

On some properties of the affixoids in Modern Greek

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This paper¹ examines the basic properties of affixoids in Modern Greek. Firstly, we propose a short theoretical framework for the process of grammaticalization, through which affixoids are extracted from existing words as bound bases. Further, we analyze the use of affixoids in the so called neo-classical compounding. In the next two parts of the paper we propose a list of the most common prefixoids and suffixoids in Modern Greek, along with brief etymological remarks. The basic conclusion is that affixoids in Modern Greek do not form a unified category, but an “affixoid subcontinuum”, where we distinguish between neo-classical affixoids, affixoids from Ancient Greek and the so-called Modern Greek affixoids.

Keywords: morphology, affixoids, derivation, neoclassical compounding

1. Grammaticalization. Morphological elements in the morphological continuum between bases and morphemes

Affixoids, also known as bound bases², occupy a specific, intermediate place between affixes and lexical bases in the morphological continuum, which represents a schematic layout of the morphological features in the language: from the bases of full-meaning (autosemantic) words with full lexical meaning and no or limited grammatical function, through affixoids and derivational morphemes that may have (limited) lexical meaning and have mainly grammatical features, to inflectional morphemes that have no lexical meaning and only have grammatical functions³. Affixoids are created as a result of a process called grammaticalization, which marks an ongoing language change. The grammaticalization is a diachronic, historical process by which language change occurs: a lexical item or

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² In linguistic research on morphology there is a variety of terms that refer to this type of morphological elements: affixoids (Booij et al. 2000: 355–356), bound base (Lieber 2009: 33), dependent morpheme (‘δεσμευμένο μόρφημα’ – Ράλλη 2005: 40), bound root (Haspelmath 2002: 21), combining form (Booij 2005: 30), confix (Martinet 1979, cited by Αναστασιάδη-Συμεωνίδη 1994: 39); Κλαίρης and Μπαμπινιώτης (Κλαίρης & Μπαμπινιώτης 2005: 80–81, 92–95) divide the affixoids to prefixoids and suffixoids, called by the authors lexical prefixes (λεξικά προθήματα) and lexical suffixes (λεξικά επιθήματα) respectively.

³ See Ράλλη 2005: 60–61, Ράλλη 2007: 151, Lieber 2009: 34. Similar classification of “grammatical forms” is also proposed by Hopper and Traugott (Hopper & Traugott 2003: 4–6).

structure acquires grammatical characteristics, or a particular grammatical element enhances its grammatical characteristics, i.e. acquires more abstract meaning⁴. The grammaticalization includes four interrelated mechanisms:

- a) desemanticization, i.e. loss of certain semantic content from the form,
- b) extension (contextual generalization), i.e. use of the new form in new contexts beyond those in which it occurred,
- c) decategorization, i.e. loss of morphosyntactic properties, typical of lexical and other less grammaticalized forms, and
- d) erosion (phonetic reduction), consisting in loss in phonetic substance⁵.

These processes do not occur independently, but are interrelated: after the desemanticization, i.e. the acquisition of a more abstract meaning, a language form tends to differentiate from its previous, more specific uses, triggering other language mechanisms of grammaticalization: the form is used more often (extension), loses categorical properties (decategorization) and undergoes certain phonetic changes (erosion). The grammaticalization results in morphological change, since the language change at the level of morphemes is carried out within the framework of word-formation.

2. Grammatical properties of the affixoids

As already mentioned, the affixoids⁶ are a result of the process of grammaticalization and, in particular, of morphologization, in which a base of a full-meaning word gradually turns into a derivational morpheme⁷, a process that from synchronic point of view is considered incomplete. The morphemes classified as affixoids change their properties and from the class of morphemes with specific lexical meaning, components in the process of compounding, move to the class of abstract morphemes with grammatically function, that are part of the word-formation inventory of the derivation⁸. From a synchronic point of view, the most important characteristics of the affixoids are the following:

⁴ Hopper & Traugott 2003: 2. Some researchers believe that the grammaticalization is a contextually driven semantic process and for this reason define it as “context-induced reinterpretation”. This approach assumes that only the context may outline the structure of grammatical forms, in the sense that grammatical forms may express meaning, which cannot be retrieved from the source forms, see Heine & Kuteva 2004: 2.

⁵ See Heine & Kuteva 2004: 2–3.

⁶ The term affixoids covers the prefixoids, i.e. affixoids in prefix position, and the suffixoids, i.e. affixoids in suffix position. It is also used for bound bases, which have no fixed position in the compound and take position to the left or to the right of the base, see below.

⁷ See Booij 2004: 114, 116, Booij 2005: 85, Trips 2009: 21–26, among many others.

⁸ See also Κολιοπούλου 2013: 152–153.

- a) an increased productivity,
- b) a decreased semantic specificness, and
- c) an etymological and formal link to an existing free base. The first two criteria distinguish affixoids from free bases and the third – from affixes⁹.

Usually affixoids are morphemes (lexical bases) that are unable to independently form a word through combination with an inflectional suffix and which are not classified as affixes¹⁰. This property of the affixoids is called by Ράλλη¹¹ unfreeability (‘μη ελευθερωσιμότητα’) and is considered by her as their most important feature. In the group of affixoids Ράλλη examines a relatively limited number of morphemes, that have been isolated from Ancient Greek verbs and have already appeared in classical Greek texts, even in the Homeric epics: λογ(ος), γραφ(ος), φορ(ος), -τροφ(ος), -νομ(ος), -κομ(ος), etc. A proof of their unfreeability is the fact that these morphemes have to combine in a compound with another lexical base and when combined with an inflectional suffix usually form a non-existent word, e.g. τροφ- + -ος > *τρόφος, κομ- + -ος > *κόμος, etc.¹²

From a diachronic viewpoint these bases are formed through the following procedures:

- a) conversion, i.e. a change of a lexical base from a verb base to a noun base: φέρω ‘bear’ > φορ- (φόρος ‘tax’, φορείο ‘stretcher’),
- b) ablaut, i.e. a change of the root vowel of the base, which marks its new noun base status: φερ- (φέρω) > -φορ- , τεμν- (τέμνω) > -τομ-, νεμ- (νέμω) > -νομ- , λεγ- (λέγω) > -λογ- etc.

This group of affixoids usually occupies the right position of the compound, i.e. they take a suffix position. According to Ράλλη the properties of these bases, placing them between the free bases and the suffixes, are the following¹³:

- a) unlike suffixes, they bear specific meaning,
- b) they convey information about the valence, i.e. about which type of bases are combined with a specific base. Unlike affixoids, suffixes have no valence, but they can change the valence of the base they are combined with;
- c) in the compounds they connect to the next base through the linking element (interfix) [ο],
- d) in some cases they may appear in a left position in a compound: υδροφόρος ‘water-bearing’ – ένυδροσ ‘hydrated; containing water’; this unfixed position is a property specific to the free (lexical) bases, but not to the suffixes: σπιτι ‘home’ – σπιτόγατος ‘home cat’, χαμόσπιτο ‘hovel’,

⁹ Booij et al 2000: 355.

¹⁰ See Lieber 2009: 33.

¹¹ See Ράλλη 2005: 56–60 and Ράλλη 2007: 145–150.

¹² See, however, below, section 3.

¹³ See Ράλλη 2005: 58–60.

e) from a synchronic point of view, unlike suffixes, they can be attached to other bases, with which they are connected etymologically.

Based on the above properties of the affixoids Pάλλη concludes that although these morphemes are more closely related to lexical bases, there is an ongoing process of loss of semantic content and of assumption of grammatical functions, which makes them closer but not identical to affixes.

Some of these affixoids along with other bases originating etymologically from Ancient Greek and Latin, are used in the international dictionary of neologisms, known with the term internationalisms¹⁴. These bases are part of the lexical inventory, forming a huge pan-European lexicon of words, created mainly to cover the terminological needs in different branches of science – medicine, humanities, technical sciences, as well as in various spheres of public life – administration, culture, business, etc.¹⁵ Due to their origin and their specificity, these morphological elements are considered to form a separate procedure in word-formation, known as neo-classical compounding. As mentioned above, these affixoids have been isolated from Ancient Greek and Latin verb bases: klepto-, -phily, kinesi(o)-/-kinesis, -graph, from Ancient Greek and Latin common noun bases: -log-, bio-, -anthrop(o)-, -morph-, from Ancient Greek and Latin proper noun bases: euro-, afro-¹⁶, from Ancient Greek and Latin adverbs: endo-, exo-, tele- and from Ancient Greek and Latin prepositions: super-, infra-, hypo-, hyper-, etc.¹⁷ The arguments in favour of separating neo-classical compounding from the other types of word-formation by means of affixoids and placing it in an intermediate position between affixation and compounding are summarized below¹⁸:

a) unlike affixes, which have a fixed position relative to the base (left for prefixes or right for suffixes), affixoids demonstrate positional instability: **graphology** – **spectrograph**, **dermophlebitis** – **periderm**, **morphology** – **allomorphy**, **scopophilia** – **gastroenteroscopy**¹⁹,

b) unlike compounds, where usually the left component (base or word) determines the right component (base or word), which due to this fact is characterized

¹⁴ See Αναστασιάδη-Συμεωνίδη 1994: 38.

¹⁵ Booij 2005: 86–87.

¹⁶ These two affixoids have been formed by clipping, a process that took place in the modern age: Εὐρώπη > euro-, Ἀφρική > afro-.

¹⁷ The affixoids from Ancient Greek and Latin, used in different branches of science, in professional languages (professionlects) and in public life are hundreds: see Borror (Borror 1988), who has collected a huge variety of such affixoids, along with other affixoids, originating from languages other than Ancient Greek and Latin.

¹⁸ We present these arguments based on the analysis, proposed by Booij (Booij et al. 2000, Booij 2005), Haspelmath (Haspelmath 2002) and Lieber (Lieber 2009), and do not purport to cover all the aspects of the topic.

¹⁹ This feature, however, does not characterize all neo-classical affixoids, e.g. the affixoids endo-, auto-, super- take always prefix position.

as head of the compound²⁰, in the case of neo-classical compounding the meaning of the compound is unpredictable: *television* is not kind of vision, *biofuel* is not living fuel, the meaning of the word *allomorph* cannot be predicted by the semantics of its bases, etc.,

c) affixoids, used in neo-classical compounding, usually combine with other lexical bases that do not belong to the domestic vocabulary of the language in which the neo-classical compound was created. However, over the time some of these bases apply to domestic lexical bases: **teleshopping**, **biofuel**, and

d) affixes are more often used in word-formation than affixoids. This limited use of affixoids is directly connected to the limited range of lexical bases they are combined with.²¹

3. Neo-classical affixoids in Modern Greek

The neo-classical affixoids in Modern Greek represent a large group of bound bases, originating from Ancient Greek verbs, nouns, adjectives and adverbs. According to the position they occupy in the compound, they are divided into prefixoids and suffixoids.²²

Prefixoids

Prefixoid	Etymology	Use in the international lexicon
αρχ-, αρχι-, αρχε- (also used as suffixoid)	Ancient Greek (below AG) ἄρχω ‘begin; rule’, ἀρχή ‘beginning; origin’	Yes
αυτο-	AG pronoun αὐτός ‘self; same’	Yes
αφρο-	AG Ἀφρική ‘Africa’	Yes
γεω-	AG γῆ ‘earth; land’	Yes
δυσ-	AG bound base δυσ-, meaning ‘hard, bad’, first component of compounds	Yes
ενδο-	AG adverb ἐνδον ‘in’	Yes
εξω-	AG adverb ἐξω ‘out’	Yes

²⁰ Booij 2005: 54.

²¹ As Πάλλη (2007: 149) points out, the study of neo-classical compounding is quite a complex issue, since this model of word-formation is not domestic, e.g. it is not part of the word-formation mechanisms of the Greek language: Modern Greek borrows and adapts many neo-classical compounds from the international lexicon.

²² The tables below have no claim to be exhaustive. Their aim is to illustrate the phenomenon and to summarize the most common affixoids, indicating their etymology.

ευρω-	AG Εὐρώπη ‘Europe’	
ημι-	AG bound base ἡμι-, meaning ‘half’, first component of compounds	Yes
ευ-	AG adverb εὖ ‘well’	Yes
κρυπτ(ο)- (also used as suffixoid)	AG κρυπτός ‘hidden’	Yes
μικρο-	AG μικρός ‘small’	Yes
μεγα- μεγαλ(ο)- (also used as suffixoid)	AG μέγας ‘big’	Yes
νεο-	AG νέος ‘new; young’	Yes
ολιγο-	AG ὀλίγος ‘few’	Yes
παν-, παμ-	AG neutr. form πᾶν of the adjective πᾶς, πᾶσα, πᾶν ‘every; all’	Yes
υδρ(ο)-/υδατ(ο)- (also used as suffixoid)	AG ὕδωρ ‘water’	Yes
ψευδ(ο)-	AG ψευδής ‘false’	Yes

With the exception of the prefixoids αφορ- and ευρω-, which, as mentioned above (see note 14), were isolated in the modern era from the corresponding proper name bases by clipping, the other prefixoids were used as word-forming material already in Ancient Greek compounding. Some of them are autosemantic words: ἔξω, εὖ, πᾶν, others are isolated as lexical bases from the respective adjectives, nouns, verbs, adverbs, etc.: μικρός, ὕδωρ, ἄρχω, ἔνδον. The prefixoids δυσ- and ημι- are bound bases already in Ancient Greek.

Suffixoids²³

Suffixoid	Etymology	Use in the international lexicon
-ΒΟΛ- -βολ(ος) -βολ-ι(α) -βोल(о)	AG βάλλω ‘throw’	Yes
-ΓΡΑΦ- -γραφ(ος) -γραφ-ι(α)	AG γράφω ‘write’	Yes
-ΓΟΝ- -γον(ος), -γον-ι(α)	AG γεννάω ‘beget; produce’	No

²³ In the table of suffixoids for each suffixoid there is an indication of the inflectional type of the nouns or adjectives, in which the respective suffixoid is used as lexical base in right position.

-ΕΡΓ- -έργ(ος) -εργ(ός) -εργ-ι(α)	AG ἐργάζομαι ‘work, make, perform’	Yes
-ΕΙΔ- -ειδ(ης)	AG εἶδος ‘form, shape’	Yes
-ΚΟΜ- -κομ(ος) -κομ-ι(α) -κομ-ει(ο)	AG κομέω ‘take care of, tend’	No
-ΚΤΟΝ- -κτον(ος) -κτον-ι(α)	AG κτείνω ‘kill, slay’	No
-ΛΟΓ- -λογ(ος) -λογ-ι(α) -λογ-ι(ο)	AG λόγος ‘account; measure; argument; speech etc.’	Yes
-ΜΑΧ- -μαχ(ος) -μαχ-ι(α)	AG μάχομαι ‘fight’	No
-ΝΟΜ- -νομ(ος) -νομ-ι(α)	AG νέμω ‘dispense, distribute’	Yes
-ΟΥΡΓ- -ούργ(ος) -ουργ(ός) -ουργ-ι(α) -ουργ-ει(ο)	AG ἐργάζομαι ‘work, make, perform’	No
-ΟΥΧ- -ουχ(ος) -ουχ-ι(α)	AG ἔχω ‘have, hold’	No
-ΠΛΑΝ- -πλαν(ος)	AG πλανάω ‘lead from the subject, mislead’, medio-passive πλανῶμαι ‘to be in doubt or at a loss’	No
-ΠΛΟΚ- -πλοκ(ος) -πλοκ-ι(α)	AG πλέκω ‘plait, twine’	No
-ΠΟΙ- -ποι(ος) -ποι-ι(α) ποι-ει(ο)	AG ποιέω ‘make, produce’	No
-ΠΟΡ- -πορ(ος) -πορ-ι(α)	AG πείρω ‘pierce; run through’	No

-ΣΚΟΠ- -σκοπ(ος) -σκοπ-ι(α) -σκοπ-ι(ο)	AG σκοπέω/σκέπτομαι ‘examine, inspect, consider’	Yes
-ΤΟΜ- -τομ(ος) -τομ-ι(α)	AG τέμνω ‘cut’	Yes
-ΤΡΟΦ- -τροφ(ος) -τροφ-ι(α) -τροφ-ει(ο)	AG τρέφω ‘bring up, rear, grow’	Yes
-ΦΙΛ- -φιλ(ος) -φιλ-ι(α)	AG φιλέω ‘love, regard with affection’	Yes
-ΦΟΡ- -φορ(ος) -φορ-ι(α) -φορ-ει(ο)	AG φέρω ‘bear, carry a load’	Yes

Some of these bases were used in Ancient Greek to form common nouns in masculine with inflectional suffix -ος. Some of these nouns are existing words in Modern Greek as well, although they do not have a direct semantic connection to the base: **-γον-** – γόνος ‘descendant’, νομ- – νόμος ‘law’, **-πορ-** – πόρος ‘resource’, **-τομ-** – τόμος ‘volume’, **-φορ-** – φόρος ‘tax’, etc.

4. Modern Greek affixoids

In Modern Greek there is a special group of limited in number word-formation morphemes, isolated from existing nouns and adjectives: πολυ- (< πολύς ‘great; many’, πολυεκατομμυριούχος ‘multimillionaire’), μεγαλο- (< μέγανος ‘big’, μεγαλοεπιχειρηματίας ‘big businessman’), ψευδο-/ψευτο- (< ψευδής ‘false’, ψευτοαριστερός ‘pseudo-left’), θεο- (< θεός ‘god’, θεογκόμενα ‘great chick’), νεο- (< νέος ‘new’, νεοοθωμανισμός ‘neo-Ottomanism’), μικρο- (< μικρός ‘small’, μικροκλεφτρόνι ‘petty thief’), παλαιο- (< παλαιός ‘old’, παλαιοελλαδίτης ‘resident of old Greece’, i.e. of Greece’s territorial borders formed right after the liberation from the Ottoman rule), ψιλο- (< ψιλός ‘slim, thin’, ψιλοκουβέντα ‘light conversation, chatter’), καρ- (bound base or prefix καρ- ‘black; big’, καρραδεραφή ‘big time gay’) etc. This group also includes the affixoids with pejorative and / or obscene meaning: παλιο- (< παλιός ‘old’, παλιόκαιρος ‘nasty weather’), βρομο- (< βρομιά ‘dirtiness’, βρομοδουλειά ‘dirty work’), πουστο- (< πούστης ‘faggot’, πουστόγερος ‘nasty old man; old faggot’),

κωλο- (κώλος ‘ass’, κωλοεκδρομή ‘fucking excursion’), ψωρο- (< ψώρα ‘scabies’, ψωροπεριφάνεια ‘shoddy pride’) and so on. In the case of these affixoids, grammaticalization is marked not only by desemanticization, but also by incorporation of the linking element [o], that thus becomes part of the first base. The latter process constitutes a morphological change that puts these morphemes closer to prefixoids. A proof of the incorporation of the linking element into the prefixoid is the fact that in derived words (also called pseudocompounds²⁴) there is no application of the law of vowel hierarchy²⁵ in the use of the linking element [o], which in the case of the pseudocompounds remains in its position in front of hierarchically stronger vowels as [a], and is not silenced, as is the case in genuine compounding: ψευτοαριστερός, but ψευδάργυρος ‘zinc’ (neo-classical compound), μεγαλοεπιχειρηματίας, but μεγαλεπήβολος ‘ambitious’ (Modern Greek compound), μικροάνοιγμα ‘small hole’, but αγριάνθρωπος ‘wild man; savage, barbarian’ (Modern Greek compound).

5. Conclusion

This brief analysis of the affixoids in Modern Greek shows that they do not form a unified category, but an “affixoid subcontinuum”, where we distinguish between neo-classical affixoids, that are very close to the free stems, have limited grammaticalization and are used in word-formation with many restrictions, then affixoids from Ancient Greek, which have undergone some process of grammaticalization and are used in Modern Greek in a lot of word-formation models, and finally Modern Greek affixoids, which do not have any connection to Ancient Greek word-formation models, are not used in the creation of scientific or other terminology and have the highest degree of grammaticalization, which is marked by morphological changes as the incorporation of the linking element into the affixoid.

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²⁴ See Pάλλη 2007: 150–151.

²⁵ See Νικολού 2003, cited by Pάλλη 2007: 47.

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