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## The primary and the secondary ē-, ō- sounds in Greek dialects

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## IV

# THE PRIMARY AND THE SECONDARY $\bar{e}$ , $\bar{o}$ - SOUNDS IN GREEK DIALECTS

When perusing the linguistic material which may be consulted in connection with the differentiation classification of the Old Greek dialects, we shall not fail to notice that in the sphere of the long vowels the greatest significance is to be ascribed to those phonetic phenomena that are in one way or other related primarily to the phonetic qualities articulated near the middle of the front and the back long-vowel axes, which, in fact, means the long sounds of the  $\bar{e}$ - and  $\bar{o}$ - shade. Practically in all the Greek dialects we namely meet in the course of their historical and assumed prehistorical development with documents testifying to the origin of new realizations of these phones, in many Greek dialects we find traces of their various shifts, and in a number of dialects it is possible to demonstrate—at least in some of their evolutionary phases—the existence of more than one  $\bar{e}$ - or  $\bar{o}$ - phoneme.

And just this last fact is the very substance of one of the most significant differences that can be observed in the sphere of the long vowels in Ancient Greek dialects: the difference consists in the fact that, on the one hand, there exist dialects in which we are not able to demonstrate—at least with respect to the period foregoing the middle of the 4th cent. B.C.—the existence of more than one long-vowel inside phoneme accommodated on the front or the back long-vowel axes (i.e. a non-terminal phoneme, placed in between the two terminal members of the axis), whereas in numerous other Greek dialects we meet with a greater number of such phonemic units either on both axes or at least on the front one.

To the problems of this “doubling” of  $\bar{e}$ -phonemes or also  $\bar{o}$ -phonemes will now be devoted several chapters of this work. First we shall discuss those phonic processes whose accomplishment gave impulse to new  $\bar{e}$ - and  $\bar{o}$ - phonemes, both, on the front long-vowel axis and on the back one, and which always ran their course in quite a number of Old Greek dialects, for the most part genetically not at all akin (here we have to include several different types of compensatory lengthening of  $e$  and  $o$ , as well as the “equivocalic”  $e+e$  and  $o+o$ <sup>80</sup> contraction as systemically the most

<sup>80</sup> We do not take into account here the secondary  $\bar{e}$ ,  $\bar{o}$  originating in the Greek dialects through other types of contraction, for the possible dialectal differences manifested in their results are

significant type of contractions with  $\bar{e}$ -,  $\bar{o}$ - results, and the monophthongization changes of the diphthongs *ei*, *ou*); finally we shall discuss some more special processes, leading only to the origin of a new  $\bar{e}$ - (or  $\bar{e}$ -) phoneme (i.e. affecting only the front long-vowel axis), and restricted, for the most part, just to some isolated dialects or dialect groups.

Thus, in the first place, we shall turn our attention to the  $\bar{e}$ - and  $\bar{o}$ - products of the compensatory lengthening and of the  $e+e$  and  $o+o$  contraction, and we shall try to determine the relation of these secondary  $\bar{e}$ - and  $\bar{o}$ - phonic qualities to the primary  $\bar{e}$ - and  $\bar{o}$ - sounds, whereupon utilizing the results, thus obtained, for our contemplated complex analysis of the differences within the long-vowel systems of all Ancient Greek dialects.

It was only in less than a half of the Ancient Greek dialects, that the  $\bar{e}$ -,  $\bar{o}$ - vowels that originated through the compensatory lengthening or the equivocalic  $e+e$  and  $o+o$  contraction quite consequently fused with the primary  $\bar{e}$ -,  $\bar{o}$ -, whereas in the majority of Greek dialects there appeared a special product of these changes, or at least of some of them, i.e. a new long  $\bar{e}$ - or  $\bar{o}$  phoneme, whose characteristic feature was a close quality. The first case may be demonstrated<sup>81</sup> with maximum consistency in Arcadian (it may be assumed also in Cypriot),<sup>82</sup> in Lesbian, Elean, and Laconian,<sup>83</sup> and also in Thessalian and Boeotian. In all these dialects (except Cyprus) both the primary and the newly arising secondary  $\bar{e}$ -,  $\bar{o}$  were reproduced either with the signs *E*, *O* (such was the case chiefly in the archaic local alphabets of all these dialects), or with the signs *H*,  $\Omega$  (these were current symbols employed in Arcadian, Lesbian, Elean<sup>84</sup> and Laconian after the adoption of the Ionic alphabet), or finally with the spellings *EI*, *OY* (Ionic spelling from Thessaly), or also *EI*,  $\Omega$  (Ionic spelling from Boeotia; in contrast to the Thessalian consistently "close" *EI*, *OY* we therefore encounter in later Boeotian a certain asymmetry).

In the other Greek dialects we meet with a more or less regular differentiation of the primary and the secondary  $\bar{e}$ - and  $\bar{o}$ - sounds. For the most part the primary  $\bar{e}$ -,  $\bar{o}$  are reproduced by the letters *H*,  $\Omega$  and, as to their qualities, are rightly considered

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usually of no major systemic significance. At the same time we point out that in this chapter we shall deal only with problems connected with compensatory lengthening and equivocalic contraction ignoring other sources of the secondary  $\bar{e}$ -,  $\bar{o}$ ; the latter will be subjects of our discussion in the following chapters.

<sup>81</sup> As for the concrete linguistic evidence, consult the respective paragraphs esp. in Thumb — Kieckers and in Thumb — Scherer. It was not possible to include the respective material in this work.

<sup>82</sup> This is, of course, only theoretical reasoning, based on the fact that there exist no indications of Cypriot having double  $\bar{e}$ -,  $\bar{o}$ ; cf. also Note 112.

<sup>83</sup> The same holds good for Messenian and for the Laconian dialect spoken in Tarentum and Herakleia.

<sup>84</sup> We do not take here into account the occasional Elean spelling  $\Lambda$  for the primary  $\bar{e}$ -, e.g. in  $\mu\acute{\alpha} = \mu\eta$ . See more on pp. 89sqq.

to be open, while for the graphic reproduction of the secondary  $\bar{e}$ ,  $\bar{o}$  the signs *EI*, *OY*<sup>85</sup> are generally used, the quality being usually looked upon as close. Even in these dialects, however, the said graphic differentiation may naturally be observed only in those periods in which the Ionic alphabet was current already in them.<sup>86</sup> Still more important is the observation that this differentiation does not assert itself everywhere with the same proportions in the distribution of the open and close  $\bar{e}$ -,  $\bar{o}$ - sounds. It is true, all the dialects of this type distinguished double  $\bar{e}$ ,  $\bar{o}$  in principle, but yet, they are not always in accord as to whether all the above-said products, both those of the  $e+e$ ,  $o+o$  contraction and those of all the compensatory lengthenings of  $e$ ,  $o$ , resulted everywhere regularly into  $\bar{e}$ ,  $\bar{o}$  that differed from the primary  $\bar{e}$ ,  $\bar{o}$  in quality. In some of the dialects namely the "open" spelling *H*,  $\Omega$  to some extent includes also the secondary  $\bar{e}$ -,  $\bar{o}$ - sounds which were the products of the  $e+e$ ,  $o+o$  contraction, or of a certain type of the compensatory lengthening of  $e$ ,  $o$ . The primary open  $\bar{e}$ ,  $\bar{o}$  [Ionic spelling *H*,  $\Omega$ ] and the secondary close  $\bar{e}$ ,  $\bar{o}$  [Ionic spelling *EI*, *OY*] appear regularly only in Ionic, Attic, the North-West<sup>87</sup> dialects,<sup>88</sup> Megarian, Corinthian, and in East Argolic, whereas in the remaining Greek dialects distinguishing the double  $\bar{e}$ ,  $\bar{o}$ , i.e. in a) Pamphylian, b) East Aegean Doric<sup>89</sup> [probably excepting Cyrene], c) West Argolic, and also d) in Crete, the situation was more complicated.

In Pamphylian and in East Aegean Doric (perhaps excepting Cyrene) the open quality is usually<sup>90</sup> a typical feature not only of the primary  $\bar{e}$ ,  $\bar{o}$ , but also of the secondary  $\bar{e}$ ,  $\bar{o}$ , as far as it originated through either the "first" [type *\*esmi* > *ēmī*],<sup>91</sup>

<sup>85</sup> Here, we do not take into account the occasional spelling *I* instead of *EI* for the contracted  $\bar{e}$  in Argos; cf. below pp. 126sq. As for the analogical spelling in Boeotian it must be stressed that all the local examples of this kind are fairly late (all of them belong to the period after 350 B.C.; see p. 31).

<sup>86</sup> Cf., of course, also our Note 49.

<sup>87</sup> As for the West Locrian graphic disproportion concerning the result of the  $o+o$  contraction see below on p. 74sq.

<sup>88</sup> To the North-West dialects of the Classical Era we count all the Greek dialects north of the Gulf of Corinth and west of Boeotia and Thessalia, and besides—even if with certain hesitation—also the Achaean of the Peloponnesos.—On the other hand, we exclude from this group Elean, seeing in it an altogether independent West-Greek dialect just as Thumb-Kieckers (p. 234) do; the main justification of this attitude we find just in that essential difference between Elean and the North-West dialects in the formation of both their long-vowel system (see p. 94sq.), and their consonantal system (see Bartoněk, *Vývoj* 158). This standpoint, however, does not exclude the possibility that some special phenomena developed—esp. in the earlier periods—both in Elean and in the North-West dialects in close mutual contact. We mean here esp. the tendency to open the  $e$ -vowels, as it is analyzed in Chapter VI, sub A.

<sup>89</sup> The term East Aegean Doric comprises for us all the West-Greek dialects, i.e. the Doric dialects, of the Aegean islands (Crete excepting) and of Asia Minor.

<sup>90</sup> The word "usually" wants to say here that the occurrence of the "open" spelling generally predominated in older times over the "close spelling", this predomination being maintained up to the time when the influence of Koine became quite distinct.

<sup>91</sup> In these forms we do not denote either the close or the open character of  $\bar{e}$  or  $\bar{o}$ ; it is the

or through the "second" [type *ens* > *ēs*]<sup>91</sup> compensatory lengthening, while the close quality must be ascribed to the secondary *ē*, *ō* that was the product of contraction or of the 'third' compensatory lengthening [type *ksewos* > *kēsēnos*]<sup>91</sup>—provided, of course, the latter took place at all in the dialect in question.

a) As to Pamphylian, in this dialect it is fairly well possible, in spite of the comparatively late documentation, to distinguish the *ō*-sound that originated through the 1st or the 2nd compensatory lengthening (cf. *ἐβδλάσενυ* Schw. 686<sub>8</sub> [Sillyon, IV pars pr.; 1st compensatory lengthening], *ῥσα* = the Attic *οῦσα* l. c.<sub>8</sub> [2nd compensatory lengthening], or later *ῶσα* Schw. 686a 4<sub>3</sub> [Aspendos, II?]) from the *ō*-phone that originated through contraction from *o+o* (cf. e.g. the form *ἀργίρου*<sub>5</sub> = *ἀργίρον* in the last quoted inscription; in the inscription Schw. 686, as it happens, no analogical instance can be documented, nevertheless, from the contrast *ῶσα* : *ἀργίρον* valid for the 2nd cent. B.C.—as we find it in Schw. 686a 4—we can deduce with some probability the existence of an analogical contrast also in the 4th cent. B.C., maybe still in the form *ἐβδλάσενυ* : *ῥσα* : *ἀργίρον*). Similar differences probably existed also with reference to the *ē*-sounds, yet no direct demonstration thereof is available, because in Pamphylian there is not a single documentation of the long *ē* originated through compensatory lengthening.

b) In East Aegean Doric the existence of double *ē*, *ō* can be demonstrated by the following documents:

a) In *Thera*—where comparatively numerous archaic or semiarchaic inscriptions can be found—cf. e.g. *ῆμί* IG XII 3, 990 [VI—V; 1st compensatory lengthening] with *ἐποίē* IG XII 3, 763 [VII pars post.; contraction], as well as with *ἕνατο*[*υ*] IG XI 1 3, 1638 A<sub>2</sub> [VII—VI?; 3rd compensatory lengthening]; see also *Ἀνδροβόλω* IG XII 3, 1620 [IV?; with *Ω* for the open outcome of the 1st compensatory lengthening and *Ο* for the close *ō* originated through contraction], or mutually compare *-ωσα* IG XII 3, 1289<sub>3</sub> [IV; 2nd compensatory lengthening]<sup>92</sup> and *οἴροι* < *ορωοί* IG XII 3, 411<sub>1</sub> [IV med.; 3rd compensatory lengthening]. There are, naturally, numerous exceptions to this rule as well. Thus in more ancient periods we find in *Thera* the tendency to form a "compensatory" diphthong when phonic groups, subjected as a rule to the second compensatory lengthening were being liquidated (cf. *παῖσα* Buck<sup>3</sup> 67);<sup>93</sup> later—particularly from the 3rd cent. B.C.—the spelling *EI*, *OY* is predominating in the reproduction of the results of the first compensatory lengthening, probably due already to Hellenistic Koine.

β) In the *Rhodian* area archaic documents of a similar kind are less frequent, yet

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principle of lengthening and not the quality of the result that we concern ourselves with here.

<sup>92</sup> As we show in Note 121 (and elsewhere), in East Aegean Doric the second compensatory lengthening was—as a rule—accomplished only medially, and even in this position a "compensatory" diphthong appeared now and then in some subdialects (in *Cyrcne* as a rule, while in *Thera* occasionally).—As to the somewhat different *Rhodian* situation, see Note 94.

<sup>93</sup> See further Note 121.

even here we may quote for instance  $\eta\mu\acute{\epsilon}\nu$  = the Attic  $\epsilon\acute{\iota}\nu\alpha\iota$  Schw. 278<sub>11</sub> (Naukratis, "proxenia a Lindiis decreta", V extr.; with *H* for the open outcome of the 1st compensatory lengthening and with a long close *E* for  $\acute{\epsilon}$  which was formed on the analogy of the contracted  $\acute{\epsilon}$  arisen from  $e + e$  in the thematic infinitive ending  $-\epsilon\iota\nu$ ), while in the same inscription we find also  $\Delta\alpha\mu\acute{o}\xi\epsilon\nu\omicron\nu\varsigma$ ,  $\pi\rho\acute{o}\xi\epsilon\nu\omicron\nu\varsigma$  (3rd compensatory lengthening).

For the differences in the  $\Omega$ -/*O*- spelling we have no similar, fully illustrative documents, yet, we may infer the existence of an analogical original situation here from the  $\Omega$ -spelling in the form  $\beta\omega\lambda\tilde{\alpha}\iota$  l. c.<sub>1</sub> (this is an  $\tilde{o}$  produced by the 1st compensatory lengthening) and in a few proper names derived from this expression; otherwise, however, it is only  $\beta\omega\lambda\acute{\alpha}$  which is regularly documented.

From the 4th–3rd cent. B.C. also in the Rhodian area tendencies are perceivable to prefer the close spelling in the reproduction of any secondary  $\acute{\epsilon}$ ,  $\tilde{o}$  (cf., however, still in the 3rd cent. B.C. the spelling  $\acute{\epsilon}\xi\eta\mu\epsilon\iota\nu$  = the Attic  $\acute{\epsilon}\xi\epsilon\acute{\iota}\nu\alpha\iota$  Schw. 281<sub>4</sub> [Kameiros; III utique non recentior]). The different inconsistencies of that time manifest, no doubt, already the influence of Koine, or maybe partly even of the Ionic neighbourhood, and in a quite similar way we may explain also the fact that in the Rhodian area we do not find a single documentation of the open spelling in the reproduction of the results of the second compensatory lengthening; this process is namely documented only in inscriptions here, which, as we may rightly assume, were already strongly affected by the interdialectal influence (the only document of older date is the expression  $\acute{\alpha}\gamma\omicron\nu\sigma\alpha$  Diehl II 6, 39, fragm. 32<sub>2</sub>,<sup>94</sup> this graphical form, however, considering its indirect preservation, need not be taken for an original and authentic manifestation of the old Rhodian spelling. Let us add that the generally small number of documents demonstrating the second compensatory lengthening is in the whole East-Aegean Doric area the outcome of the fact that this process was accomplished there in the middle of the word only.

$\gamma$ ) From the *rest of the East-Aegean Doric* area (exc. the Theran colony Cyrene) only very few archaic inscriptions have been preserved, and that is why we perceive in the graphic reproduction of the local results of compensatory lengthenings and of equivo-calic contraction only considerable unsteadiness employing either *H* or *EI*, or else  $\Omega$  or *OY*. Nevertheless, even here there are indicators pointing to the assumed earlier local difference in quality between the various kinds of the secondary  $\acute{\epsilon}$  and  $\tilde{o}$  (cf. e.g. the genitive forms of proper names, such as  $\beta\omega\lambda\acute{\iota}\omicron\nu$  GDI 3597<sub>7</sub> [Kalymna, III?],  $\beta\omega\lambda\acute{\iota}\chi\omicron\nu$  GDI 3647<sub>2</sub> [Kos, II], GDI 3651 [Kos, II],  $\text{'}\text{Αναξίβ\acute{o}\lambda\omicron\nu}$  IG XII 3, 31<sub>5</sub>,

<sup>94</sup> Cf. also Note 121, where a late document is quoted in addition. As for the terminal position, we find it in the Rhodian area unaffected by the second compensatory lengthening only in the preposition  $\acute{\epsilon}\varsigma$  or prefix  $\acute{\epsilon}\sigma$ - and in the expression  $\delta\rho\acute{\alpha}\varsigma$  Diehl II 6, 39, fragm. 32<sub>2</sub>, otherwise we meet here only with a lengthening of the phone in question, a lengthening which most likely occurred under the interdialectal Ionic influence (cf. e.g. already  $\acute{\epsilon}\kappa\gamma\acute{o}\nu\omicron\nu\varsigma$  Schw. 279, [Lindos, cca 410]).

[Telos, II?]), and in all these cases we find  $\Omega$  for  $\bar{o}$  originating through the first compensatory lengthening and  $OY$  for the contracted  $\bar{o}$ .

δ) In *Cyrene*, on the other hand, there are only such slight indications of the double  $\bar{e}$ ,  $\bar{o}$  to be found as to make us doubt whether we are at all entitled to assume the earlier existence of "double"  $\bar{e}$ ,  $\bar{o}$  in this dialect. The only argument in favour of the assumption of a phonemic doubling of  $\bar{e}$ ,  $\bar{o}$  in Cyrenaean could be based on the Cyrenaean use of sign  $O$  for  $o+o$  in the Gen. Sing. of the  $o$ -stems, documentable according to Buck<sup>3</sup> 29 at the time when Cyrenaean already disposed of  $\Omega$ ; on the other hand, the documents *παισεῖται*, *χρῆμενος* with the spelling  $EI$ —in contrast to the "normal" Cyrenaean  $\bar{e}$ -spelling  $H$ —are very likely not of Cyrenaean origin (cf. Note 183).— This question will be discussed more in detail on page 73, here we should like just to point out beforehand that for Cyrenaean we probably cannot assume the existence of a phonemically fully independent second  $\bar{e}$ -/ $\bar{o}$ - couple springing from any of the compensatory lengthenings or from the equivocalic contraction.

And now a few words concerning West Argolis and Crete:

c) In West Argolis an analogical distribution of the double  $\bar{e}$ ,  $\bar{o}$  is documented as in East Aegean Doric, nevertheless, there is one difference: the open  $\bar{e}$ ,  $\bar{o}$  pair occurs here—so far it can be safely documented in Argos only—as product of the third compensatory lengthening as well,<sup>94a</sup> so that the close  $\bar{e}$ -,  $\bar{o}$ - sounds remain restricted here only to  $\bar{e}$ ,  $\bar{o}$  originated through contraction from  $e+e$ ,  $o+o$  (it is, of course, necessary to point out that the functional loading of  $\bar{e}$ ,  $\bar{o}$  was hardly through this event greater in Argos than in East Aegean Doric, for the whole of Argolis stood likely apart from the second compensatory lengthening). The best proof of the just mentioned difference is the fact that the secondary  $\bar{e}$  of Argos which had originated through contraction from  $e+e$ , must have fused at the latest in the first half of the 5th cent. B.C. already with  $\bar{i}$ , as we see it documented in expressions *τελιτῶ* = *τελειτῶ*, *ἀφαιριῖσθαι* = *ἀφαιρειῖσθαι* Schw. 83 A<sub>13</sub>, B<sub>6</sub> (Argos, ca. 450), while the  $\bar{e}$  that originated through the 1st or the 3rd compensatory lengthening is reproduced here by the sign  $E$  just as the primary  $\bar{e}$  is; cf. *χρῆματα* l. c. B<sub>3</sub> [primary  $\bar{e}$ ], *ἔμεν* = *εῖναι* B<sub>14</sub> [secondary  $\bar{e}$  originating through the 1st compensatory lengthening], *ξένια* B<sub>17</sub> [secondary  $\bar{e}$  originating through the 3rd compensatory lengthening]; cf. also from the inscription Schw. 85 [an Argolic inscription from Smyrna, post 338]

<sup>94a</sup> As to West Argolic Mycenae, the situation in lengthening is unknown, in East Argolic Epidauros and Troizen, however, the third compensatory lengthening certainly did not occur at all (cf., e.g., *κόρον*, *κόρον*, *μόνον*, *δλωσ* Syll<sup>3</sup> 1168<sub>5-22-73-74</sub> etc. [Epidauros, IV pars post.] with Argive *ῶρω*, *ῶρων*, *ῶρος*, *ῶρον* Mnemosyne 42, 332<sub>9-10-11-12</sub> [Argos, IV]). The Argive forms such as *πρόξενον* Mnemosyne 43, 366 A<sub>1</sub>, B<sub>1</sub> [III], *ἐνεκα* GDI 3298<sub>4</sub> [?], may, in all probability, be explained by the influence of Koine (cf. Bechtel, GD II 445, Thumb — Kieckers 115). We encounter, however, a less perspicuous situation, when trying to determine the extent in which Koine affected the above-mentioned practice in Epidauros (Bechtel, l.c., counts with Koine influence even in this case).

τοῦ συνεδροίου<sub>4</sub> [from *o+o*] beside τῶν Ἑλλάνων<sub>4-5</sub> [primary *ō*], and βωλᾶς<sub>16</sub> [secondary *ō* originating through the 1st compensatory lengthening]. A principally analogical distribution of the open and close *ē-/ō-* sounds was present also in Mycenae (excepting that neither the 3rd lengthening nor the change  $\bar{e} > \bar{i}$  can *ē, ē* arisen be documented outside Argos), whereas e.g. in Heraion it cannot be safely verified [cf. Bechtel, *GD* II 458]. Nevertheless, we believe that we do not risk committing a great inaccuracy if we postulate the existence of the basic difference between the open outcome of the 1st lengthening and between the close *ē, ē* arisen from *e+e, o+o* for the whole of West Argolis. — In the course of time, however, even West Argolis becomes the scene of graphic variability that makes the original differences hard to discern. Thus, let us put side by side for instance the expressions βωλᾶς Schw. 91<sub>4</sub> [Argos, ca. 250] and βουλᾶ[ς] l. c.<sub>3</sub>, or ἀναγγελῶντι l. c.<sub>23</sub> and ἀναγγελάντων Schw. 90<sub>4</sub> [Argos, ante 251].

As to East Argolis, we have before already associated it with dialects that regularly distinguish the primary and the secondary *ē, ō*, that is to say with Attic, Ionic, Corinthian, Megarian, and the North-West dialects. The main reason inducing us to do so is the fact that it was at least in Epidauros and Troizen that the long *ē-, ō-* sound arisen through the 1st compensatory lengthening [the 2nd and 3rd were not accomplished here) were reproduced after the adoption of the Ionic alphabet nearly always with the spelling *EI, OY*<sup>95</sup> (in contrast e.g. with the above-quoted βωλᾶς Schw. 85<sub>16</sub> from Argos). The only confusing phenomenon is that as to the substitute for the contracted *e+e* we find a certain variability of the spelling *EI, E*, and *H*, especially in Epidauros, both before the adoption of the Ionic alphabet, and after this event (e.g. in the inscription IG IV 1484 [Epidauros, IV] we find side by side the expressions ἤλετο, ἐλετο, and also εἰλετο; or compare the later ἤχον IG IV 950<sub>4</sub> [Epidauros, IV ex.] with εἶχε Syll<sup>3</sup> 1168<sub>122</sub> [Epidauros, ca. 320], Syll<sup>3</sup> 1169<sub>36.123</sub>, [Epidauros, ca. 320]); it is, of course, necessary to realize that these as well as other analogical cases are practically restricted to the temporal augment only, so that this variability need not be ascribed general, universal validity. On the contrary, documents like βῶμοῦ Schw. 108<sub>21</sub> [Epidauros, ca. 400] make it quite clear that the *ō* originating from *o+o* differed in Epidauros from the primary *ō*, and since the same may be said also about the *ō* in Epidauros and Troizen which was the product of the 1st compensatory lengthening (in Epidauros and Troizen we find only the form βῶλά or βουλᾶ, and never βωλά, as it is very often the case in Argos and in Mycenae), our view of the consistent separation of the local primary *ē, ō* from the secondary *ē, ō* is not void of substantiation.

At the same time the very fact, that in the area of Epidauros and Troizen the

<sup>95</sup> An exception is here the *χηε-* of Epidauros (from \**khers-*) found in several inscriptions, but this may after all be just a lexical deviation (cf. Bechtel, *GD* II 458 sq., and particularly 53, where the manifestation of the Aeolic—we might rather say “Achaean”—substratum is mentioned in this connection).



“close” spelling *EI, OY* is documented after the adoption of the Ionic alphabet upon the whole quite consistently as reproducing even the  $\bar{e}$ ,  $\bar{o}$  arisen already through the 1st compensatory lengthening, indicates clearly that the East Argolic double  $\bar{e}$ ,  $\bar{o}$  originated—as a systemic and purely dialectal, i.e. not interdialectal, innovation—as early as in the prehistorical stage of the Greek dialectal development, and this very likely within the frame of a wider systemic isogloss, which asserted itself about 1000 B.C. apart from other areas also along the whole coast of the Saronic Gulf [see below page 133]. Yet, this East Argolic distribution of the “double”  $\bar{e}$ ,  $\bar{o}$  can hardly be put on a level with the Epidaurian forms like  $\epsilon\acute{\iota}\varsigma$ ,  $\pi\acute{\lambda}\acute{\iota}\nu\theta\omicron\nu\varsigma$ <sup>96</sup> from the 1st half of the 4th cent. B.C., which are usually ascribed the character of later Atticisms (these forms betray traces of the accomplished second compensatory lengthening, which process does not seem to have taken place at least in the basic territory of the Argolic dialect).

It seems, however, that the above- said systemic isogloss did not affect Hermione with its  $\Omega$ -spelling for the secondary  $\bar{o}$  arisen from  $o+o$  (see the inscription Schw. 100 [Hermione, III] with 18 genitive forms ending in  $-\Omega$  and with one form only ending in  $-\text{OY}$ , or also IG IV 742 [Hermione, IV]<sup>97</sup> with twice documented expression  $\zeta\epsilon\nu\gamma\acute{\omega}\chi\omega\iota_{\theta, \sigma}$  [either from  $\zeta\epsilon\nu\gamma\omicron + \acute{\epsilon}\chi-$  or from  $\zeta\epsilon\nu\gamma\omicron\omicron + \acute{\delta}\chi-$ ] apart from three genitives ending in  $-\text{OY}$ ), or even for the secondary  $\bar{o}$  produced by the second compensatory lengthening (cf.  $\pi\omicron\lambda\tau\acute{\omega}\varsigma$  in the quoted inscription IG IV 742<sub>10</sub>). The last mentioned instance represents at the same time a very interesting document of the second compensatory lengthening in Argolic territory,<sup>98</sup> its  $\Omega$ -spelling by itself already indicating that the subdialect of Hermione may have been influenced, both in this respect and with respect to other features as well, from Laconia (Hermione is, as a matter of fact, situated outside the Saronic Gulf). On the other hand, the East Argolic Methana, which lies on the coast of the Saronic Gulf, as well as the Isle of Aigina, evidently present a picture identical with Epidauros as to the phonemic development of their  $\bar{e}$ - and  $\bar{o}$ -phones—even if we do not always recognize in the local inscriptions where the possible influence of the Attic neighbourhood begins.

d) In Crete the distribution valid for East Aegean Doric can be documented with respect to the vowel  $\bar{e}$  only, and even this holds good just about the oldest inscriptions from the 7-6th cent. B.C. (compare for instance the spelling *H* in  $\pi\epsilon\nu\tau\acute{\eta}\mu\omicron\nu\tau\alpha$  GDI 4979<sub>1</sub> [Gortys, litt. vetust.; we have to deal here with primary  $\bar{e}$ ], or in  $\acute{\delta}[\pi\acute{\eta}\lambda\epsilon\nu =$  = the Attic  $\acute{\delta}\phi\epsilon\acute{\iota}\lambda\epsilon\nu$  l. c.<sub>1</sub> [for  $\bar{e}$  produced by the 1st compensatory lengthening] with the spelling *E* in  $\rho\omicron\sigma\mu\acute{\epsilon}\nu$  l.c.<sub>2</sub> [for  $\bar{e}$  arisen from  $e+e$ ], or in  $[\chi\sigma]\bar{\epsilon}\nu\acute{\iota}\omicron\varsigma$  l.c.<sub>2</sub> [for  $\bar{e}$  originated through the 3rd compensatory lengthening],<sup>99</sup> whereas in the inscriptions from the 5th-4th cent. B.C. the Cretan orthography knows only one form of

<sup>96</sup> See Thumb — Kieckers 112.

<sup>97</sup> See Brause, *Lautlehre* 128.

<sup>98</sup> Cf. also Note 118.

<sup>99</sup> The second compensatory lengthening occurs only in East and West Crete, and even here just in medial position. Cf. Note 122.

long  $\bar{e}$ -spelling, namely the sign  $H$ ; see for instance side by side the sign  $H$  in  $\eta\mu\eta\nu$  = the Attic  $\epsilon\lambda\nu\alpha$  GDI 4998 I<sub>2</sub> [Gortys, litt. vet.; the first  $H$  stands for  $\bar{e}$  produced by the 1st compensatory lengthening, the second for  $\bar{e}$  that was formed on the analogy of the contracted  $\bar{e}$  originated from  $e+e$  in the infinitive thematic ending  $-\epsilon\omega$ ], in  $\mu\alpha\lambda\eta\nu$  GDI 4998 II<sub>9</sub> [Gortys, litt. vet.; for  $\bar{e}$  originated from  $e+e$ ] and in  $[\kappa]\sigma\eta\rho\iota\omicron\varsigma$  GDI 5003 I<sub>2</sub> [Gortys, litt. vet.; for  $\bar{e}$  produced by the third compensatory lengthening]. Noteworthy is, however, the fact that from the 3rd cent. B.C. onward we again see in Cretan inscriptions a similar graphic differentiation as that we used to find in the oldest Cretan inscriptional documents; cf. e.g.  $H$  in  $\sigma\alpha\tau\eta\rho\alpha\varsigma$  Schw. 183 C<sub>7</sub> [the contract between Lato and Gortys; III; primary  $\bar{e}$ ] with  $E$  in  $\acute{\alpha}\delta\iota\kappa\epsilon\sigma\theta\acute{\iota}\mu\alpha$  l.c. A<sub>8</sub> [contracted  $\bar{e}$ ].<sup>100</sup> At the same time we find in the quoted inscription—in contrast to instances from the oldest archaic period—an analogical graphic differentiation also with respect to the phonic  $o$ -quality; cf.  $\kappa\acute{o}\sigma\mu\omega\iota$  Schw. 183 C<sub>3</sub> [the primary  $\bar{o}$  in the long diphthong  $\bar{o}+i$ ] with  $[\kappa\acute{o}\sigma]\mu\bar{o}$  C<sub>4</sub> [the secondary  $\bar{o}$  arisen from  $o+o$ ].

Considering the long space of time from the 6th to the 3rd cent. B.C., in which we encounter in Crete only one  $\bar{e}$ - and  $\bar{o}$ -spelling, we are of the opinion—contrary to Brause, *Lautlehre* 126sq., Thumb—Kieckers 151sq., and Bechtel, *GD* II 681sq.—that the alluded to Hellenistic indications of a “double” Cretan  $\bar{e}$ ,  $\bar{o}$  are no continuation of the phenomenon found in ancient documents. While the usage of the “double”  $\bar{e}$ -spelling in the oldest Cretan inscriptions is in all probability indeed to be traced down to the actual Cretan dialect basis — we shall allude to it once more on page 74—the “double”  $\bar{e}$ - and  $\bar{o}$ -spelling in the Hellenistic Era may apparently be ascribed to the increasing influence of the Doric Koine, which according to Thumb—Kieckers 148 got a footing in the Hellenistic Era in “the Doric isles” and in the 3rd cent. B.C. began to assert itself also in East Crete. This supposition finds corroboration in the fact that all the late Cretan inscriptions with this quite safely documented “double”  $\bar{e}$ -spelling, and in one case even with a “double”  $\bar{o}$ -spelling, with dates from the 3rd cent. onward, represent contracts concluded by communities, of which every time at least one was situated either in the east of Crete or on the boundary between Central and East Crete; the inscriptions are the following: Schw. 183 [Lato—borderland, Gortys—central; III]; GDI 5100 [Lyttos—borderland, Malla—borderland; III—II?], and REG 24, 380 [Hierapytna—east, Praisos—east].<sup>101</sup> We imagine the course of development of this phenomenon as follows: in East Crete there began in the third cent. B.C.—due to interdialectal influence from the neighbouring East Aegean Doric territory—the process of phonemic “doubling” of the  $\bar{e}$ - and  $\bar{o}$ -phones, involving the same phonic distribution of the close  $\bar{e}$ ,  $\bar{o}$  and the open  $\bar{e}$ ,  $\bar{o}$  as we know it just in the East Aegean Doric dialects. The reason

<sup>100</sup> The respective part of this inscription, however, is not reprinted in Schw.; cf. Index.

<sup>101</sup> Cf. Bechtel, *GD* II 681sq.; nevertheless, the expected differentiation between the spellings  $H$  and  $E$  is not every time observed with full consistency in these inscriptions. Cf., e.g.,  $\mu\alpha\lambda\eta\nu$  Schw. 183 C<sub>8</sub> (with  $H$  for  $e+e$ ) with  $\acute{\alpha}\delta\iota\kappa\epsilon\sigma\theta\acute{\iota}\mu\alpha$  l.c. A<sub>8</sub> (with  $E$  for  $e+e$ ).

why the close  $\bar{\epsilon}$ ,  $\bar{\rho}$  was not reproduced in these cases with the spelling *EI*, *OY*<sup>102</sup>—as it was otherwise current in the contemporary Greek world—may have been the assumed fact that the monophthongization of the diphthongs *ei*, *ou* was even in the 3rd cent. not yet accomplished in Crete, so that the signs *EI*, *OY* kept being reserved for the reproduction of these diphthongs only.

If we accept this explanation, then the before-mentioned three late inscriptions, demonstrating most likely, from our standpoint, a late interdialect of East Crete, would not contradict our above view of Cretan, which we believe to have been a Greek dialect having in the 5th and 4th cent. B.C. only one  $\bar{\epsilon}$ , and only one  $\bar{\omega}$ , phonemically fixed—provided, of course, that this statement does not hold good indeed about Cretan without any chronological restriction whatsoever, which is a hypothesis that we shall discuss on page 74.

To be sure, there is another supposition that does not altogether exceed the limit of possibility, namely that the long-vowel system of East Crete was always more akin to East Aegean Doric than to the rest of Crete, and that even the Hellenistic differentiation of the “double”  $\bar{\epsilon}$ - and  $\bar{\omega}$ -spellings was in East Crete a reflexion not of an interdialect but of the purely epichoric East-Cretan phonemic condition comprising a “double”  $\bar{\epsilon}$  and a “double”  $\bar{\omega}$ , yet, we feel that it would hardly be right to draw on the basis of merely three late inscriptions—from the point of view of a dialect not quite uniform, on the top of it—such far-reaching conclusions.

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The first to attempt an explanation of this significant difference between dialects with one  $\bar{\epsilon}$ ,  $\bar{\omega}$  only and those possessing the same sounds in pairs was Ahrens (*De Graecae linguae dialectis* II, Göttingen 1843, p. 5 etc.), dealing, however, with the sphere of the “Doric”, i.e. West Greek dialects, only and dividing them into the “strict” and the “moderate” Doric (*Doris severior* and *Doris mitior*).<sup>103</sup> According to Ahrens the whole thing was a question of accomplishing a distribution of the dialects from the local point of view, neither of the two types being looked upon as senior. In contrast to this excessive simplicity of Ahrens’s theory Thumb presented his view (*Handbuch der griechischen Dialekte*, Heidelberg 1909, pp. 201—205).<sup>104</sup>

<sup>102</sup> Even such documents we find in Hellenistic Crete, partly in the extreme east, in Itanos and Praisos (cf. Bechtel, *GD* II 682sq.), and partly—as far as the  $\bar{\omega}$ -result of the third compensatory lengthening is concerned—also in the “transition” area of Dreros (see Bechtel, *GD* II 691sq.), that is to say in late inscriptions only, in reference to which, naturally, inter-dialectal influences cannot be excluded. It is interesting that Dreros manifests at the same time also other features resembling the East Crete conditions; compare for instance the local sign *I*, which can be demonstrated in Dreros, Hierapytna, Itanos, and Praisos for the proto-Greek *dj*, *gj*, *j*- still at a time when Gortys employs already *A*( $\Delta$ ), or maybe *T*(*T*) (see Thumb—Kieckers 159sq.).

<sup>103</sup> Cf. Ahrens, o.c. II 153: “pro diphthongis *ei* et *ou*, quae sunt in Atthide et Iade, saepe  $\eta$  et  $\omega$  praeferunt”.

<sup>104</sup> See also Thumb—Kieckers 315—321.

maintaining that the difference between strict and moderate Doric, as well as within the other ancient Greek dialects, was founded on a chronological basis. According to him every Greek dialect passed in its development through a stage in which the primary  $\bar{e}$ ,  $\bar{o}$  on the one hand and the results of the  $e+e$  and  $o+o$  contractions as well as of the lengthenings on the other hand were both non-close,<sup>105</sup> though slightly differing in quality. On the contrary, the occurrence of the secondary close  $\bar{e}$ ,  $\bar{o}$  in all the Greek dialects of the "moderate" type represented according to Thumb an innovation, which started in the North-East of Peloponnesos and in the North-West dialect area, then spread throughout the Aegean islands, and which later in the Hellenistic Era, owing to the influence of Koine, was adopted also in all the dialects of the "strict" type.

Thumb finds confirmation of his conception just in the double development of the secondary  $\bar{e}$ ,  $\bar{o}$ , for instance in East Aegean Doric;<sup>106</sup> this is according to him just the transition stage between the more ancient situation, in which all the secondary  $\bar{e}$  and  $\bar{o}$  were still preserving their assumed original non-close character, and a later phase with the secondary  $\bar{e}$  and  $\bar{o}$  already narrowed. Thus Thumb's theory is a theory with a chronologically determined dialectal distribution, the dialectal type with the secondary close  $\bar{e}$ ,  $\bar{o}$  being considered younger and derived from the older, non-close type.

Other scholars have not devoted much interest to these problems so far.<sup>107</sup> They generally were content with pointing out the above-mentioned differences. Of late, however, an interesting hypothesis has been expressed, offering a new solution which differs from the two preceding theories. Its author, J. Sánchez Lasso de la Vega, *Sobre la historia de las vocales largas en griego*, *Emérita* 24 (1956), 261—293, does not see in the complicated situation, demonstrated in Argolic, Pamphylian, in East Aegean Doric (and perhaps also in the most archaic Cretan inscriptions), a transition phase between the stage with the secondary non-close, or better, open  $\bar{e}$ ,  $\bar{o}$ , and that with the close  $\bar{e}$ ,  $\bar{o}$ , as Thumb would have it, but he considers it to be a reflexion of the original state, believing that the vowels  $\bar{e}$ ,  $\bar{o}$  resulting from the older types of the compensatory lengthening possessed from their very origin a rather open quality, while those that were products of contractions or of the third compensatory lengthening (i.e. of later phonic processes) possessed a close quality for the reason

<sup>105</sup> See Thumb<sup>1</sup> 205, and Thumb—Kieckers 321; Thumb's formulations seem to indicate that in his opinion the quality of the primary  $\bar{e}$ -,  $\bar{o}$ - sounds was always more open than that of the secondary  $\bar{e}$ ,  $\bar{o}$ .

<sup>106</sup> See pp. 51sqq.

<sup>107</sup> Thus Schwyzler, for instance, does not treat this question systematically at all in *GG I* (cf. page 191, 240sqq., 280sqq.); Bechtel in *GD* (see the respective expositions about Argolis, Crete, and the East Aegean Doric islands) is more or less content with a mere description of this phenomenon or at the best with its comparative study in the different Greek areas, and upon the whole a similar attitude is taken also by Brause, *Lautehre* 124sqq., although in the latter we already find some indication of the theory of Lasso de la Vega, as we shall point out.

that whether contraction or the third compensatory lengthening are upon the whole younger phenomena<sup>108</sup> than the two older types of compensatory lengthening and that in their outcome participated already the later, presumably closer quality of the short *e*, *o*, the said quality being assumed for the Classical Greek *ĕ*, *ō* by many investigators.<sup>109</sup> This original, for all the Greek dialects valid situation was, however, in the course of time upset, as the author believes, partly because in some of the Greek dialects (in Ahrens's "moderately" Doric dialects and in Attic-Ionic) the original open secondary long sounds were gradually closing (according to the author this change can still be observed in progress in Thera, Rhodes, and Argolis), whereas in other dialects (in "strict" Doric, Arcadian, and Lesbian) the original close secondary long sounds were again opening (this development can in the author's opinion still be observed in progress in Crete). Thus even according to Lasso de la Vega the close quality of the secondary Greek *ē*, *ō* was younger by origin than its open quality, yet, its origin cannot be determined locally (as if it would have first originated in one group of dialects only), but phonetically (it originated in all dialects, but only through the medium of certain later phonic processes).

The above-mentioned theories may critically be commented as follows: In Ahrens's work the whole complicated set of problems attached to the "double" *ē*, *ō* was considerably simplified, the main reason being that this research-worker had not yet so plentiful inscriptional material at his disposal as, let us say, Thumb. His explanation is too schematic and rather non-historical. The two later theories, on the other hand, have another drawback. It is true that their authors try to include in their argumentation the entire inscriptional material known so far, yes, they even make an effort to discuss matters from the historical point of view, but they restrict their research only to the problems of the secondary *ē*-, *ō*- sounds, separating them altogether from the long-vowel system as a whole. Thus, for instance, Thumb's explanation of the gradual narrowing of the secondary *ē*, *ō* in all Greek dialects appears quite convincing at first sight, all the more so since the tendency towards closing long vowels is rather a characteristic feature of many Greek dialects. The weak spot in Thumb's argumentation is, however, the fact that he at first assumes in all the Greek dialects the existence of some non-close quality of the secondary *ē*, *ō* (that is to say, of a very similar, even if—according to him—not quite the same quality as is generally ascribed to the primary *ē*, *ō*), but he fails to explain how it was possible that the two pairs of non-close *ē*-, *ō*- sounds—both the primary and the secondary pair—, existing according to Thumb side by side as separate qualities even in the dialects of the "strict" type, managed to preserve both their phonemic independence and, at the same time, their very similar non-close pronunciation so

<sup>108</sup> As for the third compensatory lengthening, indications of this view can be found also in Thumb—Kieckers 319 (but not in Thumb<sup>1</sup>); but cf. also Brause's *Lautehre* 129, which, as a matter of fact, forms a sort of starting point for Lasso de la Vega (cf. Note 107).

<sup>109</sup> Our own, rather different opinion on this question was presented in Note 79.

long. There was certainly a long interval between the origination of the first type of Greek secondary  $\bar{e}$ ,  $\bar{o}$  (through the first compensatory lengthening), and between the operation of the third compensatory lengthening or of the  $e+e$ ,  $o+o$  contraction, before whose accomplishment Thumb's secondary non-close  $\bar{e}$ -,  $\bar{o}$ - sounds could not be transformed in any of the Greek dialects into close  $\bar{e}$ ,  $\bar{o}$ , in the light of his hypothesis (about the chronological questions concerning the said phonic processes see below on pp. 62 sqq.).

This weak spot of Thumb's theory may not be compensated even by his referring to the Laconian forms of the type  $\epsilon\acute{\iota}\mu\acute{\iota}$ ,  $\tau\acute{o}\upsilon\varsigma$  (as compared to the still preserved  $\xi\theta\eta\kappa\epsilon$ ,  $\xi\delta\omega\kappa\epsilon$ ), which appear in this dialect—no doubt under Koine influence—all of a sudden in the 3rd cent. B.C., that means after a long period for which only the forms  $\acute{\epsilon}\mu\acute{\iota}/\eta\acute{\iota}\mu\acute{\iota}$ ,  $\tau\acute{\theta}\varsigma/\tau\acute{\omega}\varsigma$  can be demonstrated in Laconian inscriptions. Taking namely Thumb's part and concluding from documents of this kind that in Laconian as in a Doric dialect of the "strict" type there were maintained throughout all those long centuries side by side both pairs of the non-close  $\bar{e}$ -,  $\bar{o}$ - sounds would mean not only to ignore the laws of the phonemic systems (phonemes of this type would certainly fuse during such a long period), but also to misunderstand the interdialectal way in which the influence of the Hellenistic Koine asserted itself in the world of the local dialects, the late Koine forms  $\epsilon\acute{\iota}\mu\acute{\iota}$ ,  $\tau\acute{o}\upsilon\varsigma$  having been undoubtedly implanted in the local idiom, no matter whether the dialect in question knew close  $\bar{e}$ ,  $\bar{o}$  from the previous times, or not.

Lasso de la Vega's theory is more elaborated from the historical point of view than that of Thumb, for it takes into account the possibility that the single types of the phonic changes which were giving rise to the secondary  $\bar{e}$ ,  $\bar{o}$  in Greek may have had different phonetic results in different times. The author follows in this respect partly the idea of Brause, *Lautlehre der kretischen Dialekte*, Halle 1909, p. 124sq. In spite of Lasso de la Vega's good points, however, his chief methodical drawback lies in his presenting the primary  $\bar{e}$ ,  $\bar{o}$ , the secondary  $\bar{e}$ ,  $\bar{o}$  originating from the two older types of the compensatory lengthening, and the  $\bar{e}$ ,  $\bar{o}$  which is the product of contraction or of the third compensatory lengthening, as three quite independent units, whose development Lasso de la Vega follows without taking into account their relationship to the other members of the long-vowel system, yes, even their mutual relationship—and it is just this standpoint that makes him resort to speculations, such as the assumption of the occurrence of a special close  $\bar{e}$ ,  $\bar{o}$ , produced by contraction or the 3rd compensatory lengthening, originally even in those dialects in which we have in the Historical Era only one, universal quality of these two vowels documented, this quality being very likely neither close nor open.

Occurrence of the primary and the secondary ē, ē̄ in the Greek dialects about 350 B. C.

	ION	ATT	ARC	CYP	PAM	LESB	THES	BOE	N-W	EL	LAC	COR	MEG	WEST ARG (not Argos)	AR-GOS	EAST ARG	CEN-TRAL CRET	other CRET	HER	CYR	RHOD
Primary ē, ē̄	+	+	+	[+]	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Secondary ē, ē̄ arisen by the 1st comp. leng.	+	+	(-)	[+]	+	-	-	+	+	+	(-)	+	+	+	+	+	+	+	+	+	+
Arisen by the 2nd comp. leng.	+	+	-	[-]	+	⊥	-	+	+	+	+	+	+	-	-	(+)	-	+	(⊥)	⊥	+
Arisen by the 3rd comp. leng.	+	-	-	[-]	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+
Arisen by the contraction of e + e, o + o	+	+	+	[+]	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Arisen by the monophthong. of ei, ou	+	+	[-]	-	+	(+)	+	+	+	[-]	(+)	+	+	+	+	+	-	-	+	[-]	+
Arisen in some other way	+	+						+													

+ established

- not established

⊥ a comp. diphthong occurring instead of the comp. long vowel

(+) exceptional phenomena (not due to the influence of Koine)  
 [-] plausible inference

⊥ prevalence of close ē, ē̄  
 ⊥ prevalence of mid ē, ē̄  
 ⊥ prevalence of open ē, ē̄  
 ⊥ ē, ē̄ passing into ī, ū before 350 B. C.  
 ⊥ ē, ē̄ quality uncertain  
 ⊥ only open ē originating in this way

⊥ in the given groups consisting of two symbols the first symbol refers to the inside of the word, the second to the end of the word

⊥ in the given symbols the first mark under the plus sign refers to ē, the second to ē̄