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Revisiting the borrowability scale(s) of free grammatical elements: evidence from Modern Greek contact induced varieties

Abstract

This paper aims to test the general validity of borrowability scales by investigating contrastively two contact induced linguistic varieties of Greek in order to elucidate the factors that facilitate or inhibit the borrowability of free grammatical elements, which are usually thought of as less amenable to transfer. It argues against the formulation of any borrowability scales of generalized predictive power, even in case studies where there is a common denominator. It suggests that factors such as the (in)compatibility parameter and the subsequent structural re-arrangements of the replica language (pattern replication) as well as the repertoire of items of each different category play a key role in the adoption of grammatical elements. It demonstrates that while borrowability of grammatical elements is not shown to be an exact mirroring of their ranking in the cline of lexicality-grammaticality, general tendencies seem to be at play.

Keywords: language contact; borrowability scale(s); free grammatical elements; contact induced varieties, Modern Greek.

1. Introduction

Borrowability of a wide range of categories and category domains is admittedly a hotly debated issue in language-contact studies. Several hierarchies, well-known as borrowability scales, are usually based on specific case studies and have been formulated to measure ease of borrowing bearing temporal, implicational, quantitative and probabilistic interpretations, irrespectively of the typology of the involved languages. Therefore, they advocate a universalist approach to borrowing (see among others Haugen, 1950, 1951; Moravcsik, 1975, 1978; Muysken, 1981; Thomason & Kaufman, 1988; Campbell, 1993; Thomason, 2001; Field, 2002; Winford, 2003; Elsík and Matras, 2006; Matras, 2007, 2009). In fact, borrowability hierarchies are of great interest, since they open a different window into tackling the parameters of contact induced change and the constraints that govern the types of borrowed structure. In this spirit, they often account for the factors that enhance or inhibit contact induced change, such as the intensity of contact and the degree of bilingualism (cf. Thomason & Kaufman, 1988; Thomason, 2001), the structural (in)compatibility among the involved systems (cf. Myers-Scotton, 2002; Field, 2002), or the semantic-pragmatic features of the affected categories (cf. Matras, 2007, 2010).

The purpose of this paper is to test the general validity of borrowability scales by investigating contrastively two contact induced linguistic systems, which are varieties of the same language, that is Modern Greek (hereafter Greek). It aims to shed light on the factors that facilitate or inhibit borrowability of free grammatical elements, which are usually thought of as less amenable to borrowing due to their nature as structurally cohesive, closed-class items.

Our data¹ set involves, on the one hand, Cappadocian Greek (hereafter Cappadocian) in contact with the agglutinative Turkish, member of the Oghuz group of Turkic languages, and, on the other hand, Griko in contact with the semi-fusional Indo-European Italo-Romance.² A contrastive analysis of the borrowability of free grammatical elements which share a common origin, and have been in similar social settings of long-term intense contact with systems of divergent genetic and typological profile, aspires to a more profound understanding of the parameters that enhance or facilitate borrowing among linguistic systems.

The paper is organized as follows: after the introduction, basic premises and assumptions are summarized on the borrowability of grammatical elements. A sketchy overview of the varieties is provided next (sections 3.1), followed by a contrastive presentation of the dialectal data (section 3.2). In section 4, a profound examination of each different grammatical category is given and specific claims and proposals are put forward in order to account for the observed divergence between two borrowability scales. The paper ends with major conclusions concerning the borrowability of free grammatical elements as well as the formulation of corresponding scales and a list of references.

2. Assumptions and Premises

Even though a more or less established view in recent language-contact studies is summarized in Thomason & Kaufman's (1988: 14) diffusionist position ("*...as far as the strictly linguistic possibilities go any linguistic feature can be transferred from any language to any other language*")³, not all linguistic features are equally likely or frequently subject to contact induced transfer.

To this end, several hierarchies, well known as borrowability scales, have been proposed allowing for generalizations concerning the susceptibility of various linguistic categories to contact induced change. In this spirit, borrowability hierarchies lead to predictions that, for instance, unbound forms are more borrowable than bound forms, lexical items more borrowable than grammatical items, semantically transparent forms more borrowable than semantically opaque ones, etc.

With respect to grammatical elements, the first borrowability scale was formulated by Whitney (1881) in terms of a continuum, as part of a broader scale of linguistic borrowing involving not only grammatical but lexical material as well:

(1)

Grammatical borrowing	
Function words	Affixes
Prepositions > Conjunctions > Pronouns	Derivational > Inflectional

¹ The data under investigation are extracted from available written sources (among others, Tommasi, 1996; Stomeo, 1996; Karanastasis, 1997; Rohlf, 1977; Cassoni, 1999; Filieri, 2001; Dawkins, 1916; Mavrochalyvides, 1990; Janse forthcoming), as well as from the oral corpora of the *Laboratory of Modern Greek dialects* (<http://lmgd.philology.upatras.gr>) of the University of Patras.

² For a comparative study on the contact of Spanish with three typologically divergent languages cf. Bakker et al. (2008).

³ Or 'anything goes hypothesis', as also formulated by Thomason (2001: 11). This position runs against the so-called 'retentionist' one, according to which, the transfer of linguistic features from one language to another is feasible if the two languages are typologically similar (cf. Meillet 1921: 82).

However, the most influential borrowability scales, based on the frequency of borrowed items, have been those put forward by Haugen (1950: 224) on Norwegian and Swedish immigrant speech in the US, and Muysken (1981) on Spanish of Quechua speakers:

(2) nouns > verbs > adjectives > adverbs, prepositions, interjections⁴

Haugen (1950)

(3) nouns > adjectives > verbs > prepositions > coordinating conjunctions > quantifiers
> determiners > free pronouns > clitic pronouns > subordinating conjunctions

Muysken (1981)

More recently, Matras (2007: 61) proposed a somehow different hierarchy, also based on frequency, by investigating a sample of 27 languages.⁵

(4) Nouns, conjunctions > verbs > discourse markers > adjectives > interjections > adverbs > other particles, adpositions > numerals < pronouns > derivational affixes > inflectional affixes

Matras (2007)

As can be deduced from the above, the suggested hierarchies are not identical in the listing of specific linguistic categories, both lexical and grammatical. For example, adjectives follow verbs according to Haugen (1950), while they precede verbs according to Muysken (1981) and contrary to Muysken (1981), conjunctions and discourse markers are placed according to Matras (2007) in the highest position, outranking even lexical categories, such as verbs and adjectives. In a similar vein, Matras (2007: 55) argues that among complementizers, borrowing is thought to be almost entirely restricted to those introducing factual clauses. Note that, although based on frequency, these scales of borrowability represent chains of implications arranged in a consecutive order.

For the purposes of this study, our interest narrows down to the scaling of free grammatical elements, well known as function words, which are often argued to make a transition between the lexicon and the grammar or between content words and inflectional affixes. Admittedly, they form the most diverse group, since they can instantiate a wide range of functions and distributional characteristics. As noticed by Field (2002: 62), free grammatical elements known as “*function words are distributed into either nominal or verbal structures or occupy positions along phrasal or clausal boundaries*”. Pronouns, for example, form part of the nominal structure, auxiliary verbs are thought to be subsidiary to lexical verbs, while adpositions and various types of connectors (coordinating, subordinating conjunctions, complementizers etc.) are considered to link elements and indicate logical relations (cf. Field 2002: 63).

What all the above elements have in common is that they are independent words, forming members of closed classes. However, grouping them together does not imply that they all share

⁴ Even though lexical and bound elements do not fall within the purposes of this paper, they are mentioned for reasons of completeness, being essential for a full account of the above mentioned hierarchies.

⁵ Matras’ (2007) hierarchy is shaped on the basis of the number of those languages in the sample that show borrowing of the relevant categories.

the same properties or have the same type of behavior in situations of language contact. On the contrary, a tentative hypothesis might entail a common cline of borrowability formulated on the basis of their cline of lexicality / grammaticality (cf. Jackson, 1988; Xydopoulos, 2008).

Being devoid of a large searchable (on line) corpus or a database for the investigated dialectal varieties in order to be able to conduct a data- or a corpus-based study on the borrowability of elements of all different grammatical categories, we restrict ourselves to unbound grammatical elements/lexemes, often labeled as “function words” (cf. Stranzy 2005: 362-364), namely, adverbials (denoting place deixis and/or indefinites, time deixis and/or indefinites, quantification, etc.), conjunctions (question, answer, negation, or other) particles, adpositions, numerals, pronouns, determiners and auxiliaries⁶ that can be detected from the available oral and written sources and checked in the available grammatical descriptions in terms of types and not of token frequency. Lastly, we should note that we do not enclose in the category of adverbials adverbs of manner deriving from adjectival bases through suffixation (e.g. Modern Greek adverbs in -a like *kala* ‘well’ derives for the adjectival stem of *kal(os)* ‘good’), since they do not constitute real grammatical elements but are part of the lexicon and word-formation processes.

Grammatical categories in a given language, or to be more precise, their concrete realization, may not have an exact linguistic equivalent in other language(s) involved in a contact situation. Thus, it is the task of linguists to sort out how the structural realization of a grammatical element is accommodated in a different linguistic system. Crucially, in our view, this kind of contact induced transfer between divergent systems is of major importance for determining the borrowability of grammatical elements and aspires to a more profound understanding of the parameters that enhance or facilitate borrowing among linguistic systems. Moreover, as Stolz (2008: 25-26) asserts, given the fact that in each language a different combination of linguistic features is represented, we expect that a borrowed element will (have to) be accommodated to the structural features of each different language.⁷ In this vein, the major issue to be addressed is why divergent linguistic systems may follow the same path for accommodating a feature, an issue that need be checked in on an empirical basis and testing of course the qualities and the flaws of different approaches and theories (cf. Stolz 2008: 26).

Lastly, along the lines of Muysken (2010: 271), although we are skeptical about the formulation of absolute constraints, we find that it is really tempting to investigate whether the formulation of scenario-specific and probabilistic constraints [of borrowability hypotheses] is feasible. A contrastive analysis of the borrowability of grammatical elements, which share a common linguistic inheritance and have been in similar social settings of long-term intense contact with systems of divergent genetic and typological profile, provides the appropriate empirical ground in order to test the validity of such formulations.

⁶ Although interjections often form part of some of the existing borrowability scales (cf. Haugen 1950 contra Muysken 1981), they are not included in the present study, since they were neither easily nor symmetrically detectable in the available sources due to their debatable status as grammatical category and their onomatopoeic characteristics.

⁷ See Ralli (2016) on how verbs from the typologically divergent Turkish and Romance are integrated in several Modern Greek varieties, following the requirements of Greek morphology.

3. Dialectal Data

3.1. Historical and sociolinguistic background

3.1.1. Cappadocian: a brief description

Cappadocia came under the Turkish influence during the late Byzantine period, for the first time in the 11th century⁸ after the Seljuk invasion (cf. Vryonis 1971: 448-452), and subsequently in the 15th century after the conquest of Asia Minor by the Ottoman Turks. From that period, Cappadocian was found in a situation of regressive bilingualism, since Turkish was the dominant language of the political authorities and was spoken by the overwhelming majority of the population in all aspects of life (cf. Vryonis 1971: 457-459). As a consequence, in some communities, total turkicisation was reported to have taken place by the end of the 19th century (cf. Sarantidis 1899: 126; Dawkins 1916: 11, 14, 18). Nevertheless, although in a situation of intense language contact, Cappadocian did not disappear in central Asia Minor and was still spoken in an area that covered 32 communities approximately, till 1924, that is, till the exchange of populations that followed the Lausanne treaty (1923).

The dialect is subdivided into three basic groups, North and South Cappadocian (cf. Dawkins, 1916) and in an intermediate one, namely Central Cappadocian (cf. Janse, forthcoming) showing intra-dialectal divergence. Today, it is spoken by descendants of Cappadocian refugees of the community of Misti (second- and third-generation refugees) in several parts of Northern Greece (Kavala, Alexandroupoli, Kilikis, Thessaloniki, Karditsa, Volos, Larisa).

It is worth noticing that Cappadocian is often used in the literature as a prototypical example of ‘heavy borrowing’ in terms of Thomason & Kaufman’s (1988: 50) borrowing scale, due to ‘overwhelming long-term cultural pressure’. Some of its major dialectal innovations which are usually attributed to a contact factor are the following: a) certain agglutinative-like inflectional patterns; b) differential object marking; c) change of the basic word order from SVO to SOV in several environments, and d) loss of grammatical gender distinctions (cf. Dawkins 1916; Thomason & Kaufman (1988: 215-222); Janse, 1999, 2007, 2008, 2009, forthcoming; Johanson, 2002; Winford, 2005, 2010; Karatsareas, 2009, 2011, 2014, Ralli 2009).

3.1.2 Griko: a brief description

Griko is spoken in South Italy, namely in the Salento area of Puglia (cf. Karanastasis 1984)⁹. The sociolinguistic status of this Greek-speaking dialectal enclave has varied through centuries. Till the early 90s, although the dialect seemed to be resisting, it was reported to be confined to only nine Griko-speaking villages¹⁰ (cf. Profili, 1985) and mainly among people of advanced age. Being spoken for many centuries on Italian ground¹¹, Griko was in a long-term contact with Italo-Romance, not only in its standard Italian form (the language of school and media), but with the local Romance varieties as well, (*dialetti salentini*), which were used in every day speech (street conversations, local commerce). As a result, the sphere of the Griko usage was limited to

⁸ More specifically, when the Byzantine Empire lost control of the Asia Minor area after being defeated by the Seljuk Turks in the battle of Manzikert in 1071.

⁹ Another Greek variety is still spoken in Calabria, not very different from Griko; it is usually called Greko. The two varieties, Griko and Greko, are referred together as Grekanico or simply Italiot.

¹⁰ Calimera, Castrignano dei Greci, Corigliano di Otranto, Martano, Martignano, Melpignano, Soleto, Sternatia, and Zollino.

¹¹ See Minas (1994, 2004), Manolessou (2005) and references therein for different opinions with respect to its origin, that is, being descendant from Ancient Greek or Byzantine Greek.

family situations (cf. Profili, 1985; Katsoyannou, 1999). Following Profili (1999), speakers of Griko, as well as those of Italiot in general, do not advocate a Greek identity. They are Italian citizens and their national identity is Italian. The dialect constitutes for them a link that brings them closer to their Greek historical roots and neighbors from a viewpoint of mentality and culture, but no real genetic or ethnic bond is implied in any way.

As in the case of Cappadocian with respect to Turkish, the influence of Italo-Romance to Griko is evident on all levels of grammar. For example, the usage of the Romance periphrastic construction *'steo 'to stand' + gerund*, in order to express a progressive aspect, e.g. *steo grafonta* 'I am writing' (cf. Katsoyannou, 1995), or the re-structuring of nominal inflection leading to a more simplified organization of inflectional paradigms and case markers, as compared to those of Modern Greek (cf. Melissaropoulou, 2014).

3.2 Borrowability of grammatical elements: a contrastive approach

In this section, a schematic presentation of the grammatical elements of the systems under investigation is provided.

Table 1 summarizes all different categories of grammatical elements in Cappadocian in terms of attested types provided in bold, their interpretation in single quotation marks, and the corresponding form in the model language.¹²

TABLE 1: Loan grammatical elements in Cappadocian

Adverbials (32)				Conjunctions (19)		Particles (3)	Pronouns (4)	Numerals (4)	
Time (12)	Space (3)	Quantifier s (8)	Other (9)	Coordinate (9)	Subordinate (9)			Cardinals (1)	Ordinals (3)
bazə kere 'sometime'	doyru 'straight'	adzak ¹⁷ 'only, solely'	adzaba 'I wonder'	am(m)a 'but'	meram 'since'	mə, 'question particle'	her 'every'	juz 'hundred'	birindži 'first'
bazı kere	dođru	ancak	acaba	am(m)a ¹⁹	mêram ²⁰	mi	her	yüz	birinci
bu se(f)er 'this time, now'	uzak 'far (away)'	azgaldə 'almost'	barabarja 'together'	ha...ha 'either...or'	ki 'that'	ha 'at least'	baska '(an)other'		icindži 'second'
bu sefer	uzak	az kaldı	beraber	ha...ha	ki ²¹	ha	başka		ikinci
deminden 'just now'	çerjerde ¹⁶ 'everywh ere'	barəm 'at least'	birden 'at once, suddenly'	hem...hem 'both...and'	e(y)er 'if'	taman 'emphatic particle' ²⁵	seis 'that (person)'		ütjündži 'third'
demin(den)	ere'	bari	birden	hem...hem	eđer	tamam	şey		üçüncü
evelden 'ago'	her yerde	he(t)s 'not at all'	demek 'namely'	ja...ja 'either...or'	tsunki(u) 'because'		herkis 'everybody'		
evvel(den)		hiç	demek	ya...ya	çünkü ²²		herkes		
(en) ipte '(most) in the beginning'		pecia 'very, a lot'	ille 'above all'	ne...ne 'neither...nor'	itsin 'because of'				
(en)		pek	ille	ne...ne	için				
ibda ¹³		daa 'more'	mahsus 'on purpose'	meerise 'however'	mademki 'seeing that'				
erkenden 'early'		daha	mahsus	međerse	madem(ki)				
erkenden		salt 'a lot'		joot 'or'	sanki 'as if'				
		salt ¹⁸		yahut	sanki ²³				
					zar				

¹² Dialectal examples are given in broad phonetic transcription, while Turkish and Italo-Romance data are exemplified as they appear in sources.

¹³ Even though the form *ibda* does not exist in Modern Turkish, it is found in Anatolian Turkish and in Ottoman Turkish bearing the meaning 'beginning, creation' (Bağrıacık, personal communication).

ozaman ‘then’ o zaman ¹⁴ osaat ‘exactly that time’ o saat sabahtan ‘in the morning’ sabahtan siftah ‘initially, firstly’ siftah soyna ‘later’ sonra soynadan ‘afterwards’ , sonra(dan) ¹⁵		(o,tia)dak ‘as much as’ dek	mutlaka ‘by all means’ mutlaka tadi ‘certainly’ tabi(i) temam ‘exactly, completely’ tamam(en)	lakin ‘however’ lâkin jousa ‘or’ yoksa	‘because’ zaar de(γ)i ‘so that’ Deyi ²⁴				
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In the same spirit, Table 2 displays the same information for Griko.

¹⁶ The form *her yerde* in Turkish is a periphrastic formation meaning literally ‘in every place’.

¹⁷ The form *adzak* is also used in the South-Eastern Cappadocian community of Ulaghats as a temporal adverb meaning ‘just’. E.g. *adzak irta* ‘(I) just came’.

¹⁸ The form *salt* in Turkish means ‘only, solely’ and by extension ‘a lot’.

¹⁹ In Standard Turkish it is written with one /m/.

²⁰ In central Anatolian dialects *mêram* is used with the meaning ‘if so, if it is the case’.

²¹ Cf. Bağrıacık (in preparation).

²² The form *çünkü* is placed in Turkish both at the beginning and at the end of causal clause (Göksel & Kerslake 2005: 452).

²³ Following Göksel & Kerslake (2005: 403) the “*addition of the subordinating conjunction sanki ‘as if’ at the beginning of the clause [in Turkish] provides early warning to the hearer of the non-factual status of the content of the clause*”.

²⁵ Cf. Bağrıacık (in preparation).

¹⁴ *O zaman* treats in Turkish the content of the first conjunct as a knowable condition which is assumed to be fulfilled.

¹⁵ In the adverbial *sonradan* ‘after the event’, ‘(only) afterwards’, the ablative case marking *-dan* has the opposite effect of drawing the attention to the *lateness* of the occurrence of an event (Göksel & Kerslake 2005: 202).

²⁴ Cf. Bağrıacık & Göksel (2016).

TABLE 2: Loan grammatical elements in Griko^{26/27}

Adverbials (16)				Conjunctions (10-11)		Numerals (6)		Prepositions (3)	Particles (1)	Pronouns (1)
Time (9)	Space (2)	Quantifiers (3)	Other (2)	Subordinate (6)	Coordinate (4)	Cardinal (4)	Ordinal (2)			
(a)poi 'afterwards' poi (It) allora ²⁸ 'then' allora (It) appena 'as soon as' appena (It) viata 'always' viatu (R) mai 'never' mai (It) doppu 'after(wards)' doppu (R) tarda 'late' tardi (It) presta 'early' presto (It) ankora 'still' ancora (It)	ka 'here' qa/qua (R) fore 'outside' fore (R)	maka(ta) 'not at all' ma cata (R) minimo 'minimum' minimo (It) kuazi 'almost' quasi (It/R)	puru 'also' puru (R) fortsi 'maybe' forsi (R)	sekundu 'as' se/i/cundu (R) ka 1. 'that' 2. 'because' ca (R) se 'if' se (It) dop(p)u ²⁹ 'when' doppu (R) komu 'as' comu (R) finu 'until' fino (It) / finu (R)	ma 'but' ma (It/R) o 'or' o (It/R) manko 'ούτε' manco (R) ka 'than' ca (R)	settanta 'seventy' settanta (It) kuattruvint i 'eighty' quattu vinti (R) annovinta 'ninety' novanta (It) mmijuna 'million' migghiune (R)	primo 'first' primo (It) sekund o 'second' secondu (R)	a 'in' a (It/R) tra 'between' tra (It/R) sentsa 'without' senza (It/R)	si 'yes' si (It./R.)	stesso 'the same' stesso (It.)

Information organized in the tables above leads to the generation of the following borrowability scales for each one of the systems under investigation, shown below.

TABLE 3: Cappadocian borrowability scale

²⁶ The source forms of loan grammatical elements in Griko are marked, depending on their origin, as coming either from (It)alian or from the (R)omance varieties or both.

²⁷ On the italianization of function word systems of the autochthonous minority languages of Italy, Italo-Greek included, see Stolz (2005).

²⁸ Cf. Stolz (2007).

²⁹ Apart from its adverbial use, *doppu* occurs as a temporal subordinator as well, bearing the meaning 'when'. E.g.:

An valome nnero poddine dop(p)u dzimonnome, to ssomi erkete apalo.

If put.1pl water a lot when knead.1pl the bread come.3s soft.

'If we put a lot of water when we knead, the bread becomes soft'

Adverbials > conjunctions (co-ordinate, subordinate) > particles, pronouns, numerals

TABLE 4: Griko borrowability scale

Adverbials > conjunctions (subordinate > co-ordinate) > numerals > prepositions > particles, pronouns

4. Discussion

A contrastive look at the two borrowability scales leads us to the following observations. With respect to similarities we observe the following:

(i) In both case studies, adverbials are placed on the highest position of the borrowability scale. This should not come as a surprise, since sentential adverbials constitute a category of a more lexical and less grammatical nature, forming a less closed-class category as compared to other grammatical elements, such as pronouns, determiners and auxiliaries (see Jackson 1988: 17 on the formulation of a cline of lexicality-grammaticality and Xydopoulos 2008: 75-76 on its adaptation in Greek in terms of a continuum).

As regards their internal hierarchy, our data corroborate the established claim that place adverbials, and place deixis in particular, seem to be more resistant to borrowing compared to the other categories, more specifically compared to time adverbials (cf. Matras, 2007). Only two members have been traced in both Cappadocian (i.e. *doγru* ‘straight’ < Tr *doğru* and *uzak* ‘far(away)’ < Tr *uzak*) and Griko (i.e. *ka* ‘here’ < R *qa/qua* and *fore* ‘outside’ < R *fore*) compared to the corresponding sub-category of time adverbials which outnumbers many more members (i.e. 12 and 8 numbers correspondingly, including both time indefinites and time deixis). Absolute numbers are not of interest, in this particular case, since their inventory is strongly related to the inventory of the respective model language (i.e. Turkish and Italo-Romance, respectively).

(ii) Conjunctions are placed in the second position regarding the borrowability cline. This finding is in accordance with Matras (1998, 2007) who argues that connectors are by far the most susceptible category to borrowing, as attested in the 27 different languages of his sample.

(iii) Crucially, although in both case studies categorization of free grammatical elements was anticipated to encompass auxiliaries and determiners as well, the corresponding categories are absent from both tables. Their absence should not be interpreted in terms of omission due to methodological reasons but as a pure reflex of the fact that in neither variety members of the above mentioned categories have been traced. The zero borrowability of determiners and auxiliaries in contrast with the high borrowability of adverbials in the two dialectal case studies seem to align with and depict in general the different places that these categories hold on the cline of lexicality (proposed by Jackson, 1988 and revised by Xydopoulos, 2008 for Greek).³⁰

³⁰ According to this cline four different grades are provisioned as follows: the first one contains nouns, verbs, adjectives and manner adverbs, the second contains prepositions, conjunctions, quantifiers, and sentential adverbs, the third one pronouns, deixis, and possessives, while the last one determiners and auxiliaries. The members of the first grade, placed at the leftmost end of the continuum, are considered to be the most lexical ones, while those of the

Namely, auxiliaries³¹ and determiners, which are placed at the rightmost end of the cline of lexicality and are argued to have a more grammatical status than all the other categories, are those which are not susceptible to borrowing.

(iv) Lastly, in both case studies, particles and pronouns occupy the last position of the respective borrowability scale, thus, they seem to be more resistant to borrowing than the preceding categories. Nevertheless, their free alternation and their qualitative differences in terms of membership in each different dialectal system force us to elaborate on them below, when emphasizing dissimilarities.

Interestingly, these findings summarize all established similarities in the borrowability scale of our study. The rest of the categories, i.e. adpositions, quantifiers, particles, pronouns and numerals do not show a uniform behavior.

With respect to dissimilarities we note the following:

(i) the two scales do not converge as regards the internal hierarchy of the category of conjunctions. In Cappadocian, co-ordinate conjunctions do not outrank subordinate ones, as expected according to Muysken's (1981, 2014) scale, showing that subordinate conjunctions are more susceptible to borrowability. Interestingly in Griko, the reverse ordering seems to be at play, that is, subordinate conjunctions outrank co-ordinate ones, calling for an explanation. Nevertheless, in neither case, subordinate conjunctions appear to be the less susceptible category to borrowability, as advocated in Muysken (1981).

In an effort to account for the observed divergence between the two case studies we appeal to the different characteristics of the two model languages. In fact, Turkish and Romance varieties diverge significantly in their strategies for denoting subordinate clauses. On the one hand, Turkish marks subordinate clauses mainly with the use of postpositions, while Italo-Romance with the use of conjunctions, similarly to Greek. Some illustrative examples can be seen under (5), (6) and (7) below:

Turkish
(5)³²

<i>[arka-sin-da</i>	<i>adam ol-an]</i>	<i>çocuk</i>
back-POSS.3SG-LOC	man be-SBJ.REL	child

fourth, placed at the rightmost end of the continuum, are seen as the most grammatical ones, the other grades being in between.

³¹ The only case that may be a counter-example is the transfer to Griko of the structural pattern [*ste(k)o* + gerund in -*onda*] (e.g. *ste(k/g)o yrafonda*, 'I am writing' *steo pentseonda* 'I am thinking') for the realization of the continuous present, containing the verbal Italo-Romance form *ste(k)o*, which could be argued to serve as an auxiliary verb. However, accounting for *ste(k)o* as a loan auxiliary form is really controversial since, although the verb in its realization as *steo* -i.e. without the inter-vocalic consonant- is phonologically - formally similar to the Italo-Romance verb (see the Italian/Romance *stare* 'to stand' and the corresponding structural pattern [sto + gerund in -*ndo*] (e.g. *sto facendo* 'I am doing'), it comes from the Greek native verb *ste(k/g)o* which is systematically found in the dialect not only in the Present Indicative -in which a formal coincidence between the two systems occurs- but also in other verbal forms (e.g. the imperatives *stasu / stasite* 'stand.2.SG/2.Pl'). This particular schema can be seen as an instance of pattern replication in terms of Sakel (2007).

³² Abbreviations throughout the paper are read as follows: 1= first person, 3= third person, FEM=feminine, FNOM=factive nominalizer, FUT.NOM=future nominal, GEN=genitive, IMPERF=imperfective, INF=infinitive INSTR=instrumental, LOC=locative, NEG=negation, NEU=neuter, PAST=past, PL=plural, POSS=possessive, PR=present, PRT= particle, SG=singular, SUBJ.REL=subject relativizer, TEMP=temporal.

‘the child [behind whom there is a man]’

(Göksel & Kerslake, 2005: 382)

Italian

- (6) *Lui è tornato a casa sua, [perché aveva un appuntamento]*
He is returned at home his because had.3SG an appointment
‘He went back home, because he had an appointment’

Greek

- (7) *Aftos jirise s-to spiti [jati ixē dulja]*
He returned.3SG to-the home because had.3SG work
‘He went back home, because he had work to do’

What can be seen from the above is that in the case of Griko both the model and the replica language (i.e. Italian and Greek) use the same strategy for the introduction of subordinate clauses. They both use subordinators placed at the beginning of the dependent clauses. On the contrary, in Cappadocian, there appears to be a significant divergence between the model and the replica system (i.e. Turkish and Greek): Cappadocian is unfamiliar with the use of postpositions for the introduction of subordinate clauses, as opposed to Turkish which marks subordinate clauses mainly with the use of postpositions, and only in some cases with the use of subordinate conjunctions. As underlined by Göksel & Kerslake (2005), the Indo-European type of subordinate clauses, composed by a preceding subordinating conjunction and a finite verb, constitutes the only significant foreign grammatical influence to be seen in the Turkish language. In particular, some of the Turkish subordinate conjunctions originate from Arabic (*eğer*, *madem(ki)*) and others from Persian (*ki*, *çünkü*). Crucially, they seem to have been transferred to Cappadocian (see the respective column in Table 1) due to their structural compatibility with the Greek system.

Among the borrowed elements from Turkish in the specific category, the subordinator *itsin* ‘because’ < *için* is of particular interest, since it is a unique example of a Turkish postposition that has entered the Cappadocian system, as a pre-posed conjunction. The postpositional use of *için* in the model language can be seen in the examples under (8) below:

(8)

- a. *kim-in için*
who-GEN.3SG for
‘for whom’ Göksel & Kerslake (2005: 54)
- b. *bak-ma-dıĝ-ım için*
look-NEG-FNOM-1SG because
‘Because I haven’t looked/am/was not looking’ Göksel & Kerslake (2005: 85)
- c. *ver-mek için*
give-INF for
‘in order to give’ Göksel & Kerslake (2005: 87)
- d. *O akşam misafir-ler-imiz ol-acaĝ-ı için] yemek yap-mak-la*
that evening guest-PL-POSS.1PL be-FUT.NOM-3PL because dinner make-INF-INSTR

meşgul-dü-k
busy-PAST-1PL

‘As we were expecting guests *that evening*] we were busy cooking’

Göksel & Kerslake (2005: 203)

This instance of the borrowing of *için* in Cappadocian is of particular interest since it suggests that, although not frequently, it is not impossible for a purely functional element, such as an adposition, to be transferred to a language without the concomitant transfer of its structural features (that is, its linear ordering, contra Moravcsik 1978: 112). This element, however, must be accounted for in terms of reanalysis (cf. Siegel, 2000) or relabeling (cf. Lefebvre, 2008 and references therein for relevant discussion). In fact, relabeling is thought of as one of the major processes in language contact, which is mainly semantically driven, on the basis that the two lexical entries (of the model and the replica language) that are involved in the process must share some semantic similarity (see also Muysken, 1981). However, in some cases, transfer may involve only a subset of features (cf. Lefebvre 2008: 95). This is the case of transfer of *için*, where relabeling seems to have been activated on the basis of the meaning ‘because’ for the introduction of finite subordinate adverbial (causal) clauses. Nevertheless, instances of relabeling of adpositions do not abound in our case study.

The corresponding structure of the causal clause in the Cappadocian system can be seen under (9) below:

- (9) *de* *peniksan* *skoleia* [*giai* *dulivan*]
not go.Past.3PL school because were working.3PL

‘They did not go to school because they were working’

Interestingly, in the case of Griko, subordinate conjunctions outrank co-ordinate ones. This divergence, which is attested in other case studies as well (see Field 2002 on Spanish borrowings in Modern Mexicano), should not come as a surprise since it can be easily ascribed to the ample repertoire of subordinate conjunctions in the Romance varieties (that is, causal, concessive, conditional, temporal, resultative, final, declarative, consecutive, comparative, modal, adversative, exclusive, privative, concessive), which are more numerous than those of coordinate ones (that is, copulative, explanatory, contrasting, conjunctions of sequence, declarative, concluding, comparative). Furthermore, their transfer is facilitated by the structural compatibility between the model and the replica language, in that in both languages, subordinate conjunctions bear the same structural features in terms of linear ordering and syntactic saliency (they hold the same position, being heads of their phrases). We would like to propose that the big number of borrowed co-ordinate or subordinate conjunctions –in terms of membership in each different subcategory– could be viewed as an epiphenomenon, in the sense that among quasi synonymous connectors the most frequent ones, or the most typical of the area, would be the most powerful candidate(s) for contact induced transfer. We would further propose that the number of each different category of grammatical elements that enters the replica language is heavily determined by the structural characteristics of the two languages in contact and their respective (in)compatibility as well as by the relative repertoire of the model language. Therefore, it plays a crucial role for the formulation of the respective borrowability scale.

(ii) In a similar vein, we could account for another crucial difference concerning the borrowability of grammatical elements, the presence of loan prepositions in Griko and their

respective absence in Cappadocian.³³ As already mentioned above, Moravčsik (1978: 112) has argued that grammatical elements (including at least conjunctions and adpositions) cannot be transferred to a replica language unless the structure determining the linear order with respect to the head is transferred as well.³⁴ Crucially, Griko and Romance languages³⁵ are both prepositional systems, thus, structurally compatible, in the sense that a loan prepositional element could easily fit into the replica system without the insertion of a diverging structure compared to the existing one (i.e. a different linear order of prepositions and NPs) being necessary for the integration of innovative grammatical elements. On the contrary, in the case of Cappadocian, Turkish is of post-positional type, disfavoring transfer of the specific adpositional elements, unless specific re-arrangements are made in order for the innovative postpositional elements to fit into the replica language. Interestingly, according to Karatsareas (2013), although the functional subset of Turkish adpositions had been left intact, that is, proper post-positions had not been transferred to Cappadocian, Turkish adverbial elements can combine with Greek prepositions, but the construction undergoes a rearrangement, in that a circumposition has become an available option and circumpositional the default ordering, probably as a result of the replication of the Turkish adpositional pattern. An illustrative example of a circumpositional pattern can be seen under (10) below, where the combination of the Greek preposition *se* and the Greek article *to*, under the form of *so* ‘at the’, precedes the noun, while the Turkish adverbial element *qarfu* ‘opposite’ follows it.

- (10) *pije* *ce* *ekatse* *so* *tfirak* *qarfu*
 Go.PAST.3SG and sit.PAST.3SG at.the light opposite
 ‘She went and sat opposite the light’

(Dawkins 1916: 346, cited in Karatsareas 2013)

Expanding this observation, we propose that, in cases like that under discussion, borrowability of free grammatical elements, in our case adpositions, is captured more efficiently when it is interrelated with grammatical pattern replication (cf. Matras & Sakel, 2007), seen as a preparatory path in order for matter replication of grammatical elements to be able to occur. In other words, grammatical pattern replication or specific re-arrangements reconciling the structural incompatibility between the model and the replica language seem to be a prerequisite for the replication of grammatical elements.

Given the above, our data argue against Thomason’s (2001) thesis that typological parameters do not govern contact induced change. On the contrary, given the contrastive analysis of our case studies, we would predict that if the co-existence of Cappadocian and Turkish had not been

³³ The only element that could be counted as an adpositional one is *tfax* or *tfaus* ‘up to, until’ which, however, is not included in the present study due to its debatable origin either as a native element, deriving from (*e*)*tfa* ‘there’ and the limitative *us*, or as an instance of matter replication of the Anatolian Turkish postposition-affix *-çaq* (cf. Deny 1921: 614; Karatsareas 2013).

³⁴ The exact passage is as follows: “A lexical item that is of the ‘grammatical’ type (which type includes at least conjunctions and adpositions) cannot be included in the set of properties borrowed from a language unless the rule that determines its linear order with respect to its head is also so included.”

³⁵ For the reverse situation, namely the transfer and the accommodation of a Romance preposition in a variety of languages see Stolz (2008: 23-25).

abrupt due to the exchange of populations, matter replication involving the functional set of adpositions would be more than likely to follow the observed grammatical pattern replication.

(iii) As regards numerals, our data do not provide a unified picture either: in Griko, they are placed in the third position outranking prepositions, pronouns, and particles, while in the Cappadocian borrowability scale they occupy the last position being ranked together with particles and pronouns.

The general assumption in the existing literature is that numerals are placed low in the borrowing scale given that all languages display a system of quantification. However, according to Matras (2007: 51) the likelihood of borrowing numerals is subject to sociolinguistic constraints, since the dominant language is used in business transactions and institutional services.³⁶ Matras (2007) argues that these circumstances favor higher numerals over lower ones. His prediction is the following:

(11) 1000, 100 > above 20 > above 10 > above 5 > below 5 (Matras 2007: 51)

If we take into account the fact that, in everyday life, the use of low numerals is far more frequent than that of higher ones, we expect that with respect to Griko and Cappadocian, the use of borrowed low cardinal numerals will not be attested. Indeed, it is the case that although the number of borrowed cardinal numbers is not the same in both systems, the general prediction asserting that higher numerals outrank lower ones is verified. Nevertheless, in Cappadocian, only one number is borrowed, ‘hundred’, while in Griko, lower numerals such as, ‘seventy’, ‘eighty’, ‘ninety’, are attested along with the most highly ranked ‘million’. Moreover, the existing generalizations concerning the borrowability of ordinal numbers is verified by the Griko dialectal data in that the attested ordinals are ‘first’ and ‘second’, obeying the generalization that the occurrence of higher ordinals presupposes the occurrence of lower ones. Similarly, in Cappadocian (cf. Janse forthcoming, citing Mavrochalyvides & Kesisoglou 1960: 51) the three first forms, i.e. first, second and third, are also attested.

Matras & Elsik (2006) interpret the high universality of low ordinals in terms of their ‘structural conspicuousness’ (their term), realized through lexical suppletion, and are ultimately related to cognitive saliency. Thus, the high borrowability of low ordinals is accounted for by the authors in terms of pragmatic saliency referring to the need to separate one single entity from a larger set. Focusing on the dialectal data in hand, we would argue that borrowability of *first* and *second* in Griko is predictable in the light of their suppletive nature, that is, their formal absence from a larger set. In Cappadocian, even though the formation of all ordinal numbers is realized through the attachment of the suffix *-Incl* and no suppletive forms are at play, the occurrence of the three first numbers is attested and can be accounted for in terms of cognitive saliency, as suggested by Elsik & Matras (2006). Nevertheless, in an effort to generalize we would say that, in our case, only very low ordinals appear in both varieties.

³⁶ Additionally, according to Matras (2010: 82) “Numerals are borrowed more often in formal contexts – for example when citing dates or commercial quantities, or in connection with commercial transactions – where they are associated with the language of the institutional domain and commerce. Among cardinal numerals, higher figures tend to be borrowed before lower figures, the latter being protected by the routine of everyday counting in the recipient language, the former being more typical of institutional settings (school, trade, administration, and so on)”.

(iv) A contrastive look at the two dialects does not reveal a unified behavior regarding the borrowability of pronouns either. In Griko, pronouns are placed at the end of the scale, with only one member, whereas in Cappadocian, although not much higher on the scale, they are ranked together with particles and numerals, displaying four members.

Admittedly, in the relevant literature, pronouns, personal ones in particular, and their respective paradigms are thought of as non-borrowable items on the basis of: (a) their status as a closed set of forms, and (b) their tight structure as paradigms situated at the core of a linguistic system that cannot be disrupted (cf. Thomason & Everret, 2001³⁷; Dixon, 1997; Nichols & Peterson 1998). Most of the voiced claims stress the non-borrowability of pronominal paradigms, the latter being considered among the ‘surest indicators’ of genetic affinity (Dixon 1997: 22). However, examples of adopted pronouns abound in the literature concerning Southeast Asian languages Austronesian, Papuan languages and elsewhere (cf. Foley (1986: 210); Campbell (1997: 340)), and, in general, borrowing of individual pronouns is not said to be rare in the list of loanwords in a great variety of languages (cf. Haspelmath & Tadmor 2009). Although some pronouns of both Cappadocian and Griko are listed in the tables listed above, none of them belongs to the category of personal pronouns, and no pronominal paradigm has been traced. For instance, in Griko, in spite of the fact that the donor language displays a vast repertoire of pronouns, the only borrowed member of the category is *stesso* ‘-self’ which is a stressed reflexive pronoun, (e.g. *Io lavo me stesso* ‘I wash myself’). However, it seems to operate more like a definite adjective, since it does not replace but rather modifies nouns, as shown in the following examples:

(12) *I stessa jineka*
the same.FEM woman.FEM
‘the same woman/the woman herself’

To stesso spiti
the same.NEU house.NEU
‘the same house/the house itself’

(Rohlf 1977: 96)

In other words, this specific instance of pronoun borrowing in Griko could adequately be accounted for as an instance of adjective-like borrowing, adjectives being not particularly resistant to borrowing.

In Cappadocian, on the other hand, the range of borrowed pronoun elements is bigger, displaying four members. Interestingly, however, the elements that are integrated and identified in the dialect as pronouns are not pronouns in the strict sense in Turkish and, crucially, they are not inflected, thus, not tightly structured into paradigms. Namely, *her* ‘every’ and *başka* ‘(an)other’ are often labeled as uninflected determiners in Turkish, while *herkes* ‘everyone’ and *sey* ‘thing’ as uninflected pronominal quantifiers. In our view, their uninflected nature along with their unbound form have acted as a facilitating factor for the transfer of these specific elements

³⁷ Thomason and Everett (2001) are right in arguing that social factors may determine the borrowability of pronouns. Borrowing of a specific type of inclusive or exclusive ‘we’, as noted by Thomason & Everett (2001), or of a totally different form for the realization of a form of courtesy or polite address we would add, cannot be predicted only by taking into account general linguistic principles. However, it goes without saying that these kinds of transfer have been the outcome of heavy and long-term (language and cultural) contacts of the involved systems.

into Cappadocian, and their identification as indefinite pronouns on the basis of their semantics, i.e. bearing an adjective-like behavior.

Crucially, in both dialects, all borrowed elements belong to the (in)definite sub-group of pronouns, which could be viewed as more of the adjectival type on the basis that they do not only substitute a noun but they often modify it, as is the case for adjectives as well.

(v) Lastly, as regards particles, there is much controversy on both the definition and the members of this specific category. Whereas in typological studies the term has little or no status, in both general grammatical descriptions and language-contact studies it is found quite often in use, but with very little consistency. Generally speaking, an element is categorized as particle on the basis of its invariable form, its grammatical or pragmatic meaning, its short length -usually monomorphemic-, and because of not falling easily under any of the traditional parts of speech / of the main classes of words. However, several sub-categories and respective labels have been recognized, such as adverbial particles, verbal particles, modal particles, focus particles, discourse particles, clitic particles, pronominal particles, etc.

For the purposes of this study, we adopt a narrow definition of the term in the spirit of Bussman (1999: 867), excluding all invariant words, which in the replica languages are seen to belong to other grammatical categories, that is, adverbs, conjunctions, prepositions and interjections.³⁸

In this perspective, turning now to our data, a contrastive look at the two dialects does not reveal a significant divergence in the ranking of particles in the borrowability scales. Namely, in both Cappadocian and Griko, particles are placed on the ultimate position of the scale. In terms of absolute numbers, Cappadocian displays three members, while Griko only one.

What should be borne in mind for this specific category is that in the grammatical description of both model languages,³⁹ the repertoire of the relevant items diverges significantly. According to Göksel & Kerslake (2005), Turkish has several different particles shown under (13):

(13)

- a. the negative particle *değil*,
- b. the particle *ve*, borrowed from Arabic, which conjoins all types of phrases and clauses
- c. the particle *keşke* ‘if only’
- d. the question particle *mi*, which may host agreement markers in Turkish⁴⁰.
- e. the particle *bile* ‘even’

In Italian, on the other hand, following, among others, Proudfoot & Cardo (2005), only two particles are generally recognized, namely *ci/vi* (with an adverbial or a pronominal meaning of ‘here/there’) and *ne* (with a mainly partitive meaning), while both occur as pure particles in several idiomatic expressions. Crucially in Italian, apart from ‘yes’ and ‘no’, particles seem to be

³⁸ In Standard Modern Greek, the category of particles displays the following members: the deictic *na*, the exhortative *ja*, the oath-ing-affirmative *ma*, the prospective-potential *tha*, the exhortative *as*, the yes/no particles *ne*, *oxi*, *de(n)*, *mi(n)*.

³⁹ However, in some recent syntax-oriented studies (cf. Coniglio, 2008) it has been proposed that some of the elements that are often considered as adverbs (e.g. *mai*, *poi*, *pure*) display special characteristics worth scrutinizing and labelling as particles.

⁴⁰ We thank an anonymous reviewer for highlighting this piece of information.

more tightly structured and semantically opaque, as illustrated in the following example in which the contribution of *ce* cannot be easily detected:

- (14) *Ce* *l'* *hai?*
PRT it have.2SG
'Have you got it?'

Thus, in an effort to generalize on the borrowability of this specific category and its ranking in the respective borrowability scales, we ascertain that the general tendency is that this narrow defined category of particles has a low ranking in the respective borrowability scales. This behavior is rather due to the fact that in the model languages particles belong to an extremely closed-class category encompassing short-length items which do not fall within any other grammatical category.

5. Conclusions

To conclude, on the basis of our data we would not argue in favor of any borrowability scale of generalized predictive power, even in case studies with a common denominator that is, with the same model or the same replica language and similar social settings. On the contrary, our data offer further support to the thesis that any borrowability scale is only representative of the specific model-replica language pair that was used for its formulation, referring to a specific language-contact setting.

Our data do now allow us to generalize and treat any specific category as a strong indicator of genetic linguistic inheritance that cannot be subject to contact induced transfer. However, they do not seem to argue against the non-borrowability of pronominal paradigms as the most secure indicators of genetic linguistic inheritance.

Contrary to Matras's (2007: 66-68) assertion that the structure of the replica language plays a secondary role in determining borrowability scales and that only the functionality of categories and the extent of bilingual pressure hold the most prominent role, our data seem to suggest that

- (i) the structural (in)compatibility parameter and the sub-sequent re-arrangements in the structure of the replica language (i.e. pattern replication), as well as
- (ii) the repertoire of each different category of grammatical elements

may play a key role in the borrowability of grammatical elements and the respective formulation of any borrowability scale.

However, we argue against the thesis that borrowing of grammatical elements occurs only in cases of structural compatibility among the involved systems (contra *Campbell 1993: 91*). On the contrary, we align with Aikhenvald (2006: 26) who proposes that "*diffusion of grammatical forms and patterns [can] be viewed in terms of a variety of facilitating factors or preferences*".

In this vein, we propose that any hierarchy of borrowability should take into account typological criteria concerning not only the morpho-syntactic structure but also the distinction among different categories of grammatical elements in the involved systems (see also Rendon 2008: 71). In other words, we do not argue in favor of a universal hierarchy of borrowing but we could speak of strong tendencies on the borrowability of specific categories by taking into consideration specific parameters, as those proposed above. In our case, the general tendencies could be the high borrowability of adverbial elements and conjunctions, while the respective low susceptibility to the borrowing of particles, pronouns, and prepositions, and the zero

borrowability of determiners and auxiliaries depict, in general, the different places that these categories hold in the cline of lexicality.

Thus, as regards Campbell's (1993: 100) claim that "*borrowability of elements is based on the ranking of grammatical categories*", we would say that there is no exact mirroring but undoubtedly general tendencies seem to play a role (cf. also Bakker et al. 2008 on contact of Spanish with Guaraní, Otomí and Quichua). Finally, we would like to expand Matras's (2007: 35) claim that probably different explanatory accounts may be needed for interpreting the borrowability of different structural components, by adding 'different grammatical elements as well'.

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