

Suffixation and the expression of time and space in Modern Greek

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Abstract

This paper draws a comparison, through semasiological and onomasiological methods, of three Modern Greek (MG) suffixes *-in(os)*, *-iatik(os)* and *-isi(os)*, which construct denominal adjectives of time and/or space. Following D. Corbin's model (1987; 1991 and forthcoming) of Construction Morphology, an in depth analysis of these suffixes' semantics will be presented. The results suggest that, in order to construct a denominal adjective following the relational Lexeme Construction Rule (LCR_{REL}), a categorical, semantic and pragmatic compatibility are necessary between the base-noun and the suffix, as well as between the suffixed adjective and the noun of the noun phrase (NP); there are no synonyms even if the same noun is used as a base-noun. The three suffixes differ with respect to their semantic and pragmatic features; as a consequence, they are used in different genres. The data has been drawn from many dictionaries and especially from the *Reverse Dictionary of Modern Greek* (Anastassiadis-Symeonidis, 2002) as well as the *Corpus of Greek Texts* (Goutsos 2003).

1 The suffixes

1.1 The *-in(os)* suffix

This suffix is applied to a nominal base, or an adverbial one which could, however, be considered as a nominal one, given that these adverbs function also as nouns (Berthonneau 1989: 493). Consequently, we suggest a unified nominal base. In our corpus' base-nouns (87%) belong to the category of temporal or spatial nouns,

e.g., *proinos* 'of early morning', *vradinos* 'of the evening', *kalokairinos* 'of the summer', *pashalinos* 'of Easter', *aprilianos* 'of April', *simerinos* 'today's/of today', *pantotinos* 'of ever - everlasting' - *vorinos* 'north', *antikrynos* 'of the opposite side', *brostinos* 'of the front', *makrinos* 'distant'.

The temporal sense base-nouns can label one of the denominations of the internal structure of the time unit YEAR, e.g., *kalokairi* 'summer', *theros* 'summer', *fthinoporo* 'autumn', or DAY, e.g., *proi* 'morning', *vradi* 'evening', or designate one of their special denominations, e.g., *Aprilios* 'April'. Aside from these base-nouns, we observe that the base can be selected from the names of important celebrations e.g., *Pasha* 'Easter', and that the specific deictic (NOW) denominations construct denominal adjectives exclusively with the suffix *-in(os)*, e.g., *simerinos* 'of today', *apopsinos* 'of this evening', *htesinos* 'of yesterday', *torinos* 'of now', *fetinos* 'of this year', *persinos* 'of last year', *pantotinos* 'of ever - everlasting'.

Following our observation of spatial sense base-nouns we operate a distinction between: (i) a group of nouns referring to geographical terms, e.g., *vorras* 'north', *oros* 'mountain', *thalassa* 'sea'; (ii) toponyms, e.g., *Alexandria* 'Alexandria'; and (iii) adverbs constructing denominations within the deictic system (HERE), e.g., *antikry* 'across', *konta* 'near', *makria* 'far', *pisos* 'behind'.

Finally, based on the context, the remaining nouns in the corpus (13%) can be categorized as conveying spatial meaning (provenance), e.g., *agheladhino ghala* 'cow's milk', *vodhino/hoirino kreas* 'bovine (beef)/pig (pork) meat', *kreatini/tyrini evdhomadha* 'Meatfare/Cheesefare week', *anthropini symperifora* 'human behaviour'. The same principles hold for the adjectives *foteinos* 'bright', *faeinos* 'brilliant', *skoteinos* 'dark', *alithinos* 'real', that originate in ancient Greek, where the base-noun functioned as a spa-

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tial noun; relevant passages are preserved where the nouns *fos* ‘light’ and *skotos* ‘darkness’ refer to the source that transmits light and darkness respectively (Giannakis, 2001). Similarly, *alithinos* ‘real’ refers to location, since –according to Plato– truth originates from the real world.

1.2 The *-iatik(os)* suffix

From a semantic point of view, we notice that approximately 85% of the corpus consists in bases which are temporal nouns referring to time-measure units, e.g., *hronos* ‘year’ *minas* ‘month’ (*e)vdhomadha* ‘week’ as well as their reanalyses, including two subsets: (i) denominations of special units, e.g., *Dheftera* ‘Monday’, *Triti* ‘Tuesday’, *Ianouarios* ‘January’, *Fevrouarios* ‘February’; and (ii) denominations related to the internal structure of the above units, e.g., *proi* ‘morning’, *mesimeri* ‘midday’, *anoiksi* ‘spring’ (Berthonneau, 1989).

In addition, the base can be selected among important days of public holidays or religious celebrations with which people mark time, and which are therefore categorized as temporal nouns, e.g., *Protomaghia* ‘First of May’, *Protaprilia* ‘First of April’, *Protochronia* ‘New Year’s Day’, *Pasha* ‘Easter’, *Hristoughenna* ‘Christmas’, *Aghio-Vasilis* ‘the feast day of Saint Vasilios’, *Ai-Dhimitris* ‘the feast day of Saint Demetrios’, *Kathari Dheftera* ‘Clean/Ash Monday’, *apokria* ‘Carnival festivities’, *paramoni* ‘Eve’. Finally, the suffix *-iatik(os)* is attached to the base form of 7 nouns, seemingly not associated with a temporal sense: *paidh(i)* ‘child’, *ghiort(i)* ‘celebration’, *skol(i)* ‘leisure’, *feggar(i)* ‘moon’, *ghampr(os)* ‘groom’, *nyff(i)* ‘bride’, *kefal(i)* ‘head’. However, these nouns can be encountered in contexts that associated to important moments of people’s lives, e.g., *ghampriatiko kostoumi* ‘bridegroom’s suit’, *nyfiatiko traghoudi* ‘wedding song’, *paidhiatika kamomata* ‘childish antics’.

1.3 The *-isi(os)* suffix

The suffix *-isi(os)* is associated with the notion of ‘provenance’ (Tsopanakis, 1994), which is diachronic in nature, particularly since the suffix *-isi(os)* is derived from the latin suffix *-ēnsis* which is associated with this notion (Meyer, 1895). This is a spatial provenance (where the base is a proper or common noun referring to the natural landscape or to man-made places (Le Pesant, 2011), e.g., *vounisios aeras* ‘mountain air’, *limnisio psari* ‘fish of the lake’); even if the base-noun refers to an animal, e.g., *arnisia*

paidakia ‘lamb cutlets’, *ghidhisio ghala* ‘goat milk’, *katsikisio tyri* ‘goat cheese’, to a plant, e.g., *kalampokisio alevri* ‘corn flour’, *thymarisio meli* ‘thyme honey’, to an artefact, e.g., *varelisia bira* ‘draught’, to a human or human-like being (human entity) or to parts of the human body, through extension, e.g., *flevisio aima* ‘veins’ blood’ or through an intension reading, related to a stereotypical meaning, e.g., *gherontisia foni* ‘elderly’s voice’.

The availability of the suffix *-isi(os)* in contemporary language use is rather restricted, as it is not encountered in cases where it is possible to construct non-attested lexemes which constitute nothing more than coincidental gaps (Corbin, 1987: 177).

2 Is there synonymy?

We argued that the *-in(os)* suffix constructs denominal adjectives related to space and time, that the *-iatik(os)* suffix constructs denominal adjectives related to time and that the *-isi(os)* suffix constructs denominal adjectives of provenance, related to the notion of space. The question will thus be the following: can we talk about synonymy between the temporal and spatial denominal adjectives constructed with the aforementioned suffixes and the same base-noun?

If we take into account the pragmatic feature [learned], a feature with a non-binary value (Anastasiadis-Symeonidis and Fliatouras, 2004), we notice that for the base-nouns with a [+learned] value, only the *-in(os)* suffix is applied, that for the base-nouns with a [-learned] value only the suffixes *-iatik(os)* and *-isi(os)* are applied, and, that for the base-nouns with a [+/-learned] value all three suffixes *-in(os)*, *-iatik(os)* and *-isi(os)* are applied. The reason is that the suffix *-in(os)* constructs denominal adjectives localizing in space and time objectively, i.e., free of prototypical or stereotypical perceptions (Geeraerts, 1985), contrary to the suffixes *-iatik(os)* and *-isi(os)*, that are associated with the individual’s everyday life. Consequently, the derived adjectives are not synonymous, even if the aforementioned suffixes are attached to the same base, e.g., *vradino/*vradhiatiko dheltio eidhiseon* ‘the evening news report’, or to a synonymous base, e.g., *arnisia/*provatisia paidhakia* ‘lamb cutlets’. This is the reason for which only adjectives in *-in(os)* are encountered in scientific and religious discourse, in greater percentages in premeditated speech on television and the radio, as well as in newspapers. This means, seman-

tic/pragmatic factors determine the genre of text where a lexeme may be encountered. It is not by chance that the pragmatic feature [learned] is attributed to a suffix found in ancient Greek and the feature [-learned] to suffixes that appeared later, during the Hellenistic era.

3 Compatibility

A categorical as well as semantic and pragmatic compatibility are therefore necessary between the base-noun and the suffix as well as between the derived noun and the modified noun. For instance, there would be an issue of categorical compatibility if the suffix *-in(os)* or the suffix *-iatik(os)* were attached to a verb-base. There would be an issue of semantic compatibility if the suffix *-in(os)* were attached to a non-temporal/spatial base-noun or if the suffix *-iatik(os)* were attached to a non-temporal base-noun. Lastly, there would be an issue of pragmatic compatibility if the suffix *-in(os)* were attached to a [-learned] base-noun or if the suffix *-iatik(os)* were attached to a [+learned] base-noun, e.g., if the adjective *aniksiatikos* ‘of spring’ modified the noun *isimeria* ‘equinox’.

Therefore, each of the aforementioned suffixes is characterized by their categorical, semantic, and pragmatic/stylistic specifications and, according to this “genetic inheritance”, it participates in the LCR_{REL}. Subsequently, within the framework of Construction Morphology, the notion of compatibility constitutes the key to grammaticality judgements.

4 Predictions

Starting from the semantic function of each suffix at the word-construction level of words that belong to the same onomasiological field, on one hand, similarities as well as differences at both the semantic and pragmatic level can be explained. For example, terms such as: *kalokairiatikos* – *kalokairinos* ‘of the summer’, *kampisios* – *pedhinos* ‘of/in a plain’; on the other hand, predictions can be formulated, in the sense that restrictions are imposed, e.g., *avrianos* – **avriatikos* ‘of tomorrow’, *kontinos* – **kontaios* ‘near’ (similarly: *mesaios* ‘middle’), *ghenarisios* – **ianouarisios* ‘of January’.

According to this model we are able to explain:

a) The reason why it is possible to derive adjectives with different suffixes from the same base-noun e.g., *vradhinios* – *vradhiatikos* ‘of the evening’, *agheladhisios* – *agheladhinios* ‘of a

cow/cow’s (milk/meat)’: the suffix *-in(os)* selects certain properties from the anaphoric/descriptive meaning of the base-noun, whereas the suffixes *-iatik(os)* and *-isi(os)* select from the base-nouns those properties that correspond to an experiential meaning associated with everyday life. We can thus explain why the adjectives in *-in(os)* and *-iatik(os)*, or those in *-in(os)* and *-isi(os)* are not synonyms.

b) The reason why certain suffixes cannot be attached to certain base-nouns: compatibility is required between the two. The adjectives in *-in(os)* are likely derived from the [+learned] or [+/-learned] allomorph of the base-noun, whereas the adjectives in *-iatik(os)* and *-isi(os)* are derived from the [-learned] or [+/-learned] allomorph of the base-noun, e.g., *mesimvrinos* and *mesimeriatikos* but **mesimvriatikos* ‘midday’, *pedhinos* and *kampisios* but **pedhisios/*kampinos* ‘of/in a plain’, *therinos* but **theriatikos* ‘of the summer’, *heimerinos* but **heimeriatikos* ‘of the winter’, *omfalios* and *afalisios* but **omfaliosios, *afalios* ‘umbilical’.

c) The reason why both the adjectives *kalokairinos* and *kalokairiatikos* ‘of the summer’ are grammatical without being synonymous: they both share the [+/-learned] feature.

d) The reason why it is grammatical to say *pragmatika anoiksiatikos kairos* ‘real spring weather’, *pragmatika vounisios aeras* ‘real mountain air’, but we do not say **pragmatika earini isimeria* ‘real vernal equinox’, **pragmatika oreinos oghkos* ‘real mountain massif’: the adverb *pragmatika* ‘real/proper’ modifies qualifying adjectives but not taxonomic/relational ones.

e) The reason why the suffix *-in(os)* is selected in utterances that refer to the speaker’s “HERE and NOW”, within the deictic system: adjectives in *-in(os)* merely denote a location in space and time; that is, within the NP, they create a temporal or spatial relationship between the modified noun and the time period or the location signified by the base-noun. Conversely, the suffix *-iatik(os)* is associated with a subjective, experiential and/or stereotypical temporal meaning, while the suffix *-isi(os)* is experientially associated with the notion of provenance, e.g., *brostinos* – **brostisios* ‘of the front’, *simerinos* – **simeriatikos, *simerisios* ‘of today’.

f) The reason why the adjectives *tritiatikos* ‘of Tuesday’, *tetartiatikos* ‘of Wednesday’, *pemptiatikos* ‘of Thursday’ (and the corresponding adverbs) are not encountered in written texts: are they potential or non-grammatical words?

According to the theoretical framework followed throughout this article, the aforementioned words are constructed according to the LCR_{REL} and are, therefore, potential words. However, they are not encountered in written texts due to pragmatic factors, as individuals – marking time and demarcating their life according to a sum – in our case, a sum of days –, are inclined to pay attention only to the beginning and the end, that is, for people, the days that mark the beginning and the end of the week are of particular importance.

Based on what I have stated above, I suggest the following categorization of the three suffixes according to semantic criteria:

	experiential	objective
space	<i>-isi(os)</i>	<i>-in(os)</i>
time	<i>-iatik(os)</i>	

Table 1: Semantic distribution of the suffixes *-iatik(os)*, *-in(os)*, *-isi(os)*

5 Impact on the theory of derivation

Every suffix is characterized by their categorical, semantic, and pragmatic/stylistic specifications and, according to this “genetic inheritance”, they participate in the LCRs. Consequently, within the field of Construction Morphology, the notion of compatibility is key notion for grammaticality judgements. Thus, it seems to me that it is a bit far-fetched to attribute anomalies/exceptions, or even a lack of productivity, to lexicon merely because the study of lexicon constitutes unmapped territory (see also Anastassiadis-Syméonidis, 2003).

Similarly, as there is no synonymy between lexemes, there is neither synonymy between suffixes nor between their derivatives, even if the related suffixes are attached to the same base or if the same suffix is attached to a synonymous base.

Lastly, semantic/pragmatic reasons determine the genre of text wherein a derived lexeme will appear, due to semantic/pragmatic features of both the base as well as the suffix.

6 Conclusion

Since the lexicon does not constitute a separate level of linguistic analysis, but horizontally cuts through all levels, the properties of those levels are to be taken into consideration, that is, phonological, morphological, syntactic, semantic and pragmatic.

This study examines the abstract system – in the form of LCRs and the suffixes’ semantic instruction, which, according to several theories, is homogeneous. However, the present study is based on actual language use, since it takes into consideration rich authentic language data within context, linguistic production of native speakers, as well as metalinguistic texts. In particular, the study of concordances in the *Corpus of Greek Texts* illustrated the breadth of use of derivatives that carry the suffixes in question.

The homogeneity of the abstract system is contrasted to the linguistic variety characterizing the use of the system, and simultaneously, it constitutes an essential linguistic attribute.

In our case, variety is associated with the varying degrees of availability of the suffixes in question, as well as with the [+/- learned] feature. This simultaneous examination is beneficial to both, as it bridges the gap between theory and practice to the extent that one fuels the other. This is a dynamic, dialectical relationship that explains language change, which has been a topic of interest either in the form of borrowing, during earlier times, or through the non-frequent occurrence of the *-isi(os)* suffix in contemporary language.

Furthermore, an association has been attempted between the onomasiological method – which, in our case, originates from the notion of time and space – and the semasiological method. The latter, starting from the form of the suffixes *-iatik(os)*, *-in(os)* and *-isi(os)*, focused on the extensive analysis of their semantic instruction, unlike other studies that are limited to a basic presentation of semantic features.

Within D. Corbin’s theoretical framework of Construction Morphology, meaning occupies a central role, since the units that contribute to it are meaning-bearing units. The constructed lexemes demand a more complex analysis at the semantic level in comparison to simple ones. The reasons are multiple: (i) because two elements participate – the base and the suffix; (ii) because the suffix is encountered in many other constructed lexemes; (iii) because the base is part of other constructed lexemes with a different suffix; and, (iv) because the meaning and the behavior at the level of anaphora of constructed lexemes are associated with their morphological structure. Through implementing this theoretical framework, it was possible to compare the semantic instruction of the suffixes *-iatik(os)*, *-in(os)* and *-isi(os)*, the interpretation of semantic similarities and differences between derived words that carry

those suffixes, as well as the interpretation of grammaticality through the notion of compatibility between the base-noun and the suffix with regard to grammatical category, meaning, and pragmatic level.

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