AFFIXOIDS, AN INTRIGUING INTERMEDIATE MORPHOLOGICAL CATEGORY[*]

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This article investigates the presence of intermediate morphological categories between stems and affixes, the so-called 'affixoids' (prefixoids and suffixoids) in a number of Modern Greek varieties. It argues that affixoids can exist as an independent morphological category in morphologically rich languages, such as Modern Greek, on condition that these languages base their word-formation processes on stems. It also shows that affixoids can vary within the same language, depending on several factors, as for instance, the original items affixoids come from (Greek affixoids may emerge from lexemes or affixes), the word-formation process which gives birth to them, or the occurrence of a grammaticalization or a degrammaticalization process. Proposals and arguments will be supported by evidence consisting of two prefixoids, *plako-* and *mata-*, and one suffixoid, *-opulo,* drawn from the Modern Greek varieties.

Keywords: affixoids, morphology, compounding, derivation, Greek, dialectal varieties.

1. Introduction

An intermediate category between lexemes and affixes, the so-called 'affixoids', has been put forward mainly in German linguistics of the 70's and 80's (see, among others, Schmidt 1987). More recently, Stevens (2000, 2005), Aascoop & Leuschner (2006), Kenesei (2007), Decroos & Leuschner (2008), Kastovsky (2009), Elsen (2009), Lightfoot (2011a,b), Leuschner (2010), van Goethem (2010, 2016), Booij & Hüning (2014), Hartmann (2016), among others, tried to resuscitate the notion of affixoids by drawing evidence mainly from Germanic languages (German, English, Dutch, Swedish), Hungarian and French.

In spite of the flourishing recent literature, the status of affixoids is still controversial and scholars do not agree whether they constitute a distinct category. For instance, assuming that the borderline between linguistic units like root and affix is sometimes blurred, Schmidt (1987: 98) expresses his doubts about the independent status of this category. He wonders why one should set up a third category beside those of roots and affixes, which would instigate not one but two unclear lines of division. In the same spirit, Booij (2010) treats affixoids as words with an affix-like behavior, which participate in compounds with a special bound meaning, while the other constituents in compounds have unbound meanings. Furthermore, adopting a construction-grammar framework, Booij & Hüning (2014) propose to account for them as lexically-specified parts of constructional idioms, constructional idioms being schemas in which one of the slots is lexically fixed. Contrary to these views Kenesei (2007) and Elsen (2009) maintain that there is a need for a distinct category of morphemes, beside the categories of lexical morphemes (stems, roots, or even morphologically-simple words) and affixes. For them, affixoids is an intermediate category, part of a scale below the word level, ranging from roots/stems to affixes. In the same spirit, Kastovsky (2009: 8, 12) accepts the presence of intermediate categories below the word level, but for those languages which have stem-based morphology.[1] He argues that the existence of affixoids is language dependent, since the input to morphological processes is not homogeneous (see, also, Kastovsky 1992, 1994, 2006) but highly depends on the language one deals with. It is worth noting that independently of the different opinions on the theoretical status of affixoids, all scholars agree about their diachronic significance. In particular, Stevens (2005: 4) claims that the affixoid is a diachronically useful and important concept since in a grammaticalization process developing an affix out of a lexeme it shows how an intermediate step is taken, that is, it shows the gradualness of the process.

In this article, I deal with three affixoids of the Greek language, two prefixoids and one suffixoid.[2] I demonstrate, first, that an affixoid may be the product of the grammaticalization of a stem (morpheme with a lexical meaning) or that of the degrammaticalization of an affix.

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[1] Confixes, splinters and acronyms are also part of Kastovsky's (2009) hierarchy, but I do not take them into consideration here, as being irrelevant for the purposes of this article.

[2] In this article, Greek will be used as a general term to design the language in general. Ancient Greek will denote the language of the classical period (5th – 4th c. BC), Medieval and Modern Greek the language before and after the 15th c. AD, respectively, and Standard Modern Greek the actual official language (see Ralli 2012 for details about Greek and its historical stages).

In other words, I argue that there are no particular directionality requirements for the formation of affixoids. Second, on the basis of formal and semantic criteria, I claim that affixoids could be treated as a distinct category below the word level, ranging between the stem and the affix, in accordance with Kenesei (2007). I further propose that this claim should be viewed in relation with the language one deals with, in my case, in relation with Modern Greek. I believe that Kastovsky (2009) is right to point out that the existence of intermediate categories between words and affixes vastly depend on the morphological type of the particular languages. Given the fact that Greek morphology is stem-based and displays combinatorial affixal derivation (Ralli 2005), I propose that there is a dividing line between Greek affixoids and stems on the one hand and Greek affixoids and affixes on the other.

For the purposes of this article, the data which serve as evidence are drawn from the Modern Greek dialectal variety. Modern Greek dialects are the only systems depicting the intermediate stages of the natural evolution of the Greek language, while Standard Modern Greek (hereafter SMG) is a system that has been mainly developed in the 19th century on the basis of three dialects, Peloponnesian[3], Heptanesian[4] and Constantinopolitan[5], while it has been further enriched with items and features of Ancient Greek.

The article is structured as follows: after the introduction, I try to define the category of affixoids on the basis of the existing literature. The data are presented in the third section, followed by a discussion on the idiosyncratic properties of the examined items in the fourth. The article concludes with a summary of the main claims put forward in the paper and the relevant bibliography.

2. What is an Affixoid?

It is generally assumed that an affixoid approaches an affix but it also shows properties of a lexeme. In the literature, there is an extensive research on affixes and lexemes and their characteristics (see, among others, Scalise 1984; ten Hacken 2000; Booij 2000; Stevens

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[3] The dialect spoken in the Peloponnese peninsula, which has been the nucleus of the newly created Greek state in the 19th century, after the liberation from the Ottoman rule.
[4] The dialect of the Ionian islands.
[5] The dialect of Constantinople, today's Istanbul, which was the capital of the Byzantine empire till 1453, when it fell in the Ottoman hands.

2000). Although it is not in the scope of this paper to revise the list of their properties, it is useful to mention some of the prototypical characteristics of affixes and lexemes, which would help us to understand and determine the status of affixoids examined in this paper:

(a) Lexemes are abstract lexical units, the meaning of which cannot be understood from its internal components (Bonami et al. 2018). In languages, the surface realization of lexemes are usually *roots*, or, in synchronic terms *stems,* or even *words* regardless of the inflectional endings they may have, a root being a rather diachronically-relevant unit (see Ralli 1988 and Kastovsky 2009 on the issue of *root*).

(b) As opposed to lexemes which have a lexical and rather concrete meaning, affixes have a more abstract meaning or a function;

(c) Affixes are bound forms, while stems can be free, realized as words. In stem-based languages (e.g. Greek), stems are bound but can become free with the addition of the appropriate inflectional endings;[6]

(d) Affixes cannot be combined with other affixes in the absence of a lexeme, while in compounds, lexemes can combine to each other.

In order to determine the potential properties of affixoids, Stevens (2000, 2005: 3) proposes the following five criteria -by using evidence mainly drawn from German- some of which are paraphrased and summarized here for clarity reasons:

(a) Affixoids can productively participate in new formations.

(b) Affixoids exist alongside a formally identical, and usually free, 'parent' morph.

(c) The meaning of an affixoid is more generalized and abstract than that of its parent morpheme.

(d) In the original morphological formation that gave birth to an affixoid, there has been a shift of meaning in the relationship between the two parts of the formation.

(e) An affixoid is in competition with or in complementary distribution with an affix.

In the following sections, it is shown that these criteria are partly satisfied by a subset of

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[6] A stem can be simple or morphologically complex. A simple stem can coincide with an ancient root or with an ancient stem, that is, a root plus a thematic vowel and/or other derivational material (see Ralli 2005 for details).

Greek items, which could be considered to belong to the category of affixoids. It is also demonstrated that the existence of affixoids is not language-independent but relies on the morphology of the specific language one deals with.

3. The Data

In this article, I examine three Greek items, two clearly dialectal ones which occupy the left-hand position of morphologically-complex constructions but come from a different source, and a third item which is found at the right-hand position of formations in both SMG and several of its dialects.[7] The first item, *plako-* expresses the bad mood of the speaker or denotes an entity or activity damned and wicked. Its final vowel /o/ appears as [u] in unstressed position due to a dialectal phonological law (see footnote 9 for examples) and combines with both nouns and verbs (e.g. *plaku-póδaru* 'damned leg', *plaku-plénu* 'wash in a bad mood').[8] It originates from the morphologically-complex verb *plakóno* 'press down, crash down', itself a derivative item of the noun *pláka* 'slab', and the derivational suffix -*on(o)* (Dimela 2010). The second item, *mata-* (e.g. *mata-ɣráfo* 'write again'), a marker of repetition, arises from an already functional element, the Ancient Greek preverb *meta*, which expressed the notions of accompaniment, participation, or series of events (Humbert 1972). The third one, -*opulo* (e.g. *korits-ópulo* 'girl child'*)*, derives from the word *pulí(on)* 'bird', itself a borrowed item from Latin, which denotes the meaning of 'chick, child' (Hatzidakis 1905-1907, Andriotis 1992). In the following sections, we see that these items share properties with lexemes on the one hand and affixes on the other, but have also some properties which are different from those categories. Thus, they are possible candidates for having an "affixoidal" status.

3.1 plako-

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[7] In this work, the dialectal data are drawn from written sources (among others, Ralli 2017 and Simiris 2017) and oral corpora collected through field work, which are stored at the *Laboratory of Modern Greek Dialects* (LMGD) of the University of Patras (www.lmgd.philology.upatras.gr).

[8] The Greek data are given a broad phonological transcription. Inflectional endings and other irrelevant material are included in parentheses and stress is noted only if it is relevant for the argumentation. For clarity reasons, a hyphen often appears between the item under examination and the base.

The use of *plako-* is not widely spread in Modern Greek dialects, but is found only in certain varieties of the northern Aegean area, as for instance in those of the island of Lesbos and its parent Asia Minor dialect of Aivali (Aivaliot), today's Ayvalık (Sakkaris 1940). Consider the following Lesbian examples taken from Ralli (2017):

(1)   a. *plakucmámi*[9] 'sleep in a bad mood'   < *plako cimáme* 'sleep'

       b. *plakutróɣu*   'eat in a bad mood'   < *plako tróɣo* 'eat'

       c. *plakuxér*   'damned hand'   < *plako xéri* 'hand'

as in the phrases

(2)   a. Ti   épaθi   símira tu   plakuxér-im   tsi   plakupuní ?
          What   happened   today   the   PLAKU.hand-my   and   PLAKU.is.in.pain?
          'What happened today to my damned hand and is in wicked pain?'

       b. θa   páɣu   na   plakutsmiθó
          Shall/will   go.1SG   to   PLAKU.sleep
          'I shall go to sleep in a bad mood'

plako- has the following properties:

(a) Similarly to affixes, *plako-* is a bound element; it cannot become an independent word with the appropriate inflectional ending and never combines with derivational affixes in order to form derivative items.

(b) Like functional elements, it does not bear any specific lexical meaning but has an expressive value; it brings a negative evaluation to the meaning of the head constituent (noun or verb) of the construction, by mainly expressing the depressing mood of a speaker.

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[9] According to a dialectal phonological law, unstressed /o/ and /e/ are raised into [u] and [i]], respectively. This law, together with that of high-vowel (/i/ and /u/) deletion, also in unstressed position, characterize the group of Northern Greek Dialects, among which Lesbian and Aivaliot. For an illustration, consider the following examples:
(i)a. xéri   -> xer   'hand'
   b. kutí   -> kti   'box'
   c. moró   -> muró   'baby'
   d. peðí   -> piðí   'child'

(c) It occupies the left-hand position of morphologically-complex constructions and never assumes the role of the head. As such, it is similar to a prefix, since prefixes are not heads of their constructions, at least in Greek (Ralli 2005). Moreover, it cannot be a stem because stems can appear both as left-hand or right-hand constituents of compounds, as illustrated by the noun stem *plak(a)* 'slab' in (3):

(3)   a. *xart-o-pézo* (SMG)   <   xart(í)   pézo
          'play cards'   card/paper play
       b. *trapul-ó-xart-o* (SMG)   <   *trápul(a)*   *xart(í)*   -INFL
          'card of a pack of cards'   pack of cards   card/paper

(d)   Contrary to Greek prefixes, which select a specific category to combine with, it can be added to both nouns (1c) and verbs (1a-b). This lack of categorial selection makes it similar to stems, which, in Greek compounds, can enter in all types of categorial combinations (Ralli 2012).

(e)   Contrary to prefixation (e.g. the prefix *kse-* in (5)), when negation precedes, the insertion of a clitic can interrupt the cohesion of a formation containing *plako-*:

(4) Lesbian
       a. *é   tu   plaku-(í)ða*
             not it   PLAKO-saw.1SG
          vs.
       b. *é   plaku-t(ú)-(i)ða*
             not   PLAKO-you-saw.1SG
          'Damn, I did not see it'
But

(5)   a. *é   tu   kse-(é)θapsa*
             not it   KSE-buried.1SG
          vs.
       b. **é   kse-tu-(é)θapsa*

not   KSE-it-buried.1SG

'I did not unbury it'

The loose bond between *plako-* and the modified verb is also depicted by the fact that, in the past tense, the augment *e-* can appear between the two constituents (6a), while this is not possible when the verb is preceded by a real prefix in SMG, like the most common *kse-* (6b, with mid-vowel raising, see footnote 9):

(6) Lesbian

    a. *plaku-é-faɟis*   *tu*   *mismirɟanó s?*

       PLAKO-AUG-ate.2SG   the   lunch   your

       'Damn, did you eat your lunch?'

    b. *burésati*   *tsi* *ksi-fíɣati?*

       could.2PL and KSE-left.2PL

       'Did you manage to escape?'

The five properties of *plako-* listed above indicate a rather ambiguous status, fluctuating between those of a stem and a prefix. Therefore, it would be right to call it 'prefixoid'.

As already mentioned, *plako-* diachronically derives from the first verbal and morphologically complex constituent of compounds, *plakóno* (*plakónu* with high vowel raising in the northern dialects, see footnote 9), which consists of the noun stem *plák(a)* 'slab', the verbalizer *-on-* and the inflectional ending *-o* (raised in [u] in unstressed position). In other words, a verbal compound like *plakutróɣu* 'eat in a bad mood' originates from un unattested form **plakon-u-tróɣu (-u-* is the compound marker). An explanation for the absence of the derivational suffix *-on-* is given by Ralli & Karasimos' (2009) *Bare Stem Constraint,* which states that in Greek compounds, the stems of left-hand constituents are as bare as possible and derivational suffixes of derived stems are stripped off. Note that relating *plako-* straight to the noun stem of *plaka* 'slab', instead of appealing to the intermediary of the verb *plakóno,* cannot constitute a viable explanation, since the negative expressive meaning brought by *plako-* seems to be consistent with the meaning of the verb and not with the meaning of the noun 'slab' (see Dimela 2010 for a detailed argumentation on this matter).

In fact, as shown in (7), formations containing the noun *plák(a)* deviate in the meaning from those with *plako-* deriving from the verb:

(7) a. *plak-u-pátuma* 'floor with slabs' (Aivaliot)
     b. *plak-u-strónu* 'pave with slabs/tiles' (Aivaliot)

As for the final vowel [o] of *plako-*, it comes from the compulsory compound marker *-o-* (Ralli 2013), that is, the linking vowel ensuring the transition between the first and the second constituent of Greek compounds, which has become part of the stem, by a reanalysis procedure shifting the morphemic boundary to the right (i.e. *plak-o-X -> plako-X*, where X= stem/word).

Crucially, the development of *plako-* which has resulted from a loss in semantic lexicality and a structural reanalysis, as well as its parallel existence on synchronic grounds with the free verb *plakóno* (see the Lesbian (8) below) suggests that it can be accounted for by a framework closely related to diachronic linguistics, that of grammaticalization.

(8) *Épisi   tu spit tsi ts plákusi*
     Fell.down.3SG the house and them buried.under.3SG
     'The house fell down and buried them under'

3.2. mata-

As a repetition marker, *mata-* is amply used in Heptanesian but can also be found in some other dialects, as for instance in those of the Kalavryta area of Achaia (Peloponnese), and in the Lamia area of Inoi (central Greece, Papanagiotou p.c.). See the following examples taken from the Heptanesian dialect of the Ionian island of Ithaca (Simiris 2017):

(9) *mata-vɣáno* 'take out again'
     mata-boró 'can again'
     mata-tróo 'eat again'

Diachronically, *mata-* derives from the Ancient Greek preverb *meta-*, which, in late middle ages (see Manolessou & Nifadopoulos 2000), had already become a prefix and still combines only with verbs. Substantial proof for the prefixal status of *meta-* is the fact that the syllabic augment *e-* appears at the beginning of the structure *meta+verb* (10b), while, in Ancient Greek, it was generally interpolated between *meta* and the verb (10a):[10]

(10)   a. Ancient Greek

    μετ-έ-διδεν [met-é-diden]

    META-AUG-give.3SG

    '(s)he transmitted'

    b. Late Medieval Greek

    Digenes Akritas (10th–15th c. AD, cod. Escorialense, line 881)

    έ-μετά-γνωσες [e- metá-γnoses]

    AUG-META-understand.2SG

    'you understood again'

According to Humbert (1972: 339–340) *meta-* expressed the notions of accompaniment, or participation in a series of events in the Homeric texts. The latter meaning gave birth to current dialectal *mata-* as a repetition marker, already found in the Krasopateras text of the 13th century (see example in (11a) from Kriaras' dictionary of Medieval Greek (1966–2015). A regressive vowel assimilation has also occurred, firstly detected in the 16th century Kartanos text (11b,c).

(11)   a. *meta-vrondó*   'peal again' (Krasopateras, line 109)
    b. *mata-káno*   'redo' (Kartanos, line 158)
    c. *mata-pandrévome* 'remarry' (Kartanos, line 158)

  Mata- bears the following characteristics:
 (a) It is bound, appears at the left side of constructions and selects verbal stems. The left-

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[10] In late medieval Greek, there are also cases with the augment before and after *meta*: E.g. *έμετεκάθησεν* [e-met-e-kaθisen] '(s)he sat again' (Callimachus and Chrysorrhoe, 14th century line 1613).

hand position, boundedness, and selectional restrictions (only verbs) suggest a prefixal status.

(b) Like typical Greek prefixes, it is never head of the construction it is part of, as illustrated by the following examples which contrast *mata-* (12a) and the Greek prefix *kse-* (12b):

(12) Dialect of Ithaca

    a. *mata-févɣo* 'leave again'

      vs.

    b. *kse-févɣo*   lit. KSE leave 'escape'

(c) As already noted, it expresses repetition, a meaning which in SMG and many of its varieties is generally expressed by a free lexical item, the adverb *ksaná* participating in compounds (13a) or in phrasal constructions (13b):

(13) Dialect of Ithaca and SMG

    a. *ksanakáno*   <u>*to íðjo*</u> *láθos*

      again.make.1SG   the same mistake

      'I make again the same mistake'

       vs.

    b. *káno*   *ksaná to íðjo láθos*

      make.1SG again the same mistake

      'I make again the same mistake'

Interestingly, in the dialects where *mata-* is used, the two items, *mata-* and *ksaná*, compete and cannot appear together within the same word, not even for the purpose of enhancing repetition:

(14) Dialect of Ithaca

    a. **ksana-mata-férno*

      're-re-bring'

        or

    b. **mata-ksana-férno*

're-re-bring'

     or

  c. *mata-férno ksaná

     're-bring   again'

All properties of *mata-*, listed so far, indicate a prefixal status. Nevertheless, while for all Greek prefixed formations a strong bond ties the two members together and no other material can be inserted between the two, clitics can appear between *mata-* and the verbal head, especially in sentences with negation, and in the same way as in the case of *plako-* (see 4b above).

(15) Dialect of Ithaca

    a. *mí   mata-mu-ʋjís   ékso*

       don't again-for.me-get.2SG out

       'Do not get out for me again'

    b. *ðé   mata-se-íða   apó tóte*

       did.not again-you-saw.1SG since then

       'Since then, I did not see you again'

    c. *ðé   mata-mu-to-éfere*

       did.not again-me-it-brought.3SG

       '((S)he) did not bring it to me again'

Crucially, this is not the case for typical Greek prefixed (compare 16a and 16b) or compound (compare 17a and 17b) formations, where the strong structural cohesion cannot be broken. On the contrary, insertion of clitics is possible in phrases, as shown in (17c).

(16) Dialect of Ithaca and SMG

    a. *mí   mu to kse-θápsis*

       do.not   me it un-bury/earth.2SG

       'Do not unearth it for me'

       vs.

    b. *mí kse-mu-to-θápsis*

'Do not unearth it for me'

(17) Dialect of Ithaca and SMG

    a. *mí   mu to ksanaféris*

      do.not me it again.bring.2SG

      'Do not bring it to me again'

      vs.

    b. *mí   *ksana-mu-to-féris*

      do.not again-me-it-bring.2SG

      'Do not bring it to me again'

      vs.

    c. *mí   mu to féris   ksaná*

      do.not me it bring.2SG again

      'Do not bring it to me again'

Similarly to *plako-*, a further indication about the rather loose structural cohesion between *mata-* and the verb is the hesitation among Heptanesian speakers as to the position of the compulsory augment in past tense verbal structures, who vacillate between the initial position (18a) and the word-internal one (18b), while there are also speakers who would use two augments for the same verbal type, one at the beginning of the word and the other in between the constituents (Simiris 2017):

(18) Dialect of Ithaca

    a. *e-matá-fere*

      AUG-MATA-brought.3SG

      '(s)he brought again'

    b. *mata-é-fere*

      MATA-AUG-brought.3SG

    c. *e-mata-é-fere*

      AUG-MATA-AUG-brought.3SG

The use of examples such as (18b) is reminiscent of the past tense formations in Ancient

Greek containing the preverb *meta-*. One, thus, could suppose that *mata-* is gaining a certain status of independence.

Based on the properties of *mata-*, we can conclude that, on the one hand, it shares many properties with prefixes, but the bond between *mata-* and the verbal head is not as tight as that in today's compounds or prefixed structures. Moreover, its meaning is synonymous of that of a free lexical item, that is, of the adverb *ksaná* 'again'. Therefore, *mata-* could possibly be a prefixoid, situated between a free morpheme and a prefix. It this is the case, its creation has followed a different path from that of *plako-* (Section 3.1.), since a more grammatical element, a prefix, became the less grammatical prefixoid. The process responsible for it is known as degrammaticalization (Norde 2009). In other words, comparing the development of *plako-* and *mata-* into prefixoids I could suggest that affixoids can emerge from both grammaticalization and degrammaticalization processes.

With respect to the independent status of *mata-*, it is worth noting that. in some Greek areas, other than those of Inoi and the Ionian Islands (namely in Greek Macedonia, Thrace and Peloponnese), *mata-* has evolved into a clearly free adverb (with stress on the first /a/) with the meaning of 'again', in both spontaneous (19a) and fixed phrases (19b):

(19)   a. Mazaika, Kalavryta area (Peloponnese)

        áma   se   ðíro   θa   to kámis   máta?

        if   you   beat.1SG   will it do.2SG again

        'If I beat you, will you do it again?'

    b. Trikala, Corinth area (Peloponnese)

        ton   eváresa   máta

        him   hit.PST.1SG again

        'I hit him again'

   (Archives of the Centre of Modern Greek Dialects of the Academy of Athens)

This is a case of *debonding*, as also defined by Norde (2009), according to which a bound morpheme, that is, the affixoid *mata-*, becomes the free adverb *máta*. Debonding of the prefixoid *mata-* does not involve any change in the meaning, but only a stress placement on the penultimate syllable (adverb *máta*). It is also worth noting that the examination of *mata-* illustrates that a cyclic development in the evolution of items is possible: as shown in this

section, the Ancient Greek preverb *meta* (itself originating from a free adverb *metá* according to Humbert 1972) was grammaticalized into the prefix *meta-*, which, in turn, became degrammaticalized into the prefixoid *mata-* the latter being further degrammaticalized into the free adverb *máta*.

3.3. -opulo

A good candidate for a Greek suffixoid is *-opulo* with the meaning of 'chick, child', which is used in several formations of SMG (see 20) and some of its dialectal varieties, as for instance in those of Thrace (Psaltes 1905), Lakonia (Koukoules 1908) and Crete (Ksanthoudidis 1903).

(20)   a. *jiftópulo*   <   *jíft(os)*   *-opulo*
           child of a Gypsy   Gypsy

        b. *Damaskópulo*   <   *Damásk(os)* *-opulo*
          Damaskos' child   proper name

        c. *ajtópulo*   <   *ajt(ós)*   *-opulo*
          eagle chick   eagle

-opulo is a bound element of nouns of neuter gender, alternating with the feminine form *-opula* (21) for animate female beings:

(21)   a. *jiftopúla*   <   *jíft(os)*   *-opula*
          Gypsy daughter   Gypsy

        b. *ajtopúla*   <   *ajt(ós)*   *-opula*
           female eagle chick   eagle

Given the fact that it occupies the second position of formations, and Greek is a right-headed language with respect to derivation and compounding (Ralli 2005, 2013), *-opulo* (or *-opula*) is head of its structures, in that it is responsible for transferring to the formation the category (noun) and gender value (neuter or feminine, depending on the case).

    In a detailed and convincing essay, Hatzidakis (1905: 632-652) attributes *-opulo* to

contact with Latin and derives it from the Latin word *pullus* 'chick, chicken'. As a loan, it has undergone hellenicisation, being subject to phonological, morphological and semantic changes. The Latin *pullus* was integrated in Greek as *pulíon*[11] (with the inflectional ending -*on*) with the meaning of 'bird', already in the 2nd century AD, while under the form of *pulí* it is still used as a common item in SMG, having assumed the loss of the ending -*on* in the later middle ages 1100 – 1453 (see also Browning 1969: 81). For Hatzidakis (1905: 648), at some point before the 10th century AD, and through compounding, *pulíon* gave birth to a bound item -*opulo(n)*, with an initial /o/, which was the compound marker (linking element between the first and the second compound constituent) attached to it after a shift of the morpheme boundary. In the following centuries, -*opulo(n)* showed an independent and parallel course with its parent word, denoting the descendant not only of humans ('son or daughter of X') but of all animate beings. Actually, the bound element -*opulo* displays a different ending from the free word *pulí,* has undergone a resemanticisation and shows a different stress pattern (*pulí* is stressed on the word final /i/ while formations with -*opulo* carry stress on the initial /o/).

According to Philintas (1910), in the Byzantine period (before the 10th century for Hatzidakis 1905: 648), -*opulo(n)* also appeared as -*opulos* or -*opula* denoting the son or daughter (or chick) of an animate male or female being, carrying the endings -*os* or -*a,* which are the most typical of masculine and feminine nouns:

(22)   a. *γavriilópulos*   < *γavriíl*   -*opulos*
           'Gabriel's son'   Gabriel (proper name)
        b. *papaðopúla*   < *papá(s)*   -*opula*
           'priest's daughter'   priest

One of the dialects adopting this use is Cretan, which, during the Venetian period (15th–17th century), displays many masculine forms in -*opulos* with the meaning of 'son of X'. For Ksanthoudidis 1903: 72) it entered in competition with the suffix -*akis* (23), and after a period of co-existence, -*akis* has replaced -*opulos* around the 19th century, while the feminine -*opula* still remains in use.

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[11] For etymological reasons, Hatzidakis spells the word with the double /l/ (*pullion*) of its Latin predecessor *pullus.*

(23) Cretan *Xatzópulos and Xatzákis*

      'son of Xatzis'

Note that *-opulos* further evolved into a simple formative, which, devoid of any meaning, has the function of producing proper nouns, namely, family nouns out of proper ones (24). This process is principally found in the Peloponnese peninsula:

(24)   a. *Angelópulos*   <   *Ángel(os)*   *-opulos*

        last name   first name

      b. *Kostópulos*   <   *Kóst(as)*   *-opulos*

        last name   first name

Interestingly, around the 12th century (Hatzidakis 1905) or even before, *-opulo(n)* had also assumed a hypocoristic function, creating diminutives of any type, from both animate and inanimate nouns. This use is still found in certain dialectal areas, as for instance in Peloponnesian (Melissaropoulou 2015), competing with the suffix *-aki*:

(25)   a. *psaliðópulon*   < *psalíð(ion)* *-opulon*

       'little fork'   fork

       (Prodromic poems, 12[th]century, see Hatzidakis 1905: 649)

     b. *arnópulo /arnáki* <   *arn(í)* *-opulo / -aki*

      'little sheep'   sheep

      (Peloponnesian dialect, Melissaropoulou 2015)

Given these characteristics of *-opulo*, it would be legitimate to suppose that it constitutes a particularly complex case, which may be split into more than one item. On synchronic and formal grounds, the item with the meaning of 'chick, child' could be considered as a suffix, bearing the following formal characteristics, typical of Greek suffixes: boundedness, contrary to the original *pulíon* (today *pulí*) which is a free item, and headedness, being mainly responsible for transmitting to its formation a specific gender value (neuter for *-opulo* and feminine for *-opula*). However, this item satisfies the five criteria given by Stevens for

affixoids (see Section 2) and thus, it could also be treated as a suffixoid: it has undergone a meaning alteration (criteria c,d), has become very productive into producing new items (criterion a), it actually exists alongside its parent free morpheme *pulí,* it is phonologically related to it (criterion b) and speakers link it to *pulí*, although very weakly. Furthermore, in some cases (e.g. the Cretan example in 23 or the Peloponnesian one in 25b), it is in competition with a suffix (criterion e). In contrast, the evolved masculine form *-opulos* as a family-noun formative should be excluded from a possible suffixoidal status, since it does not carry any meaning and there is no link to its parent item. Therefore, I would like to propose that in Greek, depending on the dialectal variety, there are two synchronically homonymous *-opulo*: one suffixoid and one suffix, all diachronically derived from the same item.

With respect to the suffixoid *-opulo*, it is worth stressing that its development has followed the same path as *plako-*, suggesting application of a typical grammaticalization process: a free item (*pulí*) has become the grammaticalized *-opulo*, which has undergone a slight change in form, a loss of lexical meaning and a structural reanalysis. Furthermore, in the conscience of native speakers, *-opulo* is still linked to its parent *pulí*.

4. Discussion

The properties of affixoids proposed by Stevens (2005) generally match those of *plako-*, *mata-* and *-opulo*. However, with the exception of properties (a,c,d), which refer to the productivity, meaning and function of affixoids, there are some divergences due to the particular type of the item under investigation, the word-formation process which has led to its development or even to the type of language one deals with. Property (b) refers to a form identity between an affixoid and its parent morpheme. Considering the items under examination, I would rather change the phrase 'form identity' into 'certain form similarity', since all three of them show a form alteration with respect to their parent morphemes, resulting from the word-formation process responsible for their development though time: first, the /e/ of the original preverb *meta-* has been transformed into /a/ by a vowel assimilation, well-known to occur in the history of the language (Hatzidakis 1905: 504). Second, the shape of *plako-* has been first molded by the Bare-stem constraint, which, as noted in Section 3.1, has deleted the derivational suffix *-on-* of its parent verb. Then, *plako-*

has acquired its final form by a reanalysis procedure, which has cancelled the morphological boundary between *plak-* and the compound marker *-o-*, the two items, stem and compound marker being merged into one entity. Third, the same reanalysis has affected *-opulo*, which, beside the compound marker, obtained an inflectional ending *-o*, different from that of the original item.[12] Finally, (e) claims a competition or complementary distribution between an affix and an affixoid. This can apply to the diminutive *-opulo* competing with the suffix *-aki* in certain dialectal areas (e.g. in Peloponnese, as in 25b), as well as to prefixoids originating from lexemes, but there is no equivalent competing or complementary prefix in Greek for *plako-*. Moreover, criterion (e) cannot refer to prefixoids originating from prefixes, such as *mata-*, the latter being in competition not with a current prefix but with the free adverbial word *ksaná*.

It is also worth stressing that the three items under investigation cannot be compared to the free Germanic and French items considered to be affixoids in the literature (e.g. Booij & Hüning 2009 and van Goethem 2014), because Greek affixoids are bound items, that is, categories below the word level. Therefore, the existence of affixoids is rather language-dependent. On the one hand, affixoids differ from stems, which are also bound items but can become free words with the addition of an appropriate inflectional ending. On the other hand, they are distinct from affixes, as having a more lexical meaning, and are linked to their original morphemes.

Aligning with Kenesei (2007), I would like to propose that affixoids, at least for Greek, exist as a morphological category and that they can be distinguished into prefixoids and suffixoids depending on the position they occupy in morphologically-complex words. This cannot come by surprise, since Greek morphology has both prefixes and suffixes, and is particularly rich in both derivation and compounding, which are the processes leading to the creation of affixoids.

Comparing the properties of the three items above, *plako-*, *mata-* and *opulo-*, it is also significant to stress that their affixoid status has been diachronically activated by the type of

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[12] Greek compounds which display a different inflectional ending from that of their second constituent taken in isolation have a [stem stem] structure, as proposed by Nespor and Ralli (1996) (see also Ralli 2013 for more details):
(ii) axond -ó- spit-o < árxondas spíti
    noble.man CM house-INFL noble man house
    'noble-man's house'
    where CM = compound marker

word-formation process into which they participated. *plako-* and *-opulo* have been developed through compounding, because they consist of a shortened form of a lexeme constituent and the compound marker *-o-* whose presence is compulsory in Greek compounds (Ralli 2008, 2013). In contrast, *mata-* has evolved via derivation, because it has resulted from a prefix *meta-*, itself being ascended from an Ancient Greek preverb *meta*. Thus, Greek affixoids show that there is no specific directionality in the development of affixoids, that is, they may come either through derivation or through compounding and either from lexemes or affixes.

In the literature, the directionality of change is much debated (see, among others, Haspelmath 1999; Norde 2009). Again, I would like to propose that this issue depends on the particular language one deals with, and that it is a matter of its specific type of morphology. I am tempted to claim that Greek, being very rich in morphological processes, both compounding and derivation (Ralli 2005, 2013), it can develop affixoids out of lexemes or affixes, depending on the case.

Crucially, the affixoids examined here resulted either from a loss in semantic lexicality and a structural reanalysis involving a stem and a compound marker, as is illustrated by *plako-* and *-opulo,* or from a certain gain in semantic lexicality and a phonological form change, as is depicted by *mata-*. A framework closely related to diachronic linguistics, that of grammaticalization or degrammaticalization could very well describe their development, as well as their parallel existence with their parent morphemes, on synchronic grounds, since the free items *plakóno* (26a) and *pulí* (26c) are still used as verb and noun, while *metá* is still used as a prefix (26b):

(26) a. Lesbian *Episi   tu   spít   tsi   ts   plákusi*
                   Fell.down.3SG the house and them buried.under.3SG
                   'The house fell down and buried them under'
        b. Heptanesian *To   plío   metaféri   metanástes*
                   The boat   carry/transport.3SG   immigrants
                   'The boat carries/transports immigrants'
        c. SMG *Vlépo   éna pulí sto   paráθiro   tu   spitjú*
                   see.1SG a   bird on.the window   the.GEN house.GEN
                   'I see a bird at the window of the house'

Contrary to *plako-* and *-opulo*, produced by grammaticalization, the case of *mata-* is an instance of degrammaticalization, since from the clearly functional and bound prefixal status it shows a lexical meaning and a certain tendency to acquire a semi-free status, allowing clitics to be inserted between it and the head constituent, as illustrated in (15). In addition, the further development of *mata-* into the free adverb *máta*, attested in certain Greek areas (e.g. in Kalavryta, as illustrated in (19a)), suggests a change of the so-called 'debonding' type (Norde 2009: 186).

Interestingly, the clearly discernible presence of diachrony concerning the status of affixoids makes this category debatable, as compared to that of stems and affixes, whose etymology and diachronic development are most of the times obscure. Thus, the crucial question that needs an answer is whether the category of affixoids may be considered on synchronic grounds as an independent one, parallel to that of stems and affixes, or it is a rather diachronic byproduct strictly depending on the blurred boundaries of these categories and the word-formation processes into which they participate.

Based on his discussion on affixoids, Stevens (2005) concludes that there is no strict dividing line between synchrony and diachrony[13], and adopts the notion of 'panchrony' which would include the two domains without any clear separation between them (see also Lightfoot 2011a,b for the same view). This approach would conduct us to consider the territory between stems and affixes as a slide with no sharp demarcation lines. Instead, I propose a synchronically independent status for affixoids and view the range of morphological categories below the word level as a step-ladder connecting stems, affixoids and affixes, in accordance with Kenesei's (2007) proposal. The rationale that has led me to this decision is the following: first, affixoids display properties not shared by stems or affixes. For instance, contrary to typical prefixes, which have categorial restrictions, and in prefixed words they are tightly bound with the base, *plako-* can be added to both nouns and verbs (see (1)) and an augment or a clitic can break the cohesion between *mata-* (15, 18b,c) or *plako-* (4b, 6a) with the constituent they are combined with. Second, the properties of affixoids as a whole cannot be attributed to one or the other category, that is, to stems or affixes, on synchronic grounds. Third, there cannot be any prediction when a stem or an affix will turn into an affixoid, not even any prediction whether and when an affixoid will become

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[13] In Stevens' own words: "…if we are not going to proceed in strict synchronic fashion, where do we draw the line between synchrony and diachrony?"

an affix or a stem/lexeme. Fourth, languages may have categories that are not clearly discrete. Take, for instance, Turkish, where there is no distinction between nouns and adjectives (see on this matter Braun & Haig 2000). Thus, intermediate categories can be a reality, even in synchronic terms. Crucially though, as evidenced in this article, the existence of affixoids is language-dependent - at this point I align with Kastovsky (2009) - since critical notions that are necessary for my entire argumentation, such as the property of stem-based morphology, or that of having affixes are not universal.

5. Summary

To sum up, in this article, I have argued that there is an intermediate category between stems and affixes, the affixoid one. More particularly, on the basis of Greek dialectal data, I have shown that a stem-based language with rich compounding and affixal derivation, may develop affixoids originating from different sources, that is, from both stems and affixes. In line with Kastovsky (2009), I have proposed that the occurrence of this category is language-dependent, being forged by the type of morphology of the language under examination. Admittedly, the process of becoming an affixoid is a diachronic one, interacting with a morphological system allowing stems and affixes as input to word-formation processes, that is, to compounding and derivation. Nevertheless, in accordance with Kenesei (2007), this process prompts the creation of a synchronically relevant category, the members of which participate in structures that are not clearly compounds or clearly derived formations.

References

Andriotis, N. (1992). *Ετυμολογικό λεξικό της Κοινής Νεοελληνικής* [*Etymological dictionary of Common Modern Greek*], Thessaloniki: Institute of Modern Greek Studies.

Ascoop, K. and Leuschner, T. (2006). Affixoidhungrig? Skitbra! Comparing affixoids in Swedish and German. *Sprachtypologie und Universalienforschung* 59, 241–252.

Booij, G. (2000). Inflection and Derivation. In G. Booij, Ch. Lehmann, J. Mugdan, W. Kesselheim and S. Skopeteas, eds., *Morphologie/Morphology,* vol. 1, Berlin: De Gruyter, pp. 360–369.

Booij, G. 2010. *Construction morphology*, Oxford: Oxford University Press.

Booij, G. and Hüning, M. (2014). Affixoids and constructional idioms. In R. Boogaart, T. Colleman and G. Rutten, eds., *Extending the scope of construction grammar*. Berlin: Mouton de Gruyter, pp. 77-106.

Bonami, O., Boyé G., Dal, G., Giraudo, H. and Namer, F., eds. (2018). *The lexeme in descriptive theoretical morphology*, Berlin: Language Science Press.

Braun, F. and Haig, G. (2000). The noun/adjective distinction in Turkish: an empirical approach'. In A. Göksel and C. Kerslake, eds., *Studies on Turkish and Turkic Languages: Proceedings of the Ninth International Conference on Turkish Linguistics*, Wiesbaden: Harrassowitz Verlag, pp. 85–92.

Browning, R. (1969). *Medieval and Modern Greek*, London: Hutchinson & Co.

Decroos, N. and Leuschner, T. (2008). Wortbildung zwischen System und Norm: Affixoiden im Deutschen und im Niederländischen. *Sprachwissenschaft* 33, 1–34.

Dimela, E. (2010). *Η προθηματοποίηση στις νεοελληνικές διαλέκτους* [*Prefixation in Modern Greek dialects*]. Ph.D. Dissertation. University of Patras.

Elsen, H. (2009). Affixoide: Nur was benannt wird, kann auch verstanden werden. *Deutsche Sprache* 37, 316–333.

Hartmann, S. (2016). Compound constituents or affixoids? An exploration of German compound landscapes. Paper presented at the 49th *Annual Meeting of the Societas Linguistica Europaea*, 31 August - 3 September 2016, Naples: University of Naples Federico II.

Haspelmath, M. (1999). Why is grammaticalization irreversible? *Linguistics* 37(6), 1043–1068.

Hatzidakis, G. (1905-1907). *Μεσαιωνικά και Νέα Ελληνικά* [*Medieval and Modern Greek*]. Athens: Sakellarios.

Humbert, P. (1972). *Syntaxe grecque*. Paris: Klincksieck.

Kastovsky, D. (2009). *Astronaut, astrology, astrophysics*: About combining forms, classical compounds and affixoids. In R. W. McConchie, A. Honkapohja and J. Tyrkkö eds., *Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis (HEL-LEX 2)*. Somerville, MA: Cascadilla, pp. 1–13.

Kenesei, I. (2007). Semiwords and affixoids: The territory between word and affix. *Acta*

Linguistica Hungarica 54 (3), 263–293.

Koukoules, Ph. (1908). *Οινουντιακά. Γραμματική και Λεξιλόγιο της Β.Α. Λακωνίας,* [*Oinountiaka. Grammar and Vocabulary of Northeastern Lakonia*], Chania.

Kriaras, E. (1966-2015). *Λεξικό της μεσαιωνικής δημώδους γραμματείας* [*Dictionary of the Medieval Vulgar Greek literature*] (1100-1669), Thessaloniki: Centre for the Greek Language.

Ksanthoudidis, S. (1903). Χριστιανικαί επιγραφαί εκ Κρήτης [Christian inscriptions from Crete]. *Athina* 15, 72.

Leuschner, T. and Wante, E. (2009). Personale Suffixoide im Deutschen und Niederlandischen. *Germanistische Mitteilungen* 70, 59–73.

Leuschner, T. (2010). Ausnahmepianist fettgeschreckt – inbleich! Deutsche, niederländische und schwedische präfixoide im Spanningsfeld von Genealogie, Kreativität und Norm. In A. Dammel, S. Kürschner and D. Nübling, eds., *Kontrastive Germanische Linguistik,* Vol. 2. Hildesheim: Georg Olms Verlag, pp. 863−892.

Lightfoot, D. (2011a). Testing the Suffixoidization of German -MANN 'man''. *Linguistica II. Les Frontières Internes et Externes de la Morphologie*. Ljubljana.

Lightfoot, D. (2011b). Grammaticalization and lexicalization. In H. Narrog and B. Heine, eds., *The Oxford Handbook of Grammaticalization*, Oxford: Oxford University Press, pp. 438−449.

Manolessou, I. and Nifadopoulos, Ch. (2000). Verbal augment in Medieval Greek: A first approach on the basis of compound verbs. *Studies in the Greek Language,* 20, 301−315.

Melissaropoulou, D. (2015). Evaluative morphology in Greek. In N. Grandi and L. Kortvelyessy, eds., *Handbook of Evaluative Morphology*. Edinburgh: Edinburgh University Press, pp. 269−277.

Nespor, M. and Rall, A. (1996). Morphology-phonology interface: Stress domains in Greek compounds. *The Linguistic Review* 16, 357–382.

Norde, M. (2009). *Degrammaticalization.* Oxford: Oxford University Press.

Oikonomidis, D. (1958). *Γραμματική της ελληνικής διαλέκτου του Πόντου* [*Grammar of the Greek dialect of Pontus*]. Athens: Academy of Athens.

Philintas, M. (1907-1910). *Γραμματική της ρωμαίικης γλώσσας* [*Grammar of the Greek language*], 2 volumes. Athens.

Psaltes, S. (1913). *Grammatik der Byzantinischen Chroniken*, Göttingen.

Ralli, A. (1988). *Eléments de la morphologie du grec moderne*. Ph.D. Dissertation. Université de Montréal.

Ralli, A. (2005). *Μορφολογία* [*Morphology*], Athens: Patakis.

Ralli, A. (2008). Compound markers and parametric variation. *Linguistic Typology and Universals – STUF* 61, 19–38.

Ralli, A. (2012) Greek. *Revue Belge de Philologie et d'Histoire* 90, 939–966.

Ralli, A. (2013). *Compounding in Modern Greek*, Dordrecht: Springer.

Ralli, A. (2017). *Λεξικό της διαλεκτικής ποικιλίας Κυδωνιών, Μοσχονησίων και Βορειοανατολικής Λέσβου [Dictionary of the dialectal variety of Kydonies, Moschonisia and Northeastern Lesbos].* Athens: Foundation of Historical Studies.

Ralli, A. and Karasimos, A. (2009). The Bare-stem constraint in Greek compound formation. *Gengo Kenkyu* 135, 29–48.

Sakkaris, G. (1940). Περί της διαλέκτου των Κυδωνιών εν συγκρίσει προς τας Λεσβιακάς [On the dialect of Kydonies (Aivali) as compared to the dialect of Lesbos]. *Mikrasiatika Chronika* 3, 74–141.

Scalise, S. (1984). *Generative Morphology*, Dordrecht: Foris.

Schmidt, G. D. (1987). Das Affixoid. Zur Notwendigkeit und Brauchbarkeit eines beliebten Zwischenbegriffs der Wortbildung. In R. Wimmer and G. Zifonun, eds., *Deutsche Lehnwortbildung: Beiträge zur Erforschung der Wortbildung mit entlehnten WB-Einheiten im Deutschen.* (= Forschungsberichte des IdS 64.). Tübingen: Narr, pp. 53–101.

Simiris, D. (2017), *Το Γλωσσικό Ιδίωμα της Ιθάκης* [*The dialect of Ithaca*], Patras: Laboratory of Modern Greek Dialects.

Stevens, Ch. (2000). The derivational suffixes and suffixoids of Old Saxon. A panchronic approach to a linguistic category. *American Journal of Germanic Linguistics and Literatures* 12, 53–79

Stevens, Ch. (2005). Revisiting the affixoid debate: On the grammaticalization of the word. In T. Leuschner, T. Mortelmans, and S. De Groodt, eds., *Grammatikalisierung im*

Deutschen. Berlin/New York: Mouton de Gruyter, pp. 71–83.

ten Hacken, P. (2000). Derivation and compounding. In G. Booij, Ch. Lehmann, J. Mugdan, W. Kesselheim and S. Skopeteas, eds., *Morphologie/Morphology,* Vol. 1. Berlin: De Gruyter, 349–360.

Van Goethem, K. (2010). The French Nouveau + past participle revisited: arguments in favour of a prefixoid analysis of nouveau. *Folia Linguistica* 44, 163-178.

Van Goethem, K. (2016). Debonding of affixoids. A comparative constructionist account. In A. Ralli, B. D. Joseph, M. Janse, N. Koutsoukos and S. Bompolas, eds., *Proceedings of the 6th International Conference on Modern Greek Dialects and Linguistic Theory.* Patras: Laboratory of Modern Greek Dialects, University of Patras.