Abstract

In this paper we deal with a borderline case between prefixation and compounding in the dialectal varieties of Lesbos, Kydonies (Aivali) and Moschonisia, namely with the addition of an element sa- to a number of locative adverbs. We show that sa- displays most of the apparent characteristics of a prefix, without having acquired a full functional status yet, and claim that the sa- formations may be considered as instances of the relatively unknown phenomenon of morphological creativity. We further argue that the dialectal varieties with sa- locative adverbs are situated in the middle of a morphological continuum. One pole of the particular continuum displays dialects with a full prefix sa- or s(j)o-, where Cretan belongs. The other pole is occupied by Standard Modern Greek and dialects where is(j)a, the adverb where sa- derives from, is still an autonomous word, such as Corfiot.

Key words: prefixation, compounding, morphological creativity, dialectal variation.

1. Prefixation vs. Compounding: borderline cases

It is generally known that several prefixes behave like the left-hand constituents of compounds in many respects. Suffice to mention the characteristics of stress subordination and categorial neutrality that are shared by the so-called Class-II prefixes in English (e.g. pro- and en- as in the words proclitic and enclitic) and the left-hand constituents of compounds (see, among others, Siegel 1979, Stekauer 2005).

As far as Standard Modern Greek (hereafter SMG) is concerned, a considerable number of prefixed structures have been usually confused with compounds. For example, there is a long tradition of treating verbs preceded by preverbs as

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compounds (e.g. Triantaphyllidis 1941, Babiniotis 1969, etc.), and not as derived words, in spite of the fact that several preverbs are not separable items:

(1) 

<table>
<thead>
<tr>
<th>a. anaγrafo²</th>
<th>&lt; ana- γrafo</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘write on, inscribe’</td>
<td>‘write’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. kataγrafo</th>
<th>&lt; kata- γrafo</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘write down, register’</td>
<td>‘write’</td>
</tr>
</tbody>
</table>

The reason for such an analysis is mainly due to the fact that most of these preverbs are formally identical to ancient adverbs or prepositions, and diachronically derive from them³.

The similarity between prefixation and compounding is an old issue in morphological theory, and various proposals are put forward to account for it. Crucially, this similarity has led Marchand (1967) to treat differently prefixes from suffixes: he considers compounding and prefixation as cases of ‘expansion’, while he sees suffixation as a special case of ‘transposition’. In more recent theoretical models, for example, in the strata-ordered lexical morphology (Kiparsky 1982), Class-II prefixation and compounding are regarded as instances of the same stratum. Moreover, in the generative approach proposed by Di Sciullo & Williams (1987), both prefixes and left-hand constituents of compounds are not analyzed as heads because of their categorial neutrality.

However, prefixation and compounding have also differences. Their most striking difference lies on the fact that prefixes have a functional character which characterizes a limited set of closed-class elements. On the contrary, the left-hand constituents of compounds have a lexical content, i.e. they are lexemes, stems or words, depending on the language one deals with. As such, they are usually members of an open class. This difference is crucial to the consideration of prefixation and compounding as distinct word-formation processes, although their similarities make the borderline of the two processes particularly fuzzy.

2. The sa-adverbs: properties and morphological behavior

In what follows, we examine a phenomenon which is found at the border between the two processes in Lesbian, Aivaliot, and Moschonisiot (hereafter LAM), three

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² Examples are given a broad phonological transcription. Stress is noted only when it is relevant to the argumentation.

³ It is only recently that Greek preverbs have been analyzed as instances of prefixes (see Ralli 1988, 1992, 2004, 2005, Holton et al., etc.). Following Ralli, this analysis is based on criteria of structural (e.g. combinability properties) and semantic (e.g. semantic differences) nature, which distinguish prefixes from prepositions and adverbs.
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dialectal varieties of Modern Greek, which belong to the group of northern dialects. In particular, we examine the formations of adverbs beginning with sa-:

\[
\begin{align*}
\text{sapéra `far away'} & \quad < \quad \text{sa- péra `away'} \\
\text{saðó `over here'} & \quad < \quad \text{sa- íðó `here'} \\
\text{sáðju `over here'} & \quad < \quad \text{sa- éðju `here'} \\
\text{sáðuna `over here'} & \quad < \quad \text{sa- éðúna `here'} \\
\text{sákí `over there'} & \quad < \quad \text{sa- íkí `there'} \\
\text{sácina `over there'} & \quad < \quad \text{sa- écina `there'} \\
\text{sáfítu `after there'} & \quad < \quad \text{sa- éftú `there'} \\
\text{sáfína `over there'} & \quad < \quad \text{sa- éfná `there'} \\
\text{sakáítu `straight down there'} & \quad < \quad \text{sa- kátú `down'} \\
\text{sápáínu `straight up there'} & \quad < \quad \text{sa- apánú `above'} \\
\text{samésa `more inside'} & \quad < \quad \text{sa- mésa `inside'} \\
\text{but} & \\
\text{*sákísu `more outside'} & \quad < \quad \text{sa- óksú `outside'}
\end{align*}
\]

These adverbs are morphologically complex, in that they contain an adverbial word, preceded by an element sa-, which functions as an intensifier of the locative meaning of the adverb. According to the existing literature (Liapis 1996, Dinas 2005) sa originates from the directional adverb isja `straight’. Isja in SMG is an autonomous word, which can modify verbs (3a) or locative adverbs (3b) in syntactic structures, like those in (3). It should be noticed that in the latter case, isja intensifies the meaning of the adverb:

\[
\begin{align*}
\text{SMG} \\
\text{a. kofto isja (< kope to isja)} & \quad \text{`cut it straight’} \\
\text{b. pijene isja kato} & \quad \text{`go straight down there’}
\end{align*}
\]

In LAM, isja, with the form of isa, can also be used as an autonomous directional adverb, which modifies verbs, but not locative adverbs, since this function has been replaced by its reduced form sa-:

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4 The group of northern dialects is phonologically characterized by the deletion of unstressed /i/ and /u/ and the mid-vowel raising, also in unstressed position:

(i) a. xurupóðo < xoropíðò `jump and dance’ b. kliménus < kleménos `stolen’

5 Words in (2) are given in their dialectal form.
Isja in LAM has undergone a phonological attrition with an initial /i/ deletion, and the internal loss of the semi-vowel /j/. The disappearance of /j/ is not proper to the particular adverbial formations. It is due to a general phonological phenomenon of the dialectal varieties, which occurs in word-internal contexts between a /s/ and a vowel. This phenomenon has already been noticed by Newton (1972: 128-129), and is illustrated by the following examples:

(5)

SMG                       LAM
a. ísja < isia            ísa
   ‘straight’          ‘cut-it straight’

b. nisjótis < nisiótis   n’sóts7
   ‘islander’         ‘cut-it straight’

Moreover, the initial /i/ deletion in sa- is also independently motivated from the morphological combination of –isja with the adverbial base, since initial unstressed /i/s are frequently deleted in the particular dialectal varieties, as in the examples in (6):

(6)

SMG                     LAM
il’iokaménos       l’ukaménus
   ‘sun burnt’     ‘cut-it straight’

sázu < isázu < ísja –azu
   ‘arrange’

As stated by Lehmann (1982, 1995), phonological attrition is frequently attested in several cases of grammaticalization, but it cannot be the only reason for a lexeme to become a functional element. Thus, the phonological change of isja into sa- does not constitute by itself a safe criterion for assigning to sa- the functional status of a

6 Newton (1972) has proposed that the semi-vowel is deleted after becoming a post-palatal consonant.

7 By a general phonological rule, /n/ and /l/ are palatalized when followed by the high front vowel /i/.
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prefix. In fact, the question whether \textit{isja}- has been grammaticalized - or better morphologized - into a prefix\(^8\), is crucial, since the boundary between compounding and prefixation has been crossed several times in the course of the history of languages, and there are derivatives that were once compounds.\(^9\) A plausible answer to this question should be based on an in-depth investigation of other properties of \textit{sa}-, a number of which are examined below:

a) As already mentioned, \textit{sa}- functions as a semantic intensifier of the adverbial base, but it does not bring a radical change to its core meaning. For instance, \textit{eðju} ‘here’ becomes \textit{saðju} ‘right here’, \textit{mesa} ‘inside’ becomes \textit{samesa} ‘more inside’ etc. The reduction of its original meaning (‘straight’), and the development into a meaning intensifier, may be an indication that \textit{sa}- has become a prefix. In fact, intensification is often expressed by other prefixes as well:

\begin{center}
\begin{tabular}{ll}
SMG & LAM \\
n. katamesimero & katamisimiru \\
\textit{katamesimero} & \textit{katamisimiru} \\
\textit{‘high noon’} & \textit{noon} \\
b. ksevrizo & ksivrizu \\
\textit{ksevrizo} & \textit{ksivrizu} \\
\textit{‘highly insult’} & \textit{‘to insult’} \\
\end{tabular}
\end{center}

However, intensification is not a new semantic property, proper to the dialectal \textit{sa}-, since, as shown in (3b), intensification may also emerge in SMG adverbial phrases involving a locative adverb, which is modified by an autonomous \textit{isja}. As far as LAM is concerned, \textit{isa}, i.e. the adverb where \textit{sa}- derives from, is a particularly polysemous element, because independently of its original use as a directional adverb, \textit{isa} is also attested in other contexts: it can be doubled, as in the phrase \textit{isa isa} denoting an opposition (8a); it can be used as a particle with an exhortative meaning (8b), or as a simple interjection with an emphatic stress (8c); it can also combine with the preposition \textit{me} ‘with’, and the result of this combination is the morphologically complex adverb \textit{isami} (< \textit{isa} + \textit{me}) ‘until’\(^{10}\).

\begin{center}
\begin{tabular}{l}
(8) \\
an. isa isa \\
\textit{‘on the contrary’} \\
\end{tabular}
\end{center}

\(^8\) Morphologization is taken to be a special case of grammaticalization, along the lines of Joseph (2003).
\(^9\) See Bauer (1983: 98) for concrete examples in English (e.g. –\textit{dom} in \textit{kingdom}, –\textit{hood} in \textit{childhood}, etc.) and French (e.g. –\textit{ment} in \textit{doucement} ‘slowly’).
\(^{10}\) As opposed to its occurrence with the locative adverbs, where its form is phonologically reduced, in the last example, \textit{isa} keeps its initial /i/ in spite of the fact that it is not used as an independent word. Its form preservation is due to stress purposes: since the preposition \textit{me} is unstressed, \textit{isa} keeps its original stress on the /i/, which is transmitted to the formation \textit{isami}. 99
b. isa kupilôel’il tsi ọta ta katafers,  
isa girl.my and will it do  
‘go my girl, go, you will succeed’
c. ìsa!  
‘go!’
d. èsì ënà ëdàrì isami tun urano  
I saw a tree until the sky  
‘I saw a tree, up to the sky’

Crucially though, in all these occurrences, an intensification of the meaning is involved. Therefore, although the semantic reduction into a general intensifier may be used as an argument in favor of *sa- being a prefix, it cannot be a safe criterion for accepting it as a prefix.

b) Quite often in LAM, *sa- is repeated in adverbial formations in order to strengthen intensification of the meaning of the base:

(9)  
a. sasakina < sa-sacina  
   (isja + eki + na)  
   ‘over over there’  ‘straight’  ‘there’  ‘there’
b. sasapera < sa-sapera  
   (isja + pera)  
   ‘far far away’  ‘straight’  ‘far’
c. sasaðuna < sa-saðuna  
   (isja + èdò + na)  
   ‘right over here’  ‘straight’  ‘here’  ‘there’
d. sasakatu < sa-sakatu  
   (isja + kato)  
   ‘down down there’  ‘straight’  ‘down’

This repetition may be considered as an illustration of the grammatical phenomenon of recursiveness, and thus, it may be taken as a criterion for a recursive application of a prefixation rule. It is important to note though that *sa- does not appear more than twice. For instance, a formation like *sasasapera is impossible. Thus, a plausible solution would be to regard the examples in (9) as instances of doubling. Doubling in these cases is facilitated by the inherent property of *sa- to intensify the meaning of the element which is modified. Note that, unlike recursiveness, doubling cannot be characterized as a pure grammatical phenomenon, but has other functions as well. For instance, depending on the case, the language uses it in order to put emphasis on a process. Therefore, it should not be considered as a strong indication that *sa- has become a prefix.

c) The appearance of –sa in morphologically complex adverbs is restricted to a handful of examples. As Bauer (2005: 104) points out, affixes tend not to be unique, and are used in many instances. Thus, on the basis of its extremely limited use, we may suppose that an element such as *sa- is a rare lexeme.

If *sa- is a lexeme, its combining with locative adverbs may be seen as an instance of compounding. In fact, *sa- with its full adverbial form *isa, also appears at
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the right-hand position of other adverbial compounds, as for example in the formation *uloisa*<sup>11</sup> ‘all straight’ < *ulu* ‘all’ + *isa* ‘straight’, where the meaning of *isa* as a second member of compounds is not reduced into a general intensifying function. However, the compounding hypothesis runs against the fact that *sa*- selects locative adverbs, because selectional restrictions are usually assumed to belong to affixes and not to lexemes.<sup>12</sup> More importantly though, *sa*- selects locative adverbs.

On the basis of the argumentation in the preceding paragraphs, we conclude that there are no sufficient semantic or formal justifications for the hypothesis that *sa*- has been morphologized into a prefix. If it is not a prefix, the formations listed in (1) should be considered as compounds, although there are problems with this assumption too (selectional restrictions imposed by *sa*-). Nevertheless, a tentative solution would be to suppose that *sa*- is under the process of becoming a prefix, without having acquired the full prefixal status yet. In other words, we could argue that in spite of the fact that *sa*- does not have all the properties of a real prefix, and there is no guarantee that it will result into being one, there are serious indications of a morphologization in progress (form reduction and reduced meaning). As stated by Bauer (2005: 98), in languages, it is easy to find examples that appear to be at various points of a potential diachronic development, i.e. examples that are in the process of losing their word independence.

### 3. The dialectal continuum hypothesis

In section 2, we have seen that there is no conclusive evidence for the hypothesis that *sa*- is a prefix. Another important factor which makes the situation more difficult is relative to the notion of morphological productivity. According to the well-defined concept of productivity, a process is considered to be productive if it provides means for speakers to create words from entities, properties and situations that they need be mentioned, and if the process is not submitted to a significant number of constraints affecting the ease of frequency with which words are formed.<sup>13</sup> Following this definition, the productivity of *sa*-formations is limited: *sa*- combines only with a small number of adverbial bases of a typical locative value, and is not used as a general meaning intensifier that could be prefixed to other adverbs or other non-adverbial words. Moreover, there are also locative adverbs, e.g. *oksu* ‘outside’ (SMG *ekso*), which do not accept *sa*- (see the ungrammatical *saksu* in (2)). In order to find a solution to the problem, we have put forward the tentative hypothesis that there are indications that *sa*- in LAM is under a morphologization process, without being a real prefix yet. Elaborating on this hypothesis, we further

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11 In this position, there is no need for an initial /i/ deletion.
12 But see Scalise, Bisetto & Guevara (2006), who have proposed that selectional restrictions can be properties of compounding as well.
13 Cf. Plag (1999), Bauer (2001), and Adams (2001) for a detailed justification of this definition.
suppose that there is a dialectal continuum with respect to the status, i.e. prefixal or lexematic, of the Greek directional adverb *isja*. One of the poles of the particular continuum is occupied by SMG, Corfiot, or the Peloponnesian dialects, where *isja* is a full autonomous word. Dialects which appear on the other pole have a fully morphologized *sa*- into a prefix. LAM (Lesbian, Aivaliot and Moschonisiot), which are under examination in this work, are situated in the middle of the continuum, since in these dialectal varieties there is no proof that *sa*- has become a full prefix.

One of the dialects where –*isja* has become a prefix is Cretan, where *s(j)o*-(*sjo*- in Western Crete and *so*- in Eastern Crete), a corresponding to *sa*- element, is found prefixed to both verbs (10a) and adjectives (10b)\(^\text{14}\).

\[
\begin{align*}
\text{(10)} \\
\text{Cretan} \\
a. \quad \text{sojerno} & \quad < \quad \text{so- jerno} \\
\text{‘become very old’} & \quad \text{‘become old’} \\
b. \quad \text{soaspros} & \quad < \quad \text{so- aspros} \\
\text{‘very white’} & \quad \text{‘white’}
\end{align*}
\]

As seen in (10), –*s(j)o* is attested in a wider context than the one that we find in LAM, and, as shown by Dimela (2005), it is extremely productive. High productivity and the non-restricted application of *s(j)o*- are significant indications of a prefixal status. It is important to point out that *so*- is so productive that its prefixation to bases may lead to the creation of neologisms. For instance, Dimela (2005) mentions the neologism *sjoksejivedizo* ‘highly humiliate’, which cannot be found in the most updated dictionaries of Cretan (Idomeneas 2006, Garefalakis 2002, Ksanthinakis 2001).\(^\text{15}\) As opposed to *s(j)o*- prefixation in Cretan, neology formation with *sa*- is impossible in LAM, something which further proves that *sa*- has not become a functional element yet.

An additional argument in favor of the Cretan *s(j)o*- being a prefix comes from the fact that, on synchronic grounds, Cretan speakers make no link between its initial lexical meaning and the intensifying function. Native speakers, as well as scholars, show a significant difficulty into determining whether *s(j)o* originates from –*is(j)o(s)* ‘straight’, or from the adverb *eso* ‘inside’, or from the preposition *sin*. Pangalos (1955) and Pitikakis (1971) assume that most *s(j)o*- occurrences derive from *isjos* ‘straight’. Platakis (1979) proposes that *so*- is probably an abbreviated form of the adjectival word *soos* ‘entire, perfect, alive’, the latter been confused with the adjective *isos* ‘straight’. According to Charalambakis (2001) the adverbial *eso*, the adjectival *is(j)o(s)*, and the prepositional *sin* have been fused into a single unit, *s(j)o*-

\(^{14}\) Adverbs like *sodreta* ‘very straight’ derive from corresponding adjectives (e.g. *sodretos*).

\(^{15}\) *Sjoksejivedizo* ‘highly humiliate’ was found in the Archives of the Research Centre of Modern Greek Dialects of the Academy of Athens, and has been cross-checked with native speakers.
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because of the phonological identity which resulted from their phonological attrition. Along the same lines, different etymologies are attributed to Cretan words beginning with s(j)o-, which are found in the Files of the Research Center of Modern Greek Dialects of the Academy of Athens. For instance, in a number of files the verb s(j)ofiliazo ‘fit’ (orthographic forms: σοφηλειάζω, σιοφυλιάζω, σοφιλιάζω) is proposed to derive from the adjective isjos ‘straight’ and the verb θiiliozo ‘to noose’ or filiazo (> filo ‘leaf’), an etymology which is attributed to Pangalos (1955) and Ksanthinakis (2001), while for the same verb, an origin from the preposition sin and the verb filiazo is proposed in the file S. Kapsom. Byzant Zeitsar 51. 1958, 134.

Finally, another indication that the LAM sa- has not acquired a full prefixal status, as compared to the Cretan prefix s(j)o- is the fact that sa-, beside the phonological transparency, still keeps a certain degree of semantic transparency with the original adverbial word isa.

4. An instance of morphological creativity?

Items, the structural status of which is unclear, have always been a problem for morphological theory, in synchronic terms (see, for example, the so-called ‘berry morphs’ in Aronoff 1976). These items cannot be classified in one particular category and the processes into which they participate cannot be adequately delimited. As shown above, sa- in LAM seems to be a problematic case, since no synchronic morphological analysis could decide whether it should be registered as a prefix or a lexeme, and whether its combination with locative adverbs should be treated as prefixation or compounding.

In an effort to provide a solution to the particular problem, we appeal to the notion of morphological creativity. According to Schultink (1961) and Lieber (1992), morphological creativity is the process under which there is a conscious coinage of a new word, as opposed to morphological productivity, which involves words that are unintentionally created. Words formed by morphological creativity are perceived by the speakers as odd, amusing, or ‘remarkable’, in Lieber’s (1992: 3) terms, and are not necessarily accounted for by a theory of word formation. Extending the notion of morphological creativity, Baeskow (2004: 78) assumes that it can also include phenomena involving a superficial reinterpretation of items, which may be done for specific purposes, without any real change of their inherent categorial status. In this section, we are tempted to adopt this broadened view of morphological creativity, and suggest that it can account for the peculiarities of the sa-formations in LAM, from the synchronic point of view.

As pointed out in the preceding sections, the process of sa-creations in LAM is unclear: there are properties which list it as prefixation, and properties that are similar to compounding. We propose that in these creations, sa- seems to behave like a prefix in a specific context, i.e. when it is combined with the majority of locative adverbs, and may be reinterpreted as such. However, we further suggest that this reinterpretation is only superficial, since the full form isa, which sa- derives
from for independent phonological reasons, still keeps its lexeme status, as far as its lexical entry is concerned. In other words, we propose that isja- functions as a prefix in the particular context of its combination with the locative adverbs, but does not have undergone a radical category change from lexeme to prefix. Indeed, this position is justified on the basis of the evidence exposed in the preceding sections: a) sa- may have become a meaning intensifier, but its original meaning is still transparent, in all sa-formations, and its intensifying property also characterizes certain autonomous isja word occurrences. b) The reduced form sa- is due to independent phonological reasons, and not because of a possible prefixal status. c) It has a limited productivity, since it combines only with locative adverbs, and not with all of them (see *saksu in (1)).

5. Conclusions

In this paper, we have shown that locative adverbs with sa- in Lesbian, Aivaliot and Moschonisiot, three varieties of the northern dialects, are situated between prefixed and compound formations, since they display characteristics of both structures. Phonological attrition, semantic change, and selection restrictions can point to the direction of a morphologization process, which could assign to sa- the status of prefix. However, a limited productivity, and the semantic transparency with respect to the original isja indicate that it may still be a lexeme. We have proposed that morphological creativity can account for the peculiarities of the formations under examination, from the synchronic point of view: sa- functions as a prefix in the particular context of its combination with locative adverbs, but does not have undergone a radical category change from lexeme to prefix.

Moreover, we have proposed that the dialectal varieties with sa-formations are situated in the middle of a continuum. One of its two poles is occupied by SMG, or the Peloponnesian dialects, where isja is an autonomous word, while the other pole contains dialectal systems with a prefixal sa- or s(j)o-, such as the Cretan dialect.

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Περίληψη

Το άρθρο εξετάζει μια περίπτωση που τοποθετείται στο όριο μεταξύ προθηματοποίησης και σύνθεσης, σε τρεις διαλεκτικές ποικιλίες των βορείων ιδιωμάτων, αυτές της Λέσβου των Κυδωνιών (Αϊβαλί) και των Μοσχονήσιων. Συγκεκριμένα, διερευνά το στοιχείο -α, το οποίο ανάγεται στο επίρρημα ισία και συνδυάζεται με πολλά τοπικά επιρρήματα. Υποστηρίζει ότι το -α εμφανίζει μόνον επιφανειακά τις λειτουργικές ιδιότητες των προθημάτων και δεν έχει χάσει τη λεξηματική του υπόσταση. Ως τέτοιο, αποτελεί αντιπροσωπευτικό δείγμα του φαινομένου της μορφολογικής δημιουργικότητας. Επιπλέον, προτείνει ότι οι υπό εξέταση διαλεκτικές ποικιλίες ταξινομούνται σε ένα μορφολογικό συνέχες, ο ένας πόλος του οποίου έχει διαλέκτους όπου το -α είναι πρόθημα και ο άλλος διαλέκτους όπου το επίρρημα ισία δεν εμφανίζει ιδιότητες προθήματος. Στην πρώτη περίπτωση ανήκουν τα Κρητικά με το προθηματικό σ(ι)ο-.