore, -n- of -ern- forms should be considered as a simple formative, which served to create new stem allomorphs, that is, allomorphs to be used in the imperfective context, on the basis of stem forms utilized in the perfective one.

Being a simple formative, -n- cannot be a true integrating element, at least like the verbalizers -iz-, -ev-, and -iaz- which appear in verbal loans accommodated by indirect insertion. Substantial proof to this suggestion comes from the fact that in Aivaliot/Lesbian (8b), as well as in Cretan (10b), -n- is confined to specific stem allomorphs, that is, to those of the imperfective paradigms of present tense, imperfect and imperfective future. For an illustration, consider the following verbal types of the Aivaliot/Lesbian loan verb *saltérnu* 'to jump', where, for clarity reasons, a hyphen separates the borrowed stem from the Greek inflectional ending:

(31)   Present   Imperfect   Imperfective future
  1SG   saltérn-u   sáltirn-a[31]   θa saltérn-u
  1PL   saltérn-umi   saltérn-ami   θa saltérn-umi

In contrast, -n- is absent from the aorist and perfective future paradigms, which are built on the perfective stem.

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[30] In certain dialects, e.g. in Aivaliot/Lesbian, and analogically to native forms, the aorist -ar- is further developed into -ari- in the singular number. Note, however, that [i] may be deleted because of the high-vowel deletion in unstressed position.

(iii) Aivaliot/Lesbian 1SG AOR: Loan saltár(i)sa   native xár(i)sa
                                    'I jumped'   'I gave/donnated'

[31] *sáltirna* derives from *sálterna*, since unstressed [e] becomes [i]. Compare also *sáltirna* with *saltérnami*. For an explanation, see the examples under (1).

(32)   Aorist   Perfective future

   1SG   saltár(i)-sa   θa saltár-u
   1PL   saltár-ami   θa saltár-umi

3.3 Exaptation

A crucial issue to deal with is whether borrowing has affected the morphological system of Greek verb-formation. In fact, in SMG, verb borrowing gave birth to the introduction of a new derivational suffix/verbalizer, *-ar-,* originating from the Italo-Romance infinitival marker *-ar(e).* The change of this inflectional marker into a verbalizer is corroborated by the fact that, in SMG, it productively creates verbs out of foreign bases, both nominal and verbal, not necessarily Italo-Romance (33a-c), while, more rarely, it also combines with Greek bases (33d):

(33)   SMG
       a. makij-ar-o   <   French   maquiller 'to make-up'
          'to make up'
       b. film-ar-o   <   English film or to film
           'to film'
       c. jux-ar-o / juxa-iz-o <   Turkish yuha 'bronx cheer'
          'to hoot, to boo'
       d. luf-ar-o   <   Greek   lufa 'loofah'
          'to lie low, to lie doggo'

I suppose that this situation had probably started in Heptanesian, the most heavily affected dialect by Venetian, and ultimately passed to SMG, since Heptanesian, together with the Peloponnesian varieties, served as base for the development of SMG. Nowadays in Heptanesian, a considerable number of English- and Greek-based verbs end in *-ar(o)*:

(34)   Heptanesian
       a. timoni-ar-o   <   Greek   timoni   <   Venetian timon
          'be at the helm'   'steering-wheel, helm'
       b. propoz-ar-o   <   English to propose
           'to propose'
       c. trapan-ar-o or δrapan-ar-o <   Greek δrapan(o) or Italian trapano
          'to open holes with a scythe'   'scythe'
       d. rizik-ar-o   <   Greek rizik(o)
          'to dare, to venture'   'fate, destiny'

-ar- must have resulted from a structural reanalysis of the Italo-Romance infinitives (see section 3.2.5) into stems in order to be combined with the appropriate Greek inflection. Since many Greek verbal stems are morphologically complex, consisting of a stem and a verbalizer (e.g. *xor-ev-o* 'I dance' < *xor-* 'dance' + verbalizer *-ev-* + INFL), *-ar-* must have been reinterpreted as a verb-forming suffix.

I believe that the recategorization of the Italo-Romance infinitival marker into a Greek derivational suffix was triggered by the existence of certain noun-verb pairs in the donor language, like *arrivo 'arival'* - *arrivar(e)* 'to arrive' or *protesta 'protest'* - *protestar(e)* 'to protest', where the basic formal difference between the noun and the verb is the infinitival marker *-ar(e)*. Comparing these pairs with some corresponding Greek examples, such as those listed under (35), it is not hard to understand how *-ar(e)* could be interpreted as having the same function with the Greek verbalizers: in the Italo-Romance pairs, the only structural difference between the verb and the noun is the *-ar(e)* suffix:

(35) a. -iz- zoɣraf-iz-o   < zoɣraf-os
             'to paint'   'painter'
     b. -on- kikl-on-o   < kikl-os
             'to cycle'   'cycle'
     c. -ev- xor-ev-o   < xor-os
              'to dance'   'dance'
     d. -iaz- periδrom-iaz-o < periδrom-os
              'to eat a lot'   'too much food'
     e. -en- ftox-en-o   < ftox-os
              'to become poor' 'poor'

Lastly, it is worth adding that the reanalysis of the Italo-Romance infinitival marker into a Greek derivational suffix provides a good illustration of the so-called "allogenous exaptation" (Gardani ms.), because it shows that, through borrowing, there can be a functional change of a grammatical element, in our case, a change from the inflectional to derivational status.

4. Conclusions

In this paper, I have tackled several issues concerning the dynamics of verb borrowing, such as the interplay of system-internal and system-external factors, the role of structural compatibility between the donor and

the recipient languages, the determining factors for choosing a particular integration strategy and/or pattern, the resolution of competing affixes regarding the selection of integrating elements, and finally, the impact of borrowing on the native morphology of the target language. I have shown that adopting foreign verbs is not impossible, contra Moravçsik (1978), but the integration of verbal loans is more complex than what one could think of, and depends on several factors and constraints, both linguistic and socio-linguistic. More particularly, the borrowing and integration of verbs in the Greek varieties which have entered in contact with Turkish and Romance are contingent upon the following parameters:

(a) the native morphological properties of the recipient language, that is, the stem-based word formation property in Greek, the perfective (aorist) stem to operate as the base for derivative purposes and the degree of suffixal productivity which contributes to the selection of a specific integrator among several competing suffixes;

(b) a certain structural compatibility between the systems in contact, which sometimes overrides genetic parenthood;

(c) a certain phonological matching between the transferred elements and equivalent native ones, which may determine the form of integrating elements;

(d) the degree of contact, the education rate, and the speakers' socio-linguistic attitude towards the donor language, which may facilitate, but also limit transfer of foreign material.

Acknowledgments

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