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Abstract

The present paper discusses cases of morphological change in the paradigm of the mediopassive in Modern Greek varieties and the contribution of the observed changes to the theory of morphological change.

1. Introduction

- **1.1.** The aim of the present paper is to present and analyze a number of changes which have led to the formation of the endings of the mediopassive voice in the Modern Greek dialects, as well as to connect them with linguistic theory in general and the theory of morphological change in particular. Needless to say, the discussion cannot cover neither the totality of the MG dialects nor all of the relevant changes.
- **1.2.** The notion of inflectional paradigm will be considered basic for the issues discussed here; it is not within the aims of the present study to subject this notion to theoretical scrutiny. Every form (or "slot" or "cell" in some theoretical models) of the inflectional paradigm is connected to other forms via a semantic relationship (in broader or stricter terms: for example, with the sub-paradigm of the same number, with the same person in a different number or tense etc). The morphological relationship between the various forms of the inflectional paradigm is stronger or weaker depending on the phonological and/or semantic features they have in common. Most of the processes which cause changes on the form of the mediopassive endings follow this logic; the stronger the relationship between two forms, the higher the possibility of interaction between them. It is only in a few cases that the relationship between two interacting 'cells' of the paradigm is more distant, e.g. the same cell of the same tense but in a different person or voice1. The present paper focuses mainly on the inflectional paradigm of the mediopassive imperfect of the traditionally termed "1st conjugation" (barytone) verbs, which presents greater variety of forms than the present.
- **1.3.** The changes in the mediopassive endings of Modern Greek and especially its dialects can provide clues to the way in which speakers analyze their primary linguistic data, at least at the moment an innovation is created, and thus contribute to the better understanding of each "synchrony" (Booij 2007: 255, Joseph 2009: 53, 55)2. At the same time, they can contribute to the development of the theoretical approaches to the mechanisms of morphological change, such as reanalysis and analogy, and show in which ways other morphosemantic and phonological factors may interact with each other, as will

¹ The to a great extent purely morphological distinction of voice does not seem to have diachronically impeded the possibility of interaction of forms belonging to the same lexeme, i.e. share the same lexical representation.

² "...diachrony is relevant to our understanding of synchronic systems. This is understandably so if one takes a 'dynamic' view of synchrony".

be shown below. Finally, they contribute to the claim that the classic notion of morpheme is not sufficient to describe and interpret the changes in the mediopassive endings. In the present study, the traditional distinction between "dialect" ($\delta\iota\dot{\alpha}\lambda\epsilon\kappa\tau\sigma\varsigma$) and "local variety / patois" ($\iota\delta\dot{\omega}\mu\alpha$) is not taken into account both for theoretical and for practical reasons.

1.4. The longer size (compared to those of the active voice) of the mediopassive endings renders them more liable to processes of restructuring, which may make them "producible" one from another or "relatable" to one another in the speaker's mind and thus contributes to the creation of small-scale "generalizations" (see Joseph 2009). A case in point is the notoriously difficult reconstruction of the mediopassive endings of the Indoeuropean proto-language on the basis of the inflectional paradigms of the various IE descendant languages. These endings seem to be made up (or rather to have been made up) of smaller elements and are restructured in the various IE languages through complex analogical/morphological processes (cf. Clackson 2007: 142-151 among others). What is more, in the case of the Modern Greek dialects in particular, the absence, at least in previous periods, of a linguistic standard has facilitated changes. The mediopassive endings thus present a considerable amount of local variation, although the various inflectional paradigms could be subsumed under a small number of basic types according to criteria such as stress pattern, following e.g. the practice of Newton's 1972 article. Even within the system of each individual local variety is it possible in some cases to observe extensive allomorphy, not only phonological or morphological (Ralli 2005:67), but also connected to various factors as well as to the general history of the language (and occasionally to the influence of Standard Modern Greek). The so-called free variation of allomorphs of the mediopassive endings deserves a more in-depth study from the viewpoint of whether it may be influenced by factors such as style or phrasal/sentence rhythm3. Inflectional paradigms like those presented in prescriptive grammars of Standard Modern Greek are rare. The impression of inflectional paradigms without variation and allomorphy is sometimes created indirectly through publications (specialized or not) which provide partial or complete description of dialects (see also Newton 1972):

Mediopassive imperfect (singular) in the variety of Kea (Kollia 1933: 278)

(Table 1)

Island of Kea (Tzia):

ímudan ~ ímane ~ ímuna ísudan ~ ísane ~ ísuna ídane ~ ítane ~ ítone

Mediopassive imperfect in the dialect of Patmos (Papadopoulou 2005: 177-8):

(Table 2)

³ For example, the choice of the 3.PLUR. allomorph '-o(n)dan or -ó(n)dusan. e-Proceedings of 4th Modern Greek Dialects and Linguistic Theory

Island of Patmos:

3.SG: -útane ~ -údone ~ '-udane ~ -ódane

1.PL: -úmeste ~ -úmastóne

1.5. Newton in his 1972 article gave a first, quite detailed overview of the dialectal and geographical distribution of the various types of inflectional paradigms, as well as of the processes which led to the attested forms, based of course on a limited, by today's standards, amount of data. The evidence he gathered from his informants gives a different picture from the one deriving from the examination of the extensive material available in the contemporary data collections and corpora; this is due both to the imprecise and occasionally outright wrong answers of his informants, and to the extensive allomorphy present even within the same settlement (as pointed out above), something which does not come through in the data he sets out. Moreover, in my view, the distinction between diachronic processes and synchronic rules of the generative model of the period is less than clear in this paper. Parts of the data presented requires revision, while all the changes are viewed as simple changes on the level of form (as some of them undoubtedly are) without reference to the marking of grammatical categories. Yet the latter point cannot be ignored, and seems to constitute a crucial factor in several cases (cf. Janda & Joseph 1992, Joseph 2005, 2006, 2008, 2009). Speakers seem in some cases interested to emphasize specific grammatical categories which they perceive as insufficiently marked in some forms of the inflectional paradigm or whose morphological expression has become opaque, although in other cases this need is not evident. Of course one should be careful not to confuse the trigger of a change with the result it has on the inflectional paradigm; in any case, however, it is necessary for any interpretative attempt to take into consideration the whole inflectional paradigm as well as data from language history. The a-historical perspective on linguistic questions such as the one under discussion can lead to questionable conclusions which may also have repercussions on the theory, as will be shown in the case of the 3.PL. ending '-ondan of the mediopassive imperfect. The various linguistic varieties constitute, as Newton indirectly concluded, different stages of evolution of the inflectional paradigm in different "branches". Furthermore, the investigation of the structure of the inflectional paradigm in each dialect can provide important clues for the relative chronology of the changes.

2. The morphological structure of the mediopassive present and imperfect in Standard Modern Greek.

The forms of the inflectional paradigm of the mediopassive (present and) imperfect in Standard Modern Greek are structured as follows:

BASE + INFLECTIONAL SUFFIX. The inflectional suffix can be viewed as also containing the element to the left of the agreement markers (person+number) which displays in the present an alternation /o/ (or /u/) \sim /e/, while appearing in the imperfect as a columnally stressed /o/ (except for the 3.PL. allomorph '-ondan), which derives from the Ancient Greek so-called "thematic vowel":

(Table 3)

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PRESENT	IMPERFECT	
'-ome	-ómun(a)	
'-ese	-ósun(a)	
'-ete	-ótan(e)	
-ómaste	-ómaste	
	-ómastan	
'-este	-ósaste	
-ósaste	-ósastan	
'-o(n)de	'-o(n)dan	
	-ó(n)dusan	

The precise analysis of the "thematic vowel" is a disputed issue due to the different approaches adopted depending on the model of morphological analysis (in general or of the Modern Greek verbal system in particular)4. As far as the dialects are concerned, the system of each should be examined separately in order to isolate the factors which determine its appearance, form and function. For example, while in Standard Modern Greek the thematic vowel appears regularly in the mediopassive imperfect as carrier of the stress (with the exception of the 3.PL. allomorph '-ondan), in the dialects placement of stress varies, and so does the form of the thematic vowel, which alternates between /o/ or /u/5 and /e/ (or /i/ in northern varieties) as in the present. The form of the thematic vowel in the present is determined in Standard Modern Greek by the combination of the morphosyntactic properties of person+number, while in the imperfect its form is stable, a result of gradual changes which have not yet been completed in all Modern Greek linguistic varieties.⁶ The basic stress pattern of the present, inherited in general from previous phases of the history of the language, requires recessive stress (on the antepenult) in Standard Modern Greek. In the imperfect, it requires stable stress on the thematic vowel. The inflectional suffixes can be considered "portmanteau morphs" in that they are carriers of the morphosyntactic properties of person+tense+number, perhaps even of verbal aspect since in the mediopassive agrist (i.e. the perfective past) the inflectional suffixes are identical to those of the active voice. The contrast 'present: past' is neutralized in the allomorphs *-maste* and *-saste* of the 1-2 PL.

3. The original inflectional paradigm of the mediopassive imperfect

The inflectional paradigm of the mediopassive imperfect which can be considered as lying at the origin of the inflectional paradigms of the different MG varieties, and which is recoverable not only through the direct sources of past forms of Greek (including older dialect sources) but also through the comparative study of the dialects in the framework of the historical-comparative study of genetically related language-forms in general, is as follows:

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(Table 4)

-ómin

'-eso \rightarrow '-eso(n)

'-eto \rightarrow '-eto(n) (and '-oton)

-óme\theta a \rightarrow-ómesta(n) (\rightarrow-ómes\thetaen/-ómeste(n) etc.)

'-este
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⁴ See Ralli 1987: 258, Mackridge 1990: 269-277. A discussion on the precise morphological status of the thematic vowel in the Modern Greek verb is beyond the scope of the present paper.

 $^{^5}$ /u/ even in southern varieties. Its presence there cannot of course be attributed to the law of raising of unstressed /o/ as in northern varieties.

⁶ In some approaches to the structure of the MG verb, it is considered in the imperfect as one of the exponents of "past".

'-ondo \rightarrow '-ondo(n) ('-ondan, - \acute ond-asi(n) \rightarrow - \acute ondisan 7)

Of course it cannot be assumed that the paradigm was completely homogeneous in the whole geographical area in which Greek was spoken, in fact the detailed historical-comparative investigation could even uncover larger geographical sub-sets of inflectional paradigms within (early) Medieval Greek (cf. Horrocks 2010:320-323).

4. General observations on the form of the 3.SG.

The retention in many dialects (or in their older sources) of the specific inflectional suffix, either unaltered or with changes in its vocalism, but always maintaining its original stress, is in line with its observed high frequency and therefore the assumed autonomy and strength of the 3.SG (in the sense of Bybee 1985) as a model of analogical change. In many varieties the stress pattern of the 3.SG was extended to the 1.SG which was originally stressed on the "thematic vowel" (perhaps under the combined influence of the more basic present, e.g. 1.SG $-\acute{o}min \rightarrow -\acute{o}mun$, but also '-umun, compare 3.SG.IMPERF '-eton, 1.SG.PRES. '-ome / '-ume), while in others (e.g. many northern dialects) the 3.SG. underwent syncretism with the 3.PL. in '-undan.

In fact, in older sources (of the 16th-17th c.) of dialectal varieties which nowadays present columnal accent on the "thematic vowel" as in Standard MG (e.g. in the Heptanese and in the Peloponnese: $-\acute{o}muna/-e$, $-\acute{o}suna/-e$, $-\acute{o}tuna/-\acute{o}tane$) it is still possible to find 3.SG forms stressed according to the "older" pattern, e.g. '-oton / '-oton. In parts of the Peloponnese and Central Greece one even finds '-etan (and with northern vocalism: '-itan), e.g. $est\acute{e}ketan$ efitan efitan etc. In various today's insular varieties (e.g. in the Dodecanese, Ikaria, Crete etc.) one finds in the imperfect forms ending in '-umu(n(e)) (1.SG), '-usu(n(e)) (2.SG), '-eto(n)/ '-edone/ '-uta (3.SG) etc., and in various northern varieties forms in '-uman '-usan '-undan.

While in some of these varieties the 1.PL (and the 2.PL wherever we have extension to $-\delta$ saste from original '-este') has maintained stress on the "thematic vowel", i.e. $-\delta$ mastan $-\omega$ maston etc. (and with stress shift -o mástane -o mástene etc. as required by the trisyllabic window), in other varieties (e.g. northern ones) a tendency for fixing stress on the verbal base can be observed, with development of secondary stress due to the trisyllabic window, e.g. k δ 0 mastan δ 1 with vowel deletion due to the same rule, e.g. δ 2 mastan or δ 3 played a crucial role in the general development of these varieties. Of course it too underwent changes triggered by other forms of the inflectional paradigm, mainly by the equally strong 3.PL (see below):

- a) Syncretism of the 3.SG and the 3.PL in the direction of the latter in many northern varieties among others (see also Ruge 1973:154-157)8. This is perhaps connected with the retention of the original stress pattern, which is identical to that of the 3.PL in '-ondo.
- b) Extension of -an from the 3.PL. in '-ondan to the 3.SG. and creation of '-etan (e.g. in Peloponnese) or -étane/-étani/'-itan in Old Athenian and in other varieties of Central Greece -"Sterea Ellada"- and Euboea). Interestingly, no or very little influence of the 3.SG on the formation of the 3.PL. is observable in the material examined.
- c) Extension of the vowel /u/ from the 1.-2.SG $-\delta muna$ to the 3.SG, yielding $-\delta tuna$ in Heptanesian. As mentioned above, however, in older phases at least the original stress pattern was maintained ('-oton or the even more archaic '-eto(n)). Thus the 3.SG showed remarkable resistance before the modern form $-\delta tan(e)$, whose vocalism and stress pattern are unconnected to the original ending, finally prevailed.

The varieties which belong to each type are not necessarily genetically related (or at least, this characteristic does not constitute sufficient explanation on its own), while many of

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⁷ See Pantelidis (2005).

⁸ In today's Standard Modern Greek usage of some parts of northern Greece one may also observe the reverse direction of syncretism, i.e. the use of forms in $-\acute{o}tan(e)$ with plural function, e.g. *aftés erxótane* 'they (FEM.) were coming'.

them do not represent a pure type; this shows the diachronic fluidity of the classification in the one or the other type as well as the constant appearance of new tendencies for restructuring of the whole paradigm or parts thereof. Thus, in some of the varieties which historically represent an inflectional paradigm of this type, the extension of forms with final /e/ has led to shift of stress, as required by the trisyllabic rule: $-\acute{u}mune -\acute{u}sune -\acute{u}done$ etc.

5. The form of the 3.PL: Its genesis and its role in further changes.

5.1.The 3.PL seems to have constituted an equally powerful analogical model, which lies at the origin of the creation and spread of the pattern 'present –*e*: imperfect –*an*'; this pattern spread to the 3.SG and in several northern and other varieties led to 1.-2.SG forms in –*man* –*san*:

According to Babiniotis (1972:204-206), the genesis of the 3.PL. in '-ondan can be viewed as part of the general tendency towards "unification of the past" at the level of endings, but, as he himself admits, the expected result would rather be forms with a vowel /a/marking 'past'9 immediately preceding the inflectional suffix (*-a-maste, *-a-(sa)ste, *-a-ndan or rather *-a-nde), following the pattern of the active voice (e.g. 1.PL. -a-me, 3.PL. -a-n(e)) although a "correct" linear ordering does not seem to be always the aim of the speakers (Joseph 2008:3):

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(Table 6)
[-past] -u-n(e) : -o/u-nde
[+past] -a-n(e) : *-a-nde (ή *-a-ndan?)
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A change along these lines seems to have taken place in Grico (Puglia, S. Italy, see Karanastasis 1982: 84), where /a/ as a marker of the past was transferred to the mediopassive imperfect in a position immediately preceding the suffixes denoting person + number ('-a-mo,' -a-so, '-a-to, '-a-mósto, '-a-sósto, '-a-tto). These forms could of course also be analyzed as signaling past also through the vowel /o/ (contrasting with /e/ which appears at the right edge of the present forms, e.g. -ome -ese etc.).¹⁰

5.2. If one insists in interpreting the genesis of *-ondan* as a replacement of the -o of original '-ondo through the marker -an of the 3.PL, which belongs to a set of markers of person+number which are unmarked for voice (sometimes more carefully reference to the *influence* of -an in the change of '-ondo to '-ondan is made, see Joseph 2006:2), then this change should be classified as a case of affix pleonasm (-ond- + -an), since at least the categories "person" and "number" (but tense as well), are marked on both elements participating to the creation of '-ondan (Joseph 2005). However, it is hard to see the original 3.PL. form as morphosemantically opaque, since tense (together with person and number) is sufficiently marked (tense also through the contrast /e/:/o/, e.g. $extit{erxonde}$: $extit{fraction}$

⁹ Babiniotis characterizes /a/ as the 'thematic vowel of the past' (1972:207-208).

¹⁰ An instantiation of what has been termed *extended exponence* (cf. Booij 2007:116,313, Coates 2000:622-623).

 $/\acute{e}rxondo$), and therefore the conditions which according to Haspelmath (1993:297-298) lead to pleonasm do not seem to apply. According to the same author, "pleonastic affixation" consists in the addition of a productive affix onto a word in order to achieve more transparent marking of the morphosyntactic category which is already expressed in this word through a different morpheme, which however has become opaque¹¹. It is therefore a mechanism increasing the morphosemantic transparency of synchronically "irregular" or "unproductive" structures. The question in this case is in what sense a form like \acute{i} - $/\acute{e}rxondo$ could be considered irregular or unproductive at the time of its change to $\acute{e}rxondan$. Lehmann (2005: 141), providing a more sound perspective, speaks of hypercharacterized forms, which are created due to paradigmatic pressure:

"All of these examples [of hypercharacterization in inflection] clearly involve analogical transfer of a marker from a context in which it is the only operator to fulfill the function in question to a context where it pleonastically duplicates an operator already applied. We may generalize that hypercharacterization in morphology itself is based on analogy. Moreover, in a diachronic perspective, the two concurrent markers are not on the same level. There is an inner marker which for some reason does not quite do the job, and an outer marker which is currently productive and which speakers feel should appropriately appear on such a word form. A more precise formulation of the analogical account might therefore say that hypercharacterization is a kind of adaptation of a stem or word form based on paradigmatic pressure".

In fact, according to him (2005: 151, fn. 22), "an analogical model does not need to be perfect in motivating each and every feature of the transformed item; it suffices that it share some features with the latter". In the case under discussion, the active voice, which can be viewed as the semantically unmarked member of the system of voices in Modern Greek, must have provided the model, despite the fact that the contrast in the 3.PL. in the active voice is [-past] -un(e) : [+past] -an(e) (and/or -asi) (see above). The main question in this context remains why the "inner marker" "does not quite do the job".

We are dealing here with a classic example of how the lack of attention to the historical record and to the dialectal data as collected up to the 20th c. can lead to erroneous conclusions. In older sources (of the 16th and 17th centuries)¹² one finds 3.PL imperfect forms in -ondon (beside the more recent -ondan). This ending, which is probably preserved in mainly insular varieties as -o/u-don(e), came about as follows: The strong analogical model of the 1.SG. -omin > -omun (according to Horrocks 2010:321 also of the 3.SG. in -en bearing the so-called ny ephelkystikon) which has final /n/ influenced the nearest slots of the paradigm on a purely formal level, giving 2.SG: $-eso \rightarrow -eson$, 3.SG -eto

¹¹ Haspelmath's description of the phenomenon involves a contradiction, in that when a marker has become opaque, its recognition concerns mainly past synchronies and not the time of the appearance of the innovation. In other words, at the time when such an innovation is created, it is doubtful whether the speaker at least can be considered as capable of synchronically recognizing a marker which transparently expresses a category. In many cases, as e.g. in the change of the Latin infinitive *esse* (etymologically *es-se*) to *esse-re* in Vulgar Latin (cf. Ital. *essere*, Fr. *être*, Span. *ser*), it is in my opinion doubtful whether there still exists synchronically any marker of the infinitive, opaque or not (cf. Haspelmath 1993:299).

¹² E.g., the sermon of Maximos Peloponnisios, Ioannikios Kartanos etc. In the text of the Chronicle of Morea, as transmitted by the Copenhagen manuscript, as well as in the War of Troy, only -ondan (and -óndisan) is attested, which shows the chronological priority of the genesis of -ondan with respect to the 3.SG. -tan (from older -ton). Editions of the texts: (a) Nikolopoulou A. (1995). "Μαξίμου του Πελοποννησίου εξήγηση του 'Κατά Ιουδαίων' έργου του Μελετίου Πηγά". Parnassos 37:308-346. (b) Ιωαννίκιος Καρτάνος, Παλαιά τε και Νέα Διαθήκη (Βενετία 1536). Ed. by Eleni Kakoulidi-Panou & Eleni Karantzola. Thessaloniki: Kentro Ellinikis Glossas, 2000. (c) Το Χρονικόν του Μορέως, ed. by Petros Kalonaros. Athens: Ekati editions. (d) Ο πόλεμος της Τρωάδος, ed. by M.Papathomopoulos & E.M.Jeffreys. Athens: Morfotiko Idryma Ethnikis Trapezis, 1996.

 \rightarrow -eton, as well as 3.PL. -ondo \rightarrow -ondon. -ondon, which shared the feature [+past] and the final /n/ with the unmarked for voice marker of person + number (3.PL) -an, was further transformed into -ondan under the influence of -an. Of course a more exhaustive investigation of older (late Medieval/ early Modern) Greek texts and dialectal varieties could lead to more reliable and detailed answers.

5.3. In the opposition -onde:-ondan, the elements -e and -an were reanalyzed as markers of the category of tense ([+past]), since the presence in both forms of the element -nd-could mark the categories of person and number (see also Mackridge 1990:276).

The stage which included 3.SG -eton and 3.PL -ondon probably caused the appearance of the 1.-2. PL. markers -maston(e) -saston(e) -meston etc. (with thematic vowel /ó/ or /ú/ or /u/) which are recorded in various (mainly insular) varieties (Patmos, Kythnos, Symi, Crete, Rhodes¹³, parts of the Peloponnese etc.), and which must be due to a similar process of reanalysis at this precise stage. Furthermore, the 1.-2. PL. forms in use in many parts of the Peloponnese, $ka\theta$ ómastun, $ka\theta$ ósastun (similar forms are attested also in Velvendo, prefecture of Kozani -Macedonia-, e.g. \acute{e} rxumástun \acute{e} rxusástun) derive from corresponding processes of reanalysis on the basis of the contrast -e: -un in the 1-2.SG.:

(Table 7)

íme : ímun → ímaste : ímastun íse : ísun → ísaste : ísastun

Patterns which are the result of an initial change triggered by different causes are reinterpreted by the speakers, often without taking into consideration the overall morphological structure of the language at least as would be analysed by linguists:

Stage 1. $-ondo \rightarrow -ondon \rightarrow -ondan$ (3.PL.IMPERF)

Stage 2. PRES *-onde* : IMPERF *-ondan* \rightarrow reanalysis of *-e* and *-an* as markers of tense: PRES *-e* : PAST *-an* (*-nd-* : 3.PL mediopassive)

Stage 3. Extension of the pattern to the 3.SG. which shares the feature of person with the 3.PL : PRES -te : IMPERF -tan (\leftarrow -to(n)).

Stage 4. In northern (and other) varieties, extension to other forms of the paradigm:

1.SG -me:-man 2.SG -se:-san

In fact, from the moment that the innovative forms come into existence on the basis of their analogical models, the former can gradually acquire autonomy with respect to the latter as to several parameters, e.g. addition of the vowel /a/ in 1.2.SG but of the vowel /e/ in the 1.2.PL, e.g. $\pi.\chi$. *i-mastune isastune* ('we were, you were') versus *i-muna i-suna* ('I was, you (SG) were').

5.4. In such cases, the notion of morpheme is not sufficient for the interpretation of the developments. Janda and Joseph 1992 (cf. also Joseph 2009:52-53), discussing the recurrent partial similarities between various forms of a paradigm do not accept hypersegmentation into morphemes, which would go against the elsewhere condition, but instead recognize elements (which cannot fit into the classic notion of morpheme) introduced on the basis of "meta-redundancy" rules, while several other scholars accept the existence of sub-morphemic units as necessary for morphological analysis¹⁴, both in inflectional and in derivational morphology. A slightly different approach is adopted by Bybee (1985:127-129), who views morphological structure within the framework of connections between lexical units or between forms of the inflectional paradigm, which do not function on the basis of a strict segmentation into morphemes. In this framework however one may recognize elements which would not be considered morphemes stricto sensu, but can nevertheless be viewed as markers of grammatical categories. Psycholinguistic (and neurolinguistic) research also provides interesting insights into the

¹³ Cf. e.g. Newton 1972:281. 3.PL. érkund-e: érkund-on \rightarrow 1-2. PL. érkumest-on érkust-on (Rhodes).

¹⁴ See Luschützky 2000, Kubrjakova 2000 with extensive overview of the issue and bibliography.

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way speakers process the structure of words and consequently into the basis of morphological change: Experiments have offered important corroborative evidence for the largely emergent character of morphological structure and for what speakers actually treat as meaning/function bearing units. Their processing does not necessarily conform to the morphological analyses linguists would come up with (see among others Devlin et al. 2004, Taft & Kougious 2004).

An interesting case is also provided by Ruge (1973:131, fn. 15), operating in much the same way: in this case as well, parts of the inflectional forms, which would in all probability not be considered as markers under a classic morphemic analysis (in this case /o/ vs. /e/) are perceived by the speakers as function-bearing units:

"The 2.PL. form [e]sterís θ o (or [e]sterísto]), occasionally heard in place of esteríste is strange. I interpret it as an analogical formation on the basis of 3.SG esteríto:

	3.SG.	2.PL.
PRES. (-e)	sterít <i>e</i>	steríst <i>e</i>
IMPERF. (-o)	(e)steríto	(e)sterísto"

I have recorded both esterísto as well as aníxesto (i.e. anexósastan 'you were tolerating').

6. 1.-2. SG structures of the type -mu-tan(e)/-tone -su-tan(e)/-tone etc.

In other changes, morphosemantic transparency seems indeed to increase, according to the principle one meaning: one form (as far as possible). Thus in many varieties, both northern and southern, the reanalysis of the inflectional suffixes of the 1. and 2.PL as containing the oblique weak inflectional forms mas and sas of the personal pronouns (see Ruge 1984) has led to the creation of 1.-2. SG forms like ekimúmutóne (standard kimómun 'I was sleeping'), *ímutáne* (standard *ímun* 'I was'), *ísudan* (standard *ísun*, 'you (SG.) were'), $ka\theta \delta m' dan$ (standard $ka\theta \delta mun$ 'I was sitting'), $k\alpha \theta \delta s' tan$ (standard $ka\theta \delta sun$) etc. (see also Pantelidis 2006:290-292) analyzable as 'thematic vowel+marker of person/number + tane': The creation of these forms seems to confirm Ruge's theory much more than the changes in Standard Modern Greek. The problem in this context is whether after the reanalysis one is dealing with a sequence of two markers (e.g. -mas-tane, -m(u)-tane) or just one. The first solution, although it conforms to the speakers' analysis of the 1.-2.PL. forms runs up against the difficulty of attributing a specific and clear function to the second element (-tane = [-per-fective], [+past], [-active] or combination thereof? "empty morph"?), something which is not always possible (Bybee 1985:128, Luschützky 2000:456-458, Kubrjakova 2000:424-425). It would also run counter to an important feature of Modern Greek verbal morphology, according to which the agreement properties which are important for syntax, i.e. person + number, are expressed on the right edge of the verbal inflectional form. On the other hand, it is obvious from the reanalysis that the speakers have isolated -mas- and -sas- in the forms of the 1.-2.PL. as markers of person+number. This is yet another case where the classic notion of morpheme cannot describe morphological structure adequately, since the new parsing made by the speakers identifies new markers of person+number on the basis of form and meaning similarities with elements outside the verbal inflectional paradigm. Moreover, it "disregards" both the overall morphological system of Modern Greek, which requires final position of the agreement markers in inflectional forms, and the syntactic congruity of such an analysis, since the pronominal forms mas and sas which were analyzed as bearers of meaning in the mediopassive forms do not represent the case of the subject, being genitive-accusative and not nominative forms. Interestingly, the dialectal varieties in which these forms are attested do not seem to employ 3.PL forms in -óndusan. This fact weakens the possibility that the latter was created on the basis of analyses of the 1.-2. PL. as -mas-tan -sas-tan \rightarrow -ón-tus-an (tus: oblique form of the 3.PL personal pronoun), as has been suggested (see

Joseph 2008, 2009), while at the same time exemplifying the autonomy (in the sense of Bybee 1985) of the 3rd person forms and their consequent resistance to restructuring.

7. "Affix pleonasm".

In this section cases are discussed which would fit into the concept of "pleonastic affixation" as conceptualized by Haspelmath (1993). The results are "hypercharacterized" forms in the sense of Lehmann (2005).

7.1. In the dialectal variety of the village Ochthonia in Euboea, the following inflectional paradigm of the mediopassive imperfect is attested (Favis 1911: 58):

(Table 8)

```
erx-úm' tane < * erx-úmutane 'I was coming' (see above for similar structures) erx-és' tanes (from older *erx-és' tane < *erx-ésutane) erx-é tane erx-úmastane erx-ésastane erx-ún)dane
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In the 1.-2.SG, which came about through the process described in the preceding section, the deletion of /u/ in the otherwise southern dialect has "corrected" the violation of the trisyllabic window, leading to the 2.SG form *erx-és'tane. The new form is clearly distinguished from the 1.SG through the form of the thematic vowel and /m/, as well as from the PL forms through the increased phonological difference. But the distinction from the 3.SG is not clear-cut: The increased phonological similarity to the 3.SG erxétane due to the form of the thematic vowel, the position of stress, the deletion of /u/ and the presence of -tane rendered the form opaque as to the category of person within the singular. This creates the conditions necessary for "affix pleonasm" as described by Haspelmath and Lehmann (see § 5.2 above); the addition of final -s, a marker of 2.SG unmarked for voice, restored the transparency of the form *erxés'tane.

7.2. In some Euboean varieties 3.PL present forms in -ondes/-undes are attested, e.g. $l\acute{e}u(n)des$ $pa(n)dr\acute{e}v\gamma o(n)des$ (standard $l\acute{e}\gamma o(n)de$ $pa(n)dr\acute{e}vo(n)de$ 'they are named, they get married'), which Minas (1987:47) indirectly but correctly, in my view, attributes to an older *-o(n)de-si. The creation of the latter is probably quite old, belonging to a period when both the active and the passive voice displayed alternation between allomorphs ending in the element -si and allomorphs without -si:

(Table 9)

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-un \sim -usi -o(n)de \sim *-o(n)de-si > -o(n)des
-an \sim -asi -o(n)dan \sim *-o(n)d-asi(n) \rightarrow -o(n)disan / -o(n)disane^{15}
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This case would be a more characteristic instance of what Lehmann terms "hypercharacterized forms" (2005:141), at least in the initial phase before the deletion of final /i/, in that a new marker -si of the 3.PL, unmarked for voice, was added onto the already extant marker of this category.

7.2. Another possible case of affix pleonasm is constituted by the mediopassive imperfect inflectional paradigm of parts of Aetolia, as reported by Papadopoulos (1927:93):

(Table 10)

-um'n-an

-is'n-an

-itan

-umast-an

-i(sa)st-an

-und-an

e-Proceedings of 4th Modern Greek Dialects and Linguistic Theory

¹⁵ Cf. also Pantelidis 2005.

The -an contrasting with -e (e.g. -und-e:-und-an) in the 3.PL was reinterpreted as marking tense ([+past]) and was extended to the whole paradigm of the imperfect. Its extension to all the forms of the inflectional paradigm, in combination with the fact that in the singular it seems to have been added onto the whole original marker of person+number (e.g. in -m'n-an -s'n-an, where -m'n-<-mun $\kappa\alpha\iota$ -s'n-<-sun through high vowel deletion, in contrast to what happens in other northern varieties, e.g. -oman/-u-man and -osan/-u-man and did not replace the final phonemes of the older markers could be viewed as a reinforcement of the markers of the 1.-2.SG. These must have been at some point rendered partially opaque, or phonotactically unacceptable through the operation of phonological processes such as high vowel deletion ((?)*-m'n <-mun and (?)*-s'n-<-sun), if of course what lies at the origin of -m'nan -s'nan is indeed *-m'n and *-s'n and not - m'na -s'na (<-muna -suna). In the latter case, the interpretation of these forms should be different.

7.3. G. Salvanos (1918:14, fn.1) mentions a case from the variety of Corfu. According to him, many speakers in the city of Corfu employ 1.PL. mediopassive forms in *-omáste-me* (instead of *-ómaste/-omástene*). We are in all probability dealing (if the ending was correctly recorded) with the same mechanism here, which leads to a unified marking (in this case of the 1.PL.) at the right edge of the inflectional form, despite the fact that the categories person+number are already marked by the inflectional suffix *-omástene*. This development was perhaps facilitated by the phonological similarity of the syllable *-ne* (which probably evolved partially through phonetic processes, i.e. the addition of final /e/ onto the older ending *-mesten/-masten* due to the well-known tendency for open final syllables) with the unmarked for voice inflectional suffix of the 1.PL. *-me*.

The cases under discussion in this section present similarities with the process that Booij (2007:273-275) termed systematization (which leads to "overcharacterization"), referring to processes of derivation and not inflection. Koefoed & van Marle (2004:1581) view such processes as a type of *morphological adaptation* operating on the "output" and not "on the rule system as such". In my view the assumed motives for such changes (opacity of markers as supposed by Haspelmath, emphasis or fitting of "an expression in a paradigm into a structural class", as proposed by Lehmann, 2005:148) are not evident in all of the above cases. The case in § 7.1 (and perhaps the one in §7.3 to a certain extent) more clearly involves a morphologically opaque construction (due to phonological factors) as to certain categories. The rest can be viewed as results of analogical pressure on forms on which the categories seem to be already sufficiently marked. The crucial point is that such processes of "pleonastic affixation" lead to "hypercharacterized" forms which underline the categories marked by the new elements a posteriori. Joseph (2008:3) in my view points in the right direction when he remarks that "speakers, when innovating, care more about getting appropriate pieces expressed and into the mix, as it were, than they do about observing ordering regularities concerning these elements. This is not to say that anything goes, but recognizes rather that getting the informative pieces into the form is the paramount consideration". Building on this thought, I would suggest that the above described changes are an instantiation of a tendency to give potentially a separate morphological coding to every morphosyntactic property regardless of the fact that the property is already encoded, albeit cumulatively with other properties by the pre-existent marker. In this process speakers tend perhaps to "spread" the complex morphosyntactic information (tense, person, number, voice) onto more than one element:

-onde [3.person+plural+present+mediopassive] \rightarrow *-onde-si [3.person+plural+present+mediopassive] - [3.person+plural]

Limitations on this tendency may be imposed by the length of the resulting construction and the repertoire of available elements. Subsequent phonological and morphological changes (loss of final /i/ due to the trisyllabic window, obsolescence of -si) may of course again obscure things:

*-onde-si > -undes (not further segmentable?)

This means that "hypercharacterization" in such cases would be only an epiphenomenon. Furthermore, the constructions referred to in §6 above could fit in this framework as well.

8. Interactions between voices.

8.1. The change of $-ondon \rightarrow -ondan$ shows that there are no "watertight" boundaries between voices, and that inflectional forms of one voice can influence the forms of the inflectional paradigm of the other voice, when there exists even a slight semantic relationship between them (cf. above -ondon \rightarrow -ondon under the influence of -an, though the latter should be regarded as unmarked for voice). In the following case, an inflectional suffix of one voice was adopted as is by the paradigm of the other voice16. In many varieties of the Aegean Sea, the use of the inflectional suffix of the 1.SG.IMPERF of the mediopassive voice has restored in oxytone active verbs the distinction between the 1.SG and the 3.PL of the imperfect, both of which originally ended in '-un (and '-u with deletion of final /n/ in some varieties), e.g. *(e)γέlun 'I was laughing', *efórun 'I was wearing' (standard yelúsa forúsa) \rightarrow yélum'na fórum'na (Kydonies-Lesvos). 17 Interestingly, the mediopassive voice, from which the inflectional suffix originates, is the marked member of the voice system. Furthermore, it was not the unmarked for voice (and hence displaying wider distribution within the verbal system) marker of the 1.SG -a that was taken over, in contrast to what happened in many other varieties (e.g. $f \acute{o} r u n - \alpha$, standard $f o r \acute{u} s a \acute{u}$ 'I was wearing', see Pantelidis 2008).

8.2. Sporadic attestations of forms like 1.PL. imperfect forms like stekósame erxósame (standard stekómaste/-an, erxómaste/-an 'we were standing, we were coming') (Arcadia, Achaia, see Pantelidis 2006:288), which can be viewed as reanalysis of the forms of the 3.PL. stek-ósane erx-ósane as stekós-ane erxós-ane, on the basis of the widely used within the verbal system 3.PL.PAST marker -ane (active or unmarked for voice). The reanalysis and the spread of the new structure, limited locally to the sub-paradigm of the plural is an interesting evolution, both because it has as a model an ending which is unmarked for voice but which is tacked onto forms which are clearly marked as [+mediopassive], and because of the unexpectedness of the result (no singular forms like *érxos-a, *érxos-es, *érxos-e are attested), which, as in the previous case, create a new local generalization but an "irregularity" on another level, at least from the specialist's point of view. The new structure can be subject to alternative interpretations on the part of the linguist ('new base allomorph erx ós- + -ame -ane' or 'base erx- + new ending -ósame'), all of which could be considered uneconomical and would perhaps go against the perception of the speakers themselves concerning the morphological structure of the inflectional forms. In this case the $-\dot{\phi}$ - cannot in my view be considered a marker of tense, as several models of analysis of the Modern Greek verb do. Speakers do not seem to (always) care about the precise status and the precise function of all the elements which make up an inflectional form. 18

 $^{^{16}}$ In any case, in the mediopassive agrist the inflectional suffixes are identical to those of the active forms of the past.

¹⁷ Kourmoulis 1956:3-4. Further data (from Papadopoulos 1927, Kourmoulis 1956, Katsanis 1995): Samothraki: bóluman (orig. epólun 'I was selling'), xálnuman (standard xalúsa). Imvros: aγάpum, θάrrum (-um < *-um'n < '-u-mun). Limnos: rótum'ne, pirpátum'ne. Mykonos: epínum'ne, ezítum'ne. Kythnos: a-γápumúne, bórumu. Krini (Asia Minor): iγélumúne, irótumúne. Andros: aγápumúne, ízjumun (← *í-zjun 'I was living', standard zúsa). Naxos: zítumun, pérnumun. Kimolos: itrávumúne. Sikinos-Folegandros: emíljumun. Rethymno (Crete): epínumuné, epérnumuné.

 $^{^{18}}$ See also Luschützky 2000:455. Discussing the issue of what constitutes a morpheme, he points out that while the elements /fl-/ and /gl-/, which appear in many German words with common semantic features, theoretically fulfill the necessary criteria for their recognition as morphemes, such an analysis would be completely unfounded, since the parts of the words that would remain after the segmentation of /fl-/ $\kappa\alpha\iota$ /gl-/ (e.g. -immer-, -irr-, -ucker-, -atter- etc.) could not be attributed to any morpheme nor could their contribution to the meaning of the whole word be identified. As he himself later on admits, the recognition of a special morphological status for elements such as fl-/ $\kappa\alpha\iota$ /gl-/ leads to interesting and justifiable generalizations, which function on e-Proceedings of 4^{th} Modern Greek Dialects and Linguistic Theory

9. Conclusions.

The inflectional paradigm of the mediopassive, and especially of the imperfect, in the Modern Greek dialectal varieties is interesting both for the theory of morphological change and for theoretical notions and issues such as the status of the morpheme, the submorphemic units, the marking of categories and the overall morphological structure. It can, furthermore, be seen within the framework of well-attested cross-linguistic tendencies:

- a) Reanalysis shows that speakers often operate on surface forms and are in a constant process of interpretation/analysis of their data.¹⁹ During this process, they are looking for "structure", especially in longer inflectional forms such as the forms of the mediopassive paradigm (Joseph 1992:131-133, Booij 2007:258). In these forms, they often seem to be looking for overt markers of morphosyntactic categories without necessarily paying special attention to the "correct" linear ordering, to the extent at least that this is deducible from what is known about the morphological structure of the Modern Greek verb.²⁰ In fact, sometimes the function of the elements resulting from the speakers' alternative analysis of the data is not even clear (Kubrjakova 2000:422,424-425). Thus for example they occasionally analyze linguistic data in a way that goes against the classic synchronic analyses that appear justifiable or transparent from the linguist's point of view, e.g. the case of erx-ósane \rightarrow reanalysis to erxós-ane \rightarrow 1.PL. erxós-ame (beside 1.PL. erx-ómaste, alongside singular forms erx-ómun(a) erx-ósun(a) erx-ótane etc). Moreover, they occasionally even go against the basic morphological structure of the Modern Greek verb (as in the case of the reanalysis of the sequences -mas- -sas- as markers of person+number, and are not always "perfectly" well-founded (at least semantically and syntactically as in this case). As has been remarked, real speakers are far from a "perfect speaker-listener" who has at any moment a grasp of the totality of the system of his language (see Joseph 1992:132-133).
- b) Concerning the issue of whether there are constraints on "inter-cell connections" (Joseph 2009:53-54) which might facilitate certain change and render others less probable, there can be no definite and complete answer without a more comprehensive investigation of the changes attested in Modern Greek varieties. A number of tendencies can of course be established. However, it is remarkable that even slots (or cells) which are quite loosely connected with each other (e.g. the same cell in a different voice) may interact
- c) The problems connected with the classic notion of morpheme and the criteria for its identification have already been noted and commented upon in the relevant theoretical literature, and so has the question of its sufficiency for the description and analysis of morphological structure and morphological change. Also, the existence of sub-morphemic units, identifiable on the basis of form and meaning similarities, has been proposed by several scholars (see Luschützky 2000, Kubrjakova 2000). The data from the domain of

the basis of sub-morphemic units. However, it is far from clear whether speakers always attribute (or are even interested in attributing) a clear meaning/function to all the word segments which could be recognizable as units according to specific criteria. See also Bybee 1985:128, Kubrjakova 2000:424-425.

¹⁹ Cf. Booij 2007, p.258: "A [...] source of linguistic innovation besides changing the lexical norm is reanalysis. Language users cannot grasp the system behind a language in a direct fashion. The only evidence they have are outputs of the system, concrete cases of language use. This opens up the possibility that a language user reconstructs the system underlying the perceived outputs in a slightly different way from previous users". And: "...adult speakers may also change their language through reanalysis, since they are continuously interpreting the outputs that they perceive".

²⁰ Cf. Joseph 2008, p.3: "...speakers, when innovating, care more about getting appropriate pieces expressed and into the mix, as it were, than they do about observing ordering regularities concerning these elements. This is not to say that anything goes, but recognizes rather that getting the informative pieces into the form is the paramount consideration".

e-Proceedings of 4th Modern Greek Dialects and Linguistic Theory

morphological change in the mediopassive inflectional paradigm (especially the non-perfective past) in Modern Greek varieties seem to confirm, in my opinion, the existence of such elements in inflectional morphology, as speakers seem in several instances to identify within this paradigm units which are bearers of meaning/function but are situated at a sub-morphemic level. Finally, the results of psycholinguistic and neurolinguistic research on speakers' perception of morphological structure can also provide an important and fruitful contribution to the understanding of the mechanisms of morphological change.

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