# Variation with Synonymous Suffixes between Derivation and Compounding in Ancient Greek

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Abstract: The paper takes into account some cases of 'suffix alternation' in Ancient Greek, i.e., the coexistence of synonymous or nearly synonymous complex words that share the same formation pattern but have a different suffix. The analysis, carried out considering examples of both derivatives and compound words, shows that, in the case of derivatives, one of the main factors which give rise to this particular kind of variation is the desire to give the same morphological shape to words which were felt by the speakers to belong to the same 'microparadigm' (mostly semantically defined) within the lexicon. In the case of compounds, suffix alternation is linked either to an increase in the transparency of the compound's morphosemantic structure or to the extension of the scope of a given suffix to other lexical categories.

Keywords: Morphology; Word-Formation; Derivation; Compounding; Ancient Greek

## **1** Introduction<sup>1</sup>

The coexistence of synonymous or nearly synonymous complex words that share the same formation pattern but have a different suffix – a phenomenon we could refer to as 'variation with synonymous suffixes' or simply 'suffix alternation' – is a feature which can sometimes be found in languages with a highly developed inflectional and derivational morphology<sup>2</sup>. This phenomenon can be observed also in Ancient Greek, which shows it in the two main word-formation processes, namely derivation and compounding.

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<sup>&</sup>lt;sup>2</sup> Italian can provide good examples for this phenomenon, such as *abitante/abitatore* "dweller", see e.g. the data in Grossmann & Rainer (2004, eds., partic.: 197-218, 314-364).

In what follows, we will take into account some instances of suffix alternation, both in derivatives and in compounds, to see whether or not this phenomenon is related to particular characters of the words involved in it. As we will see, the key factor which may lead to suffix alternation is a certain tendency to create 'lexical micro-paradigms' characterised by high morphosemantic transparency.

### 2 Suffix alternation in Greek derivatives

A first element to be underlined is the fact that, sometimes, when we are faced with two synonymous variants which show different suffixes in an Indo-European language, we can project the synchronic variation on the diachronic level and interpret these variants either as resulting from the split of a once unitary paradigm in the proto-language<sup>3</sup>, or as the outcome of different morphological patterns which previously had a clearly different function. One of the most notorious cases of this second kind of development are the various words of the Indo-European languages which, based on the analysis of Johannes Schmidt (1889) and further improved by Jochem Schindler (1975), are today interpreted as the outcome of the PIE heteroclitic neuter -r/n- nouns (see also Dedè, 2013: 11-33).

There are some cases, however, where it is difficult to trace two words which show suffix alternation to a common ancestor in the proto-language. Here we are faced with the limits of the comparative method and many interpretations are possible, as in the well-known case of Gk.  $\chi \epsilon i \mu \alpha$  and  $\chi \epsilon \mu \omega v$  "winter"<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> An example of this are the paradigms of Greek nasal stems in  $-\check{e}n$ - (such as  $\pi \circ \mu \eta \eta$  "shepherd") and  $-\check{o}n$ - (such as  $\tau \acute{e}\kappa \tau \circ \eta$  "carpenter"), which may result from a split of a PIE ablauting paradigm, whose reflexes are still visible in some i.-e. languages, e.g. Lithuanian *piemuõ* (nom. sg.) "shepherd" < PIE \**póh<sub>2</sub>i-mõn*, *piemẽns* (gen. sg.) "id." < PIE \**p(o)h<sub>2</sub>i-mén-s* (cf. Rix, 1992: 145; Szemerényi, 1996: 169).

<sup>&</sup>lt;sup>4</sup> These two words are both attested in the Homeric poems, but later χεῖμα becomes a word of the poetic register, while χειμών remains as the unmarked form. Interpretations of the morphological and semantic relationship between them are many and varied: according to Tremblay (1996: 126 fn. 87) χειμών is a collective form compared to unmarked χεῖμα, while Nussbaum (1986: 189 fn. 67) and Widmer (2004: 110, 151 fn. 231) see χειμών as a derivative from the loc. sg. PIE \*g<sup>h</sup>ej-m-en; other scholars, such as Stüber (1998: 90) and Oettinger (2000:

In Greek derived nouns, suffix alternation is not at all rare; in this contribution we will focus on cases in which nasal stems are involved, because such stems appear to be particularly liable to participate in this kind of phenomena.

A first case is that of words denoting insects or (mostly small) animals and fish: here, we find a series of forms of the feminine gender and characterised by the termination  $-\delta\omega v$ , each of which has a correspondent synonym with a different suffix: βαμβραδών "anchovy" corresponding to βεμβράς/μεμβράς, τενθρηδών "wasp"<sup>5</sup> corresponding to τενθρήνη, and ἀνθρηδών "hornet" corresponding to  $\dot{\alpha}\nu\theta\rho\dot{\eta}\nu\eta$ . In this case we are dealing with words belonging to a language register which is at the same time technical and popular<sup>6</sup>, where formal variation in morphology is a widespread feature and it is very difficult - sometimes impossible - to go into the details of the derivational relationship between synonymous words that are scantily attested in the texts. Even stating which form is to be considered older is not an easy task; in this case, the words showing the termination  $-\delta\omega v$  often seem to be more recent<sup>7</sup>. This surely holds for the doublet  $\dot{\alpha}\nu\theta\rho\dot{\eta}\nu\eta\sim\dot{\alpha}\nu\theta\rho\eta\delta\dot{\omega}\nu$ , since the latter form is attested later<sup>8</sup> and since the word ἀνθρήνη, which lacks a satisfying etymology, could be an ancient loanword<sup>9</sup>. In the case of βαμβραδών, its very morphological structure clearly shows that it is a derivative of βεμβράς built with the suffix -ων,

<sup>395),</sup> interpret χειμών as a derivative built with the individualising suffix \*-on- (as in Gk. στράβων "squinting person" < στραβός "squinting"). The picture here is complicated by the fact that a nasal stem showing o-grade ablaut in the suffix is attested only in Greek (and possibly in Albanian dimër/dimën "winter", whose formation is not fully clear; see Wodtko et al., 2008: 166 fn. 15), so we are left without comparative evidence which might point more clearly to one or another etymological interpretation.

<sup>&</sup>lt;sup>5</sup> This term denotes a kind of wasp that makes its nest in the earth (LSJ, s.v. τενθρηδών).

<sup>&</sup>lt;sup>6</sup> A typical feature of the popular register is e.g. the (partial) reduplication of the lexical morpheme, which is seen in many of these formations.

<sup>&</sup>lt;sup>7</sup> As stated, e.g. by Chantraine (1933: 360).

<sup>&</sup>lt;sup>8</sup> Ἀνθρήνη is first attested in Aristophanes' *Clouds* (Ar. *Nub.* 947) and is common in Aristotle's works, while ἀνθρηδών is attested by Diodorus Siculus (D.S. XVII, 75.7) and Hesychius. According to the *Scholia recentiora* to Aristophanes (Koster, 1974), the variant ἀνθρήν, -ῆνος inflected as an athematic nasal stem was also used by some («ἄλλοι δὲ "ἀνθρήν, ἀνθρῆνος" φασίν», *Schol. rec. Nub., ad v.* 947); this stem is attested only here and clearly looks like a made-up form devised by grammarians based upon the passage of Aristophanes, where the word ἀνθρήνη is found in the gen. pl. ἀνθρηνῶν, which could be easily mistaken as ἀνθρήνων from a hypothetic nom. sg. ἀνθρήν. The same holds for the acc. pl. ἀνθρήνας → ἀνθρῆνας. <sup>9</sup> See Chantraine (2009, *s.v.* ἀνθρήνη).

although here it is impossible to recognise any of the functions which this suffix usually performs in Greek<sup>10</sup>. The situation of  $\tau\epsilon\nu\theta\rho\eta\nu\eta \sim \tau\epsilon\nu\theta\rho\eta\delta\omega\nu$ , however, is radically different, since the former is attested only in a verse by Nicander and the related scholia<sup>11</sup>, while  $\tau\epsilon\nu\theta\rho\eta\delta\omega\nu$  is used by Aristotle<sup>12</sup> and is the only form surviving in later texts<sup>13</sup>.

In cases such as those quoted above, it is clear that suffix alternation arises as a consequence of a process of morphological redetermination which causes words characterised by an opaque relationship between form and meaning to change their morphological structure, in order to fit with a series of words which are morpho-semantically coherent, such as the nouns of animals or insects ending in  $-\delta\omega v^{14}$ . In fact, in the case of  $\beta\epsilon\mu\beta\rho\dot{\alpha}\varsigma/\mu\epsilon\mu\beta\rho\dot{\alpha}\varsigma \sim \beta\alpha\mu\beta\rho\alpha\delta\dot{\omega}v$ the ancient testimonies hint at possible dialectal variation: the former appear in Attic comedy, while the latter, labelled as Doric, is found only in a passage of Epicharmus and in Athenaeus' *Deipnosophistae*, where it is explicitly compared to the Attic form  $\beta\epsilon\mu\beta\rho\dot{\alpha}\varsigma^{15}$ . However, it is highly probable that the Doric character – real or alleged – of the form  $\beta\alpha\mu\beta\rho\alpha\dot{\delta}\omega v$  lies in its vocalism, namely in the /a/ of the first syllable compared to the /e/ of the Attic forms, rather than in its suffix - $\delta\omega v$ ; moreover, this could well be a case of literary 'hyperdorism'.

Another case of suffix alternation which also concerns the 'popular' lexical field of animals, but with a somewhat clearer diatopic connotation, is the overlap of - $\omega v$  stems and - $\dot{\omega}$  stems (from PIE \*-oi-), as in the well-known cases of  $\chi\epsilon\lambda\iota\delta\delta\tilde{o}$  (voc. sg., Anacr. 67) beside the usual  $\chi\epsilon\lambda\iota\delta\deltav$  (from  $\chi\epsilon\lambda\iota\delta\omegav$  "swallow") and  $\dot{\alpha}\eta\delta\tilde{o}$  (voc. sg., Ar. Av. 679),  $\dot{\alpha}\eta\delta\tilde{o}\tilde{o}$  (gen. sg., S. Aj. 628)

<sup>&</sup>lt;sup>10</sup> For a survey of the functions of the Greek suffix -ων see Dedè (2018).

<sup>&</sup>lt;sup>11</sup> Nic. *Alex.* 547, where the gen. sg. τενθρήνης is found. Note that here the form τενθρηδόνος would have been unmetrical, a fact which also argues in favour of the hypothesis that τενθρήνη is but an occasional form alongside the common τενθρηδών.

<sup>&</sup>lt;sup>12</sup> Arist. *HA* 623b, 629a. Interestingly enough, in both these passages τενθρηδών is used next to ἀνθρήνη, in a comparison between the two kinds of insect.

<sup>&</sup>lt;sup>13</sup> It is noteworthy that in a late paraphrasis of Nicander's *Alexipharmaka* by Eutecnius (3/5 sec. AD), only the form τενθρηδών is used.

<sup>&</sup>lt;sup>14</sup> Already at the end of the XIX century, Maurice Bloomfield drew attention to this kind of phenomena, which he labelled *adaptation* (see e.g. Bloomfield, 1891, 1895).

<sup>&</sup>lt;sup>15</sup> Ath. Epit. 2.125: «βεμβράδες Άττικῶς. Φρύνιχος· [...] Ἐπίχαρμος δ' ἐν ¨Ηβας γάμῷ βαμβραδόνας αὐτὰς καλεῖ» (cf. also Ath. 7.28: «Ἀττικοὶ δ' ὅμως βεμβράδας λέγουσιν»).

beside the usual ἀηδόν and ἀηδόνος besides ἀηδών "nightingale"<sup>16</sup>. An interesting example of this phenomenon is the word denoting a variety of mint (*mentha polegium*), which comes in a great variety of forms: βλήχων, γλήχων, γλάχων, βληχώ, γληχώ, γλαχώ<sup>17</sup>. To the threefold shape of the lexical morpheme there corresponds, according to the ancient testimonies, a threefold dialectal variation: βλήχων is Attic, γλήχων Ionic, and γλάχων Doric<sup>18</sup>. Such a dialectal distribution is matched by the usage of Aristophanes, who employs the form βληχώ when an Athenian character is talking (Kleonike, a friend of Lysistrata)<sup>19</sup>, but γλαχώ in the case of a non Ionic-Attic speaker (a Boeotian merchant)<sup>20</sup>.

If the alternation of vowels and consonants in the lexical morpheme is granted as related to diatopic variation, the situation concerning the suffix is less clear: the predominant forms are those with nasal stem and accent on the first syllable<sup>21</sup>, and it is the nasal stem that is found later as a common term<sup>22</sup> and survives in modern Greek, albeit with oxytone accentuation and with a baffling variety of forms<sup>23</sup>. Nevertheless, in the most ancient attestations from Aristophanes, forms of the \*-oi- stem are used in two out of four cases. The

<sup>&</sup>lt;sup>16</sup> The attestations seem to point to an Ionic-Attic area, but Ahrens (1854: 108) trusts the testimony of the scholia where ἀηδώ is labelled as a Lesbian form.

<sup>&</sup>lt;sup>17</sup> There is also a thematic form with a suffix -ρο-, βλῆχρος, attested only twice in the texts, which could possibly have arisen via folk etymology from the blending with the adjective βληχρός "faint, gentle" (see Chantraine, 2009, *s.v.* βλήχων).

<sup>&</sup>lt;sup>18</sup> See for instance the statement by the grammarian Phrynichus: «βληχών: ὃ οἱ Δωριεῖς γλαχών λέγουσιν. οἱ δὲ Ἱωνες γληχών. ἀμφότεροι δὲ θηλυκῶς. οἱ μὲν τὰν γλαχόνα, οἱ δὲ τὴν γληχόνα» ("βληχών: which the Dorians call γλαχών and the Ionians γληχών. Both [regard the word] as feminine. The former say τὰν γλαχόνα, the latter τὴν γληχόνα", Phryn. Att., Praep. Soph. 53.17); a similar observation is found in a scholion to Aristophanes' *Acharnians*: «γλαχώ: ἡ γληχώ, τῆς γληχῶ. Ἀττικοὶ δὲ βληχώ φασιν» ("γλαχώ: ἡ γληχώ, τῆς γληχῶ. The Attics say βληχώ", Sch. Ach. 874b).

<sup>&</sup>lt;sup>19</sup> Ar. Lys. 89.

<sup>&</sup>lt;sup>20</sup> Ar. Ach. 869, 871, 874.

<sup>&</sup>lt;sup>21</sup> Note that this accentuation does not fit well with feminine -ων stems, cf. Dedè (2018: 28ff.).

<sup>&</sup>lt;sup>22</sup> A form γλήχωναν appears in an Egyptian *ostrakon* from Didymoi (HGV O.Did. 376 1.14).
<sup>23</sup> The standard modern Greek form is φλησκούνι (Babiniotis, 2002, *s.v.*), but other attested forms, which are more or less close to the ancient ones, are φλισκούνι, φλεσκούνι, φλουσκούνι, γληφώνι, γληφώνι, βληγώνι.

most common interpretation, here, is that the \*- $o_i$ - stems with oxytone accentuation are the original ones, and that the nasal stems are secondary<sup>24</sup>.

All in all, the suffix alternation in this case seems to be related to the diatopic variation, where the Attic dialect tends to preserve the inflectional paradigm in  $-\dot{\omega}$ ,  $-\tilde{\omega}\varsigma$ , and sometimes even extends it at the expense of the  $-\dot{\omega}v$   $-\dot{\omega}v\varsigma$  type<sup>25</sup>. These two inflectional paradigms were perceived as being close to one another: this is proven, apart from formal similarities between some of their terminations<sup>26</sup>, by the fact that in Greek onomastics there is a polarisation, clearly visible especially in shortened forms, between masculine names in  $-\omega v$  and feminine names in  $-\dot{\omega}^{27}$ .

Suffix alternation involving Greek nasal stems sometimes concerns the diaphasic level of variation, as in some instances of alternation between nasal stems and stems in -o- and - $\bar{\alpha}$ -; in these cases, the forms inflected as nasal stems are usually rarer and often restricted to the poetic register. Examples of this kind include the isolated dat. pl.  $\chi\eta\rho\alpha\mu\delta\nu\epsilon\sigma\sigma\iota\nu^{28}$ , beside the common  $\chi\eta\rho\alpha\mu\delta\varsigma$  "hole, cleft, hollow" or the biblical  $\kappa\lambda\alpha\upsilon\theta\mu\delta\nu$  "weeping, wailing", beside the common  $\kappa\lambda\alpha\upsilon\theta\mu\delta\varsigma$ ; sometimes, the relationship is inverted, as in the case of the more common  $\kappa\epsilon\upsilon\theta\mu\delta\nu$  "hiding place" compared to  $\kappa\epsilon\upsilon\theta\mu\delta\varsigma$  "id." (both these forms are already attested in the Homeric poems). In other cases, the alternation between nasal stems and other inflectional classes implies a different form of the suffix, as in the case of  $\delta\lambdao\lambda\upsilon\gamma\delta\nu$  compared to  $\delta\lambda\delta\lambda\upsilon\gamma\mu\alpha$ ,

<sup>&</sup>lt;sup>24</sup> One may also wonder if the accentuation of the modern Greek forms, despite their nasal consonant, preserves a record of the original place of the accent, possibly because of the popular nature of these words.

<sup>&</sup>lt;sup>25</sup> Particularly significant is the preservation in Attic of some ancient comparative forms in \*-*jos*- (e.g. acc. sg.  $\eta\deltai\omega < *\eta\deltai\sigma\alpha < PGk$ . \**suád-(i)jos-m*) against the reshaping as nasal stems. This has something to do with our topic, since the Greek outcomes of PIE paradigms in \*-*jos*- and in \*-*oj*- were homophones in many of their forms (though differently accented).

<sup>&</sup>lt;sup>26</sup> On these similarities as the trigger for the passage from one inflection to another, see Gusmani (1962: 407-410).

<sup>&</sup>lt;sup>27</sup> See pairs such as Άισχρων ~ Άισχρώ, Ἀκέσων ~ Ἀκεσώ, etc. Comparing personal names with common nouns, we also find cases of partial overlap between the expected suffix/gender patterns: for instance, beside the fem. τενθρηδών "wasp" (see above) we find the masculine name Τενθρηδών, already attested in Homer's Catalogue of Ships (Tenthredon, father of Prothous, the leader of the Magnetes, cf. Hom. *Il*. 2.756), while a more regular pattern is found with fem. πεμφρηδών "(another kind of) wasp" alongside fem. Πεμφρεδώ.

<sup>&</sup>lt;sup>28</sup> *Hapax* in Orph. A. 1266.

όλολυγμός, όλολυγή<sup>29</sup>, or in the pair ἀχυρών "storehouse for chaff" ~ ἀχυρμιά "heap of chaff". The final example leads us to consider the pairs of collective nouns ending in -ων and -ια (or in the complex ending -ωνιά), such as κοπρών "place for dung, privy" ~ κοπρία "dunghill", σφηκών "wasps' nest" ~ σφηκιά "id.", ῥοδών "rose-bed" ~ ῥοδωνιά "id." θημών "heap" ~ θημωνιά "id.". In these cases it is very difficult to trace the suffix alternation to a specific axis of variation; here again, the major role seems to be played by the need to group together various words in what we may label 'lexical micro-paradigms'.

On a provisional basis, it can be observed that the morphological class of Greek - $\omega$ v nouns is particularly involved in mechanisms of suffix alternation, and that this fact is possibly also related to the heterogeneous character of this class within the Greek lexicon for two reasons: on the one hand, since the suffix - $\omega$ v does not show unambiguous semantic values, this morphological class could well be interpreted as a general type for creating doublets of pre-existing words to meet specific needs, thus creating or enhancing 'lexical microparadigms' (e.g. names of animals, etc.) or establishing synchronic connections of the suffix to certain linguistic levels (e.g. the poetic language). On the other side, in cases where the word ending in - $\omega$ v is the older form, it is precisely the lack of a clear-cut suffix semantics that may have favoured the shaping of words with more transparent suffixes in order to clarify the relationship between form and meaning.

### 3 Suffix alternation in Greek nominal compounds

In Ancient Greek, suffix alternation also appears in the field of nominal composition. Nevertheless, as an important premise for the analysis of its function, it must be said that in ancient Greek compounds the presence of suffixes is not a constitutive factor, as it is, on the contrary, in the field of derivation. While indeed suffixes normally indicate syntactic function and some semantic characteristics of the word they constitute, in compounds these values are partly expressed by the internal structure of compound words. On

<sup>&</sup>lt;sup>29</sup> The latter forms all mean "loud cry", while the former denotes the verse of various animals (e.g. the croaking of the male frog in Aristotle); this semantic shift might well have been triggered by the connection between nouns in  $-\delta\omega v$  and the semantic field of animals.

this basis, we consider very significant to show that the suffix alternation has a function in the field of composition, and that this function is to enhance the morphological (and, in some cases, semantic) transparency of compounds.

It is worthwhile to summarise some of the data schematically, in order to frame the consideration about the values of suffixation in the context of different Greek compositional categories.

In some categories, in fact, suffixation is a necessary strategy for the formation of compounds. First of all, the category of verbal governing compounds, especially those in which the verbal element is the second member, shows the use of various types of nominal suffixes. Suffixation is indeed only one of the different morphological strategies used to insert verbal stems in nominal paradigms.<sup>30</sup>

Secondly, in the case of prepositional governing compounds, the presence of a suffix is a distinctive feature, as is clear from the description of Rousseau (2016):

l'association d'un suffixe au radical du second terme n'est pas morphologiquement indispensable à la création d'une forme hypostatique [...]. Dans la plupart des cas, cependant [...], les formes hypostatiques présentent un suffixe (ou une simple voyelle thématique) différent de celui du substantif qui constitue le second terme<sup>31</sup>.

For this very reason many interpreters have wondered whether the formative process of prepositional governing compounds should not rather be ascribed to derivation, albeit derivation from a syntactic structure, such as a prepositional phrase.

On the other hand, in the category of possessive compounds or determinative compounds, the process of composition is normally not marked

<sup>&</sup>lt;sup>30</sup> The different strategies used to insert verbal stems in nominal paradigms are thoroughly described, with regard to the Homeric language, by Risch: cf. Risch (1974: 189-212); for an overview of the compounds with a deverbative second member (not only in the Homeric language), cf. Tribulato (2015: 85-102).

<sup>&</sup>lt;sup>31</sup> Rousseau (2016: 84-85). See also the fundamental considerations by Sommer (1948: 107-109). It must be underlined that in French metalinguistic tradition the expression "composés hypostatiques" is in fact equivalent to German "präpositionale Rektionskomposita" and English "prepositional governing compounds": even if the two expressions arise from different interpretative paradigms, they actually refer to the same class of words.

by any suffix. The case of possessive compounds is the prototypical example of compounds in which syntactic function and semantic characteristics are almost exclusively expressed by the internal structure: since in Ancient Greek nouns and adjectives have the same inflectional paradigms, the passage of the word from the nominal category of the second member to the adjectival category of the compound as a whole is entrusted, from a functional point of view, to the exocentricity of the compound. So, nominal terminations are conserved in adjectival inflections as far as possible, whereas in other cases we find the change of the apophonic degree of the inflectional morpheme; finally, stems in  $-\bar{a}$  are changed into *o*-stems.<sup>32</sup>

This situation invites us to pay attention to the distinction – which is not always evident – between inflectional morphemes and suffixes in the formation of compounds. In fact, the same morphological unit (that is, the same morph) can be either an inflectional morpheme or a suffix according to the paradigm of forms in which it appears. The example of sigmatic termination -  $\eta \varsigma$ , - $\varepsilon \varsigma$  is very clear: in nominal second-member compounds this is the result of the apophonic variation of the stem of sigmatic neuters in *-es/os*-, while in verbal second member compounds it is a real suffix.<sup>33</sup>

In light of this premise, it is very interesting to underline that suffix alternation - in terms of the existence of couples of words which share the same meaning and the same formation pattern, but have a different suffix - is also widespread among compounds. It is therefore worth asking whether this alternation has a functional value, as we would like to show.

In order to examine this phenomenon, the present analysis focuses on Homeric examples, a choice which is due to many reasons. Firstly, Homeric language is very rich in compounds; secondly, their great quantity makes it possible to estimate the incidence of cases of suffix alternation in relation to

<sup>&</sup>lt;sup>32</sup> Cf. Risch (1974: 226-228). It is useful to underline that the description of this phenomenon by Risch also concerns verbal governing compounds with a verbal first member and a nominal second member, and other compounds with a nominal second member, where they observe the same morphological patterns.

<sup>&</sup>lt;sup>33</sup> As Blanc explains: «dans °κλεής, l'élément \*-*es*- appartient au thème du substantif qui constitue le second membre. Dans un composé comme εὐπρεπής, \*-εσ- est un élément qui s'adjoint à une base verbale pour former un dérivé (employé seulement en composition) : c'est un *suffixe de dérivation*» (Blanc, 2018: 1).

the entire number of Homeric compounds; thirdly, in Homeric language, words from different origins and ages are placed in close contact with each other (and thus affect each other); and lastly, metric constraints and other formal characteristics invite us to inquire further into the causes of suffix alternation, in order to distinguish metrical causes from semantic and morphological ones.

With regard to Homeric examples, out of a total of about 1700 different compounds, more than 120 are actually part of a pair or a group of three synonymous formations of similar synchronic etymology. Thus, these compounds have different inflectional classes and/or suffixes. These cases constitute 7% of the total, which seems to be a relevant quantity. The second interesting fact is that the types of variation are very diverse from a morphological point of view, and therefore it is even more significant to note that, by a functional point of view, they serve the same purposes, as we want to show here.

The following analyses show many examples of the different patterns of suffix alternation in Homeric Greek compounds. Firstly, cases of suffix alternation with a clear morphological function will be examined; secondly, cases will be proposed where an apparent suffix alternation can be explained in different ways; then, other cases will be divided into two groups: on the one hand, there are early cases of types of alternations that later become common, whereas, on the other hand, we will see how aberrant cases can be explained as analogies with other compositional categories. Finally, we will show cases in which suffix alternation seems to contribute to a greater transparency of compounds.

As mentioned above, Homeric language offers some cases of suffix alternation with a clear morphological function: there are some couples of masculine and feminine substantives, such as  $\ddot{\alpha}\kappa \sigma_{11}$ ,  $\sigma_{10}$  /  $\dot{\alpha}\kappa \sigma_{11}$ ,  $\dot{\alpha}\kappa \sigma_$ 

not synonyms and the change of suffix has a clear grammatical function. Therefore, these cases are outside the actual focus of our research, since here suffix alternation produces word pairs which are not semantically equivalent.

A more complex case is that of couples of synonyms, such as:  $\epsilon \rho i \beta \tilde{\omega} \lambda \alpha \xi$ ,  $\kappa o \zeta$  and  $\epsilon \rho i \beta \omega \lambda o \zeta$ , ov "with large clods";  $\tau \alpha v \upsilon \pi \tau \epsilon \rho \upsilon \xi$ ,  $\upsilon \gamma o \zeta$  and  $\tau \alpha v \upsilon \pi \tau \epsilon \rho \sigma \zeta$ , ov "with extended wings, long-winged"<sup>34</sup>. In these cases, the second members rely on doublets of a simple word and a form with a suffix:  $\beta \tilde{\omega} \lambda o \zeta$  "lump, clod of earth" is the simple form, while  $\beta \tilde{\omega} \lambda \alpha \xi$  is a diminutive; as Chantraine explains, «le terme le plus ancien et le plus important est  $\beta \tilde{\omega} \lambda \alpha \xi$  f. (Pi., Théoc., A.R.) équivalent de  $\beta \tilde{\omega} \lambda o \zeta$  mais ne se prêtant pas aux emplois dérivés, avec le suffixe - $\alpha \kappa$ - [...]»<sup>35</sup>. Similarly, Chantraine defines  $\pi \tau \epsilon \rho \upsilon \xi$ ,  $\gamma o \zeta$  "wing of a bird" as a derived form («forme dérivée») from  $\pi \tau \epsilon \rho \upsilon v$ , o $\tilde{\upsilon}$  "feather" (in the plural form, "wings"):<sup>36</sup> these forms are nonetheless used as synonyms, both in free usage and as compound members. In these cases, as it is clear, the suffix change essentially concerns simple forms, and not compounds.

Other cases are even more complex, and it is possible to wonder whether they are a question of suffix alternation or different synchronic etymology. Let us now observe the examples  $\ddot{\alpha}\pi\nu\rho\sigma\varsigma$ , ov "that have not yet been on the fire, brand-new" and  $\dot{\alpha}\pi\dot{\nu}\rho\omega\tau\sigma\varsigma$ , ov "not exposed to fire, brand-new";  $\dot{\alpha}\tau\alpha\rho\beta\dot{\eta}\varsigma$ ,  $\dot{\epsilon}\varsigma$ and  $\dot{\alpha}\tau\dot{\alpha}\rho\beta\eta\tau\sigma\varsigma$ , ov "fearless". The second member of each pair's first form is a substantive, respectively  $\pi\tilde{\nu}\rho$ ,  $\pi\nu\rho\dot{\varsigma}\varsigma$  "fire" and  $\tau\dot{\alpha}\rho\beta\sigma\varsigma$ ,  $\epsilon\varsigma\varsigma$  "alarm, terror";

<sup>&</sup>lt;sup>34</sup> Actually, the form τανύπτερος appears only in *h. Cer.* 89 and Hes. *Th.* 523; in the Homeric poems, besides τανυπτέρυξ, we find the adjective τανυσίπτερος, ov "*id.*". Risch classifies these two compounds into two different subgroups of verbal governing compounds with a verbal first member: τανυπτέρυξ is an example of the "type Ἐχέπωλος", namely compounds whose first member corresponds to the verbal stem (τανυ- > τανύω "to stretch, strain"), while τανυσίπτερος belongs to the "type βωτιάνειρα, φαεσίμβροτος", which means compounds whose verbal first member has the suffix *-ti-* (often > -σι-). Cf. Risch (1974: 190-192).

<sup>&</sup>lt;sup>35</sup> Chantraine (2009, *s.v.* βῶλος).

<sup>&</sup>lt;sup>36</sup> With regard to the suffix -ξ, -γος, Buck and Petersen write: "[T]he suffix -γ- is rare and without tangible meaning [...]. Names of animals, particularly birds, seem of IE age [...]. Other words are scattered. Examples are: πτέρυξ 'wing', φάρυγξ 'throat' [...]" (Buck & Petersen, 1970: 611). Even if the authors do not propose this interpretation, it is possible that the group of bird nouns in -γ- influenced the formation of πτέρυξ "wing", because of their semantic field sharing. Nonetheless, πτέρυξ is also used in metaphorical senses, as Chantraine explains: "nombreux emplois figurés : nageoires de poissons, plat de l'aviron, pan d'une cuirasse, d'un vêtement" (Chantraine, 2009, s.v. πτερόν).

the other forms, on the other hand, seem to rely on the verbs πυρόω "burn with fire, burn up" and ταρβέω "to be frightened, alarmed"; the forms °πύρωτος and °τάρβητος seem to be deverbal adjectives in *-to-*<sup>37</sup>. In both cases a possessive compound corresponds to a deverbative second member compound with the same meaning.<sup>38</sup>

After having examined the cases in which the morphological function of the alternation is clear, and those in which suffix alternation is only apparent (i.e., it has another explanation), we take into account the cases that appear as true suffix alternation in synonymous pairs of compounds. As already mentioned, the purpose of the analysis of these forms is to show the functional nature of suffix alternation.

A first type of variation, which is widespread, and at the same time not so well explained, is that between suffixes *-io-* and *-o-* in prepositional governing compounds; the result of the alternation are couples of perfectly synonymous and homo-functional forms. In the Homeric poems there are only three examples, namely the pairs  $\dot{\epsilon}vv\dot{v}\chi_{10}\zeta$ ,  $\alpha$ , ov and  $\dot{\epsilon}vvv\chi_{0}\zeta$ , ov ("at night", based on  $v\dot{v}\xi$ ,  $\kappa\tau \dot{o}\zeta$ ),  $\pi\alpha vv\dot{v}\chi_{10}\zeta$ ,  $\alpha$ , ov and  $\pi\dot{\alpha}vvv\chi_{0}\zeta$ , ov ("all night long") and

<sup>&</sup>lt;sup>37</sup> Actually, a deverbal adjective in *-to-* on ταρβέω is not really attested; on the contrary, πυρωτός "fiery" is attested in a fragment from Antiphanes, 217, 21.

<sup>&</sup>lt;sup>38</sup> Two other formations seem to share a similar pattern,  $\dot{\varepsilon}$   $\ddot{\upsilon}\rho\rho\epsilon\eta$ ,  $\dot{\epsilon}$ , and  $\dot{\varepsilon}$   $\ddot{\upsilon}\rho\rho\epsilon\eta$ ,  $\sigma\nu$ : the latter is surely a deverbative second member compound, where °ρείτης is based on the stem in  $e^*\rho_{\text{EFE}}$  + - $\tau\eta_{\zeta}$  (\*- $t\bar{a}$ -). The etymology of the former is, on the contrary, uncertain: from a theoretical point of view, it could be a possessive compound whose second member corresponds to the sigmatic nouns ῥέος "anything flowing, stream", first attested in Aeschylus (Ag. 901, Pr. 401, 676, 812). As Blanc explains, the situation is complex: «la racine \*sreų-"couler" du présent radical sanskrit sravati, grec ῥέω [...] a fourni au sanskrit un substantif sigmatique postvédique sravas- "courant", qui peut avoir été formé à date récente sur srávati. Le neutre grec ῥέος "flot" n'apparaît que chez Eschyle (Ag. 901, Pr. 401, 676, 812) et passe donc aussi pour une création récente, indépendante du mot sanskrit [...]. Attesté avant péoc, le composé homérique [scil. ἐῦρρεής] passe pour avoir un second membre déverbatif et on se demande même maintenant si péoç n'a pas été extrait par dérivation inverse du second membre °ρρεής. Cette interprétation des données est possible, mais non nécessaire, et le détail n'est pas susceptible de démonstration. Considérer qu'Eschyle a réhabilité un vieux mot archaïque qui est à la base du second membre de composé est tout aussi satisfaisant» (Blanc, 2018: 117). As one can see, if ἐὐρρεής is considered a possessive compound, its example perfectly fits with the others mentioned above; but if, on the contrary, it is a deverbative second member compound, the couples share, nonetheless, the same suffixes (even if they have a different function).

μέτωπον, ου and μετώπιον, ου ("front" based on \* $\tilde{\omega}\pi\alpha$  "face, appearance"). Other cases appear if Hesiod's poems and *Homeric Hymns* are also included, such as, for example, ἕμφυλος, ov and ἐμφύλιος, α, ov "of the same tribe" or εἰνάλιος et ἕναλος "in, on, of the sea".

In further developments of this compositional category, the phenomenon increases enormously to encompass a third of the forms examined by Rousseau, namely all prepositional governing compounds attested both in the archaic and in the classical periods. The fact that the pairs of compounds formed with the two suffixes are perfectly identical from a semantic and a functional point of view led Rousseau to describe the phenomenon as "suffixal freedom"<sup>39</sup>.

There are, on the contrary, some examples of the use of this alternation in compounds of other categories, for which it is a veritable exception: besides metrical necessity, these cases seem to imitate the class of prepositional governing compounds. These include the verbal governing compound  $\pi \tau o \lambda (\pi o \rho \theta o \varsigma)$ , ov and  $\pi \tau o \lambda (\pi o \rho \theta o \varsigma)$ , ov "sacking or wasting cities" (based on  $\pi \epsilon \rho \theta \omega$  "to waste, ravage, sack") and the possessive compound  $\alpha \theta \epsilon \mu (\sigma \tau o \varsigma)$ , ov and  $\alpha \theta \epsilon \mu (\sigma \tau o \varsigma)$  (based on  $\theta \epsilon \mu (\sigma \tau o \varsigma)$  "that which is laid down or established"; there is  $\alpha \theta \epsilon \mu (\varsigma, \tau o \varsigma)$  "id." in Pindar, *P.* 3, 32).

In other cases, the coexistence of forms that appear as doublets in the Homeric language can be explained, from a diachronic point of view, as of the outcome of a morphological change, whereby the older form is preserved alongside the younger one. A first type of path, on a morphological level, are cases of thematisation in -o- of possessive compounds whose second member rests on a noun stem in consonant or vowel different from -o-. In some cases, the compound in -o- coexists with a compound whose second member is identical to the free form. These include: the adjectives πολύδακρυς, υος and πολυδάκρυος, ov ("of or with many tears" on δάκρυ, υος "tear"); or the plural ἑρίηρες together with ἐρίηρος, ov "well-disposed" (based on ἦρα acc., in the expression ἐπὶ ἦρα φέρειν "to give cause of joy, to give satisfaction")<sup>40</sup>; the

<sup>&</sup>lt;sup>39</sup> Namely, «liberté suffixale», as it is presented by Rousseau (2016: 109). This "freedom" also characterises other couples of suffixes, as for example -ιο- and -ιδιο-: nevertheless, in Homeric language there is not a single case.

<sup>&</sup>lt;sup>40</sup> On the basis of the correspondence between Greek  $\tilde{\eta}\rho\alpha$  and Hittite *uarr*- defined by Gusmani (1968), García Ramón (2006) reconstructs the entire system of IE \**uerH*-, on the basis of the

plural πολύρρηνες and the dative πολύαρνι (πολύρρην, ηνος) with πολύρρηνος, ον ("rich in lambs", based on ἀρήν, ἀρνός "lamb"). The last two examples come from the group of sigmatic adjectives: the plural μελανόχροες, compared to the singular μελανόχροος, ον "black-skinned, swarthy" (based on χρώς χροός "skin"), and the accusative εὐτείχεα, compared to εὐτείχεος, ον "well-walled" (based on τεῖχος, εος "wall").<sup>41</sup>

With regard to the field of verbal governing compounds, Blanc has shown that the paradigm of sigmatic compounds with a deverbal second member spreads to the detriment of the suffix *-to-* of the verbal adjectives. The diminishing presence of *-to-* and the productivity of the sigmatic suffix  $-\eta\varsigma$  - $\varepsilon\varsigma$ depend mainly on the greater transparency of the stems to which this second suffix is added, as well as from its versatility in meter. Homeric examples of coexistence between a form with the sigmatic suffix and a form in *-to-* include  $\varepsilon \dot{\upsilon} \pi \eta \gamma \dot{\eta} \varsigma$ ,  $\dot{\varepsilon} \varsigma$  and  $\varepsilon \ddot{\upsilon} \pi \eta \kappa \tau \sigma \varsigma$ ,  $\circ \upsilon$  "well put together, well-built" (from  $\pi \dot{\eta} \gamma \upsilon \mu \iota$  "to stick *or* fix in"),  $\varepsilon \dot{\upsilon} \pi \lambda \varepsilon \kappa \dot{\eta} \varsigma$ ,  $\dot{\varepsilon} \varsigma$  and  $\varepsilon \ddot{\upsilon} \pi \lambda \varepsilon \kappa \tau \sigma \varsigma$ ,  $\circ \upsilon$  "well-plaited, well-twisted" (from  $\pi \lambda \dot{\varepsilon} \kappa \omega$  "to plait, twine"), and  $\dot{\alpha} \varepsilon \lambda \pi \dot{\eta} \varsigma$ ,  $\dot{\varepsilon} \varsigma$  and  $\check{\omega} \varepsilon \lambda \pi \tau \sigma \varsigma$  "unhoped for, unexpected" (from  $\check{\varepsilon} \lambda \pi \sigma \mu \alpha \iota$  "to expect, imagine"), the last of which, however, appears only in the *Hymns* and in Hesiod.

This same variation also appears, though, in the case of two couples of possessive compounds with a nominal second member, namely περιμήκης, ες and περιμήκετος, ov "very tall or high", and the neuter noun μῆκος, ους "length". Chantraine tries to explain the strange suffix of περιμήκετος as an analogy to πάχετος, ov "massive", a derivative of παχύς, εῖα, ὑ "thick, stout",

study of both languages. In particular, on ἦρα and ἐρίηρ\*/ἐρίηρος he writes: «IE \*µerH- se conserve en griego residualmente en hom. ἦρα φέρειν 'dar satisfacción a, complacer a' (Dat. *personae*), con el significado originario del lexema, y en hom. μοι ... ἐπιήρανα θυμῷ γίνεται. El sintagma ἦρα φέρειν, que es continuado por χάριν φέρειν, χαρίζεσθαι (χάρις 'motivo de alegría') es heredado, como muestra la correspondencia con véd. *ávas* ... *ǎ-bhar* y lat. *adiūmentum ferre* (+ Dat. *personae*). Hom. ἐρίηρ\*, ἐρίηρος es, a su vez, sinónimo de ἐνηής\* (°āµes- de \*h₂éµh₁es-) y refleja asimismo el significado básico 'lleno de buena disposición'. En este punto el griego es más conservador que el hitita. Ello favorece la propuesta etimológica de \*µērH-o- 'amistoso, fiable' (lat. *vērus* 'verdadero', germ. \*µæra- 'digno de confianza' *et sim.*)» (García Ramón, 2006: 843).

<sup>&</sup>lt;sup>41</sup> Actually, the example of πολύδακρυς, υος and πολυδάκρυος, ov could also be explained on the basis of the corresponding *simplicia* δάκρυ, υος and δάκρυον, ου "tear"; as for the other examples, instead, cf. Sommer (1948, in partic: 19 (εὐτείχεον), 21-28 (°χρως and °χροος), 66-69 (°ρην(ο)-), 138-139 (ἐρίηρος, pl. -ες)).

with an "augmentative suffix"<sup>42</sup>; nevertheless, the correspondence between the couples of suffixes in question,  $-\eta\varsigma$ ,  $-\varepsilon\varsigma$  and  $-\tau\varsigma\varsigma$ , cannot be an accident.

An opposite example is the two pairs of compounds  $\beta\alpha\theta\upsilon\delta\iotav\eta\epsilon\iota\zeta$ ,  $\eta\epsilon\sigma\sigma\alpha$ ,  $\eta\epsilon\nu$  and  $\beta\alpha\theta\upsilon\delta\iotav\eta\zeta$ , ou "of deep eddies" and  $\upsilon\psi\iota\pi\epsilon\tau\eta\epsilon\iota\zeta$ ,  $\eta\epsilon\sigma\sigma\alpha$ ,  $\eta\epsilon\nu$  and  $\upsilon\psi\iota\pi\epsilon\tau\eta\varsigma$ , ou "high-flying, soaring". The two suffixes seem adequate to the first pair, which consists of possessive compounds that have as a second member the noun  $\delta\iotav\eta$ ,  $\eta\varsigma$  "whirlpool, eddy". In fact, the suffix -Fevt- of  $\beta\alpha\theta\upsilon\delta\iotav\eta\epsilon\iota\varsigma$  is typically denominal, while in the case of  $\beta\alpha\theta\upsilon\delta\iotav\eta\varsigma$  we are faced with masculine nouns in  $-\bar{a}$ -. In the second pair, the same suffixes are applied to a verbal base, that of  $\pi\epsilon\tau$ oµau "to fly".

The last examples of alternation go in the direction of greater semantic transparency. This is so in the case of the pairs of determinative compounds δαφοινεός, όν and δαφοινός, όν "tawny" (based on φοινός, ή, όν "blood-red"), and  $\pi\alpha\gamma\gamma\alpha\lambda\kappa\omega_{c}$ , ov and  $\pi\alpha\gamma\gamma\alpha\lambda\kappa\omega_{c}$ , ov "all-brazen" (both based on  $\gamma\alpha\lambda\kappa\omega_{c}$ , où "copper"; alternatively, the first is based on  $\chi \alpha \lambda \kappa \epsilon \circ \zeta$ ,  $\epsilon \alpha$ ,  $\epsilon \circ \gamma$  "of copper" and the second on  $\chi\alpha\lambda\kappa\delta\zeta$ ); in these examples, - $\varepsilon$ o- is opposed to -o-. In this second pair, the existence of both the noun  $\gamma\alpha\lambda\kappa\delta\zeta$  "copper" and the adjective of matter χάλκεος, έα, εον "of copper or bronze" invites us to wonder whether we are facing the opposition between a possessive compound ( $\pi \dot{\alpha} \gamma \gamma \alpha \lambda \kappa \alpha \zeta$ ) and a determinative compound ( $\pi\alpha\gamma\gamma\alpha\lambda\kappa\epsilon\circ\varsigma$ ), even if from a semantic point of view they are synonymous. For the first couple, on the other hand, this problem does not arise because the only simple form they are linked to is the adjective φοινός, ή, όν "blood-red"; thus, it is particularly interesting that, beside the form with the intensive first member  $\delta \alpha^{\circ 43}$  and the second member  $\circ \phi \sigma v \delta \zeta$ , we find the form in  $-\varepsilon_0$ , namely the suffix typical to the derivatives from nouns denoting a substance, and also to the adjectives of colour.

#### **4** Conclusion

The cases of suffix alternation seen above confirm that this phenomenon is well documented in Greek, both in derivation and compounding. In the case

<sup>&</sup>lt;sup>42</sup> Cf. Chantraine (2009, *s.vv.* μακρός et παχύς).

<sup>&</sup>lt;sup>43</sup> On the origin of  $\delta \alpha^{\circ}$ , cf. Risch (1974: 216): « $\zeta \alpha$ -,  $\delta \alpha$ - "sehr", ursprünglich "durch und durch" (äol. < \* $\delta_{1}\dot{\alpha} = \delta_{1}\dot{\alpha}$ )».

of derivatives, although the presence of synonymous words built with different suffixes can be ascribed to diatopic or diaphasic variation, it has been seen that the main role played by suffix alternation is to create words with a morphosemantic structure that better fit certain 'micro-paradigms' within the lexicon.

In the case of compounds, we can say that, in the Homeric language, some word pairs appear synchronically to be cases of suffix alternation, whereas, from a diachronic point of view, they are early examples of a morphological evolution. This outcome, to which metrical needs contribute a great deal, is illustrated above all by the cases of transition to stems in *-o-*, for possessive compounds, or to signatic stems, for the compounds with a deverbal second member.

Apart from these examples of vestiges of wider morphological changes, the forms examined here show that the nature of compounds, namely of words with an internal syntactic structure, interacts with the morphological process of suffixation in two opposite directions: on the one hand, in terms of an increase in transparency (as in the case of the suffix of colour adjectives - $\varepsilon$ o-in the formation of  $\delta\alpha\phi\sigma\sigma\sigma\sigma$ ) and, on the other hand, in terms of a further grammaticalisation of the function of suffixes. This is shown by the fact that suffixes that are etymologically more suitable to a compositional category may also appear in words of other categories.

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