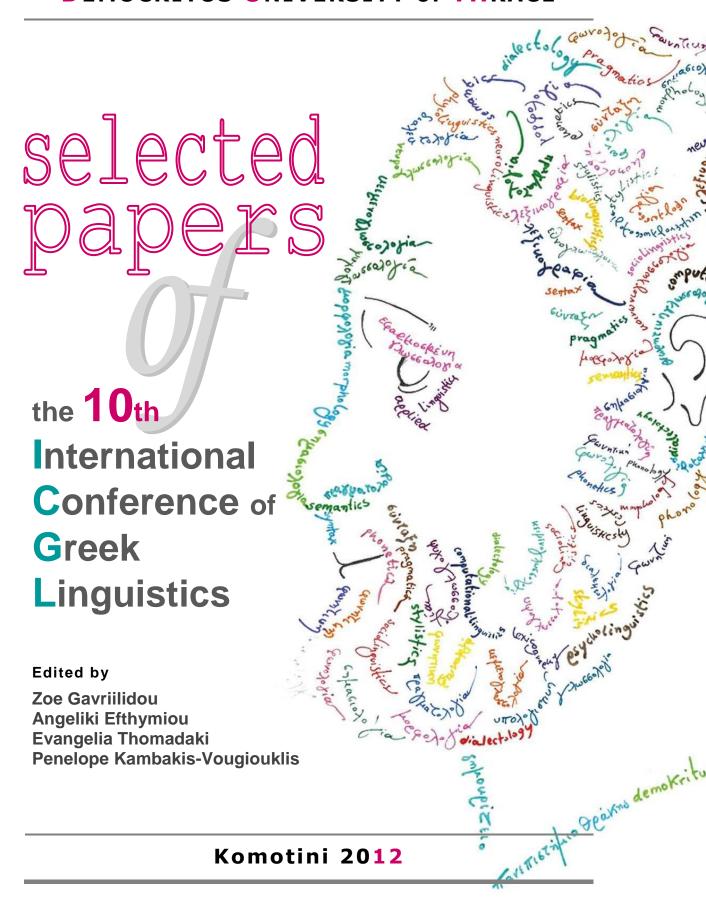
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# 'THERE CAN BE ONLY ONE': THE SINGLE ALLOMORPH SELECTION CONSTRAINT IN GREEK

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#### **ABSTRACT**

Interest in the topic of stem allomorphy has been revived in Mark Aronoff's (1994) work. The Central idea of and its later developments (Booij 1997, Pirrelli & Battista 2000a, 2000b, Ralli 2000, 2007, among others) is the notion that the signifiant of a lexeme is not a single phonological representation, but an array of indexed stems. According to Ralli (2000, 2007), stem allomorphy participates in all word formation processes. Additionally, we admit (Karasimos 2008, 2011) that the allomorphic behavior of lexemes hides common patterns. Based on data coming from Greek nominal derivation, the allomorph index of a lexeme is not totally available during word formation. In current research, we suggest that the non-occurrence of all the allomorphs that serve as basis in derived words depends on the constraint of the unique allomorph selection. This constraint is verified by morphological facts and it should be noted that it is applied to all nominal derived words without exception.

**Keywords:** stem, allomorphy, derivation, compounding, constraints

# 1. Stem Allomorphy: Introduction

#### 1.1 Stem Allomorphy under the spotlight

Research on stem allomorphy has been revived in Aronoff (1994), whose work has led to novel approaches of inflectional and derivational phenomena in morphological research by Booij (1997), Thornton (1997), Pirrelli & Battista (2000a, 2000b), Ralli (2000, 2007), Stump (2001), Bonami & Boyé (2003), Maiden (2004) among others. Aronoff's main idea also followed by other morphologists is that the signifiant of a lexeme is not a single phonological representation, but an array of indexed stems, which may stand in relations ranging from identity through regular phonological alternation, arbitrary change to full suppletion. (cf. Maiden 2004).

# 1.2 Definition of Allomorphy and Theoretical Framework

Expanding the definition of Lieber (1982: 27) for allomorphy, what we define as allomoprhs are the different varieties of the same morpheme, which share such lexical information as semantic representation and argument structure, but that differ unpredictably and arbitrarily in their phonological form and in the morphological environments in which they occur (for example  $\kappa \dot{\nu} \mu \alpha \kappa \dot{\nu} \mu \alpha \tau$  'wave',  $\pi \alpha \dot{\nu} \rho \kappa \dot{\nu} \mu \alpha \kappa \dot{\nu} \lambda \kappa \dot{\nu} \mu \alpha \kappa \dot{\nu} \lambda \lambda \kappa \dot{\nu} \lambda$ 

Ralli (2000, 2007) emphasizes that stem allomorphy is included in the core of morphology and participates in all word formation processes. She suggests that it is one of the basic features for categorizing verbal inflectional classes and nominal inflectional classes.

#### 1.3 The Allomorphic Behavior Principle

Karasimos (2001, 2011) observes that the allomorphic behavior of a morpheme / lexeme is the same in all word formation processes with the unique and systematic exceptions of two specific noun groups that are inflected as the nouns  $\pi\alpha\iota\delta i$  (child) and  $\tau\epsilon\mu\pi\epsilon\lambda\eta\varsigma$  (lazy<sub>N</sub>). These kinds of nominal morphemes participate with new or different allomorphs in derivation and compounding (compared to inflection), since the  $\pi\alpha\iota\delta i$ -type nouns have no allomorphs (e.g.  $\pi\alpha\iota\delta i$  /  $\pi\alpha\iota\delta i$ - $\acute{\alpha}$  'child / children' in inflection and the  $\tau\epsilon\mu\pi\epsilon\lambda\eta\varsigma$ -type nouns participate with a different allomorph than the one(s) used in inflection (e.g, INF  $\tau\epsilon\iota\iota\pi\epsilon\lambda\eta\varsigma$ - $\tau\epsilon\iota\iota\pi\epsilon\lambda\eta\delta$  vs. DER/COM  $\tau\epsilon\iota\iota\iota\pi\epsilon\lambda$  'lazv').

The morphemes that display allomorphic behavior in word formation processes seem to be depend on their behavior in the process of inflection. The allomorphic behaviour principle determines inflection as the primary field of allomorphic comparison, since most allomorphs 'were created' from morphemes reanalysis and from inactive phonological an morphological rules in inflection (see more Karasimos 2011).

(1) i.			
	κύμα/ κύματ-α	κυματ-ίζω¹	κυματ-ο-θραύστης
	kima/ kimat-a	kimat-izo	kimat-o-thrafstis
	'wave' / 'waves'	'to wave'	wavebreaker
	καφέ-ς/ καφέδ-ες	καφεδ-άκι	καφεδ-ο-πωλείο
	kafe-s/ kafedh-es	kafedh-aki	kafedh-o-polio
	'coffee'/ 'coffees'	'small coffee'	'coffee shop'
ii.			
	καράβι/ καράβι-α	καραβ-ίσιος	καραβ-ό-σχοινο
	karavi/ karavi-a	karav-isios	karavo-o-sxino
	'ship'/ 'ships'	'shipborne'	'headrope'
	βάρ-ος/ βάρ-η	βαρ-ίδι	βαρ-ό-μετρο
	var-os/ var-i	var-idhi	var-o-metro
	'weight'/ 'weights'	plumb	barometer
	μπακάλη-ς/ μπακάληδ-ες	μπακάλ-ικο	μπακαλ-ό-γατος
	bakali-s/ bakalidh-es	bakal-iko	bakal-o-γatos
	'grocer'/ 'grocers'	'grocery store'	'employee in a grocery store'
	νταή-ς/ νταήδ-ες	νταηδ-άκος	νταηδ-ό-μαγκας
	dai-s/ daidh-es	daidh-akos	daidh-o-magas
	'bully'/ 'bullies'	'little bully'	'bully-and-bloke'

# 2. Comparing the word formation processes

Comparing the word formation processes of inflection and derivation (and compounding) based on the phenomenon of allomorphy, we can observe several trends among languages. There are languages, like German (2.a), where all the allomorphs of an inflectional paradigm participate in derivation and compounding, while in other languages, such as Dutch and Greek, the above behavior is unlikely to be found.

(2) a. German				
Vater ~ Väter	Vaterland	-	Vättersitte	
'father' - 'fathers'	'homeland'		'ethics of ancestors'	
Mutter ~ Mütter	Mutterfreuden	-	Mütterverschickung	
'mother' - 'mothers'	'mother's joy'		'mothers' decharge note'	
Buch ~ Bücher	Buchbinder	-	Bücherfolge	
'book' – 'books'	'bookbinder'		'series of books'	
				(Lieber 1982)

<sup>&</sup>lt;sup>1</sup> In these paradigms, I do not separate the inflectional suffixes from the derivational. Also in compounding words, the second component is not separated into their morphemes.

b. Modern Greek			
άνθρωπ(ος)	άνθρωπ(οι)	ανθρωπ-ισμ(ός)	ανθρώπ-ιν(ος)
$an\theta rop(os)$	$an\theta rop(i)$	anθrop-ism(os)	$an\theta rop-in(os)$
'man'	'men'	'humanism'	'human'
αυλή	αυλ(ές)	αυλ-ικ(ός)	αυλ-αία
avli	avl(es)	avl-ik(os)	avl-ea
'yard'	'yards'	'courtier'	'curtain'
βήμα	βήματ(α)	βηματ-ίζ(ω)	βηματ-άρα
vima	vimat(a)	vimat-iz(o)	vimat-ara
'step'	'steps;	'stride'	'big step'

However, analyzing data from derivation in Modern Greek, we discover that all the different forms of a morpheme are not fully available during all the word formation processes. For example the noun βήμα 'wave' displays two allomorphs βημα~ βηματ in inflection, it displays only one morpheme form in the process of derivation (βηματ~), e.g. βηματάκι 'small step', βηματάρα 'big step', βηματίζω 'stride'. The same allomorphic pattern of this noun is observed in the process of compounding, in examples such as βηματοδότης 'pacemaker', βηματομέτρηση 'step counting'. As it is demonstrated in the following session (3.), such allomorphic behavior is not random and is solely due to a constraint that applies to all nominal and adjectival stems and suffixes.

# 3. The Single Allomorph Selection Constraint

The process of derivation contains principles and constraints about the categories of stems of derived words that are combined with derivational suffixes. The most common constraint for input-type cases (input constraint) is the number of requirements of a base-stem to be chosen and combined by derivational suffixes. There are a few derivational processes that require even more limited bases. Let's take some examples from German (Riehemann 1998: 54) and Modern Greek:

```
(3) a. German
                                            essbar 'eatable'
         essen 'eat'
         zahlen 'pay'
                                            zahlbar 'payable'
         halten 'hold'
                                            haltbar 'durable'
   b. Modern Greek
                                            ταξιτζής 'taxi driver'
         ταξί 'taxi
         καφές 'coffee'
                                             καφετζής 'coffee shop owner'
                                            τζαμτζής 'glazier'
         τζάμι 'glass'
         σαπούνι 'soap'
                                             σαπουντζής 'soapmaker'
```

Analyzing the above examples from German, the derivational suffix -bar is combined only with base-stems that are transitive verbs to form adjectives; a similar case is the corresponding suffix -baar from Dutch (Booij 2006: 62), which requires the same context subcategorization. For example, the word drink-baar 'drinkable' is derived from the transitive verb drink 'drink'. In Modern Greek there are few derivational suffixes which are attached to specific stems, such as the suffix  $-\tau\zeta\eta(\varsigma)$  in (3.b) which combines only with nominal bases and stems. On the other hand there are several suffixes that do not present any combinational constraints with bases, since they can attach to nominal, adjectival and verbal stems (even adverbial bases). In English the suffix -er is combined with verbs (keep >> keeper, print >> printer) and nouns (Berlin >> Berliner). The greek verbal derivational suffix  $-\varepsilon v(\omega)$  combines with nominal stems ( $\chi o \rho - \delta \varsigma$  'dance' >>  $\chi o \rho \varepsilon \dot{\omega}$  'dance') with adjectival stems ( $\dot{\eta} \mu \varepsilon \rho - o \varsigma$  'meek' >>  $\eta \mu \varepsilon \rho \varepsilon \dot{\omega}$  'tame') and with adverbial stems ( $\kappa o v \tau \dot{\alpha}$  'close' >>  $\kappa o v \tau \varepsilon \dot{\omega}$  'getting close').

More specifically, we maintain that the non-appearance of all the allomorphs as bases in derivation is not random, occasional or not independent from the morphological environment in which the allomorphs appear. I have previously suggested ( $K\alpha\rho\alpha\sigma(\mu\sigma)$  2011a, 2011b) that nominal bases of derived words and nominal stems as first constituents of compound words allow the appearance of only

one allomorph due to a constraint that takes place in the input configuration of a derived or compound word; this constraint prevents the appearance of all allomorphs of each morpheme as basis on a nominal derived word. We call this specific limitation of selection **single-allomorph selection constraint**. I have observed that the Greek derived words fall under the restrictions of this constraint and some allomorphs that participate in inflection are excluded. Since the constraints do not usually apply randomly in a language, but for a reason, I point out that the single-allomorph selection constraint ensures unique uniformity among derived words with a common basis through the appearance of only one form of the morpheme-base.

In the present article, I suggest that the non-appearance of all allomorphs as bases in derivation does not depend on the process itself, since the phenomenon appears also in compounding. I believe that in Modern Greek the reasons for the occurrence of single-allomorph selection constraint are independent; the selection of the single-allomorph is neither random and arbitrary, nor unpredictable. In fact, this particular constraint applies mainly for morphological and phonological reasons.

#### 3.1 Optional phonological conditions

Checking carefully the phonological structure of a derived word base, the existence of stems with a final-character consonant is statistically more significant than with a final-character vowel. According to Ralli's inflectional model  $(2000)^2$ , the nouns in Modern Greek that display allomorphs, have an allomorph that ends with a vowel and another one that ends with a consonant (4.b). The inflectional classes with no allomorphs at all have in majority stems with ending of the XC-type<sup>3</sup> (4.a). The only and systematic exception is the sixth inflectional class of  $\kappa\alpha\rho\alpha\beta i$ -type neutral nouns (4.c, see Karasimos 2011a). On the other hand, verbs with systematic allomorphy (5.a, second inflectional class according to Ralli's model (2004)) display a stem with a final-character consonant and a stem with a final-character vowel (X ~ XV); other verbs without systematic allomorphy (5.b, first inflectional class, see above) can have all their allomorphic types with a consonant as a thematic character.

(4)	a.	άνθρωπ-ος απθrop-ος δάσ-ος δαs-ος μωρ-ό mor-ο		'man' 'forest' 'baby'
	b.	πάπα-ς papa-s θάλασσα θalasa κύμα kima	παπάδ-ες papaδ-es θάλασσ-ες θalasa κύματ-α kimat-a	'priest' – 'priests'  'sea' – 'seas'  'wave' – 'waves'
	c.	καράβι karavi τραπέζι trapezi μολύβι molivi	καράβι-α karavi-a τραπέζι-α trapezi-a μολύβι-α molivi-a	'ship' – 'ships'  'table' – 'tables'  'pencil' – 'pencils'
(5)	a.	αγαπ-ώ αγαρ-ο πηδ-ώ ρiδ-ο	αγάπη-σα aγapi-sa πήδη-σα piδi-sa	'love' – 'loved' 'jump' – 'jumped'

<sup>&</sup>lt;sup>2</sup> Ralli (2000) suggests that there are eight inflectional nominal classes in Modern Greek. The first two contain masculine nouns, the third and fourth (include) feminine nouns and the rest neutral nouns.

<sup>&</sup>lt;sup>3</sup> XC-type: any kind of phoneme (X) and a consonant (C).

	αφαιρ-ώ afer-o	αφαίρε-σα afere-sa	'remove' - 'removed'
b.	πλέν-ω	έ-πλυν-α	
	plen-o	e-plin-a	'wash' - 'washed'
	ξεχν-ώ	ξεχα-σα	
	ksexn-o	ksexa-sa	'forget' - 'forgot'
	ρουφ-ώ	ρουφηγ- $\sigma \alpha^4$	
	ruf-o	rufiγ-sa	'suck' - 'sucked'

Structurally, over eighty percent of the derivational suffixes that combine with nouns/ or nominal bases and adjectives/ or adjectival bases start/begin with a vowel. To maintain the optimal syllabic structure CV, the base "should" have a morpheme ending with a consonant (if applicable). Therefore, although it does not form a requirement, the allomorph ending with a consonant is qualified as the only and final choice. For example, the verbal suffix  $-i\zeta(\omega)$ , when combined with the lexeme KYMA 'wave' which has the allomorphs  $\kappa\nu\mu\alpha\tau$ ; the allomorph  $\kappa\nu\mu\alpha\tau$  is joined with the derivational suffix and that way the optimal syllabic structure is achieved. The highly productive subclass of diminutive and augmentative derivational suffixes have all their suffixes starting with vowel, like  $-\dot{\alpha}\kappa\iota$ ,  $-\dot{\alpha}\rho\alpha$ ,  $-\dot{\alpha}\nu\alpha$ ,

I have to clarify here that I do not maintain that the derivational suffix selects the proper allomorph of the base/ stem/ root, but that the phonological structure of the suffix justifies the "choice" of the specific stem allomorph. Moreover, there are a few derived words with their optimal syllabic structure violated in the absence of an alternative morpheme (allomorph), as for example the stem  $\lambda\alpha(\delta\varsigma)$  'people' >  $\lambda\alpha$ - $\iota\kappa(o\varsigma)$  'folkish',  $\mu\nu\sigma\tau\dot{\eta}\rho\iota(o)$  'mystery' >  $\mu\nu\sigma\tau\eta\rho\iota$ - $\alpha\kappa(o\varsigma)$  'mystic',  $\rho\dot{\alpha}\beta(\omega)$  'sew' >  $\rho\dot{\alpha}\phi$ - $\tau\eta(\varsigma)$  'tailor'. Therefore, the derivational suffix does not require a specific form of a basis-morpheme, since if that was the case, then this characteristic would constitute a universal property of all suffixes, which is to select the proper form of a basis-morpheme.

#### 3.2 Morphological conditions

The derivational suffixes "adopt" the same allomorphic behavior as the stems. Therefore, we expect that the suffixes share the same context information and morphological environment with their allomorphs. More specifically, when a derivational suffix, that is going to be combined with a simple or a derived stem, is followed by an another derivational suffix, it will be placed in the second level of derivation process in a non-head position and will display only one allomorph. Derived base is called the combination of a stem and a derivational suffix, e.g.  $[\alpha v\theta\rho\dot{\omega}\pi-iv-]$  'human.NoINF<sup>5</sup>',  $[\chi\rho\rho-\varepsilon v-]$  'dance<sub>V</sub>.NoINF',  $[\rho\mu\rho\rho\phi-\dot{\phi}\tau\varepsilon\rho-]$  'more beautiful.NoINF'.

Plag (1999) and Hay & Plag (2004) claim that the basis of a derived word demands a specific allomorph of the derivational suffix; we maintain that this fact can be modified in Modern Greek derivation. More specifically, the basis demands a specific allomorph of derivational suffix *if and only if* the derivational suffix participates in another derivational suffixation process; thus it is obliged to obey the single-allomorph selection constraint. In English, such constraints apply only to specific groups of morphemes or suffixes. On the contrary, in Modern Greek each base selects the proper allomorph of a suffix, if it is any further suffixation (6.a). A similar procedure applies in cases of suffixation in compound words, such as  $\chi o \rho - o - \pi \eta \delta \eta \chi - \tau - o \delta \lambda \eta \zeta$  'gamboler',  $\delta \iota \kappa \tau v - o - \tau \rho \rho \iota \rho - \tau \iota \kappa - \delta \zeta$  'cyber-terroristic',  $\alpha \epsilon \rho - o - \mu \alpha \chi \eta - \tau - \iota \kappa - o \zeta$  'air-fighter plane' (6.b).

<sup>&</sup>lt;sup>4</sup> The type 'ρούφηξα' is created after the phonological rule of dissimilation.

<sup>&</sup>lt;sup>5</sup> NoINF = absence of inflectional suffix.

(6) a.	κλαίω kleo	κλαι∼ κλα kle~ kla	DER	κλά-μα/ κλά-ματ-α kla-ma/ kla-mat-a	>>	κλα-ματ-άκι kla-mat-aki
	'cry'	'allomorphs of	'cry'	'crying / cryings'		'short crying'
b.		ι~ αερ) + μάχομαι	COM	αερ-ο-μαχη-τη-ς		μαχη-τ-ικ-ο
	aeras (aera~ 'air'	aer) + maxome 'fight'		aer-o-maxi-ti-s 'pilot-fighter'		naxi-t-ik-o shter plane'

No information for the morphological environment of a non-head position is included in languages like German. The allomorphs of/in German are characterized by Lieber (1980) as singular and plural ones; she uses inflectional terms to categorize allomorphy. This characterization is not only morphological concerning the inflectional paradigm, but it is also semantic, because it implies the meaning of the singularity (SINGULAR) and quantity (PLURAL), as it is mentioned by Lieber (2.a). On the contrary, in Modern Greek it is possible for two allomorphs to occur in the same inflectional subparadigm, as for e.g. the nouns of IC8 ( $\beta\dot{\eta}\mu\alpha$ -type nouns) that 'use' the "plural" allomorph-t ( $\beta\dot{\eta}\mu\alpha\tau$ - $\alpha$  'steps',  $\kappa\dot{\nu}\mu\alpha\tau$ - $\alpha$  'waves',  $\mu\alpha\theta\dot{\eta}\mu\alpha\tau$ - $\alpha$  'lessons') also in the singular genitive ( $\beta\dot{\eta}\mu\alpha\tau$ - $\alpha\varsigma$  'of step',  $\kappa\dot{\nu}\mu\alpha\tau$ - $\alpha\varsigma$  'of wave',  $\mu\alpha\theta\dot{\eta}\mu\alpha\tau$ - $\alpha\varsigma$  'of lesson'). Furthermore, the allomorphs in Modern Greek are characterized by morphological information and do not contain any potentially hidden non-morphological information, such as semantic markedness. Additional morpho-semantic information for a lexeme, such as if it/ that is an Ancient Greek relic, puristic Greek, or a calque, is not attached to its allomorphs, since this information is not helpful for the selection of the proper allomorph in derivation and compounding. According to Booij (1997), the feature [+ CALQUE] in Dutch seems to cause a different behavior in lexemes and the selection of a non-expected allomorph.

#### 3.3 'Counterexamples' of single-allomorph selection constraint

Drachman (2006) gives some examples from Modern Greek, which seem to form exceptions of the single-allomorph selection constraint. He introduces the term 'shared allomorphs' which 'are produced' from a basic form, have an independent status in the word formation processes involved, but are more or less related to each other, so in essence the notion of 'derived from' or 'created from' is no longer necessary.

```
(7) a.
        κρέ-ας/ κρέατ-α κρεατ-ερό, κρεατ-ίλα, κρεατ-ινό
        kre-as/ kreata
                         kreat-ero, kreat-ila, kreat-ino
         'meat'/ 'meats'
                         'fleshy'
                                    'smell-of-the-meat' 'of-meat'
                          κρε-ο-πώλης, κρε-ο-φάγος, κρε-ο-κοφ-τήρας
                         kre-o-polis, kre-o-faγos, kre-o-kof-tiras
                          'butcher'
                                       'meat-eater' 'minching machine'
                          κρεατ-ο-πωλείο, κρεατ-ο-σανίδα, κρεατ-ο-πιτα
                         kreat-o-polio, kreat-o-saniδa, kreat-o-pita
                          'butcher's shop' 'meat-board'
                                                          'mince pie'
        αίμ-α/ αίματ-α
                         αιματ-άκι, αιμάτ-ωμα
        em-a/ emat-a
                         emat-aki, emat-oma
        'blood'/ 'bloods'
                                    'hematoma'
                         αιμ-ο-σφαίρια, αιμ-ο-δοσία, αιμ-ο-ρραγία
                         em-o-sferia. em-o-δosia. em-o-rajia
                          'blood capsule' 'blood donation' 'bleeding'
                         αιματ-ο-βαμμένος, αιματ-ο-κύλισμα, γλυκ-ο-αίματ-ος
                         emat-o-vamenos, emat-o-kilisma, ylik-o-emat-os
                          'bloodstained'
                                             'carnage'
                                                              'sweet-blood'
                          ημερίσιος (*μερίσιος), ημερομίσθιο (*μερομίσθιο)
     b. (η)μέρα
                          imerisios (*merisios), imeromisθio (*meromisθιο)
        (i)mera
                          'daily'
                                                'wage'
                          μερόνυχτα
```

meronixta 'days and nights'

(ε)νοίκι(ο) νοικιάζω, ενοικιαστής (\*νοικιαστής), νοικιάρης (\*ενοικιάρης) (e)nici(o) nicjazo, enicjastis (\*nicjastis), nicjaris (\*enicjaris)

'rent<sub>v</sub>' 'tenant' 'roomer'

(ο)μιλώ μίλησε, ομιλητής (\*μιλητής) (ο)milo milise, omilitis (\*militis)

'spoke' 'speaker'

(Drachman 2006: 14, 19)

The examples in (7a) seems that they seem to be counterexamples of the constraint presented here; however, the truth lies somewhere in the middle. First of all, I have to underline that this constraint has no exceptions of derived words with nominal and adjectival stems. The case of the noun αίμα 'blood' with the allomorphs  $\alpha \mu \alpha \sim \alpha \mu \alpha \sim \alpha \mu$ , Karasimos (2001) has exhibited its peculiar behavior in the process of compounding. The derived words from  $\alpha i \mu \alpha$  'blood' use only the allomorph  $\alpha i \mu \alpha \tau$ , obeying to the single-allomorph selection constraint. The compound words from  $\alpha i \mu \alpha$  are divided into three groups: (a) compound words with the stem  $\alpha u \mu \alpha \tau \sim as$  their second component, (b) compound words with the allomorph aux- as their first component; these words came from French, Ancient Greek or International Greek and (c) compound words with the allomorph αιματ~ as their first component; these words came from English or from Modern Greek. As Ralli & Karasimos (2008, 2009a, 2009b) argue for the bare-stem constraint, the compound words formed in International Greek or by non-native speakers, violate the rules, principles and constraints of the compounding process, as they are created outside of the morphological word formation processes of the Greek language. Regarding the case of the noun  $\kappa\rho\epsilon\alpha\varsigma$  'meat' with the allomorphs  $\kappa\rho\epsilon\alpha\sim\kappa\rho\epsilon\alpha\tau\sim\kappa\rho\epsilon\sim$ , its derived words follow the constraint without exceptions, while the word participates in compounding with two allomorphs ( $\kappa \rho \varepsilon \alpha \tau \sim \kappa \rho \varepsilon$ ), since it is a word from Ancient Greek with a double inflectional paradigm (see Economou 1971: 85-86); therefore the 'relic-type allomorph'  $\kappa \rho \varepsilon \sim$  is used into words that were created in previous phases of Greek. Furthermore, the examples (7b) are in no way allomorphs, as the optional phonological deletion of the initial vowel, by definition, does not constitute a case of allomorphy (see Karasimos 2011a).

Finally, it is necessary to point out that the single-allomorph constraint makes no exception in the whole process of derivation and applies to all nominal and adjectival stems (we except that there will not are also no exceptions in Modern Greek Dialects) and allows us to predict which allomorph is going to be used. In languages, like German (Lieber 1981) the single-allomorph selection constraint does not exist, but we expect that languages with extended allomorphy may display this constraint.

#### 4. Conclusion

The derivational suffix does not force the base of a derived word to participate with the proper allomorph, as this would be a universal feature of all suffixes. The single-allomorph selection constraint applies in Modern Greek, is definitely not a universal constraint, but it may also apply in other allomorphically rich languages. This constraint refers to a morphological phenomenon (allomorphy) which changes are arbitrary and unpredictable; however the constraint is characterized by predictability and regularity. Furthermore, Karasimos (2011a) claims that this constraint provides us important advantages to analyze computationally this phenomenon, to export allomorphic rules and to improve the performance of a parser through predictability of allomorph selection.

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