An electronically-based investigation of left-headed dialectal compounds

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Στο παρόν άρθρο εξετάζονται οι σύνθετες λέξεις των νεοελληνικών διαλέκτων που έχουν τη βάση τους, δηλαδή τη δομική κεφαλή, αριστερά, αντίθετα με ό,τι συμβαίνει στην Κοινή Νεοελληνική, στην οποία τα σύνθετα, στη συντριπτική τους πλειοψηφία, είναι δεξιόστροφα. Υποστηρίζεται ότι η ύπαρξη των αριστερόστροφων συνθέτων οφείλεται κυρίως στην επίδραση των ρομανικών γλωσσών, που από την ύστερη μεσαιωνική περίοδο και για αρκετούς αιώνες είχαν έλθει σε επαφή με τις νεοελληνικές διαλέκτους σε περιοχές όπου κυριαρχούσαν οι Φράγκοι, κυρίως οι Ενετοί. Τα δεδομένα που απεικονίζουν τη γλωσσική κατάσταση δια-διαλεκτικά, όσο και τα στατιστικά στοιχεία, προέρχονται από την ηλεκτρονική βάση διαλεκτικών συνθέτων (ΔΙΑΣΥΝ), η οποία περιέχει γύρω στα 16.363 σύνθετα, όπου το κάθε λήμμα συνοδεύεται από γλωσσικές και μεταγλωσσικές πληροφορίες.

Keywords: compounding, dialectal compounds, head position, left-headed compounds, language contact

1. Assumptions and claims

It is generally accepted that Modern Greek (hereafter Greek) is a right-hand head language, that is, in a binary word structure (derived and compounded), the head, defined on formal grounds, is at the right-hand side[1]. According to Ralli (2005 [2022]), in derived structures, the derivational suffix is the head, while in the vast majority of endocentric one-word compounds, the head is usually the right member. Only inflected structures deviate from this pattern, in that the only function of the inflectional suffix is to complete information required by the stem, as for instance, specific values for case and number for nominal stems, the latter acting as heads.

[1] In this article, the term 'Greek' is used for the Modern Greek language of the historical period covering the last three-four centuries. Standard Modern Greek denotes today's official language and Ancient Greek the language before our era. Other terms in use, depending on the period, are: Hellenistic Koiné (ca. 3rd c. BC — 3rd c. AD) and Medieval Greek, Early and Late (see Ralli 2012 for a periodization of the Greek language).

Following Ralli (2007; 2013), most Greek one-word compounds combine either two stems (1a) or a stem and a word (1b), stem being the part of the word deprived from its inflectional ending, and the two compound members are linked together by a linking vowel /o/, which marks the compounding process and is, thus, called "compound marker" (Ralli 2008).

(1) Endocentric compounds (Standard Modern Greek)[2]

a. *ayrioɣúruno*$_{N}$ < *áyri*(*o*)$_{A}$ + ***yurún***(***i***)$_{N}$
'boar' 'wild' 'pig' (Ralli 2013)

b. *xartopézo*$_{V}$ < *xart*(*i*)$_{N}$ + ***pézo***$_{V}$
'play cards' 'card' 'play' (Ralli 2007)

Endocentric compounds generally display a dependency relation between their members, a subordinate (1b) or an attributive relation (1a). Among endocentric compounds, one can also classify the coordinative ones, because they often carry the inflection of the second member, although this is not always the case. In these compounds, it is not clear whether one of the members is the head, since both constituents can be the source for the grammatical category and the basic meaning of the construction. In fact, linguists do not agree on this matter. Coordinative compounds are often presented as having two heads or are conventionally taken to be right-headed in languages with right-hand heads (see Kageyama 2009 and Ralli 2019b for an overview of these views).

(2) Coordinative compounds (Standard Modern Greek)

a. *alatopípero*$_{N}$ < *alát*(*i*)$_{N}$ + *pipér*(*i*)$_{N}$
'salt-pepper' 'salt' 'pepper' (Ralli 2013)

b. *aniɣoklíno*$_{V}$ < *aníɣ*(*o*)$_{V}$ + *klín*(*o*)$_{V}$
'open-close' 'open' 'close' (Ralli 2013)

c. *mavróaspros*$_{A}$ < *mávr*(*os*)$_{A}$ + *áspr*(*os*)$_{A}$
'black-white' 'black' 'white' (Ralli 2013)

[2] Greek examples are broadly phonologically transcribed with the characters of the International Phonetic Alphabet and stress appears on the stressed vowel. The segments of stems and/or the inflectional endings that do not take part in the compounding structure are put in parentheses.

Note that adjectival (2c) and nominal (2a) coordinative compounds are common since the Early Medieval Greek (Manolessou & Tsolakidis 2009). V(erb) V(erb) ones (2b) are creations of late Medieval Greek (they are unknown before the 14th c.), as argued by Ralli (2009), and are not frequent in all Greek dialects. For instance, they are absent in the Cappadocian dialect (see Dawkins 1916 for a description of Cappadocian).

In Greek, both in Modern and Ancient, there is also a considerable number of compounds that are exocentric, where none of the two members is the head. This feature has characterized the Greek language since the Homeric period, as shown by many examples provided by Tserepis (1902).

(3) Exocentric compounds (Ancient Greek)

a. *polymelɛ:s*$_{A}$ < *poly*$_{A}$ + *mel*(*os*)$_{N}$
'having many members' 'many' 'member'

b. *vrakhymogɛ:s*$_{A}$ < *vrakh*(*ys*)$_{A}$ + *mog*(*os*)$_{N}$
'tireless' 'short' 'labour' (Tserepis 1902)

However, according to Ralli (2007; 2013), the structure of exocentric formations is not entirely headless. She has proposed that the role of the head is assumed by a derivational suffix. By examining compounding in Standard Modern Greek, Cypriot and South Italian Greek, Ralli & Andreou (2012) and Andreou (2014) have suggested that this suffix is either zero (4a) or an overtly realized one (4b), and it is always added to the structure after compounding has taken place. The suffix is responsible for the grammatical category of the compound and its basic meaning. See (4) for an illustration of the internal structure of Modern Greek exocentric compounds:

(4) Exocentric compounds (Standard Modern Greek)

a. *ipsilómisðos*$_{A}$ < [[[*ipsil-*$_{A}$ + *misð-*$_{N}$] *-Ø*$_{A}$]$_{A}$ *-os*]$_{A}$
'high-salaried' 'high' 'salary' (Ralli 2007)

b. *anixtoçéris*$_{A}$ < [[[*anix*t-$_{A}$ + *çer-*$_{N}$] *-i*$_{A}$]$_{A}$ *-s*]$_{A}$
'open handed' 'open' 'hand' (Ralli 2013)

In this article, we will question the place of head in Greek compounds, following Andreou (2014) who has argued that righthandedness is not an absolute property of Greek compounding and that, although less frequent than righthanded, left-headed structures always existed in Greek. He has based his claims on evidence

drawn from Ancient Greek, as well as from some dialectal systems, such as Cypriot and South Italian Greek, where there are also left-headed compounds.

(5) Ancient Greek

a.	*agilóglōsson*	<	*agíli*(*on*)	+	*glōss*(*a*)	
	'tongue's bridle'		'bridle'		'tongue'	
b.	*theóoinos*	<	*the*(*ós*)	+	*oín*(*os*)	
	'God of wine'		'God'		'wine'	

(6) Cypriot

a.	*fillokrómmiðon*	<	*fill*(*on*)	+	*krommíð*(*in*)	
	'onion leaf'		'leaf'		'onion'	
b.	*stomólakkon*	<	*stóm*(*a*)	+	*lákk*(*os*)	
	'well-mouth'		'mouth'		'well'	

(7) South Italian Greek

a.	*ksilopótamo*	<	*ksíl*(*o*)	+	*potam*(*ó*)	
	'driftwood'		'wood'		'river'	
b.	*korkóššino*	<	*kókk*(*os*)	+	*šín*(*os*)	
	'seed of pistacia'		'fruit/seed'		'pistacia'	(Andreou 2014)

In fact, the existence of left-headed compounds is also attested in Late Medieval Greek, as illustrated in (8), with examples found in a number of written sources, most of which come from areas that have been under Romance influence:

(8) Late Medieval left-headed compounds

a.	*ǰirábelo*	<	*ǰír*(*os*)	+	*abél*(*i*)	
	'perimeter of grapevine'		'perimeter'		'grapevine'	
			(Maras [1549], Kastrofilakas [1558], Katzaras [1622], Crete)			
b.	*ixnópoð*(*os*)	<	*íxn*(*os*)	+	*póð*(*i*)	
	'footprint'		'print'		'foot'	(Livistros and Rodamne [14th–15th c.])[3]
c.	*çilopótamon*	<	*çíl*(*os*)	+	*potam*(*ós*)	
	'edge of a river'		'edge'		'river'	
					(Velthandros and Chrysantza [13th c.])	

[3] Probably written in Rhodes (Krumbacher 1897), or in Constantinople (Lendari 2007).

d. *karpováλsamon* < *karp*(*ós*) + *válsam*(*on*)
'balsam seed' 'seed' 'balsam' (Ierakosophion)[4]

e. *palamóçiron* < palám(*i*) + *çíra*
'palm of the hand' 'palm' 'hand'
(Playful Story about Quadrupeds [14th c.])[5]

We will base our investigation on a corpus of 16.363 dialectal compounds. This corpus is the product of a research conducted by Angela Ralli and George Chairetakis over a seven-year span. The data have been drawn from 12 Greek dialects, namely, Cappadocian, Cretan, Cycladic, Cypriot, Dodecanesian, Heptanesian, South Italian Greek, Maniot, Northern Greek dialects, Peloponnesian (from areas other than Mani and Tsakonia), Pontic and, Tsakonian. They have been collected from a big number of existing written sources (dictionaries, glossaries, grammars and other documents), but also from the oral corpora collected by A. Ralli's research team of the Laboratory of Modern Greek Dialects of the University of Patras and are stored at the electronic database, Di(alectal)Comp(ounds)[6].

More specifically, we will show that:

(i) How right-headed and left-headed compounds are distributed in the dialects,
(ii) Which are the dialects with none or the smallest number of left-headed compounds.

We will attempt to interpret the different distribution of compounds cross-dialectally and will try to provide some tentative explanations with respect to the presence of left-headed compounds.

2. Head in compounding

Head is the component which transmits its basic properties to the word. Plag (2003: 135) defines the term as that which is "generally used to refer to the most important unit in complex linguistic structures". The following criteria are employed for its identification in morphologically-complex words (Scalise & Fábregas 2010; Ralli 2013):

[4] Written in Constantinople around the 13th c. by Demetrios Pepagomenos, the doctor of the Emperor Michael Palaiologos.

[5] Probably written in an area under Romance influence (Tsiouni 1972).

[6] For a detailed description of DiComp and its content, see (Ralli et al. 2020).

(i) **Grammatical category**: The head of a compound formation is considered to be responsible for determining the category of the entire compound formation (Williams 1981).

(9) Standard Modern Greek
xrisóskoni$_{N}$ < *xris*(*ós*)$_{A}$ + ***skón***(***i***)$_{N}$
'golden dust' 'gold' 'dust' (Ralli 2007)

(ii) **Meaning**: A head contributes to the assignment of the basic meaning of the word (Jespersen 1924; Zwicky 1985, among others).

(10) Standard Modern Greek
krifotróɣo$_{V}$ < *krif*(*á*)$_{Adv}$ + ***tróɣo***$_{V}$
'eat in secret' 'secretly' 'eat' (Ralli 2013)

Scalise & Fábregas (2010) have pointed out that, in a compound formation, the formal head and the semantic head must coincide. However, Ralli (2013: 105) has noted that when both constituents share the same grammatical category (for instance N(oun) N(oun) compounds), the semantic criterion can serve as the only test to identify the head of a compound.

(11) Standard Modern Greek
psarósupa$_{N}$ < *psár*(*i*)$_{N}$ + ***súpa***$_{N}$
'fish soup' 'fish' 'soup' (Ralli 2013)

(iii) **Morphological information**: Zwicky had defined the head as the locus of inflection, and according to Namiki (2001) and Scalise and Fábregas (2010), in languages with overt and rich inflection, gender and inflection class (IC)[7] are usually assigned by the head of the formation.

(12) Standard Modern Greek
psarósupa$_{N.FEM.IC3}$ < *psár*(*i*)$_{N.NEU.IC6}$ + *súpa*$_{N.FEM.IC3}$
'fish soup' 'fish' 'soup' (Ralli 2013)

Again, Ralli (2013) has shown that in a headed compound, the morphological information, such as gender and inflection class, do not always derive from the head.

[7] Modern Greek nouns inflect according to eight inflection classes, verbs according to two, while adjectives share with nouns three inflection classes (IC1, IC3, IC5) and have another two (IC9, IC10) for learned formations (see Ralli 2000; 2005 [2022] for details).

For instance, in compounds of a [stem stem] structure, that is, in those which are created via the combination of two stems, inflection is added to the compounding stem as a whole, and sometimes may be different from that of the second member when taken in isolation. As a consequence, in [stem stem] compounds, the transmission of information from the head to the word node can be principally determined as far as the grammatical category and the meaning are concerned.

(13) Standard Modern Greek

cefalóvriso$_{\text{N.NEU.IC5}}$	<	*cefál(i)*$_{\text{N.NEU.IC6}}$	+	*vrís(i)*$_{\text{N.FEM.IC3}}$	
'headspring'		'head'		'spring'	(Ralli 2013)

As already mentioned in the introduction, Greek has a big number of endocentric compounds, the vast majority of which are right headed. It contrasts Romance languages like Italian (Scalise 1992) and Spanish (Rainer & Varela 1992) or even Vietnamese (Lieber 1980), where the head of many binary compounded structures is the first member. In other words, these compounds are left headed:

(14) Left-headed compounds

a. Italian

capostazione	<	*capo*	+	*stazione*
'station master'		'head'		'station'

b. Spanish

papel moneda	<	*papel*	+	*moneda*
'money paper'		'paper'		'money'

c. Vietnamese

nhà ăn	<	*nhà*	+	*ăn*
'place for activities'		'house'		'eat'

Examples like those in (14) weaken Williams' (1981) statement that in morphologically-complex structures the head is always at the right-hand side.

3. Dialectal data and statistics

As already mentioned, in this article, we base our argumentation on the investigation of 16.363 compounds, which are stored at the electronic database DiComp. The distribution of these compounds in the 12 dialects that have been scrutinized so far is the following:

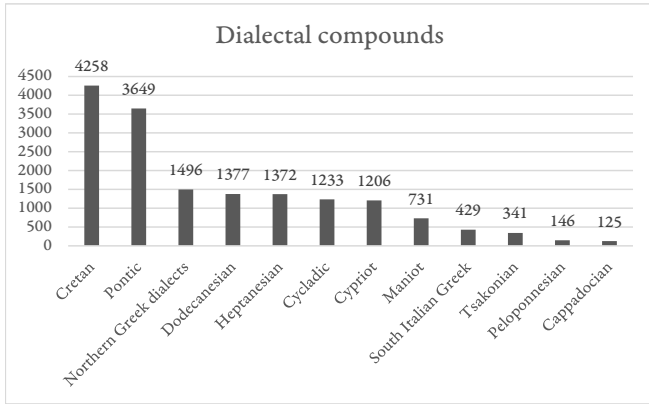

Figure 1: Distribution of compounds in 12 Modern Greek dialects

Among these entries, 10.967 (67,02 %) are endocentric and 5.396 (32,98 %) exocentric:

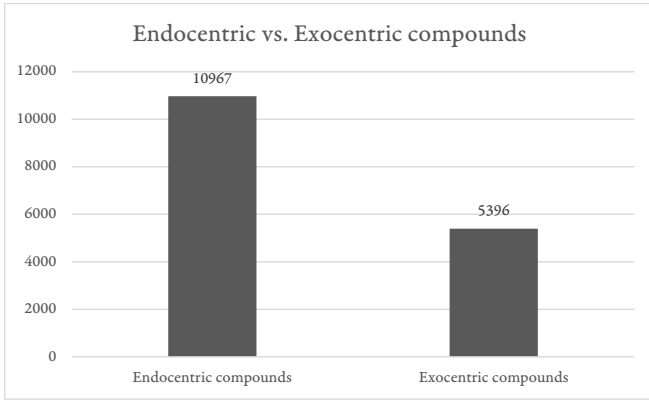

Figure 2: Total number of endocentric and exocentric compounds

We focus on endocentric compounds, that is, on headed structures. We show that beside the right-headed formations, there is a number of left-headed ones. We exclude exocentric formations from our argumentation, since, as mentioned in section 1, we assume that they are headless, as far as the compounding structure is concerned, and that the role of the head is taken by a derivational suffix which is added after the compounding structure has occurred. Moreover, from the 10.967 endocentric

compounds, we also exclude the 591 (5,39 %) coordinative structures, because their structure is unclear with respect to headedness and it is only conventionally considered to have a head (see section 1). From what is left (10.376 endocentric compounds), 10.244 (98,73 %) are right headed and only 132 (1,27 %) are left headed.

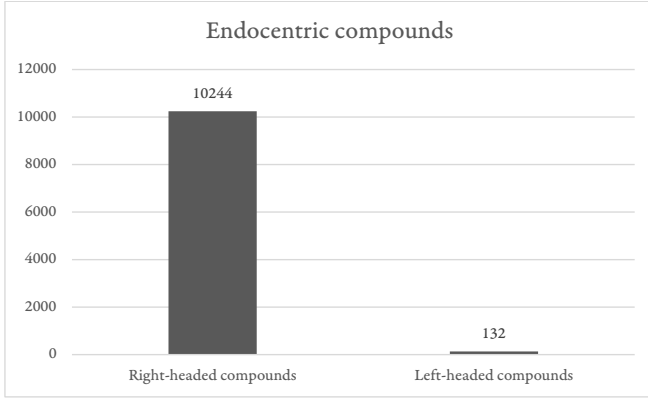

Figure 3: Distribution of endocentric compounds with respect to the place of head

Therefore, our collected data prove that, in the dialectal endocentric compounds of Modern Greek, the prominent position of the head is that at the righthand side. The occurrences of right-headed compounds cross-dialectally are illustrated with the statistical chart in Figure 4.

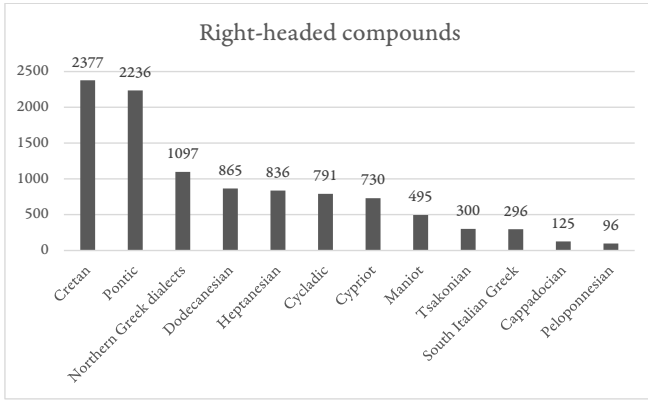

Figure 4: Statistical chart of right-headed dialectal compounds in 12 Modern Greek Dialects

As for the scale of righthandedness in dialectal compounds (more right-handedness → less right-handedness), it is presented as follows, where the dialect is listed first, followed by the percentage of tokens, the number of right-headed compounds and the number of endocentric compounds:

Language	%	Tokens
Northern Greek dialects	100,00 %	1097 / 1097
Cappadocian	100,00 %	125 / 125
Pontic	99,92 %	2236 / 2238
Maniot	99,40 %	495 / 498
Dodecanesian	99,08 %	865 / 873
Cycladic	99,00 %	791 / 799
Cretan	98,55 %	2377 / 2412
Peloponnesian	97,96 %	96 / 98
Heptanesian	97,78 %	836 / 855
Tsakonian	97,40 %	300 / 308
Cypriot	96,95 %	730 / 753
South Italian Greek	92,50 %	296 / 320

Table 1: Scale of righthandedness

Indicative examples of endocentric right-headed endocentric compounds are given in (15):

(15) Right-headed compounds

a. Cretan

bagaðofevɣála	<	*bagá(s)*	+	*fevɣála*
'fast run'		'feet disease'		'fast escape'

b. Pontic

kartofotópin	<	*kartóf(in)*	+	*tóp(os)*
'place with potatoes'		'potato'		'place'

c. Northern Greek dialects (Lesbian)

aɣriʝuðámalu	<	*áɣriʝ(us)*	+	*ðamál*
'wild beef'		'wild'		'beef'

d. Dodecanesian
plizinokúna < *plizín*(*a*) + *kúna*
'watermelon seed' 'watermelon' 'seed'

e. Heptanesian
tubuloperivóli < *túbul*(*o*) + *perivóli*
'garden made of bricks' 'brick' 'garden'

f. Cycladic
scinókukha < *scín*(*os*) + *kukh*(*í*)
'schinus seed' 'schinus' 'seed'

g. Cypriot
anarópita < *anár*(*í*) + *píta*
'pie with cheese' 'kind of cheese' 'pie'

h. Tsakonian
strugoliϑí < *strúg*(*a*) + *liϑí*
'rock as a seat' 'livestock' 'rock'

i. South Italian Greek
rusoxúma < *rús*(*o*) + *xúma*
'red soil' 'red' 'soil'

j. Maniot
ksilóɣata < *ksíl*(*o*) + *ɣáta*
'mouse trap' 'wood' 'cat'

k. Cappadocian
tiflokodiló < *tifl*(*á*) + *kodil*(*ó*)
'stumble blindly' 'blindly' 'stumble'

Let us move now to compounds with left headedness. As shown in Figure 3, they are not as many as those with right headedness: they are only 132 instances, as compared to the 10.244 instances of right-headed compounds. Their cross-dialectal distribution is given in Figure 5:

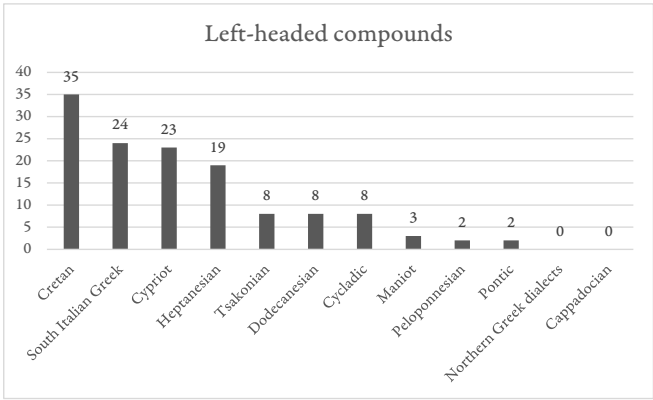

Figure 5: Cross-dialectal distribution of left-headed compounds

For illustration, examples of left-headed compounds from each dialect are listed in (16):

(16) Left-headed compounds

a. Cretan

kasocéra < *kás*(*a*) + *cer*(*í*)
'waxes dirt' 'dirt' 'wax'

rizótixos < *ríz*(*a*) + *tíx*(*os*)
'wall base' 'base, root' 'wall'

b. South Italian Greek

atsidopótamo < *atsíd*(*a*) + *potam*(*ó*)
'ferret which lives near the river' 'ferret' 'river'

klonósparto < *klon*(*í*) + *spárt*(*o*)
'broom stick' 'stick' 'broom'

c. Cypriot

kotsirokámilon < *kótsir*(*a*) + *kámil*(*os*)
'camel's dropping' 'dropping' 'camel'

axnarópoðo < *axnár*(*i*) + *póð*(*i*)
'foot print' 'print' 'foot'

d. Heptanesian
afedábelo < *afédi*(*s*) + *abél*(*i*)
'owner of grapevine' 'owner' 'grapevine'

kalamóçero < *kalám*(*i*) + *çér*(*i*)
'hand's bone' 'bone' 'hand'

e. Dodecanesian
miksofítilon < *míks*(*a*) + *fitíl*(*i*)
'snot similar to a fuse' 'snot' 'fuse'

nevrokútala < *névr*(*a*) + *koutála*
'scapula's nerves' 'nerves' 'scapula'

f. Cycladic
karðjoçímono < *karðj*(*á*) + *çimón*(*as*)
'winter's heart' 'heart' 'winter'

rizoðódja < *ríz*(*a*) + *ðód*(*ja*)
'root of teeth' 'root' 'teeth'

g. Maniot
piɣóspito < *píɣ*(*os*) + *spít*(*i*)
'tower which is used as a house' 'tower' 'house'

plakolíϑi < *plák*(*a*) + *líϑ*(*os*)
'block from stone' 'block' 'stone'

h. Peloponnesian
ponomástaro < *pón*(*os*) + *mastár*(*i*)
'breast pain' 'pain' 'breast'

staxtopíri < *stáxt*(*i*) + *pir*(*á*)
'burning ash' 'ash' 'fire'

i. Pontic
soróliϑos < *sor*(*ós*) + *líϑ*(*os*)
'pile of stones' 'pile' 'stone'

rizótin < *ríz*(*a*) + *otí*(*on*)
'the back of the ear' 'base, root' 'ear'

j. Tsakonian

ponóstoma	<	*pón(o)*	+	*stóma*	
'mouth pain'		'pain'		'mouth'	
xortaropótam(o)			<	*xortár(i)*	+ *potam(ó)*
'grass which grows around river'				'grass'	'river'

In order to render this distribution clear, we present it on the geographic map of the Greek speaking world.

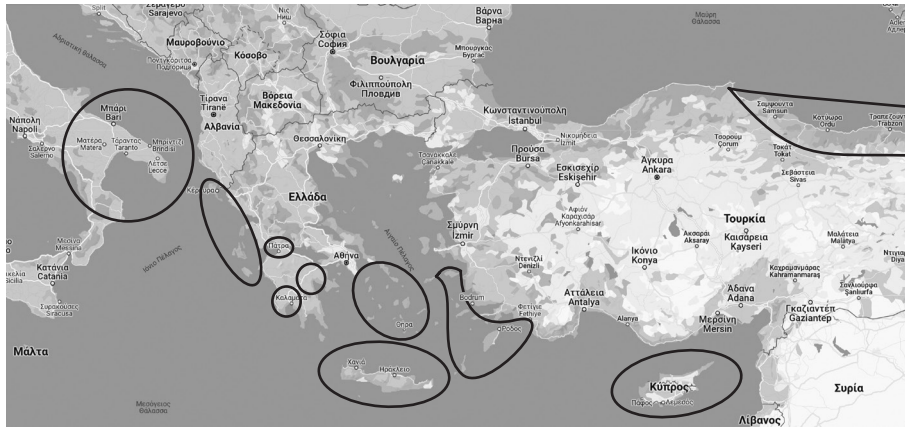

Figure 6: Marking of areas with left-headed endocentric compounds

4. Discussion

In Figure 3, among the endocentric compounds, we see that there is a total of about 132 left-headed structures. What is particularly interesting is the fact that almost all of them are located in the Aegean and Ionian islands, Crete, Cyprus and South Italy, while there are few occurrences in the Peloponnese and Pontus as well. The questions which are raised now is why there are left-headed compounds in these areas, and why the other areas do not contain such structures, at least on the basis of the dialectal systems that we have investigated so far.

It is crucial to observe that the areas where most left-headed compounds appear are exactly those which have been under a long-lasting Romance domination

(among others, Ralli 2019a; Minervini 2019), and, as we have already mentioned in section 2, Romance compounding is principally left headed. Would it, thus, be legitimate to assume that the existence of left-headed structures has resulted from contact with Romance? In favour of this hypothesis is the fact that in the dialects of these areas one can also find compounds which are directly borrowed from Italo-Romance, such as the following:

(17) Cretan
setacrúda/satacrúda < Italo-Romance *seta* *cruda*
lit. silk raw 'silk' 'raw'
'silk cloth' (Attested in a legal document of 1457)

(18) Heptanesian
kapobándos < Italo-Romance *capobanda*
'director of philharmonic orchestra' 'philharmonic orchestra'
(Gasparinatos & Gasparinatou 2004)

The adoption of compounds like those of (17) and (18) is a case of **matter borrowing** in terms of Sakel (2017), that is, it involves transfer of lexical material, since both the compound members are Italo-Romance words. In contrast, left-headed compounds such as those under (16) involve Greek lexical material and only the left-headed structure could be assumed to have been transferred from Romance, principally from Italo-Romance and to a lesser extent from Gallo-Romance[8]. If this is the case, we have an instance of pattern borrowing, that is, borrowing of structure, something which is generally assumed to be more difficult to take place. In the relevant literature, Thomason & Kaufman (1988) have argued that structural borrowing is very low in the borrowing scale, and its occurrence is shown in cases of heavy bilingualism and long-lasting contact (see also Field 2002; Gardani 2020a; 2020b). In fact, instances of structural borrowing are attested in Greek of South Italy a dialect under a heavy Italo-Romance influence (Rohlfs 1977), as is, for example, the borrowing of progressive aspectual structures (see, among others, Squillaci 2016; Ledgeway et al. 2021, etc.), or the loss of the ±perfective opposition on verbal forms precede by the complementizer *na* (19), as opposed to Standard Modern Greek (SMG), which has

[8] In Late Medieval Greek, most Greek-speaking areas were under Italo-Romance domination, while Cyprus and the Peloponnese have also known Gallo-Romance rule (see Ralli 2019a; to appear, for more details).

built its entire verbal system on this opposition. For illustration, consider the following Griko (South Italian Greek from Salento) examples, taken from Filieri (2001):

(19) a. Standard Modern Greek

θélo	*na*	*fonázo*	vs.	*θélo*	*na*	*fonákso*
I.want	to	I.call.IMPF		I.want	to	I.call.PERF

'I want to call'

b. Griko

**télo*	*na*	*fonázzo*	*télo*	*na*	*fonáso*
			I.want	to	I.call.IMPERF/PERF

'I want to call'

Therefore, the attested left-headed compounds in South Italian Greek should not come by surprise; in this area we have the highest rate of left headedness among the compounds of our corpus: 24 left-headed compounds out of 320 tokens (7,5 %).

Nevertheless, it is important to stress that the pattern borrowing of left headedness in the dialects of the other regions could not be uniquely justified on the basis of contact with Romance because in areas like Crete, Cyprus, the Ionian and Cycladic islands, as well as in the Dodecanese, there was no full bilingualism among the population, and, with the exception of the elevated class, no high degree of linguistic contact had occurred (see, among others, Dendias 1923; Soldatos 1967; Papapavlou 1994; Chairetakis 2020; Makri 2020, etc.). In fact, the rate of left headedness in the Hellenic geographic area and Cyprus shows to be lower than that in South Italy: Cypriot displays 23 occurrences over 753 tokens[9] (3,05 %), Tsakonian 8 over 308 tokens (2,6 %), Heptanesian 19 over 855 (2,22 %), Peloponnesian 2 over 98 tokens (2,04 %), Cretan 35 over 2412 tokens (1,45 %), Cycladic 8 over 799 tokens (1 %), Dodecanesian 8 over 873 (0,92 %), while Maniot and Pontic have the lowest rate of left-headed compounds, 3 over 498 (0,6 %) and 2 over 2238 tokens (0,09 %) respectively.

It is not without importance to stress that the highest rate of left-headed compounds, other than that in South Italy, exists in areas where contact with Romance was relatively long-lasting, that is, in Crete, the Ionian islands and Cyprus, and that the dialects which had no influence from Romance, such as Cappadocian, had zero occurrences. Therefore, we are tempted to propose that contact with Romance has

[9] Note though that a substantial amount of Cypriot data (e.g., from the Lazarou 2019 dictionary) has not been inserted yet in DiComp.

played a significant role in the adoption of the left-headed compound pattern in certain areas, but we should also accept that this borrowing procedure was facilitated by the fact that, in the diachrony of Greek, this pattern was not completely unknown, although it existed to a lesser extent than the right-headed pattern, as shown by the corpus of Ancient Greek provided by Tserepis (1902). In other words, we agree with Andreou (2014) that the endogenous linguistic factor has played a certain role, but, assuming an interplay of both the endogenous and the exogenous factors, we propose that priority should be given to the exogenous contact factor, at least for those regions which have been under a long Romance domination. Moreover, we would also like to suggest that the inheritance from Ancient Greek is responsible for the rare presence of left-headed compounds in dialects such as Pontic and Tsakonian, two linguistic systems that are well-known for having preserved Ancient Greek features (see Manolessou & Pantelidis 2011 for Pontic and Costakis 1951 for Tsakonian); the Romance influence on these two dialects was either very weak or absent.

Another piece of evidence in favour of our proposal for a Romance influence on those Modern Greek dialects which have undergone a long-lasting contact with Romance is another possible pattern borrowing, involving V(erb) N(oun) compounds. The structure of these compounds displays the principal compounding pattern of Romance languages in general, as attested in several works, as for example in Scalise (1992), Zwanenburg (1992), and Rainer & Varela (1992) for Italian, French and Spanish, respectively:

(20) a. Italian
portacenere
bring ashes
'astray'

b. French
porteparole
bring word
'spokesman'

c. Spanish
saltamontes
hop mountains
'grasshopper'

Although rare, this pattern is not unknown in Modern Greek. See, for instance, a Standard Modern Greek occurrence such as *xasoméris* 'who loses time', which consists

of the aorist stem *xas-* of the verb *xáno* 'lose' and the stem *mer-* of the noun *méra* 'day'; The same pattern was also common in Ancient Greek, as shown by examples such as *philómusos* 'who loves arts' (< stem *phil-* of the verb *philō* 'to love' + stem *mus-* of the noun *musa* 'muse') and *misánthropos* 'who hates men' (< stem *mis-* of the verb *misō* 'to hate' + stem *anthrop-* of the noun *ánthropos* 'man'). Interestingly, compounds of this type seem to be relatively spread in some specific Modern Greek Dialects, as opposed to both Standard Modern Greek and other dialects which have either none or a very low number of these structures. Our DiComp data base reveals that the rate of V N compounds is higher in Cretan, Heptanesian and South Italian Greek, that is, in the heaviest affected dialects by Romance and more particularly by Italo-Romance [10]. Given the fact that the rate of these structures in all the other dialects of the DiComp database is under 2 %, and along the lines of our position with respect to the presence of left-headed compounds, we would also like to conclude that V N compounds have become relatively popular in Cretan, Heptanesian and South Italian Greek under the influence of Italo-Romance.

(21) a. Cretan

xtipar∂únis	<	*xtip*(*ó*)	+	*arthún*(*i*)	
'irritable'		'hit'		'nostril'	

b. Heptanesian

allaksafentía	<	*alláss*(*o*)	+	*afént*(*is*)	
'change of government'		'change'		'master'	

c. South Italian Greek

survomítti	<	*sourv*(*ó*)	+	*mítt*(*i*)	
'person who sniffles repeatedly'		'sniffle'		'nose'	

5. Conclusions

In this article, we have examined the presence or absence of left headedness in the compounds of a number of Modern Greek Dialects. On the basis of data stored in DiComp, an electronic dialectal database, consisting of 16.363 compounds, we

[10] Cypriot is absent from these rates because, as mentioned in footnote 9, the Cypriot data that are available from the written sources are not fully inserted in DiComp.

have shown that left-headed compounds are relatively frequent in the dialects that have undergone a long-lasting Romance influence, such as South Italian Greek, Heptanesian, Cretan and Cypriot. We have proposed that the contact factor has triggered the proliferation of left-headed structures in these dialects, and that they can be considered as a pattern borrowing case. We have also suggested that their presence was facilitated by the fact that they have not been unknown in the Greek language through its long history, although they have always been less frequent compared to the right-headed ones. Supporting evidence in favour of our argumentation was also brought from another compounding structure, the V N one, which is relatively common in the dialects affected by Romance.

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