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Bachelor Thesis

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The Question of Mycenaean Lexical Relics in Ancient Greek

Otázka mykénských lexikálních pozůstatků ve starořečtině

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Acknowledgements

I would like to thank my supervisor Dr. phil. Reiner Lipp, M.A. for all the advice and assistence he gave me during writing this thesis. I would also like to thank all the members of the Department of Comparative Linguistics for their support as well as my family and friends for their encouragement and patience.

Prohlášení

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V Kroměříži, dne 13. srpna 2021	
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Keywords

Ancient Greek Language, Greek Dialects, Homeric Greek, Loanwords, Mycenaean, Relics

Klíčová slova

Starořečtina, řecké dialekty, homérská řečtina, výpůjčky, mykénština, pozůstatky

Abstract

This thesis discusses the question of possible Mycenaean lexical relics in later Greek. Some words in Ancient Greek show unusual phonological developments for their respective dialects. Thus, they raise the question of interdialectal borrowing. Most of these words, which are already attested in Homer, differ from the expected forms regular for 'homerische Kunstsprache', the language of Homer's epics, which mainly consists of Ionic and Aeolic dialectal elements. In a number of relevant cases they show a treatment characteristic of the so-called strong dialects like Doric. Since Doric did not partake in the creation of the Homeric language, these forms must be explained differently.

One possible solution to this problem is to interpret these words as relics from the Mycenaean dialect. However, the exact state of the phonological system of Mycenaean is still not fully understood due to the limitations of the Linear B script, so this explanation must be regarded with caution.

Abstrakt

Tato práce se zabývá otázkou možných mykénských lexikálních reliktů v pozdější řečtině. Některá slova v klasické řečtině vykazují neobvyklý fonologický vývoj pro svůj vlastní dialekt. Nabízí se tedy otázka, zdali se nejedná o mezidialektální výpůjčky. Většina těchto slov, která je doložena už u Homéra, se liší od podob, které bychom očekávali pro ,homerische Kunstsprache', jazyk Homérových epických básní, jenž se skládá hlavně z iónských a aiolských dialektálních prvků. V některých případech tato slova ukazují vývoj charakteristický pro tzv. silné dialekty, jako jsou např. dórské dialekty. Dórské dialekty se však nepodílely na vzniku homérského jazyka, tyto formy je tedy třeba vysvětlit jiným způsobem.

Jedním možným řešením tohoto problému je interpretovat tato slova jako na relikty z mykénského dialektu. Nicméně přesný stav fonologického systému mykénštiny není stále ještě zcela pochopen kvůli nedostatkům lineárního písma B, toto vysvětlení je tedy třeba brát s jistou opatrností.

Abbreviations

Aeol. Aeolic Arc. Arcadian

Arc.-Cypr. Arcado-Cypriot

Arm. Armenian
Att. Attic
Av. Avestan
Cypr. Cypriot
Dor. Doric
Goth. Gothic
Ion. Ionic

Ion.-Att. Ionic-Attic
Lat. Latin
Lesb. Lesbian
Lith. Lithuanian
OAv. Old Avestan
OE Old English
OIr. Old Irish

PIE Proto-Indo-European

TA Tocharian A
TB Tocharian B
Thess. Thessalian
Umbr. Umbrian

YAv. Young Avestan

Ved. Vedic

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1. Introduction

The phonological development of many (in origin Indo-European) words in Ancient Greek is still not satisfactorily explained, they do not correspond to the generally accepted sound laws, which took place in the history of the Greek language and therefore they are many times explained by irregular, ad hoc changes. Some of them could be even etymologically misinterpreted in which case it is clear why they do not follow the expected developmental path.

With the decipherment of the Linear B script and the general acknowledgement, that the language written in Linear B is an old Greek dialect, some of these words found a new possible area for explanation.

Mycenaean, as other dialects, went through many sound changes, some of them are specific just for the Mycenaean dialect, if identified could be relics. Unfortunately, the Linear B script complicates the analysis of such words for its imperfect orthography.

One of the words discussed in this work is $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ 'to join'. Risch (1958: 160) was the first one to suggest that this might be a loanword from the Mycenaean dialect for its unusual suffix $-\dot{\delta}\zeta\omega$ which nicely correlates with the Mycenaean o-reflex of syllabic nasals (Myc. a-mo/wheel' ~ Att. $\ddot{\alpha}\rho\mu\alpha$ 'chariot' < * $h_2\dot{e}r$ - $m\eta$).

Later, Risch also pointed out that the classical Greek $i\pi\pi o\varsigma$ 'horse' could be of Mycenaean origin (1966: 157), as its initial *i*- does not correspond with the expected outcome of the PIE reconstruction * $h_1\acute{e}k\mu o$ - 'horse'. This *i* is, however, attested in the Mycenaean term for 'horse' i-qo / $ikk^\mu os$ /.

The list of Mycenaean relics was further expanded by Ruijgh's suggestion (1967: 363 fn. 53) that Homeric $\delta \dot{\eta} v \varepsilon \alpha$ 'plans, counsels' is a Mycenaeanism inherited into the poetic language for its unexpected root vowel. He assumes that the first compensatory lengthening in Mycenaean resulted in a long open vowel (in contrast to the Ion.-Att. long close vowel and geminated resonant in most of Aeolic dialects) just like in the Arcadian dialect.

On the basis of Ruijgh's conclusion, Dunkel (1995) offered a Mycenaean explanation for other words whose development is not still fully understood, namely $\delta \mu o \zeta$ 'shoulder', $\delta \nu o \zeta$ 'purchase price, buy', $\Delta \iota \dot{\omega} v \nu \sigma o \zeta$ 'Dionysus', $\kappa \tilde{\omega} \mu o \zeta$ 'celebration, revel', and $\zeta \omega \mu \dot{o} \zeta$ 'sauce, broth'. Just like Ruijgh, he assumes that these words originated in a dialect whose compensatory lengthening had resulted in a long open vowel. Since most of these words are already attested in Homer, it excludes Arcadian (and Cypriot?), Boeotian and Doric dialects because these dialects did not partake in the creation of the Homeric language, so that leaves only the Mycenaean dialect as a source of these terms (Dunkel 1995: 3).

1.1 The Homeric language

The Homeric language (or 'homerische Kunstsprache') is to some extent artificial language in which Iliad and Odyssey are composed. Despite the fact that the language consists of elements of more dialects, it became the literary language of epic poetry which was composed in it for many centuries.

The origins of the Homeric language reach back to the Proto-Indo-European times when the Indo-European poetic tradition arose, this tradition, common to all languages of the family, is demonstrated not only by Greek epic poetry or Indic Vedas but also in many other epic works of the old Indo-European languages. There are many similarities in poetic formulaes and metres, the most famous of them being the parallel between Gk. $\kappa\lambda\acute{\epsilon}o\varsigma$ $\check{\alpha}\varphi\theta\iota\tau ov\sim$ Ved. $\acute{s}r\acute{a}vas$ $\acute{a}ksitam$ 'imperishable fame' < PIE * $\acute{k}l\acute{e}\mu$ -os $\acute{\eta}$ - $\acute{d}^hg^{uh}i$ -to-m.

Since the beginnings of the studies of Homer's epics, their language was interpreted as a mixture of Ionic and Aeolic dialectal elements. To these the Arcado-Cypriot dialects were later added as the source of some elements which did not correspond to Ionic nor Aeolic. When the Linear B script was deciphered, the attention turned to the Mycenaean dialect. Not long after that, many parallels between Homeric terms, which seem to describe an older stages of the history, and Mycenaean have been found, eg. Hom. $\varphi \dot{\alpha} \sigma \gamma a v o v \alpha \rho \gamma v \rho \dot{\alpha} \eta \lambda o v$ 'silver-hilted sword' \sim Myc. pa-ka-na / $p^hasgana$ /, a certain type a sword which according to the archaeological evidence ceased to being used during the 14th c. BC (West 1988: 156). Also many Homeric kingship terms have found their equivalents in Mycenaean: $\dot{\alpha} v \alpha \xi$ 'lord, ruler' \sim Myc. wa-na-ka /uanaks/ or $\beta \alpha \sigma \iota \lambda \varepsilon \dot{\nu} s$ 'king' \sim Myc. qa-si-re-u / $g^uasileus$ /.

There have been identified stages of the language that show even older linguistic features than those attested in Mycenaean, eg. tmesis – the separation of preverbs from the verbs, some lines also metrically refer to the stage when syllabic liquids were not yet vocalized (West 1988: 156).

Mycenaean, therefore, became the oldest stage to which we are able to trace the beginnings of Homer's oral tradition. After the collapse of the Mycenaean civilization, the tradition was adopted by singers native to Aeolic and Ionic dialects. Some scholars (Ruijgh or West) separate them into two phases (or even more), first Aeolic and then Ionic, other scholars (Heubeck, Hackstein or Miller) assume concurrent Aeolic and Ionic tradition (cf. Miller 2014: 336).

For the separate phases of Aeolic and Ionic epic, Ruijgh (2011: 262) posits this chronological framework: 1) Mycenaean Proto-Achaean phase (1600–1200 BC): 1a) Proto-Mycenaean period (1600–1450 BC), 1b) Later Mycenaean period (1450–1200 BC); 2) Aeolic

phase (1200-800 BC): 2a) Continental Aeolic period (1200–1000 BC), 2b) Asiatic (East) Aeolic period (1000–800 BC); and 3) Ionic phase (850–800 BC).

Miller (2014: 94) nicely summarizes the character of the Homeric language in these words: "the highly artificial nature of the Homeric epics, being quite distant from any natural Greek dialect, meant that for any singer, from anywhere on Greek soil, epic language had to be acquired as a second language. It was the native language of no speaker of any Greek dialect."

2. Mycenaean Greek

The Mycenaean civilization was the most prominent civilization on the Greek mainland in the Bronze Age. The beginnings of the Mycenaean culture can be traced back to the Middle Helladic III period in the 17th c. BC when the Greek culture started to flourish. Later, Mycenaean palaces, which became the centers of the Mycenaean culture, were built, the most important ones were in Mycenae, Pylos, Tiryns, Orchomenos, Thebes, and Athens. In the early 12th c. BC the Mycenaean civilization collapsed, most likely due to the invasion of the Sea Peoples.

Mycenaean Greek is the earliest attested Greek dialect with written records dated from the 14th c. to the beginning of the 12th c. BC.¹ Clay tablets with writings in the Linear B script have been found in many places on the Greek mainland, as well as on the Greek islands, most notably on Crete. The highest number of tablets has been found in Knossos, Pylos and Thebes (Bartoněk 2003: 29f.). Besides tablets, Mycenaean writings have also been found on a larger scale on sealings, medaillons and sherds of vases.

The tablets were generally not burned, they contained economic records of the Mycenaean palaces from the last year, as they were annually rewritten. Only during a disaster the tablets were burned and preserved until nowadays (Bartoněk 2003: 31).

The Linear B script was deciphered in 1952 by Michael Ventris and John Chadwick who identified the language as an old dialect of the Greek language. In 1953, they published a paper called "Evidence for Greek Dialect in the Mycenaean Archives" where they presented the conclusions of their research and thus started a new field of classical philology.

2.1 Linear B script

The Linear B script was derived from some variation the Linear A script used by Minoans and to some extent adapted to the needs of the Greek language. It is supposed that the Linear B script was created sometime between the 16th and 15th c. BC (Melena 2014: 6). The scripts consists of around 90 syllabograms, more than 100 ideograms, and other signs denoting amounts and measures (Bartoněk 2003: 100).

Syllabograms are signs representing a phonetic value, the most common are CV-signs having a value of a consonant and a vowel, there are also a few CCV-signs and signs used for vowels at the beginning of words. Ideograms are signs used to depict an actual item, they have

¹ For a detailed account on the chronology of the Linear B tablets, see Driessen 2008.

no phonetic value and are mostly used at the end of a line to facilitate the identification of objects that the tablet addresses.

Being a syllabic script, Linear B was not an ideal means to write down a language so rich in consonant clusters as Greek. Consequently, some orthographical rules must have been developed to record the language – these include omitting consonants, mute vowels etc.

In short, there are some relevant orthographical rules of the Linear B script (for the complete list, see Bartoněk 2003: 106ff.; Risch – Hajnal 2006: 45ff.):

- 1. Vowel quantity and quality are not noted.
 - nom.sg. po-me /poimēn/, gen.sg. po-me-no /poimĕnos/ 'shepherd'
- 2. I-diphthongs are not usually noted before another consonant, u-diphthongs, on the other hand, usually are.

ko-to-na /ktoinā/ 'plot of land' vs. dat.pl. ze-u-ke-si /d^zeuges(s)i/ 'yoke'

3. Consonant clusters are often written with mute vowels, the first consonant of the cluster is followed by a mute vowel which corresponds in quality to the actual vowel following the cluster, if at the end of the word, the mute vowel copies the quality of the preceding one.

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acc.sg. ka-ra-te-ra /krātēra/ 'mixing vessel' 
a<sub>3</sub>-ti-jo-qo /Ait<sup>h</sup>iok<sup>u</sup>s/ 'Ethiop'
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4. Labials, velars and labiovelars are not distinguished in voice and aspiration. Only voiced dentals are distinguished.

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pa-te /patēr/ 'father', nom.pl. pa-ka-na /phasgana/ 'sword'

tu-ka-te /thugatēr/ 'daughter' vs. 3.pl.ind.fut. 'do-so-si /odōsonsi/ 'they will give'
ka-ko /khalkos/ 'copper', nom.pl. ka-ra-we /grāues/ 'old woman'
nom.pl. a-pi-qo-ro /amphikuoloi/ 'handmaid', nom.pl. qo-u-ko-ro /guoukoloi/
'herdsman'
```

5. Liquids are not distinguished.

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e-re-u-te-ro /eleutheros/ 'free'
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6. Consonants /r, l, m, n, s/ are usually not written before another consonant.

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pe-mo/spermo/'seed', pa-i-to/Phaistos' 'Phaistos'
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7. There are special signs for certain sounds, for example:

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a<sub>2</sub> for /ha/: acc.sg. a<sub>2</sub>-te-ro /hateron/ 'other' (cf. Att. ἕτερος); nom.pl. pa-we-a<sub>2</sub> /p<sup>h</sup>arueha/ 'piece of cloth'
a<sub>3</sub> for /ai/: acc.pl. a<sub>3</sub>-ka-sa-ma /aiksmans/ 'spear'
ra<sub>2</sub> for /ria, lia/: a-ke-ti-ra<sub>2</sub> /akestriai/? (besides a-ke-ti-ri-ja /akestriiai/?, maybe
```

2.2 Characteristic features of Mycenaean Greek

As the oldest attested dialect Mycenaean still retained many archaisms.² Two main archaisms, by which it differs from all other dialects, are the preservation of labiovelars (a-pi-qo-ro/ amp^hik^uoloi / $\sim ἀμφίπολοι$ 'handmaids') and the retention of the instrumental case (at least in plural): po-pi/ $popp^hi$ / 'with feet' ($< *p\acute{o}d$ - p^hi), po-ni-ki-pi/ $p^hoin\bar{\imath}k^hp^hi$ / 'with palms'. Other notable archaisms are the gen. sg. ending of the o-stems in -o-jo/-oijo/ (< *os-io), the dat. sg. ending of the athematic stems in -e/-ei/ (the original PIE dative ending, other dialects often used the original locative ending *-i for the dative case), the third person sg./pl. ending of ind. pres. mps. in -to/-(n)toi/ (in other dialects (except Arcado-Cypriot) analogically levelled to $-(v)\tau\alpha i$). Palatalized velars were still affricates (noted with the signs of the z-row): su-za/ $sūt^sai$ / \sim Att. sv $κα\~i$, Aeol. sv $κα\~i$ 0 'fig-tree', to-pe-za/torped za/z0 Att. tzpazzz0 'table'.

On the other hand, one of the most prominent Mycenaean innovations is its assibilation. Mycenaean sequence $t^{(h)}i$ was assibilated to si, a development which is shared with Arcado-Cypriot and Ionic-Attic (and Lesbian). This change affected verbal endings $(pa-si/p^h\bar{a}si/\sim Att.\ \phi\eta\sigma i$ 'he says', $e-ko-si/ek^honsi/\sim Att.\ \xi\chi\sigma\nu\sigma i$ 'they have') as well as nominal suffixes $(a-pu-do-si/apudosis/\sim Att.\ \alpha\pi\delta\delta\sigma\sigma i\varsigma$ 'payment'), assibilation in Mycenaean proceeded even further than in Ionic-Attic which can be seen in $ko-ri-si-jo/Korinsios/\sim Att.\ Kopiv\theta io\varsigma$ 'Corinthian'. Assibilation does not occur in some specific cases (Risch – Hajnal 2006: 116f.): after s, in loanwords and derivations that came around after this change took place, or if the original t was restored due to paradigmatic levelling.

Syllabic resonants were mostly vocalized with the vowel o (*m/*n > o; *r > or/ro, *l > ol/lo), a feature shared with most of Aeolic and Arcado-Cypriot dialects (contrary to Ion.-Att. vocalization with a: *m/*n > a; *r > $a\rho/\rho a$, *l > $a\lambda/\lambda a$): pe-mo /spermo/ ~ Att. $\sigma\pi\acute{e}\rho\mu a$ 'seed', to-pe-za / $torped^{2}a$ / ~ Att. $\tau\rho\acute{a}\pi\epsilon \zeta a$ 'table'.

² For the full list of Mycenaean dialectal features, see Bartoněk 2003: 446ff.

A specifically Mycenaean change is raising e > i in the vicinity of labials (and labiovelars): di-pa /dipas/ ~ Att. δέπας 'goblet', dat.sg. a-ti-mi-te / $Artimite\dot{\iota}$ / ~ Att. $\ddot{\iota}$ Αρτέμιδι 'Artemis', i-qo / $ikk^{\mu}os$ / ~ Att. $\ddot{\iota}$ ππος 'horse'.

These are the main features of the standard dialect of the Linear B tablets. There were also found tablets containing certain different phonological and morphological features which have been the subject of debates for a long time, also a new term for the language of these tablets was coined – *mycénien spécial*.

2.2.1 Mycénien normal and mycénien spécial

Not long after the decipherment of the Linear B script, Risch (1966) noticed that there were some differences in writing in the tablets found in Pylos. He concluded that these were traces of dialect diversification. He called the standard language *mycénien normal* and the language with dialectal differences *mycénien spécial*. He pointed out three specific features of *mycénien spécial*:

- The ending of dat.sg. in -i /-i/ instead of myc. normal -e /-ei/.
 po-se-da-o-ni /Poseidāōni/ vs. po-se-da-o-ne /Poseidāōnei/ 'Poseidon'
- 2. Vocalization of the syllabic nasals in *a* in the vicinity of labials instead of *o* in *myc*. *normal*.
 - pe-ma/sperma/vs. pe-mo/spermo/'seed'
- 3. No raising of e > i in the vicinity of labials which took place in *myc. normal*. gen.sg. *a-te-mi-to* /*Artemitos*/ vs. dat. sg. *a-ti-mi-te* /*Artimitei*/ 'Artemis'

Since then *mycénien spécial* has been identified also in other places, especially in Knossos (Woodard 1986). Also some other features were later added to the original three: the lack of assibilation in the sequence $t^{(h)}i$ in *myc. spécial* vs. its assibilation in *myc. normal* (eg. a woman's name *ka-pa-ti-ja* /*Karpasija*/ vs. *ka-pa-si-ja* /*Karpatija*/), and metathesis of the sequence liquid and vowel in *myc. spécial* to *to-ro-no* /*thronos*/ vs. the "normal" state in *myc. normal to-no* /*thornos*/ (Thompson 2002–2003: 337).

The lack of assibilation has even convinced Chadwick to propose a new hypothesis about the history of the Doric people (Bartoněk 2009: 104–106). He suggested that *mycénien spécial* (in his terminology "substandard Mycenaean") was a more archaic language of the lower social classes, whom he identifies with the Doric people, whereas *mycénien normal* ("standard Mycenaean") was a more phonologically progressive language of the higher social classes. After the fall of the Mycenaean culture, the language of the lower social classes became more dominant and prevailed, especially in the southern Peloponnese. This way, he can explain the presence of the Doric dialects in the Peloponnese peninsula without the Doric migration

which was supposed to happen sometime in the 11th c. BC and which is not very well proved even by the archaeological evidence. However, this hypothesis was not met with a general acceptance.

Thompson (2002–2003: 365f.), on the other hand, does not regard the lack of assibilation (the attestations could be analogically levelled, formed to stems which do not undergo assibilations, they include proper names etc.) and the metathesis (not even the raising of e in the proximity of labials as the attested examples of this change are based only on words which do not have certain Greek etymologies and therefore it could be the result of adaptation of loanwords to the Greek phonological system) as compelling evidence for the dialect diversification.

It seems that the *mycénien normal* was the Mycenaean koiné dialect, the official "literal" dialect used for writing, while mycénien spécial was a native dialect of some scribes who here and there misspelled and used their native dialect instead of the standard one (Woodard 1986: 49).

3. Greek dialects and the position of Mycenaean

Already in the ancient times, Greeks divided themselves in four major ethnic groups: Ionians, Aeolians, Dorians, and Achaeans. This ethnic distinction was later adjusted by Strabo (Geogr. VIII 1, 2) to correspond to how the linguistic reality had been perceived by Greeks. Strabo defines four main dialects: Attic, Ionic, Aeolic, and Doric. He also recognizes the genetic relationship between Attic and Ionic. This would then lead to three main dialectal groups acknowledged by Greeks: Ionic-Attic, Aeolic, and Doric.

In the modern times, the most common dialectal classification consists of four main dialectal groups, those are: Ionic-Attic (East Ionic, Euboean, Attic), Aeolic (Lesbian, Boeotian, Thessalian), West Greek (Doric dialects: Laconian, Cretan, Saronic, etc.; Northwest dialects: Elean, Phocian, Locrian, Epirote, etc.), and Arcado-Cypriot (Arcadian, Cypriot). Beside these main groups, there are two other dialects whose position among the other ones is still not generally agreed upon: Mycenaean, Pamphylian.

The most widespread key element for the basic division of the dialects is the assibilation of ti > si. One of the first ones, who used this key feature to classify the dialects, was Risch (1955). He split all dialects of the second millenium BC into two main groups: North Greek dialect group (Doric, Northwestern dialects, Aeolic, maybe Pamphylian) and South Greek dialect group (Ionic-Attic, Arcado-Cypriot, Mycenaean). This division was criticized a lot for his simplified view on the history of Aeolic dialects and was modified by many other scholars to represent their views (Bartoněk 2009: 19ff.), but the main distinction between the North(western) and the South(eastern) groups has remained.

Based on the fact that Aeolic and West Greek dialects (and Pamphylian) did not undergo the assibilation of ti (Aeolic and Doric $\varphi \not\in \rho o v \tau i^3$ vs. Arcado-Cypriot $\varphi \not\in \rho o v \sigma i$ and Ionic-Attic $\varphi \not\in \rho o v \sigma i$) and on the fact that this is considered to be the main feature, by which the North(western) dialects differ from the South(eastern) dialects, we can proceed to the closer inspection of the South(eastern) group in establishing the closer connection between Mycenaean and other dialects.

3.1 Mycenaean and the South(eastern) dialects

The connection between these dialects is not demonstrated only by the assibilation but also by some other changes and isoglosses which are shared among these dialects. In this group

³ But Lesb. φέροισι which is most likely secondary development influenced by nearby Ionic dialects.

of dialects, Mycenaean is clearly more closely related to Arcado-Cypriot dialects than Ionic-Attic. Ruijgh (1967: 37) even considered Arcado-Cypriot to be a direct descendant of the Mycenaean dialect.

Unfortunately, also the Cypriot dialect was written in a syllabic script for a long time into the classical period, so the precise development of the phonological system more difficult to establish. The classical Cypriot syllabary was used until the 3rd c. BC when it was entirely replaced by the Greek alphabet (alphabetic inscriptions started to appear since the 6th c. BC onwards), however, at this time the dialect was already losing its specific features (Bartoněk 2009: 175).

Ionic-Attic dialects differs from the rest of the South(eastern) group by many innovations, mainly (Bartoněk 2009: 197): the ending of the 3.sg./pl. of ind.pres.mps. in $-(v)\tau\alpha\iota$ (instead of the archaic $-(v)\tau\alpha\iota$), the loss of F, raising of $\bar{\alpha} > \eta$ (but not in Attic in the vicinity of ε , ι , ρ), the second compensatory lengthening ($Vns > \bar{V}s$: Ion.-Att. $\varphi \varepsilon \rho o v \sigma \iota$ vs. Arc.-Cypr. $\varphi \varepsilon \rho o v \sigma \iota$, acc.pl. of thematic stems in Arc.-Cypr. most likely just simplified to $-\alpha \varsigma$, $-o \varsigma$ (from $-\alpha v \varsigma$, $-o v \varsigma$), Ion.-Att. have $-\bar{\alpha} \varsigma$, $-o v \varsigma$. Also by a regular vocalization of syllabic resonants with the vowel α (*m/* $n > \alpha$; * $r > \alpha \rho/\rho \alpha$, * $r > \alpha \lambda/\lambda \alpha$).

This leaves us to compare the dialectal features of the Mycenaean and Arcado-Cypriot dialects. Morpurgo Davies (1992: 425f.) has found these correspondences between Mycenaean and Arcado-Cypriot: the assibilation ti > si; gen.sg. of the masc. a-stems Myc. -a-o $/-\bar{a}(h)o$ / \sim Arc.-Cypr. $-\bar{a}v$; the endings of the 3.sg./pl. of ind. pres. mps. in $-(v)\tau oi$; preverb/preposition Myc. a-pu /apu/ \sim Arc.-Cypr. $\dot{\alpha}\pi\dot{v}^4$ 'from'; preverb/preposition Myc. po-si /posi/ \sim Arc.-Cypr. $\pi\dot{o}\varsigma$ (Att. $\pi\rho\dot{o}\varsigma$) 'towards'; conjunction Myc. o-te /hote/ 'when' \sim Arc. $\tau\dot{o}\tau\varepsilon$, Cypr. $o\tau\varepsilon$; isogloss Myc. i-je-ro /(h)ijeros/ 'holy' \sim Arc. $i\varepsilon\rho\dot{\eta}\varsigma$, Cypr. $ij\varepsilon\rho\varepsilon\dot{v}\varsigma$ 'priest'; maybe also the construction of prepositions with dat. instead of gen.

The divergenes between Mycenaean and Arcado-Cypriot (based on Morpurgo Davies 1992: 426): raising of final o > u in Arc.-Cypr. (Myc. de-ka-sa-to /deksato/ 'to take' vs. Arc. $\mathring{a}\lambda\lambda v$, Arc.-Cypr. $-\varepsilon\tau v < -\varepsilon\tau o$); raising of $\varepsilon > \iota$ in the vicinity of nasals in Arc.-Cypr. (Myc. e-ne-e-si /eneensi/? 'to be in place' vs. Arc.-Cypr. ptc.mps. $-\mu v \circ \varsigma < -\mu \varepsilon v \circ \varsigma$); preverb an(a)- in Myc. vs. on-/un- in Arc.-Cypr. (Myc. a-na-ke-e /anagehen/ 'to lead up' vs. Cypr. $\mathring{v}v\varepsilon\theta\varepsilon\kappa\varepsilon$ (<* $\mathring{v}v\varepsilon\theta\varepsilon\kappa\varepsilon$) \sim Att. $\mathring{a}v\varepsilon\theta\eta\kappa\varepsilon$ 'to lay upon'); maybe also dat.pl. Myc. -o-i /-oihi/, -a-i /-aihi/ vs. Arc.-Cypr. $-o\iota\varsigma$, $-a\iota\varsigma$.

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⁴ Arcado-Cypriot dialects raise final o > v, but this change does not seem probable for Mycenaean, it rather seems to be an inherited variant (Colvin 2010: 208).

Based on this evidence, there seems to be no feature which would be exclusive only for these three dialects (Morpurgo Davies 1992: 428), the only isogloss which share only these three dialects is the ending $-(v)\tau oi$, this is, however, not a shared innnovation but a shared archaism.

It appears that there is no evidence to posit a genetically closely related dialectal group just for Mycenaean and Arcado-Cypriot or to even consider Arcado-Cypriot⁵ to be a direct descendant of the Mycenaean dialect.

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⁵ Ringe (apud Parker 2008: 443 fn. 40) does not even find secure shared innovations for Arcado-Cypriot and divides South Greek dialects into four independent groups: Mycenaean, Arcadian, Cypriot and Ionic-Attic.

4. Mycenaean relics based on the Linear B evidence

The more certain group of Mycenaean relics can be identified by the specific sound changes which occured in the history of the Mycenaean dialect and which can be seen directly in the Linear B script. There are only two words which comply to these requirements and could be therefore placed into this groups: $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ and $i\pi\pi\sigma\varsigma$.

4.1 Άρμόζω 'to join, fit together'

The denominative verb $\dot{\alpha}\rho\mu\dot{\alpha}\zeta\omega$ (Att. $\dot{\alpha}\rho\mu\dot{\alpha}\tau\tau\omega^6$, Dor. $\dot{\alpha}\rho\mu\sigma\sigma\delta\omega$) presents an isolated suffix - $\dot{\alpha}\zeta\omega$ whose origin has been viewed problematic for a long time (Schwyzer 1939: 734; Frisk 1960: 144), as there is only one other verb with this suffix – $\delta\varepsilon\sigma\pi\dot{\alpha}\zeta\omega$ 'to be lord/master'.⁷ The *o*-vocalism of the stem is attested in all Greek dialects.

According to Risch (1958: 160), $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ is of Mycenaean origin for its distinctive o-vocalism which can be clearly seen in nom.sg.ntr. a-mo/ar(h)mo/ 8 'wheel' (also attested in nom.pl. a-mo-ta/ar(h)mota/ and other cases, for complete list of attested forms, see Jorro 1985: 57f.), nom.sg.fem. of ptc.pf.mps. a-ra-ro-mo-te-me-na/ $arar(h)motmen\bar{a}$ / 'fitted with wheels' and in other derivations. All attested derivations show the o-vocalism of $myc\acute{e}nien$ normal, there is no $myc\acute{e}nien$ $sp\acute{e}cial$ derivation with a-vocalism attested.

The Mycenaean neuter a-mo can be directly compared to Att. $\[\[\] \alpha \] \mu \alpha$ 'chariot', both derived with the nomen instrumenti suffix *- $m\eta$ from the root * h_2er - 'to join (together)'. The root is well attested in Greek ($\[\] \alpha \] \mu \alpha \omega$ 'to join (together), fasten', $\[\] \alpha \] \mu \alpha \omega$ 'joining, agreement, harmony', $\[\] \alpha \mu \omega$ 'just (now), recently') as well as in other IE languages (Lat. $\[\] \alpha \mu \omega$ 'weapons', $\[\] \alpha \mu \omega$ 'art, skill'; Skt. $\[\] \gamma \alpha \omega$ 'order, truthful', Av. $\[\] \alpha \omega$ 'truth'), for other derivations, see LIV² 269f.

The suffix $-\zeta \omega$ is a frequent suffix of denominative verbs, its origin must be in the PIE suffix *-*ie*/o- which was added to a stem ending in *d, *g or *g^{μ}. Similarly, other denominative

⁶ Suffix -ζω was analogically replaced with the suffix -ττω in Attic (Duhoux 2000: 342), cf. Att. $\sigma \phi \dot{\alpha} \tau \tau \omega \leftarrow \sigma \phi \dot{\alpha} \zeta \omega$, in Attic, the original root ending of the verb is shown by aor.ind.pas. $\dot{\epsilon} \sigma \phi \alpha \gamma \dot{\eta} v$.

⁷ The verb $\delta \varepsilon \sigma \pi \delta \zeta \omega$ is a derivation of the noun $\delta \varepsilon \sigma \pi \delta \tau \eta \varsigma$ 'lord, master'. For $\delta \varepsilon \sigma \pi \delta \tau \eta \varsigma$ shows an original PIE σ -grade (generally accepted to come from PIE * $d\acute{e}ms$ -poti- 'lord of the house', a nominal compound of * $p\acute{o}ti$ - 'lord' and gen.sg. of * $d\acute{o}m$ - 'house', also attested in Ved. $d\acute{a}mpati$ - and OAv. $d\bar{\sigma}ng$ paiti-, both 'lord'), the vocalism of the derived verb is, therefore, not surprising.

⁸ The presence of h is discussed below in 4.1.1.

suffixes arose: in Attic, the suffix $-\tau\tau\omega$ (Ionic $-\sigma\sigma\omega$) came into being by adding the suffix *-ie/o- to stems ending in *t, * t^h , * t^h , * t^h , *stems ending in * t^h , stems ending in * t^h , *

The suffix $-\zeta\omega$ following vowels $-\alpha$ - and -i- was later reanalyzed as $-\acute{\alpha}\zeta\omega$ and $-\acute{\iota}\zeta\omega$ (Duhoux 2000: 341). These suffixes later became ones of the most productive denominal suffixes in Greek, attested in more than three thousand verbs (together). On the other hand, the suffix $-\acute{\delta}\zeta\omega$ did not. The only examples are presented by $\acute{\alpha}\rho\mu\acute{\delta}\zeta\omega$ and $\acute{\delta}\varepsilon\sigma\pi\acute{\delta}\zeta\omega$ and their derivations.

Ruijgh (1967: 48 fn. 17) derives the verb $\dot{\alpha}\rho\mu\dot{\delta}\tau\tau\omega$ from a nomen agentis $\dot{\tau}\dot{\alpha}\rho\mu\dot{\delta}\tau\bar{\alpha}\varsigma$ 'the one who occupies himself with joining/fitting' (unfortunately, it is nowhere attested, the only attested nomen agentis of this root is $\dot{\alpha}\rho\mu\sigma\tau\dot{\eta}\rho$ (also $\dot{\alpha}\rho\mu\sigma\tau\dot{\eta}\varsigma$), already in Myc. a-mo-te-re $\langle ar(h)moster\rangle$ which is derived from * $\dot{\alpha}\rho\mu\dot{\delta}\varsigma$. He considers $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ in other dialects to be an innovation since dental flexion is normal for presents in $-\zeta\omega$ ($\gamma\nu\mu\nu\dot{\alpha}\zeta\omega$, fut. $\gamma\nu\mu\nu\dot{\alpha}\sigma\omega$), while presents in $-\tau\tau\omega/-\sigma\sigma\omega$ show more often dorsal flexion ($\varphi\nu\lambda\dot{\alpha}\sigma\sigma\omega$, fut. $\varphi\nu\lambda\dot{\alpha}\dot{\zeta}\omega$). The present $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ was analogically built on the future $\dot{\alpha}\rho\mu\dot{\delta}\sigma\omega$ (in the same way $\delta\varepsilon\sigma\pi\dot{\delta}\zeta\omega$ was built on the future $\delta\varepsilon\sigma\pi\dot{\delta}\sigma\omega$ and replaced the original * $\delta\varepsilon\sigma\pi\dot{\delta}\sigma\sigma\omega$).

If we regard $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ as the original form, we should start the derivation from stems ending in d or g. These are stems are not plentiful in any manner, the only options seem to be $\dot{\alpha}\rho\mu\sigma\dot{\gamma}\dot{\eta}$ 'fitting, joint' and $\dot{\alpha}\rho\mu\dot{\delta}\delta\iota\sigma\varsigma$ 'fitting together'. Out of these, the stem $\dot{\alpha}\rho\mu\dot{\delta}\delta$ - seems more probable to be the derivational basis of $\dot{\alpha}\rho\mu\dot{\delta}\zeta\omega$ for the dental flexion of the verb in other forms (especially aor.pas. $\dot{\eta}\rho\mu\dot{\delta}\sigma\theta\eta\nu$ and verbal adj. $\dot{\alpha}\rho\mu\sigma\tau\dot{\delta}\varsigma$)

There was also an attempt to derive this verb from an old loc. of $\dot{\alpha}\rho\mu\dot{\alpha}\varsigma$, that is $\dot{\alpha}\rho\mu\tilde{\alpha}\tilde{\epsilon}$ (probably only later lexicalised as 'just, lately'): * $\alpha\rho\mu\tilde{\alpha}+j\omega$ > * $-\alpha\tilde{\beta}\omega$ > * $-\alpha\tilde{\beta}\omega$ > $-\alpha\tilde{\beta}\omega$ (Schwyzer 1939: 734 fn. 2), but this solution does not appear very probable as deriving denominatives from the locative case seems quite odd to me.

4.1.1 Aspiration of ἀρμόζω

The presence of the initial aspiration in Mycenaean is not certain, maybe even less probable than more probable for there is no example of this root attested with the sign a_2 which was used for initial ha-/ (not consistently though).

Based on this, Ruijgh (1967: 60f.) concludes that the aspiration is of post-Mycenaean date and it most likely arose from an s-extension of the suffix *-mn (*ar-s-mn > *arhma > $\alpha\rho\mu\alpha$). Maybe more probable solution is an s-extension of a suffix *-mo- as this suffix is much more common in Greek, then we would get: * $h_2(e)r$ -s- $m\dot{\phi}$ -> $arhm\dot{\phi}$ -> arhm

4.2 $T\pi\pi o\varsigma$ 'horse'

Greek $\emph{i}ππος$ has been long debated for its unexpected initial $\emph{i-}$ and aspiration. Its cognates in other Indo-European languages (i.e. Ved. $\emph{aśva-}$, Av. $\emph{aspa-}$, Lat. \emph{equus} , OE \emph{eoh} , OIr. \emph{ech} , TA \emph{yuk} , TB \emph{yakwe} 'horse', Arm. $\emph{eš}$ 'donkey', and Lith. $\emph{ašvà}$ 'mare') support the PIE reconstruction * $\emph{h}_\emph{l} \acute{e} \emph{k} \emph{uo-}$ 'horse'. The regular outcome of this reconstruction should be $\emph{†} \emph{e} \emph{π} (π) \emph{o} \varsigma$ or $\emph{†} \emph{e} \emph{κ} (κ) \emph{o} \varsigma$ in the classical Greek dialects, yet these forms are nowhere to be found (except for an interesting derivation attested in the Homeric name $\emph{E} πe \emph{i} \emph{o} \varsigma$, interestingly enough it is the name of the builder of the Trojan horse, and the Homeric ethnonym $\emph{E} πe \emph{i} \emph{o} \varsigma$). The only dialectal variation $\emph{i} κκος$ of this lemma as a common noun is cited only later in the Byzantine times (Etymologicum Magnum 474, 12). There are also personal names $\emph{T} κκος$ (attested epigraphically in Epidauros, Taras, Rups – Lat. Rubi), $\emph{T} κκότας$ and $\emph{T} κκότμος$ (Kalindoia).

The thematic stem $*h_1\acute{e}\acute{k}$ - μ -o- could be analyzed as a substantivization of a possessive adjective $*h_1\acute{e}\acute{k}$ - μ - \acute{o} - 'having speed' from an original AS ntr. μ -stem $*h_1\acute{o}\acute{k}$ - μ - $'*h_1\acute{e}\acute{k}$ - μ -' 'speed, quickness', its literal meaning then would be 'animal having speed' \rightarrow 'horse', similarly as Ved. ν ats \acute{a} - 'calf' $< *\mu$ ets- \acute{o} - 'yearling' $< *\mu$ et- ι - ι -'year' (Lipp 2009a: 75).

The first one, who suggested the Mycenaean origin, was Risch (1966: 157). The term for 'horse' is well attested in Myc. i-qo / $ikk^{\mu}os$ / and its derivations (most importantly i-qi-ja / $ikk^{\mu}ij\bar{a}$ / 'chariot', according to Panagl (1992: 139) most likely metonymically used as a pars pro toto from a syntagma wo-ka i-qi-ja / $uok^h\bar{a}$ $ikk^{\mu}ij\bar{a}$ / 'chariot for horse', both of these terms were used to denote 'chariot', wo-ka in Pylos, i-qi-ja in Knossos). Risch saw this development comparable to a phenomenon typical for Mycenaean (normal), that is raising of e > i in the vicinity of labials (and labiovelars), attested in nom.sg. di-pa /dipas/, dat.sg. a-ti-mi-te /Artimitei/, gen.sg. ti-mi-ti-ja / $T^himistias$ / 'geographical region' (cf. Att. $\Theta \hat{\epsilon} \mu s$) etc. This solely

⁹ In his lecture "Zu Form und Funktion der indogermanischen o-Stämme" in Freiburg in 1989.

Mycenaean phenomenon convinced him of the Mycenaean origin of the word $i\pi\pi o\varsigma$. Interestingly enough, there is no attestation of a *mycénien spécial* form $\dagger e$ -qo.

Thompson (2003: 339) points out that this fluctuation between *i*- and *e*-vocalism is restricted to words that do not have a convincing Greek etymology, making them all possible loanwords. The fluctuation was then caused by a different perception of the vowel in the original language.

This leaves the Myc. i-qo in a peculiar position. Especially when we take the Homeric forms $E\pi\epsilon\iota\dot{o}\varsigma$ and $E\pi\epsilon\iota\dot{o}i^{10}$ (if they are indeed derived from the stem $*h_1\dot{e}k\mu o$ -) into consideration. This could indicate that the Myc. i-qo is actually a loanword from some related Indo-European language (similarly to Ruijgh's idea, see further) which turned initial e > i (maybe even through another non-IE one whose distinction between e and i was either non-existent or very dull) and the Homeric attestations of the full-grade could show the actual forms inherited into Greek which were used in other Greek dialects until the Mycenaean i-qo replaced them.

4.2.1 Alternative hypotheses on the development of $i\pi\pi\sigma\varsigma$

Another solution to the initial i- problem is suggested by Ruijgh (1995: 353–355), he presupposes a related Indo-European language spoken in the proximity of Greek that did not allow heavy initial consonantal clusters. An initial cluster *pn- was split apart by an epenthetic i, clusters * sk^h -, * k^ht^h -, and *kt- were preceded by a prothetic i, these words were afterwards borrowed into Greek ($\pi i \nu \nu \tau \delta \varsigma$ 'wise', $i \sigma \chi \delta \varsigma$ 'strength', $i \chi \theta \delta \varsigma$ 'fish', $i \kappa \tau \tilde{\imath} \nu o \varsigma$ 'kite'). Regarding the horse, he presents two different reconstructions for two different kinds of horses: * $h_1 \epsilon k - u$ 'wild horse' and an adjectival derivation * $h_1 k u \delta$ - 'equine \rightarrow domestic horse'. The form * $h_1 k u \delta$ would give * $i k u \delta$ - in the related language and then would be borrowed by the Greeks, the accent would be influenced by the related form * $\epsilon k u s \delta u \delta u \delta u$

A different approach to the phonological development of $i\pi\pi\sigma\varsigma$ relies on the evidence from Anatolian languages, especially from Hittite. The word for 'horse' is unfortunately not attested in its entirety in Hittite, only as a Sumerogram ANŠE.KUR.RA. However, the nom.sg. ANŠE.KUR.RA- $u\check{s}$ reveals us that it was a u-stem noun. Since every other branch derives this term from the thematic stem * $h_1\acute{e}k\mu o$ -, Starke (1995: 120) suggests a remodelling of the suffix from * $-\mu o$ - -u-. Kloekhorst (2008: 239), on the other hand, finds this very unlikely and assumes that it comes from an original u-stem and reconstructs a hysterodynamic paradigm:

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¹⁰ There is not much to say about the treatment of the clusters *- $k\dot{\mu}$ - as the 'horse' lemma seems to be the only example of this cluster which is not at a morphological boundary. A seemingly similar case ὄκκος 'eye' is cited by Lejeune (1987: 83f.) who considers these to be expressive geminations (but this is from the root * h_3ek^{μ} -). Maybe the gemination is analogical to the dual ὄσσε 'eyes' < * $h_3\acute{e}k^{\mu}$ -je < * $h_3\acute{e}k^{\mu}$ -jh₁.

nom. * $h_1\acute{e}\acute{k}$ -u-s, acc. * $h_1\acute{k}$ - $\acute{e}\mu$ -m, gen. * $h_1\acute{k}$ - $\acute{\mu}$ - $\acute{o}s$. ¹¹ Kloekhorst states that all Anatolian languages show reflexes of the original u-stem paradigm, the rest of the Indo-European family thematized this u-stem to * $h_1\acute{e}\acute{k}$ - $\check{\mu}$ -o-.

De Vaan (2009: 198–203) accepts this athematic reconstruction and following the hypothesis of the origin of the thematic stem noun class in the early PIE/pre-PIE from reanalysis of the gen./abl. of hysterodynamic paradigms (in *- $\acute{o}s$), which supposedly served as an ergative, as a new nominative he proposes a new pre-form * $h_l k \mu \acute{o}$ - for the Greek $i \pi \pi o \varsigma$. This way, he reconstructs three different forms of the term for 'horse': * $h_l \acute{e}k \acute{u}$ - for Anatolian, * $h_l \acute{k} \mu \acute{o}$ - for Greek, and * $h_l \acute{e}k \acute{u}$ o- for the rest of the family.

He sees (2009: 201) the initial cluster in * h_1 kμό- as an ideal environment for a prop vowel, specifically for the schwa secundum, which was inserted into heavy consonantal clusters and which developed into i in Greek, its responsible for the poetic forms like $\pi i \tau v \eta \mu \iota$ 'spread out' < * $p_{\bar{\nu}} t n$ - < * $p_{\bar{\nu}} t n$ - < * $p_{\bar{\nu}} t n$ - and $\sigma \kappa i \delta v \eta \mu \iota$ 'disperse' < * $s k_{\bar{\nu}} d n$ - < *s k d n- (nasal infix present formations of the PIE roots * $p_{\bar{\nu}} t n$ - 'spread' and *s k t n- 'split, disperse', these forms were later remodelled to $\pi \epsilon \tau \dot{\nu} v v \nu \mu \iota$ and $\sigma \kappa \epsilon \delta \dot{\nu} v v \nu \mu \iota$).

Accordingly, he presupposes the same development in the initial cluster $*h_1k\mu->$ $*h_{1\partial}k\mu->$ Proto-Gk. $*ik\mu-$ (also in impt. $i\sigma\theta i < *h_1s-d^hi$ 'be'). This change would take place before the standard vocalization of initial laryngeals followed only by one consonant $*h_1CV->$ *eCV-.

This hypothesis sounds surely interesting, but the existence of the stem $*h_1ku\acute{o}$ - (solely for Greek) besides the remodelled stem $*h_1\acute{e}ku\acute{o}$ - (for the rest of the family, possibly except Anatolian) seems very odd to me, especially in Greek, the core branch of the Indo-European family.

4.2.2 Aspiration of $i\pi\pi o\varsigma$

¹¹ Beekes's subtype 1 of hysterodynamic paradigms (Beekes 2011: 190).

¹² See Beekes 2011: 214–216.

Ruijgh (1995: 355 fn. 42) explains the aspiration as a post-Mycenaean influence of $\[\[\] \] \] \phi$ ($\[\] \] \phi$) whose meaning changed from 'spoked wheels' to 'chariot' after the Mycenaean period. This happened most likely as a result of some sort of a frequent phrase of a type $\[\] \] \[\] \[\] \[\] \[\] \$

However, Pinault's law is not generally accepted. Lipp (2009b: 449–458) points out that the deletion of the laryngeals would restrict the operation of Siever's law (unfolding of a glide after a heavy syllable) in Vedic. The existence of doublets like Ved. instr.sg. $s\acute{a}khiy\bar{a}-\sim s\acute{a}khy\bar{a}$ -of the *i*-stem noun $s\acute{a}kh\bar{a}y$ - 'friend' is explained by the operation of Siever's law. There are, however, examples where the laryngeals were lost, these could be then explained by other sound changes in Proto-Indo-European (*oRHC > *oRC or in tautosyllabic sequence *.HRo- > *.Ro).

5. Mycenaean relics based on compensatory lengthening

The second group of possible Mycenaean relics discussed in this thesis consists of words displaying long open vowels that very likely arose through the first compensatory lengthening. Those words are $\delta \dot{\eta} \nu \epsilon a$, $\Delta \iota \dot{\omega} \nu \nu \sigma \sigma \varsigma$, $\dot{\tilde{\omega}} \nu \sigma \varsigma$, $\dot{\tilde{\omega}} \mu \sigma \varsigma$, and $\zeta \omega \mu \dot{\sigma} \varsigma$.

The first compensatory lengthening is a sound change that most likely took place in the second half of the second millenium BC. It was a longer process that operated in the clusters *VRs and *VsR (R = r, l, m, n, i, u)¹³ where the cluster through debuccalization of s > h to and its consequent assimilation (or disappearance with compensatory lengthening if not through metathesis of quantity from geminated resonant to the preceding vowel) developed into $\bar{V}R$ or VRR.

A geminated resonant as a result of this change appeared in Lesbian and Thessalian dialects (* $h_1 \acute{e}smi > *\acute{e}hmi >$ Lesb., Thess. $\acute{e}\mu\mu\acute{u}$ 'I am').

The outcome in a long vowel was twofold. This change resulted in a long open vowel in some dialects and in a long close vowel in others. Ionic-Attic dialects, North Doric dialects (so called Doris mitior 'mild Doric', eg. Corinthian, Megarian), and Northwest Greek dialects resulted in the long close vowel (* $h_1 \acute{e}smi > *\acute{e}hmi > ε\acute{\iota}μ\acute{\iota}$), while South Doric dialects (so called Doris severior 'strict Doric', eg. Laconian, Messenian, Cretan), Boeotian and most likely Arcado-Cypriot dialects resulted in the long open vowel (* $h_1 \acute{e}smi > *\acute{e}hmi > \mathring{\eta}μ\acute{\iota}$).

As the Homeric language mainly consists of Ionic and Aeolic (Lesbian and Thessalian) dialectal elements, the outcome of the first compensatory lengthening is expected to be either a long close vowel or a geminated resonant. The third possible source could be the Mycenaean dialect, but as we have just seen, the outcome of the first compensatory lengthening in Mycenaean is not known. Ruijgh and Dunkel believe that the state of Mycenaean in this matter

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¹³ A similar development which resulted in a simplification of the cluster with compensatory lengthening took place also in clusters *-*ln*-, *-*rj*-, *-*nj*-, *-*nj*-, (Bartoněk 2003: 446).

is represented by Arcado-Cypriot dialects, but the outcome of the first compensatory lengthening is not completely certain for these dialects (besides the fact that they are not that much genetically related). The outcome in Cypriot cannot be known with certainty as there was a syllabic script in use which did not discern between vowel quality, if there are any alphabetical inscriptions, the alphabet are usually different, so nothing can be concluded (Miller 2014: 256f.).

The Arcadian dialect, on the other hand, shows usually a long open vowel treatment, but there are also residues with a result in the geminated resonant: Arc. ἔκρινναν οτ ὀφέλλονσι. The existence of -VRR- outcome in Peloponnese increases the likelyhood that the Mycenaean compensatory lengthening also resulted in a geminated resonant, Myc. o-pe-ro-si would then represent $op^hellonsi/< *op^helnonsi$ (Miller 2014: 257).

5.1 Δήνεα '(divine) plans, counsels'

The word $\delta \dot{\eta} \nu \varepsilon \alpha$ is attested in the Homeric epics only three times (II. 4.361, Od. 10.289, Od. 23.82) and only once in Hesiodus (Th. 236), all of them are in plural. The singular $\delta \ddot{\eta} \nu o \varsigma$ is attested in Hesychius where he gives the explanation $\delta \ddot{\eta} \nu o \varsigma \cdot \beta o \dot{\nu} \lambda \varepsilon \nu \mu \alpha$ 'plan, resolution'. Beside this lemma, Hesychius also mentions some of its derivations, for example $\dot{\alpha} \delta \eta \nu \dot{\eta} \varsigma \cdot \dot{\alpha} \kappa \alpha \kappa o \varsigma$ 'guileless, innocent', $\dot{\alpha} \delta \alpha \nu \dot{\epsilon} \varsigma \cdot \dot{\alpha} \pi \rho o \nu \dot{\delta} \eta \tau o \nu$ 'unpremeditated'.

It is usually connected to the root *dens- 'be clever, adept', so we could reconstruct an AS s-stem neuter *déns-os/*déns-es- which is also attested in Ved. dámsas- 'wise, wonderful deed' and Av. danhah- 'dexterity, skill'. The etymological connection between the Indo-Iranian descendants and our discussed word is further seconded by a compound presented by Hesychius, that is $\pi o \lambda v \delta \eta v \epsilon a \cdot \pi o \lambda v \delta \rho v \lambda o v$ 'much-counselling' and its counterpart in Ved. purudámsas- 'much-miraculous'.

However, if we take this PIE reconstruction as a starting point and project it to Greek with the regular changes, which took place on the way (in this case only the compensatory lengthening), we would expect the unattested forms $\dagger \delta \varepsilon \tilde{\imath} v o \varsigma$ in Ionic-Attic and $\dagger \delta \varepsilon v v o \varsigma$ in Aeolic.

A solution to this problem is offered by Ruijgh, he states that is a Mycenaean element in the poetic language since it disagrees with the expected forms for Ionic and Aeolic dialects (1967: 363 fn. 53). Later, he expands (1970: 589) on this theory saying that the result of the compensatory lengthening of ε in Mycenaean is the long open vowel η , just like the Arcadian dialect shows, the descendant of Mycenaean. He also provides another example of this

Mycenaean development in the adjective $\tau \epsilon \lambda \dot{\eta} \epsilon \iota \varsigma$ 'perfect, complete' < * $\tau \epsilon \lambda \epsilon \sigma$ - $F \epsilon \nu \tau$ -, saying that one would expect stem $\dot{\tau} \tau \epsilon \lambda \epsilon \dot{\iota} \epsilon \nu \tau$ - in Ionic-Attic and $\dot{\tau} \tau \epsilon \lambda \epsilon \dot{\iota} \epsilon \nu \tau$ - in Aeolic.

Peters (1986: 305f.) disagrees with these statements, he says that $\tau \epsilon \lambda \dot{\eta} \epsilon \iota \varsigma$ is just how the Ionic reflexes of sequences *-ehe- and *-eh\bar{u}- are regularly represented before i and e, cf. $\sigma \pi \epsilon i o v \varsigma \sim \sigma \pi \ddot{\eta} \ddot{\imath}$ 'cavern'; $\chi \dot{\epsilon} \rho \epsilon \iota \alpha \sim \chi \dot{\epsilon} \rho \eta \ddot{\imath}$, $\chi \dot{\epsilon} \rho \eta \epsilon \varsigma$ 'inferior' (already Brugmann – Thumb 1913: 78, also Chantraine 1948: 7ff.).

He then argues against Ruijgh's conception of $\delta \dot{\eta} \nu \varepsilon \alpha$ being only a poetic word since we have an epigraphical attestation from Chios of an adverb $\dot{\alpha} \delta \eta \nu \dot{\varepsilon} \omega \varsigma$ 'without malice', so it is not a poetic word but genuinely Ionic.

He also finds a development of stem *déns- (and also *dáns-) to $\delta \dot{\eta} \nu \epsilon \alpha$ phonetically problematic and he tries to reconstruct other pre-forms (1986: 306 fn. 8): *dNs-nes- for $\delta \dot{\eta} \nu \epsilon \alpha$ and * dh_2 -nes- for $\dot{\alpha} \delta \alpha \nu \dot{\epsilon} \zeta$ (if the root α is short), but these reconstruction are problematic too as they separate Gk. $\delta \dot{\eta} \nu \epsilon \alpha$ from the Indo-Iranian evidence and also $\delta \dot{\eta} \nu \epsilon \alpha$ from $\dot{\alpha} \delta \alpha \nu \dot{\epsilon} \zeta$ (Dunkel 1995: 5).

5.1.1 Analogically levelled root

Even though *s*-stem neuters are derived with the *e*-grade of the root, many of Greek continuations show an *a*-vocalism in the root as they were analogically levelled from the related adjectives.

S-stem neuters are a part of an extensive system of suppletive suffixes called the Caland system (see Bičovský 2017: 149f., more extensively Rau 2009). The main suffixes and derivations involved in this system include: an s-stem ntr. abstract $(R(\acute{e})-os)$, a positive of adjectives in *- \acute{u} -, *- $r\acute{o}$ - or *- $m\acute{o}$ - $(R(\emph{o})-\acute{u}$ -/- $r\acute{o}$ -/- $m\acute{o}$ -), a comparative of adjectives $(R(\acute{e})-is$ - $t(h_2)o$ -), the first part of a compound $(R(\emph{o})-i$ -), the second part of a compound $(R(\emph{o})-\acute{e}s$ -). Many of the s-stem neuters in Greek adopted the zero grade of the adjectives. These include Att. $\kappa \rho \acute{a} to \varsigma$ 'strength' \leftarrow * $kr\acute{e}t$ -os (cf. Aeol. $\kappa \rho \acute{e} to \varsigma$) from Att. $\kappa \rho a t\acute{v} \varsigma$ 'strong' < * $k_R t$ - \acute{u} -; Att. $\pi \lambda \acute{a} to \varsigma$ 'width, breadth' \leftarrow Att. $\pi \lambda a t\acute{v} \varsigma$ 'wide, broad' < * $p_l th_2$ - \acute{u} -.

The root *dens- was also a part of the Caland system as it is confirmed by Vedic adjectives dasrá- and dasmá- 'wonderful, extraordinary' < *d\(\eta s - r\'o\)-; *d\(\eta s - m\'o\)-. There is also a Greek derivation of this root participating in the Caland system, that is $\delta \alpha \(\tilde{a} \tilde{\rho} \rho \warphi\) 'wise' <$

* $d\eta s$ -i- \circ . This could have induced a pressure for the analogical levelling of the root vowel from *dens- to *dans-.

The pressure would be even higher since there are no Greek derivations of this root (besides the derivations of $\delta\dot{\eta}\nu\varepsilon\alpha$ itself) that would show some other grade of the root vowel than the zero-grade. From the zero-grade * $d\eta s$ - (besides $\dot{\alpha}\delta\alpha\dot{\eta}\varsigma$ and $\delta\alpha\ddot{\imath}\varphi\rho\omega\nu$) we have attested forms $\delta\dot{\alpha}\omega$, $\delta\alpha\ddot{\eta}\nu\alpha\iota$, $\dot{\varepsilon}\delta\alpha\eta\nu$, $\delta\dot{\varepsilon}\delta\alpha\varepsilon$, $\delta\varepsilon\delta\alpha\dot{\omega}\varsigma$, $\delta\iota\delta\dot{\alpha}\sigma\kappa\omega$ and many others (cf. LIV² 118f.).

The absence of any other grade level could have triggered the analogical replacement of *déns-es-a by *dáns-es-a. Subsequently, the compensatory lengthening in Ionic-Attic would give us the attested form $\delta \dot{\eta} \nu \epsilon a$. However, some scholars consider a remodelling to $\delta \dot{\alpha} o \varsigma$ more probable (just like $\pi \dot{\alpha} \theta o \varsigma$ 'experience, emotion' besides $\pi \dot{\epsilon} \nu \theta o \varsigma$ 'grief, misfortune' ¹⁴).

The analogically remodelled form *dáns-es-a could be, though, further supported by the Hesychian form $\dot{a}\delta\alpha v\dot{\epsilon}\varsigma$ which also shows the root $\delta\alpha v$ - (most likely with a long \bar{a}). If the word is related to $\delta\dot{\eta}v\epsilon\alpha$, we would have to assume it also emerged through the compensatory lengthening from the pre-form *dans- in some dialect which did not shift \bar{a} to η .

To some extent similar case of such contamination could be seen in the origin of $vai\omega$ 'dwell', related to vioual 'go, come' < *nis-e/o- 'pull through, return home safely'. The zero-grade of *ns-ie/o- would yield $†ai\omega$ which would be paradigmatically to different from the original root, so it was remodelled to $vai\omega$ to preserve the connection with vioual. On the other hand, aouevos 'glad, pleased' (originally most likely the middle participle of the root *nes-, if not related to the root $*sueh_2d-$ 'become delicious') was not remodelled as the meaning of it had changed too much from the original one and it was no longer connected to this root, perhaps * 'safely returned, safe' \rightarrow 'glad'.

5.2 $\Omega \mu o \varsigma$ 'shoulder'

Greek $\delta \mu o \varsigma$ has secure cognates in many languages (Ved. $\dot{a}msa$ -, Lat. umerus, Umb. UZE onse (loc.sg.), Goth. amsans (attested only acc.pl. in Lk 15:5), TA es, TB $\bar{a}ntse$, Arm. us 'shoulder'), yet the precise reconstruction of this lexeme has been deemed rather problematic for a long time. All these attestations point to o-vocalism of the root (which could be from *Ho-or * h_3e -), Tocharian then points to a long \bar{o} (Adams (2013: 46) reconstructs Proto-Tocharian * $\bar{a}nse$ < PIE * $h_{I/4}\bar{o}mso$ -) which would nicely correspond with Greek (which also needs an inherited \bar{o} in order to be considered as originally Ionic-Attic word). Hittite $ana\check{s}\check{s}a$ - 'lower back' was dismissed as a descendant of this root (Kloekhorst 2008: 178).

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¹⁴ On the origin of these forms, see Meissner 2005: 64ff.

There is another Aeolic variant of $\delta \mu o \varsigma$ attested in Theocritus (29.29): $\epsilon \pi o \mu \mu \alpha \delta i \alpha \iota \varsigma$, but the reading of this form is not certain, Ringe (1984: 49f.) states that "Aiolic $\epsilon \pi o \mu \mu \alpha \delta i \alpha \iota \varsigma$ 'on the shoulders'... as evidence for a reflex of * $\delta msos$ in Greek is a conjectural emendation of a corrupt variant reading in a text that contains hyperaiolisms" and concludes that this form cannot be used as evidence for any etymology.

A different reconstruction, which would account for the long-grade, was posited by Nassivera (2000: 65 fn. 16). She reconstructs a HD paradigm: nom.sg. $*h_1eh_3-m_s$, gen.sg. $*h_1h_3-m_s$, acc.sg. $*h_1h_3-ems-m_s$. This reconstruction could nicely explain the long grade in Greek, but there is no other evidence not only for the root $*h_1eh_3$ - but not even for the suffix *-ms-, this reconstruction then remains very uncertain.

The Italic languages show Lat. *umerus* 'shoulder' and Umbr. loc.sg. *UZE*, *onse /ontse/* 'in umero'. Latin deviates from other languages in having an epenthetic vowel in the cluster *-ms-* which subsequently caused a rhotacism. The origin of this vowel is not entirely clear, Weiss (2009: 171) explains it by anaptyxis: $*h_1 \acute{o}msos > *omsos > *omVsos > umerus$ (*-ms-* at a morpheme boundary evokes an epenthetic p: $*s\bar{u}m-s-> *s\bar{u}mps\bar{i}$ 'to take'). De Vaan in his etymological dictionary (2008: 640) reconstructs PIE $*h_2 om-es-$ as a prestage for Italic, but he does not comment any further on the e-grade of suffix.

Sabellic evidence also does not shed light on the origin of the *e* in Lat. *umerus* as it could have been dropped due to syncope. There is a disagreement on when a *t*-epenthesis took place in the cluster -*ns*- in Sabellic. Buck (1928: 72) says the epenthesis took place only in the original -*ns*- clusters (which would suggests that there was no syncope in Umbr. *onse* and the *e* in Lat. *umerus* is epenthetic), but Meiser (1986: 163) believes that the *t*-epenthesis could have taken place also in secondary -*ns*- clusters (after syncope – which would account for the possible *e*-grade of the suffix).

Another reconstruction is proposed by Höfler (2018) based on the Italic material. He reconstructs $*h_1emh_xso-/*h_1omh_xso-$. Latin (and Umbrian) should come from e-grade, the rest of IE languages would come from o-grade with Saussure's law deleting the second laryngeal. This would give *emaso- in Proto-Italic. However, the development of *ema->*uma- is not very convincing, his evidence supporting this sound change consists either of loanwords (Numidae) or inherited words which are usually explained by the analogical introduction of the o-grade into the root ($numerus, hum\bar{\imath}$).

Hesychian ἀμέσω · ἀμοπλάται 'shoulder-blades' (most likely dual) rather appears to be a loanword from some related language for the retention of intervocalic s (if it is a loanword, then the initial a- has no importance in deciding what laryngeal to reconstruct). Besides the

intervocalic s, it also shows e (most likely the e-grade of the suffix) which would agree with Lat. umerus.

This could suggest that there indeed was the *e*-grade of the suffix and the oscillation between the suffixes *-*s*-/*-*es*- could be a result of a thematization of an original *s*-stem noun. This original *s*-stem has been reconstructed variously (Kroonen (2013: 25) reconstructs * $h_3\acute{e}m$ - $\bar{o}s$, gen. * h_3m -s- $\acute{o}s$ on the basis of * $h_2\acute{e}\mu s$ - $\bar{o}s$, gen. * h_2u -s- $\acute{o}s$ 'daybreak'; Martirosyan (2009: 643) posits a HD reconstruction (Beekes's subtype 1) of nom. * $h_2\acute{o}m$ -s-s, acc. * h_2m - $\acute{e}s$ -m, gen. * h_2m -s- $\acute{o}s$).

5.2.1 Vrddhi derivation and Osthoff's law

Another possible reconstruction would be AS ntr. s-stem *Hém-os/*Hém-es- 'shoulder blade' from which we could get a possessive *Hom-só- 'having shoulder blades' (and also its substantivization *Hóm-so- 'shoulder, shoulder piece'). We could then posit a vrddhi derivation *Hóm-so- 'belonging to the shoulder, shoulder area' which would then be a pre-form of Greek and Tocharian forms.

However, this reconstruction seems to be a perfect candidate for Osthoff's law which desribes the shortening of a long vowel before a resonant and another consonant (* $\bar{V}RC > VRC$). But the evidence of Aeol. gen.sg. $\mu \bar{\eta} \nu \nu o \varsigma < *m\bar{e}nh-\dot{o}s < *meh_I \eta s-\dot{o}s$ 'month' (from the root * meh_I - 'to measure') shows us that Osthoff's law must have taken place in the period when s was already weakened to h, but this was not yet assimilated to the preceding n. This also presupposes that h was not considered a consonant but a voiceless vowel (Lipp 2009a: 68 fn. 190, cf. also Peters 1980: 308f.). Osthoff's Law, on the other hand, can be seen in Ion. nom.sg. $\mu \iota i \varsigma < *m\acute{e}ns < *m\acute{e}ns < *m\acute{e}h_I \eta s$ (in Attic nom.sg. $\mu \eta \nu$ was built on the gen.sg. $\mu \eta \nu \iota i \varsigma$).

Without the operation of Osthoff's law, we could reconstruct this sequence of changes which would give us a regular $\tilde{\omega}\mu\sigma\varsigma$ in Ionic-Attic: * $H\dot{\delta}m$ -so->* $\dot{\delta}mh\sigma$ -> $\dot{\omega}\mu\sigma\varsigma$.

Darms (1978: 324f.) does not regard the reconstruction of a vrddhi derivation as likely, he also does not deem the development of the meaning of the vrddhi form *'shoulder bones/blades' \rightarrow 'shoulder' very probable.

5.3 Ψνος 'purchase price, buy'

Besides $\tilde{\omega}vo\varsigma$, there are many other derivations of this noun, the most important ones for this discussion are $\dot{\omega}v\dot{\eta}$ 'purchase, bargain, buy' and the denominative verb $\dot{\omega}v\dot{\epsilon}o\mu\alpha\iota$ 'buy, purchase'. In other dialects we find Dor. $\dot{\omega}v\dot{\alpha}$ and Aeol. $\dot{\sigma}vv\bar{\alpha}$ 'purchase, purchase-charter'.

The Indo-European connection with other IE languages can be demonstrated by Ved. $vasn\dot{a}$ - 'purchase price', Arm. gin 'purchase price', and Lat. $v\bar{e}num$ from the verbal phrase $v\bar{e}num$ dare 'to give for sale'. In Hittite, there are three verbal derivations of this root: a hi-conjugation $\mu\bar{a}\dot{s}^{-i}$ 'to buy', its secondary mi-conjugational derivation $\mu\bar{a}\dot{s}i\dot{\mu}e/a^{-2i}$ 'to buy', and a denominal verb $u\dot{s}ni\dot{\mu}e/a^{-2i}$ 'to put up for sale'. Kloekhorst (2008: 930f.) supposes that the denominative verb $u\dot{s}ni\dot{\mu}e/a^{-2i}$ was formed from an n-stem noun *us-n-(*us-n- μ e/o-) of the PIE root *us-us-'to buy, sell'.

From the attested cognates from these languages, the original n-stem noun could be reconstructed as *uos-n-/*us-en- (Beekes 2010: 1681). This pre-form was then thematized in the individual languages.

Kretschmer (1909: 123f.) explains these forms as a result of a compensatory lengthening which took place earlier than the rest. Clusters *-osn- and *-oms- (and with these most likely also *-ons- and *-osm-, although there is no evidence for them) developed into ωv and $\omega \mu$, so there is no need to reconstruct a pre-form * $F\omega\sigma v\bar{a}$ to get $\dot{\omega}v\dot{\eta}$ as with this earlier development, it can be obtained from * $F\sigma\sigma v\bar{a}$. He presupposes the same development also for $\Delta\iota\dot{\omega}\nu\upsilon\sigma\sigma\varsigma$ and $\dot{\omega}\mu\sigma\varsigma$. This, of course, is not a very convincing solution since he does not bring up any meaningful evidence to support his claim.

Dunkel (1995: 7) also points out that there is no evidence from the Attic sigmatic aorists because non of them were formed from o-grade, however, there is evidence for the cluster *-ors-: among other things for example Attic $o\dot{v}\rho\dot{\epsilon}\omega$ 'make water' from * μ ors- $\dot{\epsilon}\mu$ o-, this approach would also separate the development of the cluster *-oln- (in β ov λ $\dot{\eta}$ and $\dot{\sigma}$ ϕ e $i\lambda\omega$) from that of *-osn-.

An attractive solution was proposed by Chantraine (DELG: 1302). He sees the source of the ω in the antonym of $\dot{\omega}v\dot{\epsilon}o\mu\alpha i$, that is in $\pi\omega\lambda\dot{\epsilon}\omega$ 'to sell' which is an iterative derivation $*k^{\mu}\dot{\delta}lh_{I}$ -ie/o- of the root $*k^{\mu}elh_{I}$ - 'to turn, turn around'. Ringe (1984: 52) agrees with this hypothesis and explains the process more thoroughly: the ω from $\pi\omega\lambda\dot{\epsilon}\omega$ would, at first,

contaminated the verb $\dagger o \mathring{v} v \acute{\epsilon} o \mu \alpha \imath \rightarrow \mathring{w} v \acute{\epsilon} o \mu \alpha \imath$ and then it would also spread into the nouns $\mathring{w} v \circ \zeta$ and $\mathring{w} v \mathring{\eta}$.

5.3.1 Vrddhi derivation

In my opinion, the more likely course of action would be if we derived the feminine vrddhi formation: from the stem * $\mu \dot{o}s$ -no- or * μos -no- we would get * $\mu \bar{o}s$ - neh_2 - (on the actually attested model of PIE * $k\dot{o}r$ - μo - or *kor- μo - 'horned animal' (from the root *ker- μ - 'horn') \rightarrow * $ker \dot{o}r \dot{\mu}$ -a- 'cow = the female belonging to the horned animal' > Russ. krava, Cz. krava 'cow', for more details about the derivation and the depalatalization of the palatovelar, see Lipp 2019: 132f.). This hypothesis would also have to take in account the existence of both eh_2 -derivations, that is the vrddhi * μos - neh_2 - for Ionic-Attic and * μos - neh_2 - for Aeolic¹⁵. Then the ω would spread from $\omega v \eta$ to other derivations.

5.4 Διώνδσος 'Dionysus'

Dionysus, the god of wine and fertility, was considered to be a fairly new god in the Greek world, but with the decipherment of the Linear B scripts and finding his name written in the tablets it has become clear that Greeks were worshipping him since the Bronze Age.

His name is attested in many variations, besides the discussed $\Delta\iota\dot{\omega}vv\sigma\sigma\varsigma$ there are: Attic-Ionic $\Delta\iota\dot{\omega}vv\sigma\sigma\varsigma$, Thess. $\Delta\iota\dot{\omega}vv\sigma\sigma\varsigma$, Lesb. $Z\dot{\omega}vv\sigma\sigma\varsigma$, Ionic $\Delta\varepsilon\dot{\omega}vv\sigma\sigma\varsigma$ (Anakreon), Ionic (Amorgos) $\Delta\iota Evv\sigma\sigma\varsigma$, Myc. gen.sg. di-wo-nu-so-jo /Diuo(h)nūsojio/.

Kretschmer (1896: 241f.) considered Dionysus to be of a Thracian origin, he therefore reconstructed a compound * $\Delta \iota \dot{o}\sigma - v\bar{v}\sigma o\varsigma$ meaning 'son of Zeus' (with gen.sg. $\Delta \iota \dot{o}\varsigma$ of Zeus and

¹⁵ The Aeol. form $\emph{ονν}\bar{\alpha}$ shows that there was no long vowel in the root, otherwise we would get $\dagger \emph{ονν}\bar{\alpha}$ (as in gen.sg. of $μ \~ηννος$ 'month' < * $m \=e nsos$), there must have been both forms in Proto-Greek (Ringe 1984: 50f.).

the second part $v\bar{v}\sigma\sigma\varsigma$ 'son' which he connected to Gk. $N\tilde{v}\sigma\alpha$, a name of several mountain sacred to Dionysus) which was later borrowed into the Greek language.

Szemerényi (1971: 665) states that there is no doubt the term means 'son of Zeus', but he disagrees with Kretschmer's Thracian interpretation of $v\bar{v}\sigma\sigma\varsigma$, so he replaces the Thracian word for 'son' with the PIE equivalent $*suh_2-n\acute{u}$ - 'son' getting $*\Delta\iota_F o\sigma\sigma\bar{v}vv\varsigma$. By metathesis to $*\Delta\iota_F ovv\bar{v}\sigma v\varsigma$ and dissimilation ($*u-u \to u-o$: as in $vi\acute{o}\varsigma < vi\acute{v}\varsigma$ 'son' and $vv\acute{o}\varsigma < *snusus$ 'daughter-in-law') he comes to the pre-form $*\Delta\iota_F ovv\bar{v}\sigma \sigma\varsigma$. In 1974: 145 he adjusts the metathesis from $*\Delta\iota_F o\sigma - \sigma\bar{v}vv\varsigma$ to $*\Delta\iota_F o\sigma - v\bar{v}\sigma v\varsigma$ and by dissimilation he finally gets to $*\Delta\iota_F o\sigma v\bar{v}\sigma \sigma\varsigma$, "the form which underlies all historical forms". However, he does not explain the other variations, nor he cites them.

This explanation, however, operates with an irregular metathesis of a stem which is not attested in Greek, contrary to other IE languages Greek replaced the suffix -nu- in $*suh_2-nu$ -with -iu- (which was later thematized).

Ruipérez (from Dunkel 1995: 10f.) offered a different etymology based on a Mycenaean tablet KN Dv 1501 which showed a sequence of signs di-*79-nu[. He interpreted the sign *79 as /uio/ and reconstructed a pre-form *diuio- $n\bar{u}sos$ comparing it to $\delta\bar{\iota}o\gamma\epsilon\nu\dot{\eta}\varsigma$. By compensatory lengthening he would get *diuio-> * $d\bar{\iota}uo$ -> * $d\bar{\iota}uo$ - from which he could get a form * $di\bar{o}$ - by metathesis quantitatis. But this development is very uncertain, especially without the ascertained value of the sign *79.

A different interpretation of this name is offered by Peters (1989: 217ff.). According to his view, the forms in Δio - arose only as a result of a folk etymology which connected the name of Dionysus to Zeus, the original state of affairs is shown by the forms in $\Delta i\varepsilon$ -. On the model of the compound $\varphi \varepsilon \rho \acute{\varepsilon}oi\kappa o\varsigma$ 'snail' (lit. 'the one who carries its house'), he reconstructs a compound *Dise-snuh₂-ti-o- 'the one who makes waters flow'.

Beekes (2009: 337) is not convinced by any of these etymologies, so he accepts the foreign origin of this name.

5.5 Kõµoç 'celebration, revel'

Chantraine (DELG: 606) and Frisk (1972: 62) interpret this word as a 'drunken Dionysiac procession of celebrating and chanting', from which the word for comedy ($\kappa\omega\mu\omega\delta i\alpha$ 'revel-song', a compound of $\kappa\tilde{\omega}\mu\sigma\varsigma$ and $\psi\delta\eta$ 'song') was derived, and they connect it with $\kappa\omega\mu\eta$ 'village' (possibly from the root *kei- 'to lie' from which are also Goth. haims and Lith. $ki\tilde{e}mas$ 'village'), Frisk also suggests a connection with $\kappa\omega\mu\nu\varsigma$ 'bundle of hay', they both agree that the etymology is very doubtful. Beekes (2009: 814) suggests a Pre-Greek origin.

Durante (1974) found interesting parallels between Greek and Indian in Ved. $nar \acute{a}m$ $\acute{s}\acute{a}msa$ - and Gk. τόνδε κῶμον ἀνέρων (Pindar's Ode 5, line 22), both meaning 'praise of men', therefore he suggested the connection between $\acute{s}\acute{a}msa$ - and κῶμος. This also implies that the original meaning of κῶμος was rather 'praise' (also visible in a derivation έγκωμιον 'laudatory ode, eulogy') than 'drunken procession' which later developed through semantic specialization (Dunkel 1995: 14). A pre-form * $\acute{k}\acute{o}ms$ -o- could be then reconstructed for the Gk. and Ved. attestations.

As Ved. \acute{samsa} - is usually connected with Lat. $c\bar{e}nse\bar{o}$ 'to think, estimate', the connection with Gk. $\kappa\tilde{o}\mu\sigma\varsigma$ could clarify the nasal of the PIE root * $\acute{k}eNs$ - 'to announce, consider' (Dunkel 1995: 16–18).

A different reconstruction is proposed by Janda who reconstructs a pre-form $*koh_2$ -mofrom the PIE root $*keh_2$ - 'desire' (Hackstein 2002: 190 fn. 36).

Since $\kappa \tilde{\omega} \mu o \varsigma$ is not attested in Homer, it could have been borrowed into Ionic-Attic also from Doric dialects or even from Boeotian (Pindar's native dialect) whose first compensatory lengthening resulted in the long open vowels.

Dunkel (1995: 15), despite its absence in Homer or Mycenaean, includes $\kappa \tilde{\omega} \mu o \varsigma$ and also $\zeta \omega \mu \delta \varsigma$ into the group of Mycenaean relics just for the superiority of this solution as he states: "Neither $\kappa \tilde{\omega} \mu o \varsigma$ nor $\zeta \omega \mu \delta \varsigma$ is attested in Homer. Therefore their attribution to Mycenaean must be performed not by exclusion (what 'streng' dialect is capable of being an element of Homer's language?), but solely on the strength of the superiority of this approach to the prevailing chaos."

5.6 Ζωμός 'sauce, broth'

Its meaning would suggest to derive it from the root **ies*- 'boil, foam' which is continued in Gk. $\zeta \dot{\epsilon} \omega$ 'to boil, seethe'. If the connection to this root is correct, we would have to assume an *o*-grade root with the suffix -*mo*-, thus **ios-mo*-.

This word is often connected to $\zeta \bar{\nu} \mu \eta$ 'leaven, beer-yeast', a possible cognate to Lat. $i\bar{u}s$ 'broth, sauce' and Ved. $y \bar{u}s$ - 'soup, broth' from the root *ieuH-.

Schwyzer (1939: 346) suggests ablaut $-\bar{o}u$ -:- \bar{u} - to account for the variants $\zeta\omega\mu\delta\varsigma$: $\zeta\bar{v}\mu\eta$, but this type of ablaut does not seem very probable as it is not attested anywhere else.

This word is also not attested in Homer, that could mean that it was borrowed into Ionic-Attic from any other dialect with the "open-vowel" treatment of the first compensatory lengthening. This could especially point to the Laconian dialect as Spartans were famous for their "black soup" ($\mu \hat{\epsilon} \lambda \alpha \zeta \zeta \omega \mu \hat{\delta} \zeta$) made of pork meat and blood. This could have been borrowed

into Ionic-Attic as a "cultural" word (a peculiarity) and eventually it could have replaced the inherited $\dot{\tau}\zeta\sigma\nu\mu\dot{o}\varsigma$.

6. Conclusion

The presence of Mycenaean relics in later Greek is very possible. Especially, in the case of $\dot{\alpha}\rho\mu\dot{\alpha}\zeta\omega$ and $i\pi\pi\sigma\varsigma$ which are present in all classical Greek dialects. The Mycenaean features of these two words can be easily recognized in the Linear B script itself. This possibility is then even increased by the importance of horses and chariots in the Mycenaean culture.

Whether Myc. i-qo / $ikk^{\mu}os$ / is inherited from Proto-Indo-European and shows a specific Mycenaean development of e before labials even in the case of inherited words or whether it was borrowed from another language (from a related Indo-European one, either directly or via some non-Indo-European language) does not really matter in the end. If the Homeric proper names $E\pi\epsilon\iota\acute{o}\varsigma$ and $E\pi\epsilon\iota\acute{o}i$ are derived from the same root, they probably show the standard non-Mycenaean development and $i\pi\pi o\varsigma$ can be perceived as a Mycenaeanism in the classical Greek.

On the other hand, the relics based on the alleged outcome of the first compensatory lengthening in Mycenaean do not seem very likely. The genetic relationship between Mycenaean and Arcado-Cypriot dialects is not as close that we could just assume the same development for all of them. Furthermore, when the outcome of the compensatory lengthening is not even absolutely certain.

Homeric $\delta \dot{\eta} v \varepsilon \alpha$ can be explained by the analogical levelling of *dens- > *dans- as there is no other e-grade attested. In the case of $\tilde{\omega}\mu o \varsigma$ and $\tilde{\omega}vo \varsigma$, there is, in my opinion, a need to posit a lengthened grade, $\tilde{\omega}\mu o \varsigma$ could be supported by TB $\bar{a}ntse$ in this need, $\tilde{\omega}vo \varsigma$ is also well explained by Chantraine's theory of the analogical ω from $\pi\omega\lambda\dot{\epsilon}\omega$.

None of the different etymologies of Dionysus sounds very convincing. Also, the huge number of variations could, in fact, point to a Pre-Greek origin of the name.

Att. $\kappa \tilde{\omega} \mu o \varsigma$ and $\zeta \omega \mu \dot{o} \varsigma$ could be borrowings from other dialects whose outcome of the lengthening was the long open vowel. Especially, in the case of $\zeta \omega \mu \dot{o} \varsigma$, the Doric dialects sound quite likely.

The topic of interdialectal borrowings is a very interesting one. It would be certainly worth it to investigate this area to a greater extent as it could even shed some light on the migration of the Greek tribes in the periods without any written records. Hopefully, there will be some more Mycenaean tablets uncovered and, hopefully, we will be able to learn something more about the culture of that time.

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