Theoretical and diachronic aspects of augmentation: Evidence from Greek[1]

DIMITRA MELISSAROPOULOU   IO MANOLESSOU
University of Patras   *Academy of Athens*
dmelissa@upatras.gr   manolessou@academyofathens.gr

0. Abstract

This paper investigates the evolution of the morphological process of augmentative suffixation in the light of evidence provided by Greek. Two alternative pathways are examined: the evolution of augmentative suffixes from a) inflectional suffixes and b) derivational suffixes originally associated with different functions. On this basis, a novel theoretical proposal is elaborated, which assumes that augmentation is triggered by inflectional restructuring and gender changes for the differentiation of a) [+/- animate] and b) normal size vs. diminutive nouns. In this analysis, inflection seems to lie behind the formation of a new derivational process, that of augmentative suffixation, thus arguing against the discreteness of morphological processes and in favour of the existence of a morphological continuum, offering further support to the claim that there is considerable overlap between inflection and derivation.

1. Introduction

Evaluative morphology is a favourite topic in current linguistic theory; numerous papers have been published, focusing either on its position in grammar (among others Stump 1993, Bauer 1997, Scalise 1988, Melissaropoulou & Ralli 2008) or on the morphopragmatics and morphosemantics of the specific process (among others Jurafsky 1993, 1996, Dressler & Barbaresi 1994, Grandi 2002), with the onus of research lying on diminutives rather than augmentatives (however, cf. Dressler & Barbaresi 1994, Grandi 2002, Melissaropoulou forthcoming). This imbalance may perhaps be attributed to the fact that augmentatives display a rather limited productivity[2] compared to that of diminutives, something which might account for the fact that they have not equally drawn linguists' attention.

Augmentatives express the denotational meaning BIG, but may also realize a range of evaluative readings, such as exaggeration and intensification (Bakema & Geeraerts

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[2] Research on augmentatives is quite difficult to implement, because they belong to low registers and appear in texts very rarely (cf. Daltas 1985:63, Triantafyllides, 1991:125). This is a well known methodological problem with cross-linguistic validity.

2004:1045), and are generally viewed as the semantic counterpart of diminutives (cf. Schneider 1991 and Dressler & Barbaresi 1994).

The aim of this paper is to investigate the morphological process of augmentative suffixation in the light of evidence provided by the diachrony of Greek. More specifically, it hopes to shed light on the diachronic process of formation of augmentative suffixes. Two alternative pathways are examined: the evolution of augmentative suffixes from a) inflectional suffixes and b) derivational suffixes originally associated with different functions. Our data allow the elaboration of a new theoretical proposal, that the derivational process of augmentation can be triggered by inflectional restructuring and gender changes (cf. Corbett 1991, Grandi 2002).

Both functional and generative notions of the theory of morphological change (cf. Haspelmath's 1995 account of morphological reanalysis and Lass's 1997 notion of non-junk exaptation) will be evaluated against the data. The above discussion is intended as a contribution towards the central issue of the morphological status of augmentative formations as instances of inflectional or derivational processes, from the viewpoint of diachrony.

The paper is organized as follows: Section 2 provides the basic theoretical premises of the analysis. Section 3 sets out the data and describes the formal mechanism of affix creation. Section 4 develops the theoretical proposal. Finally, the conclusion summarizes the main points of the analysis.

2. Premises

Depending on the framework adopted, the mechanisms used to describe diachronic change can vary significantly and, in some cases, contradict each other.

One school of thought is the functionalist approach to *grammaticalization*, which is defined as a) a change whereby a unit acquires a grammatical or a more grammatical function it already has and/or b) a change strengthening the internal dependencies between the parts of a constructional schema (cf. Hopper & Traugott 1993, Bybee et al 1994, Heine et al 1991, Haspelmath 1998), a process which is standardly viewed as unidirectional[3]/[4]. The generative literature on the other hand tends to downplay the notion of grammaticalization (however, cf. Roberts 1993, Roberts & Roussou 2004), preferring instead to describe syntactic change on the basis of *reanalysis*[5].

Reanalysis usually refers to a change in the underlying structure that does not entail any change in the surface structure (see among others Langacker (1977:59)[6], Harris &

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[3] This means that no development of less grammatical from more grammatical structures or elements is expected and that the attested counterexamples are relatively few or idiosyncratic, in some cases even disputable (cf. Traugott and Heine 1991, Haspelmath 1998, 2004, Kiparsky, 2005).

[4] For a different view cf. among others Ramat (1998), van de Auwera (2002).

[5] Different terms, except reanalysis, are used in the relevant literature to cover the same mechanism such as meta-analysis, back-formation, hyper-correction, folk-etymology etc.

[6] According to Langacker (1977:59) reanalysis is a *"change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation"*.

Campbell (1995:51)). Along with *extension* and *borrowing*, they are considered the only three mechanisms responsible for syntactic change (cf. Harris & Campbell 1995)[7].

A related term is that of *exaptation*, proposed by Lass (1997:316, 319), who defined it as "*a kind of conceptual renovation, as it were, of material that is already there, but either serving some other purpose, or serving no purpose. […] in exaptation, the 'model' itself is what's new*".

Crucially, considerable literature has been published discussing the interrelation of the above-mentioned mechanisms, ranging from the complete denial of the reanalysis mechanism (McDaniels 2003) or its dissociation from grammaticalization (cf. Haspelmath 1998[8]), to its inclusion or close relation to the latter (cf. Hopper & Traugott 1993[9], Heine et al (1991)[10] or even the reduction of grammaticalization to reanalysis (cf. Harris & Campbell 1995[11]).

Narrowing down these notions for the purposes of this paper, we should note that reanalysis cannot describe adequately the mechanisms involved in the evolution of Greek augmentative suffixation, since in the case of the -´_os and –a suffixes (see below for their description) it cannot predict the fact that their original function is maintained while a new one is simultaneously realized. Crucially, reanalysis involves change in the underlying structure, which in morphological terms corresponds to word or morpheme boundaries, something which does not occur with the morphemes in question. Unfortunately, the notion of reanalysis has been built and almost always exemplified on the basis of syntactic data, thus the implementation of this specific mechanism in morphology is not equally developed (but cf. Deutscher 2001)[12].

Additional terms necessary for the present analysis are the following adopted from Haspelmath's (1995) proposal concerning the growth of affixes in morphological reanalysis):

Affix-secretion (Haspelmath 1995:8), describing those cases where "*a non-affixal part of the root is reanalyzed as part of an affix*".

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[7] For a different view arguing against the existence of reanalysis cf. McDaniels (2003:81-88). According to him a) reanalysis is not differentiated from exploratory expression and extension b) the role of pragmatics makes the use of the term reanalysis even more controversial and c) depending on the theoretical biases, (e.g. emergent grammar) reanalysis could be deprived of its reason of being.

[8] According to Haspelmath (1998: 315), "*The large majority of syntactic changes are instances of pure grammaticalization and should be explained within the framework of theory of grammaticalization without reference to reanalysis. […] Grammaticalization and reanalysis are disjoint classes of phenomena*".

[9] "*Unquestionably, reanalysis is the most important mechanism for grammaticalization*" Hopper & Traugott (1993:32).

[10] "*Typically reanalysis accompanies grammaticalization*" […] "*grammaticalization and reanalysis appear to be inseparable twins*" Heine et al (1991:27)

[11] As stated in Kiparsky (2005:4, 19, 31), Harris & Campbell (1995:90) reduced grammaticalization to reanalysis by distinguishing grammaticalization from analogy as "innovative reanalysis", in the sense that an existing category A is reparsed as a new category B.

[12] However, see Aronoff & Sridhar (1988:189) emphasizing on the role of reanalysis in morphological change, showing their antipathy for grammaticalization.

Affix-incretion (Haspelmath 1995:20), describing those cases where "*part of the affix is reanalyzed as part of the root*".

Affix splitting (Haspelmath 1995:20), describing those cases where "*a single affix is split in two smaller ones that can be used separately*".

Closing this section, what could be a preliminary observation is that contrary to Haspelmath's (1995) predictions, those patterns that are thought to be rare or counter-intuitive (i.e. *affix-incretion* and *affix splitting*) prove to play a crucial role for the evolution of a new derivational category, i.e. Greek augmentative suffixation.

3. Data: Description of the system

Let us start by stating the most obvious facts, which make Greek augmentative morphology conform to the patterns established on the basis of a considerable cross-linguistic sample (cf. Dressler & Barbaresi 1994, Grandi 2002, 2003[13]):

a) There are two types of suffixal augmentatives: Type I- those which augment the thing itself (*míti* 'nose' > *mitára* 'big nose') and Type II-those which indicate the person possessing the augmented thing (*míti* 'nose' > *mitarás* 'a person with a big nose')

b) Greek augmentatives are exclusively masculine and feminine, Greek diminutives belong to all three genders, but neuters are more frequent (Daltas 1985, Detsis, 1985, Melissaropoulou 2007, forthcoming).

c) Most complex augmentative suffixes developed from diminutive suffixes.

d) The implicational universal proposed by Schneider (1991) and Dressler & Barbaresi (1994), according to which the presence of augmentatives entails the presence of diminutives but not vice versa is valid for Greek as well. Greek developed suffixal augmentatives in the Medieval period (circa 12th c.) through the influence of diminutive morphology.

e) Greek seems to verify the well documented cross-linguistic trend towards iconic phonological realization of evaluative morphology,[14] in that augmentatives suffixes involve exclusively low and back vowels, while in diminutive suffixes the front vowel /i/ predominates.

We may group Modern Greek augmentative suffixes in 3 groups on the basis of their etymological provenance.

Group A: Bare inflectional suffixes: masculine: *-a, –´_os*
(1) a. -a

maçér-a	<	maçéri
'big knife'		'knife'
varél-a	<	varéli

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[13] Grandi (2003:140-141) attributes the evolution of the diminutive semantic value to the designation of a genealogical relation between the adult and the young, which he views as a 'strong typological matrix', acknowledging the lack of correspondence with the augmentatives. In his view, their evolution can be better accounted for in terms of areal constraints – tendencies.

[14] Cf. Wescott (1971)- despite the negative view expressed in Bauer (1996); the corpus he examines does show that the tendency exists at least in IE languages.

'big barrel'		'barel'
kolocíθa	<	kolocíθi
'big pumpkin'		'pumpkin'

   b. -_os

pórð-(os)	<	porðí
'big fart'		'fart'
tír-(os)	<	tirí
'big quantity/piece of cheese		'cheese'
mít-(os)	<	míti (Dod.)
'big nose'		'nose'

Group B: Complex derivational suffixes made up from (part of) a diminutive suffix plus a masculine or feminine inflectional marker: *-ara, -ar(os), -aka, -ak(os)*

(2) a. -ara

fon-ára	<	foní
'big voice'		'voice'
aft-ára	<	aftí
'big ear'		'ear'
poð-ára	<	póði
'big leg'		'leg'

   b. -ar(os)

péð-ar(os)	<	peðí
'big/handsome boy'		'child, boy'
koríts-ar(os)	<	korítsi
'big girl'		'girl'
scíl-ar(os)	<	scíl(os)
'big dog'		'dog'

   c. -aka (mainly in Mani)

velon-áka	<	velóni
'big needle'		'needle'
nis-áka	<	nisí
'big island'		'island'

   d. -ak(os) (Cyprus, Rhodes)

katsell-ák(os)	<	katsélla
'big chest'		'chest'
mastrap-ák(os)	<	mastrapá(s)
'big pot'		'pot'

Group C: Innovative augmentative suffixes: *-u/akla, -uklas, -u(m)ba*.

(3) a. -u/akla

psar-úkla	<	psári
'big fish'		'fish'
fon-ákla	<	foní

'big voice'		'voice'
mat-úkla	<	máti
'big eye'		'eye'

    b. -akla(s)

á(n)dr-akla(s)	<	á(n)dra(s)
'big/handsome man'		'man'
aráp-akla(s)	<	arápi(s)
'big negro'		'negro'

    c. -u(m)ba

kremið-ú(m)ba	<	kremíði
'big onion'		'onion'
cil-ú(m)ba	<	ciʎá
kafeð-ú(m)ba	<	kafes~kafeð
'big quantity of coffee'		'coffee'

Let us look at the historical process of evolution leading to the creation of the above groups of suffixes. Group A: the suffixes –*a* and –*os* were quasi- inflectional suffixes (cf. Haspelmath 1995: 3 for the term), marking specific inflectional classes (the "first" and the "second" declension, in traditional terms- cf. e.g. Woodard 2008: 24-26). In Ancient, Koine and Medieval Greek –*a* and –*os* were involved in inflectional and not in derivational processes.

These elements, while maintaining their original inflectional function, acquire an additional grammatical function. Within the framework of grammaticalization, this constitutes a special case of exaptation, namely non-junk exaptation (cf. Norde 2002: 55-56 who exemplifies via "a [Swedish nominal] suffix that was exapted for derivation, but retained its original inflectional function nevertheless"). Crucially, –*a* and –´_*os* still play an important role in Modern Greek nominal inflection (cf. Ralli 2000 for a detailed analysis).

According to traditional descriptions, the acquisition of augmentative meaning of these suffixes is mediated through the parallel existence of neuter diminutives, which had probably already lost their original diminutive meaning[15]. Schematically:

(4)

κεφαλ-ή	>	κεφάλ-ιον	>	κεφάλ-ι(ν)	>	κεφάλ-α
kefal-é:	>	cefál-ion	>	cefál-i(n)	>	cefál-a
'head'		'small head'		'(small) head'		'big head'

In the above example, no change in morpheme boundaries is observable. On the contrary, what has occurred is the reinterpretation of inflectional material as derivational one.

Passing now to group B suffixes, quite different mechanisms are in play. In both cases presented below, the point of origin seems to be derivational material, and more specifically diminutive suffixes. In the first case, part of the derivational suffix comes to

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[15] cf. Jannaris (1897: 292) for relevant information.

be reanalysed as part of the root[16]. This, in terms of Haspelmath (1995) is *affix incretion*, a process which is rather counter-intuitive and thus expected to be rare. As a second step, the new reanalysed stem combines with the inflectional suffixes of group A, leading to a second reanalysis, *affix secretio*n this time: part of the root is reinterpreted as part of the affix, which creates a new complex suffix, able to act as an independent derivational element attaching to new roots. Schematically:

(5)

πούς > ποδ-άριον > ποδάρ-ιον   > ποδάρ-α > ποδ-άρα > φων-άρα   (< φωνή)
pu:s > poð-árion > poðár-ion > poðár-a > poð-ára > fon-ára   (< foní)
'foot' 'small foot' '(small) foot'   'big foot'   'big foot'   'big voice' (< voice)

A more complex case is that of –*aka, -akos, -akas*. In this case, the diminutive suffix, which is itself the result of reanalysis (affix secretion again), is interpreted by the native speaker as being made up of two discrete constituents, because its final part, i.e. -*i*, is reanalyzed as inflectional marker. This is affix splitting in terms of Haspelmath (1995), again a counter-intuitive process. Schematically:

(6)

ρύακ-ς > ρυάκ-ιν   > ρυ-άκιν   > βελον-άκι   (< βελόνα) > βελον-ακ-ι
rýak-s > riák(c)-in   > ri-ácin   > velon-áci   (< velóna) > velon-ak(c)-i
'brook' 'small brook' '(small) 'brook 'small needle' (<needle)   > 'small needle"
                             > βελον-άκ-ος
                               velon-ák-os
                               'big needle'

It would be difficult to argue that -*aki* became at any point the subject of affix incretion, namely that it was reanalyzed as part of the root. This is because it is by far the most productive diminutive suffix (cf. Melissaropoulou 2007 and references therein). Therefore, affix splitting is preferred over the analysis presented above for –*ari*, i.e. *affix incretion*, since the latter, from the early Middle Ages onward was no longer understood as a diminutive suffix.

Group C augmentative suffixes, i.e. –*u(m)ba, and -a/ukla, -a/uklas*, are of unclear etymological origin. -*a/ukla, -a/uklas*, according to Modern Greek dictionaries (Andriotis 2001, INS 1998, Babioniotis 1998) have an unclear connection with two homonymous latin suffixes –*c(u)lum* with a feminine ending –*a*, one bearing a diminutive meaning (e.g. *pisci-culus* 'small fish' < *piscis* 'fish'), and the other a deverbal one (e.g. *habitaculum* 'residence' < *habito* 'to inhabit'). The difficulty in attributing the Greek augmentative suffix to the Latin ones lies in the fact that the number of Latin loanwords in Greek with this ending is extremely limited (e.g. *panukla* < panucula (Lat.) 'plague', *kukla* < cuculla (Lat.) 'puppet') and their meaning has nothing to do with either

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[16] The process is assisted by the borrowing of the latin suffix –*arium*, which has no diminutive meaning, and is extremely productive in creating neuter nouns (e.g. *armari* < *armarium* (Lat.)). Cf. Jannaris (1897: 293) and Minas (2003).

diminution or augmentation. As for *–u(m)ba*, it is not mentioned in Modern Greek dictionaries as it is a recent (21st century) formation, therefore no etymological information is available yet. The few older words with this ending are mainly of Latin or Turkish origin, bearing once again no evaluative meaning (e.g. *tulu(m)ba* 'a kind of sweet', *tu(m)ba* 'somersault'). Consequently, type C affixes will be excluded from the present discussion, since a consistent analysis is impossible at this point.

 Summing up, in this section, three basic mechanisms of augmentative suffix formation have been established. In the rest of the paper we will concentrate on the first two mechanisms, which are of considerable theoretical interest and represent two different paths of diachronic morphological change.

4. The proposed paths of evolution

In the cases described above, the parallelism with diminution was a prerequisite. This does not come as a surprise, since, as already mentioned, typological research has shown that augmentation entails the presence of diminution. However, diminutives constitute a necessary but not a sufficient condition for the evolution of their counterparts. Greek is a case in point: AG and Koine Greek possess a rich system of diminutive suffixation (-*ion, -idion, -arion* etc.) but only augmentatives of type II (i.e. those denoting a person bearing a property / characteristic in exaggeration). Augmentatives of type I appear only after the 12th c. AD.

Bearing this in mind, the triggering factor for the formation of augmentatives must be sought elsewhere, in some important morphological or semantic changes that took place around this period. One might postulate that the well established desemantization of several diminutive suffixes, such as *–ion* or *-arion*, might have been the initial causation for the acquisition of augmentative meaning. In the case of noun pairs, where one is the normal and its derivational pair is the diminutive, the loss of diminutive meaning in the second member and the consequent acquisition of 'normal' status would automatically push the meaning of the first member (the originally 'normal' one) by contrast to the meaning of an augmentative. This analysis, although plausible, runs up against the difficulty that desemantization is attested for diminutive suffixes from the 4th to the 10th century, whereas the new augmentatives begin to appear during the 12th century and are not well established before the 15th.

What we would like to suggest instead is that the evolution of augmentative suffixation is closely connected to the restructuring of nominal inflection, which does indeed take place during the period in question.

As a result of phonological changes leading to massive affix homophony, as well as extensive analogical levelling (cf. Schwyzer 1936, Seiler 1958, Ruge 1969, Holton & Manolessou 2010) the Ancient Greek nominal system, with its multiplicity of inflectional endings (cf. Sihler 1995, Woodard 2008) was considerably simplified, acquiring a closer connection with specific gender values. Whereas previously a noun's inflectional suffix was not predictable on the basis of its gender, from Medieval Greek onwards specific inflectional suffixes became extremely productive and as a result

characteristic of a particular gender and/or inflectional class (cf. Anastasiadi-Symeonidi & Cheila Markopoulou 2003, Christofidou 2003, in Anastasiadi-Symeonidi et al. 2003 for Modern Greek). This involves mainly 3 suffixes: *-a*, *-΄_os* and *–i*.

For the feminine gender, the unmarked ending became *–a*, thanks to a) the massive transfer of old 3rd declension feminines to the 1st declension, εἰκών > εἰκόνα, *eikón > ikóna* 'picture' and b) the change of many feminines in *-i* to *-a*, καλύβη > καλύβα *kalyvi > kaliva* 'hovel'). A rough statistic of the first 5 volumes of Kriaras' lexicon of Medieval Greek (Kriaras 1967-) shows that about ¾ of feminine nouns end in *–a*. For the masculine gender, the unmarked inflectional ending became *–os* (however, cf. Christofidou 2003 for Modern Greek), thanks to the elimination of most non-masculine nouns ending in *-os*, either through transfer to the masculine gender (e.g. ἡ ψῆφος > ὁ ψῆφος *i psífos.MASC > o psífos.FEM* 'vote') or through replacement by their corresponding desemantized diminutive (e.g. ἡ νῆσος > τὸ νησίν *i ne:sos > to nisín* 'island')[17]. Lastly, for the neuter gender, *–i* became the unmarked inflectional ending, thus creating a new inflectional class, non existing in Ancient and Koine Greek, after having lost its diminutive meaning. It is true though that all neuter diminutives also end in *–i* (e.g. *–aki, -itsi, -uli*).

However, from the 12th c. onwards we observe the genesis and spread of non-neuter diminutive suffixes (e.g. *–pula, -itsa* etc.). This could serve as an indication that *-i* is no longer sufficient to denote diminution. Once *-i* acquires its new role of inflectional marker bearing the *par excellence* neuter gender value, it enters into an interchange relationship with the new unmarked inflectional endings for feminine and masculine, i.e. *–a* or *–os.* Change of gender in nouns, for whatever motivation, entails replacement of neuter *–i* by feminine *–a* and masculine *–os* endings. One could imagine two complementary contexts where this change would be required.

a) In the case of animate neuter nouns, gender change would initially denote the corresponding feminine / or masculine of the species. According to Corbett (1991: 227-228) young animals which are not sex–differentiable are usually neuter, while the older and thus bigger of the species are masculine or feminine[18].

b) In the case of neuter nouns in *–i* still retaining their original diminutive meaning, it would denote the normal sized de-diminutive noun.

These two contexts would create a multiplicity of noun pairs in the language whereby the second masculine or feminine is BIGGER THAN the first. These new pairs joined the already considerable number of preexisting noun pairs exhibiting this relationship, i.e. those pairs formed by nouns which originally bore the specific inflectional endings (-

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[17] It is true of course that the masculine endings *–as* and *–is* were also available (the former especially since 3rd declension nouns acquire it, e.g. χειμών > χειμώνας *kheimo:n > çimónas* 'winter' and the latter forming productively deverbal agent nouns). However, roughly in the first five volumes of Kriaras lexicon, *-os* represents 65% of the masculine nouns, *-as / ás* 8%, while *–is / ís* 27%.

[18] *"Many indo-European languages assign sex- differentiable nouns to the masculine or feminine gender as appropriate, while the young of sex-differentiables – typically young animals which are treated as not yet sex-differentiable- are neuter"* Corbett (1991: 227-228)

os, e.g. *kláðos - klaðí* 'bigger branch'-'branch' *-a*, e.g. *ka(n)díla – ka(n)díli)* 'bigger cresset' – 'cresset' and which were not restricted to the categories a) and b) described above.

What is now in place is

- (i) a mechanism which creates BIGGER THAN noun pairs through gender change in specific semantic contexts.
- (ii) a large number of noun pairs which display this relationship without belonging to these semantic contexts.

Inevitably, analogy sets in, and extends the augmentative pattern to new neuter nouns. Once the gender interchange relationship extends to non animate and / or non diminutive neuter nouns in –*i*, this naturally leads to the reinterpretation of the second member as simply BIG.

Further support for this claim comes from the fact that neuter nouns of other inflectional classes cannot follow, at least not systematically, this derivational pattern. For example:

(7) címa   > *cimát-a.FEM
     'wave'   'big wave'
     vunó   > *vúna.FEM
     'mountain   'big mountain'

Once the replacement of –*i* by –*a* or –*os* is established as the semantic expression of the notion BIG, the new morphological category 'augmentative' is in place with two different suffixes: -*a* and –*os*[19]. However, this derivational pattern cannot apply to nouns that are not neuter, since they already bear the corresponding values, albeit with a different function, let alone the fact that the vast majority already bear the specific endings. The only way to augment these nouns is by creating new complex derivational suffixes, in which augmentative meaning is morphologically realized. The evolution described above can be schematized as follows:

Table 1:

1 >	2 >	3 >	4 >	5
Inflection: Variable	Inflection: -os, -a, -i	Inflection: -os, -a, -i	Inflection: -os, -a, -i	Inflection: -os, -a, -i
Augmentation: Ø	Augmentation: Ø	Gender change: a) animates b) normal-size Augmentation: Ø	Extension Augmentation: Type A for neuter nouns	Extension Augmentation: Type B and C for all nouns

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[19] A factor not taken into account is the role of the accent. In fact, both originally inflectional suffixes –*a* and –*os* bear stress properties, in that they force the position of the accent of the noun to be in the penultimate and the antepenultimate syllable respectively –if possible-. These stress properties can be explained historically on the basis of analogy with preexisting –*i* vs. –*a* or –*os* pairs, in which the position of the accent was phonologically conditioned (e.g. *βουβάλι – βούβαλος vuváli - vúvalos* 'buffalo', *ελάφι – έλαφος eláfi - élafos* 'deer', *κοτσύφι – κόσσυφος kotsífi – kósifos* 'blackbird', *πλάτανι – πλάτανος platáni - plátanos* 'plane-tree'). On a synchronic level, these stress properties offer extra support to the derivational status of these elements and contrast with their homophonous inflectional counterparts.

Diminution: neuter	Diminution: -i	Diminution: variable	Diminution: variable	Diminution: variable

This evolutionary schema makes the following predictions:

a) The earliest innovative attestations of the –*os* and –*a* suffixes involve nouns which are not necessarily augmentative, but simply animate or normal-size.

(8) a. Animate nouns

ἀρκούδ-α *(Synax. Gad. 38)*	< ἀρκούδ-ι(ν)
arkúð-a	arkúð-i(n)
'(female) bear'	'bear'
βουβάλ-α *(Ptochol. A. 119)*	< βουβάλ-ι(ν)
vuvál-a	vuvál-i(n)
'(female) buffalo'	'buffalo'

    b. Normal size nouns

γούλ-α *(Ptoch. III 197-7 ms P app.)*	< γουλ-ί(ν)
ɣúl-a	ɣúl-i(n)
'esophagus'	'(small) esophagus'
κουρούπ-α *(Landos, Geopon. 251)*	< κουρούπ-ι(ν)
kurúp-a	kurúp-i(n)
'earthen pot'	'(small) earthen pot'

    c. Augmentative nouns

πιγούν-α (Spanos D 1658)	< πιγούν-ι(ν)
piɣún-a	piɣún-i(n)
'big chin'	'chin'
παπούτσ-α (Limen., *Thanat.* 585)	< παπούτσ-ι(ν)
papúts-a	papúts-i(n)
'big shoe'	'shoe'

b) The first attestations of complex augmentatives will appear attached not to neuter but only feminine and masculine bases.

(9)

μυτ-άρα	*(Synax. Gyn. 831)*	< μύτη	+ -άρα
mit-ára		míti	+ -ára
'big nose'		'nose'.FEM	augment. suffix

φών-αρος *(Synax. Gad. 314)*		< φωνή	+ -άρα
fón-aros		foní	+ -ára
'big voice'		'voice'.FEM	augment. suffix

c) Group A augmentatives should appear earlier in Medieval Greek than type B and C complex augmentatives. Although it cannot be verified on chronological terms (since they are all attested roughly in the same period), a strong indication for the chronological priority of type A suffixes is their greater productivity (more than 20 augmentatives of type A vs. only those presented above for types B and C).

5. Conclusions

In this paper we have discussed the evolution of a new morphological category, that of augmentation. We have elaborated a novel theoretical proposal, which assumes that augmentation is triggered by inflectional restructuring and gender changes for the differentiation of a) [+/- animates] and b) normal size vs. diminutive nouns.

Therefore, our facts and analysis do not verify Grandi's (2002, 2003) proposal for Greek, according to which possessive augmentatives, those of Type II, were the origin of pure augmentatives.

In our analysis, inflection seems to lie behind the formation of a new derivational process, that of augmentative suffixation, thus arguing against the discreteness of morphological processes and in favour of the existence of a morphological continuum in the spirit of Bybee (1985), offering further support to the claim that there is considerable overlap between inflection and derivation[20].

The specific morphological processes of formation of augmentative suffixes were described on the basis of different models, since different kinds of data can be handled more adequately by different theoretical models. More specifically, Haspelmath's (1995) reanalysis account provided the necessary terminology to describe the evolution of type B augmentatives, while Lass's (1997) notions of non-junk exaptation proved more appropriate for the description of type A augmentatives evolution.

The Greek data run counter to the predictions voiced in Haspelmath (1995), as affix-incretion and affix-splitting, two mechanisms considered as counter-intuitive and thus rare, were shown to have been the main factors behind the evolution of Greek augmentative suffixation. It should be noted that in Haspelmath's (1995) proposal, phonological reduction plays a key role in the interpretation of the morphological evolutionary pathways. However, this phenomenon is only marginally involved in the derivational process examined here. Consequently, one could suggest that these generalizations apply perhaps only to those languages where phonological reduction is the key factor.

Finally, the above proposed evolution for the formation of augmentatives in Greek, since it crucially involves discussion of changes in the inflectional system, indirectly sheds light on the native speaker's intuitions concerning inflectional properties and thus could serve as a basis for further research on nominal inflection.

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[20] For discussion on the criteria distinguishing the two processes see among others Bybee (1985), Anderson (1992), Haspelmath (1996), Stump (1998)

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