

ANTONÍN BARTONĚK
REMARKS TO THE CHRONOLOGY OF THE *ei, ou*
MONOPHTHONGIZATION IN GREEK

In the particular Greek dialects the chronological classification of the monophthongization of the diphthongs *ei, ou* has not been hitherto separately considered to a sufficient degree, so that the general impression has been induced, as if in all the Greek dialects the monophthongization had been accomplished by the time of the general introduction of the Ionic alphabet, i. e. before 350 B. C. Most recently, Vega seems to support this view as regards almost all Greek dialects.¹ On the contrary, our present paper has been inspired by the opposite views occasionally expressed by some other scholars.² The purpose of our paper is not only to show that the above opinion is not entirely reliable, but also to place the question of the monophthongization of the diphthongs *ei, ou* among the wider problems of the „secondary Greek \bar{e} , \bar{o} “,³ and, consequently, to use it for classifying the ancient Greek dialects about 350 B. C.

There exists both direct and indirect evidence proving the time when the diphthongs *ei, ou* became monophthongs. Direct evidence can only be established by tracing in the particular dialects — and, above all, in the periods when local epichoric alphabets were still used in the non-Ionic dialects — whether E, I, O or Y respectively were not written in the place of the old diphthongs *ei* or *ou*. Records of this kind occur rather rarely.

The sign E instead of *ei* appears in the most ancient inscriptions of Corinthus (cf. the occurrences of *Ποτῆδᾶ* — as early as in the 7th cent. B. C.)⁴ and in those of Megaris (*ἄρχη* Schw.⁵ 165 g, fragm. def₇ /titulus Selinusius Olympiae repertus; VI^a ex.?, *Εἰὸκλῆδᾶς* Schw. 151 /Megara, V^a?/), and sporadically in Laconian (*Φῆδῖλας* Schw. 15₁₄ /tit. Spartae Deli repertus; intra 403—399/), Lesbian (*Φῆδῖλῶ* Schw. 637₂ /Thymbraï, V^a/), Attic (*Πεσιδοῦς*⁶ /IV^a/)⁷, and Ionic (*ἔπειν* Milet⁸ III 132_{a2} /VI^a/), and Pamphylian might be added as well (cf. *κῆσθαι* = *κεῖσθαι* Schw. 686₂₆ /Silyon, IV pars prior/). The greatest progress in this respect was no doubt reached in Boeotian, in the epichoric alphabet of which the monophthongal substitute for the original *ei* is often represented partly by the special letter \vdash probably indicating an articulated vowel somewhere between \bar{e} and \bar{i} (*Τ\vdashσμενῆς* Schw. 478B,

/Thespiai, V^a post./), partly also directly by the letter I (e. g. *Πίδαρχος* Schw. 451 A₁₃ /Tanagra, V^a post./).

On the other hand, the monophthongized *ou* occurs in the graphic form O only in Attic and Ionic, and that especially in the none too clear *τῶτο* (= *τοῦτο*), or in some other forms of this demonstrative pronoun (in Attica *τοτον* occurs already on the vase of Dipylos from the eighth century).⁹

Also some indirect evidence, however, proving the accomplished monophthongization of the diphthongs *ei*, *ou* is of considerable conclusive value. Most relevant are those cases in which the secondary *ē* or *ō* — which in the respective Greek dialects came into existence either as a result of compensatory lengthening or of the *e + e* and *o + o* contractions — acquired the graphic form EI, OY already before the general introduction of the Ionic alphabet. In each of these cases it is necessarily taken for granted that the above mentioned graphic form could, in no circumstances, represent a real diphthong in the respective dialect. This ancient EI, OY with the phonetic value of some monophthongal *ē*, *ō* appears not only in Ionic (e. g., *εἰμι* Schw. 723, 3 /Miletos, VI med./), but also in Old Attic (e. g., *εἰμί*¹⁰ /VI ex./, *Λετοῦς*/¹⁰ /VI ex./), in the epichoric alphabets of West Locris (e. g., *εἴμεν* often in Schw. 362 /Oiantheia, V^a pars prior/, *ἐν Λορρούς* /l. c.₂₀/), Phocis (e. g., *καταγορεύω* Schw. 323A₄₀ /Delphi, 400/390/, *τοῦ δρόμου* Schw. 321₁ /Delphi, V^a pars post./), Corinth and Corinthian settlements (e. g., *ἐποίει* Schw. 133, 1₂ /Korkyra, VI^a/, *ἠνιοῦ*, *δάμων* l. c._{1,3}), Argolis (e. g., *Κλείτος* GDI¹¹ 3260, /Argos, VI^a?, *Μνασίον* l. c.₄). Further we find EI for the secondary *ē* once in archaic Thera ([*K*]λειώτιμος GDI 4805_{5,75} /VI^a?/).

Nevertheless, it is possible to consider as sufficiently conclusive for the period about the year 350 B. C. also such cases in which the graphic signs EI, OY are used fairly regularly — i. e. without any particular variation — in the place of the secondary monophthongal *ē*, *ō* immediately after the introduction of the Ionic alphabet into the respective dialects.¹² This happened not only in the just mentioned dialects, but also in Megarian,¹³ in almost the entire East Aegean Doric¹⁴ and in Thessalian in regard both to EI and OY, and in Boeotian¹⁵ and Pamphylian with the restriction to EI.¹⁶

Besides Boeotian and Pamphylian offer special cases of indirect evidence of the monophthongization of the diphthong *ou*, as the spelling OY began to be used here in the place of the original Greek *ū* after the introduction of the Ionic alphabet. In Schw. 467 /Thebes, between 355 and 346^a/ Boeotian forms such as e. g. *χρῶσίω* are still rare, but later their number increases.¹⁷ Considering that Boeotian may have adopted the Ionic alphabet through Attic, the latter example at the same time serves as basic evidence of the fact that also in Attic the diphthong *ou* was a monophthong as far back as 350 B. C. and possibly even somewhat earlier. (A similar basic conclusion about the early Ionic monophthongization of the

diphthongs *ei*, *ou* could admittedly have been drawn from the very fact that in all the Greek dialects it was customary to use the graphic forms EI, OY instead of the secondary \bar{e} , \bar{o} in the connection with the spreading of the Ionic alphabet.) As for Pamphylian, the spelling OY in lieu of the original Greek \bar{u} or \bar{o} is found as late as in the second cent. B. C. (e. g., *γουνά* Bean 17.20 or *ΔιΦους* = *Δι(F)ός* Bean 1),¹⁸ nevertheless the extremely close quality of the Pamphylian monophthong arisen from *ou* makes it probable that the monophthongization itself took place in Pamphylian pretty soon before the 2nd cent. B. C.

From the evidence presented above it follows that the monophthongization of the diphthongs *ei*, *ou* can be positively proved for the period before 350 B. C. only in those Greek dialects, in which either a new close \bar{e} , \bar{o} had developed earlier side by side with the original universal \bar{e} , \bar{o} as a result of compensatory lengthening or contraction, or in which the close \bar{e} , \bar{o} had resulted from shifting universal \bar{e} , \bar{o} into a closed position. This argument may seem to be based on a vicious circle, for it was only in the dialects with close \bar{e} , \bar{o} arisen in another way than by monophthongization that it was possible to use the spellings EI, OY to express the undoubtedly close \bar{e} , \bar{o} .¹⁹ Only in the dialects of this type, i. e. in all the Greek dialects with two kinds of \bar{e} and \bar{o} in which the closed pair had arisen by compensatory lengthening or contraction, and, moreover, in Thessalian and partly Boeotian, we can seek for indirect evidence of the monophthongization of the two diphthongs. On the other hand, this criterion cannot be applied to those dialects in which there had never existed any phonemically independent close \bar{e} , \bar{o} arisen in another way than by the supposed monophthongization of *ei* and *ou*, i. e. to Arcadian, Cyprian, Lesbian, Elean,²⁰ Laconian, and apparently also to Cretan and Cyrenaean.²¹ The latter case namely concerns all the dialects in which each secondary \bar{e} , \bar{o} resulting from compensatory lengthening or contraction merged with the old primary \bar{e} , \bar{o} in universal \bar{e} , \bar{o} , i. e. probably in some long mid \bar{e} , \bar{o} ;²² consequently the use of the graphic signs EI, OY was here practically²³ limited only to denoting the original diphthongs *ei*, *ou*. In proving the monophthongization of the two diphthongs in these dialects only the direct criterion (i. e. the existence of spellings E, O or I, Y, denoting the original diphthongs *ei*, *ou*) can be of some importance. – But in the dialects of this type, such evidence is really found only in the two mentioned isolated cases of the Laconian *Φεδίλας* (end of the fifth century) and Lesbian *Φεδίω* (the fifth century), in fact merely two proper names derived from one and the same stem. It goes without saying that these two expressions will not suffice to prove conclusively that monophthongization of the diphthong *ei* occurred in Laconia and Lesbos in the period from which each of the two proper names originate, all the more that there are some contrary arguments showing either directly or at least indirectly that the diphthongs *ei*, *ou* did not become monophthongized so soon at least in some of the seven dialects of the latter type mentioned above.

The diphthongal pronunciation of the diphthong *ei* may be in all probability directly proved as late as the first half of the fourth century B. C. in the Cyprian dialect (c. f. *we-te-i* = *Ῥέτει* Schw. 680₁ /Edalion, ca. 388^v).²⁴ It is true there are objections that already at that time the written *-e-i*, *-o-u* could be only an expression of historical orthography;²⁵ this supposition, however, lacks a concrete basis. This evidence from Cyprian, on the other hand, is of no help in establishing the conditions in Arcadian, because both dialects had an independent existence for at least eight centuries by that time.

The second argument, this time an indirect one, is offered by Central Cretan.²⁶ In this dialect namely, some evidence can be found to prove variations between the spellings EY and OY ranging from the earliest times to the latest.²⁷ Both the early realization of this change and the variations lasting for many centuries (cf. esp. *Ἐλουσ[ω]ίω* and *[βω]λούσ[ωνται]* GDI 5075_{3,45} /Latos-Olus, I p.priori/ beside *βωλεύσονται* et al. in the same inscription /l. c.₂₀/) are phonetically possible only on the supposition that *ou* had not yet been monophthongized at those times (at most it could have been a glide with a not too energetically articulated first component).²⁸

Finally, the third argument, again an indirect one, concerns Lesbian and partly also Elean, Cyrenaean and perhaps Thera too. In these dialects, at some time in the early half of the first millenium, there developed the real diphthongs *ai*, *ei*, *oi* by second compensatory lengthening.²⁹ (E. g. the Lesbian preposition *εἰς* was pronounced as *eis* at that time, and not as *ēs*, as it was the case with the Attic *εἰς*.) This argument, it is true, does not prove anything directly for the first half of the fourth century B. C., because the diphthong *ei* could have changed by that time. In connection with the fact, however, that the described vocalic change can be proved almost exclusively in those dialects, in which no independent long *ē* or *ō* phoneme of close quality had developed either by lengthening or by contraction or by shifting universal *ē*, *ō* to a close position, it is very probable that in the dialects of this type there had existed some closer connection between their simpler long-vowel system and the lack of evidence for the *ei*, *ou* monophthongization. One of the possible explanations might be the fact that in these dialects there were no such conditions for monophthongization as existed in those dialects in which we succeeded in positively proving it: in the latter ones, the functional loads of the four long *ē* and *ō* phonemes were not such as not to be capable of receiving a further *ē*, *ō* resulting from *ei*, *ou* by monophthongization,²⁹ and besides the very existence of the special close *ē*, *ō* in most of these dialects had provided a phonemically very suitable place for the prospective results of both the above mentioned monophthongizations, all the more as the diphthongs *ei*, *ou*, by the very nature of their structure, displayed a marked tendency to approach rather the close *ē*, *ō* than the open *ē*, *ō*.

It follows from what has been said above that the monophthongization of the

diphthongs *ei*, *ou* before 350 B. C. cannot be accepted as a proved fact for all the Greek dialects. On the other hand, however, the opposite cannot be proved either, i. e. that in the seven dialects mentioned above these diphthongs would have certainly remained non-monophthongized up to that date. Under the given circumstances, at any rate, we should not commit a great inaccuracy if — in analysing the long-vowel system in Arcadian, Cyprian, Lesbian, Elean, Laconian, Cyrenaean and Cretan — we took for granted the existence of the diphthongal phonemes *ei* and *ou* as late as in the middle of the 4th cent. B. C., not subscribing to the probability of their completed monophthongization.

It may be generally said that the older phonologic differences between the Greek dialects (as set forth by the present author in *Charisteria Francisco Novotný*)³⁰ concerning the long vowels with \bar{e} and \bar{o} quality were not greatly affected by the monophthongization of the diphthongs *ei*, *ou*. The Greek dialects essentially remained divided into dialects with a long-vowel three-stage system basis and into dialects with a four-stage basis,³¹ and that in substance in the same form into which this old division had been transformed after the accomplished equivocalic contraction, and in several dialects also after the third compensatory lengthening (type *ksenwos* > > *ksēnos*); as for the establishment of the third compensatory lengthening see the table on p. 144.

All this, however, holds good only on the afore said assumption that, with the exception of Boeotian and Thessalian, those dialects, the basis of which remained three-staged even after the accomplished equivocalic contraction, probably resisted the monophthongization of the diphthongs *ei*, *ou* before 350 B. C. If, however, monophthongization did take place in some of these dialects as early as about 350 B. C., it meant, of course, the transformation of their system basis into a four-stage one, and, consequently, to a certain extent, their levelling of their system with the majority of the other dialects. The situation in Boeotian and Thessalian, as we have already alluded to, were the more complicated because either of these dialects underwent in the course of its development specific narrowing vocalic changes indicating a considerable independence of the phonological development of either of them. Out of the two dialects, it was only Thessalian, that retained consistently its three-stage system;³² on the other hand, in Boeotian, after the monophthongization of the diphthongs *ei*, *ou* there came into existence a four-stage system basis that, in the course of time, became simplified into a three-stage one after the results of this monophthongization merged into \bar{i} , \bar{u} .³³

From our present analysis, as well as from a similar analysis contained in *Charisteria*, there follows a clear conclusion that the contrast in the number of long \bar{e} and \bar{o} phonemes was of considerable significance for classifying ancient Greek dialects. At the same time, it can be taken for granted that the number of these phonemes and the total functional loading of all long \bar{e} and \bar{o} phonemes in the re-

spective dialects were closely related factors. From the table on page 144 it can be clearly seen that in the dialects with a three-stage basis there occurred fewer vocalic changes on the whole from which secondary \bar{e} , \bar{o} could have resulted than it was the case in the dialects in which the system of long-vowels was established on a four-stage basis at least in the period of contraction and of third compensatory lengthening.

Among the dialects of the three-stage type there are found cases very frequently when the sources of the secondary \bar{e} , \bar{o} , so abundantly occurring in some other Greek dialects, were applied rather sporadically. E. g. this was the case in Lesbian, in which \bar{e} , \bar{o} developed only by the contraction of $e + e$, and $o + o$. Somewhat more loaded was the universal \bar{e} , \bar{o} in Arcadian (perhaps side by side with Cyprian) because in these two dialects it contained in itself apart from the primary \bar{e} , \bar{o} only the secondary \bar{e} , \bar{o} developed from $e + e$, $o + o$, and further the \bar{e} , \bar{o} that came into existence as a result of the first compensatory lengthening (the second lengthening did not take place here). Similar conditions are found also in Thessalian; it is true that \bar{e} , \bar{o} which resulted from the monophthongization of the diphthongs ei , ou also merged into the Thessalian universal close \bar{e} , \bar{o} , but on the other hand Thessalian never knew such an important source of origin of the secondary \bar{e} , \bar{o} , as were the various kinds of compensatory lengthenings in other dialects. Somewhat more loaded than in Thessalian was the universal \bar{e} , \bar{o} in Cretan, Boeotian,³⁴ Elean³⁵ and Laconian (it included the primary \bar{e} , \bar{o} as well as the secondary \bar{e} , \bar{o} resulting from contraction and the first and third compensatory lengthenings /in Cretan/, or from contraction and the first two lengthenings /in the remaining three dialects/).^{35a} In contrast to Cretan, Laconian and Elean, Boeotian admittedly displays even the monophthongization of ei , ou , but as the resulting monophthongs apparently passed fairly quickly into \bar{e} , \bar{o} , the load of the Boeotian \bar{e} , \bar{o} (representing the primary \bar{e} , \bar{o} , and the secondary \bar{e} , \bar{o} arisen by compensatory lengthening or contraction) is about the same as the loads of the Cretan, Laconian and Elean universal \bar{e} , \bar{o} vowels. Elean, then, was of all these three dialects comparatively least affected, as here the final syllable of the word often contains a compensatory diphthong (not a monophthong) as a product of the second lengthening (e. g. $\zeta\acute{\epsilon}\kappa\alpha \mu\upsilon\alpha\acute{\iota}\varsigma$ (= $\mu\upsilon\bar{\alpha}\acute{\iota}\varsigma$) . . . $\kappa\alpha(\tau)\theta\upsilon\tau\alpha\acute{\iota}\varsigma$ (= $-\acute{\alpha}\varsigma$) Schw. 409_{3,4} /Olympia, VII ex.?!), to say nothing of a further reduction of the load connected with the possible existence of the two kinds of Elean \bar{e} (see Note 20). Among the dialects of the three-stage type, the universal \bar{e} , \bar{o} was loaded to the greatest degree in Cyrenaean,³⁶ this being due to the occurrence of all the three compensatory lengthenings in this dialect.

The load of the Cyrenaean \bar{e} , \bar{o} was around 350 B. C. very great indeed and the respective total amounts of the functional load of \bar{e} and \bar{o} phonemes in the dialects with a four-stage basis did not greatly differ from it either.^{36v} In the four-stage group of Greek dialects these very amounts were at least originally³⁷ — apart from some exceptions — more constant³⁸ and, consequently, the differences between the re-

spective dialects manifested themselves rather in the degree of the functional load of the open \bar{e} , \bar{o} in comparison with the close \bar{e} , \bar{o} . Thus e. g. in the Northwestern dialects, in Corinthian, Megarian, and Ionic-Attic there occurred a consistent separation of the primary \bar{e}/\bar{o} and the above-said types of the secondary \bar{e}/\bar{o} , and as a result of this a high load of \bar{e} , \bar{o} came into being. (At the same time, however, in Ionic-Attic (and especially in Ionic) the frequency of occurrence of the open \bar{e} was markedly strengthened by the result of the vocalic change $\bar{a} > \bar{a} > \bar{e}$; in Ionic the close \bar{e} , \bar{o} was anyhow strong, too, because the third compensatory lengthening took place here as well.) On the other hand, in Argolis, East Aegean Doric (except Cyrene), and in Pamphylia the close \bar{e} , \bar{o} is represented around 350 B. C. much less frequently than in the other dialects of the four-stage type, as it is found only for $e + e$, $o + o$, and partly also for the results of the third compensatory lengthening.³⁹ This was caused by the late origin of the second mid-vowel series in these dialects.

By placing the question of the monophthongization of the diphthongs *ei*, *ou* among the wider problems of the primary and the secondary Greek \bar{e} , \bar{o} there was made a further step in describing the differentiation of the Greek dialects, as regards the history of the \bar{e} and \bar{o} members of the Old Greek long-vowel system. Some specific sources of the secondary \bar{e} in Greek, such as the Attic-Ionic change of $\bar{a} > \bar{a} > \bar{e}$, the opening of Elean \bar{e} towards \bar{a} , and the Boeotian \bar{e} derived form *ai* have been left out of consideration in this paper. We shall make an attempt, however, to solve these problems in another paper, namely in connection with the analysis of the entire Old Greek system of long vowels.

NOTES

¹ See *J. S. Lasso de la Vega*, *Sobre la historia de las vocales largas en griego*, *Emérita* 24 (1956), 261—293.

² Cf. *Schwyzler*, *Griech. Gramm.* I 194, and most recently *W. S. Allen*, *Some Remarks on the Structure of Greek Vowel System*, *Word* 15 (1959), 240—251, esp. 247, where the author points out that „by the time of the adoption of the Attic-Ionic alphabet, at least some of the dialects (which did not distinguish two series of long mid vowels — A. B.) may have acquired a second mid-vowel series, resulting from the monophthongization of *ei/ou* > \bar{e}/\bar{o} “. This wording shows that Allen probably does not exclude, on the other hand, also the possibility of some of the dialects having *ei/ou* as late as by the time of the adoption of the Attic-Ionic alphabet.

³ See *A. Bartoněk*, *The Problem of the Primary and the Secondary \bar{e} , \bar{o} in Ancient Greek Dialects*, *Charisteria Francisco Novotný, Praha 1962*, 79-92.

⁴ See *Bechtel*, *Griech. Dial.* II 214.

⁵ *Schw.* = *E. Schwyzler*, *Dialectorum Graecarum exempla epigraphica potiora* = *P. Cauer*—*E. Schwyzler*, *Delectus inscriptionum Graecarum propter dialectum memorabilium*,³ Lipsiae 1923.

⁶ According to *Thumb—Scherer*, *Handbuch der griech. Dial.* II³, Heidelberg 1959, p. 291.

⁷ We do not take into consideration such forms as $\delta\omega\epsilon\acute{\alpha}$ (occurring instead of $\delta\omega\epsilon\iota\acute{\alpha}$ since 5th cent. B. C.), as they do not testify to any ordinary monophthongization.

⁸ *Milet* = *Th. Wiegand*, *Milet, Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1899*, Berlin 1913...

⁹ For other evidence consult *Meisterhans*, *Gramm. der att. Inschriften*,³ besorgt von *Schwyzler*, Berlin 1900, p. 63, Note 538 (see here esp. the reservations concerning βδν; as for this problem, cf. also *Schwyzler*, *Griech. Gram.* I 577, Note 7).

¹⁰ According to *Thumb—Scherer* 291.

¹¹ GDI = *Collitz—Bechtel*, *Sammlung der griechischen Dialektinschriften*, Göttingen 1884—1915.

¹² Consequently, we shall avoid forms which may have been influenced by Koine.

¹³ For Megarian, East Aegean Doric, Thessalian, Boeotian and Pamphylian see the respective pages in *Thumb—Kieckers*, *Handbuch der griech. Dial.* I³, Heidelberg 1932, and in *Thumb—Scherer*.

¹⁴ But in Cyrenaean there occurs only EI and even that only exceptionally (see the prob'ematic Theran-Cyrenaean *παισείται* *Abh. d. preuss. Ak. d. W.* 1925, No. 5, p. 21 sqq., II₄₀ ὄρKLOV. Theræorum a viro Cyrenaico incisum, IV/ beside the really Cyrenaean *δησῆται* *Sitzungsber. d. preuss. Ak. d. W.* 1927, No. 19, p. 155 sqq., A₃₉/IV ex./; that is why in regard to *παισείται* the possible Theran authenticity cannot be excluded). — The form *χρήμενος* *Sitzungsber. . . .* 1927, No. 19, p. 155 sqq., A₂ (IV ex.) is probably Delphian (see *Thumb—Kieckers* 181, and *Buck*³ 124). Cf. also Note 21.

¹⁵ Boeotian shows no OY for the secondary *ō* arisen by compensatory lengthening or contraction, as it preserves both the primary and the secondary *ō* in long mid position (cf. τῷ Ἀπόλλωνος = Attic τοῦ Ἀπόλλωνος in *Schw.* 467₃ /Thebes, between 355 and 346/). The secondary *ē*, on the other hand, occupied in the course of time at first the position of the close *ē* (e. g. *χει(λ)ίας* l. c.₁₆) and later, since the end of 3rd cent. B. C., the position of *ī* (e. g. *Παμπύλιο* *Schw.* 506₁₁ /Lebadeia; III^a pars post./).

¹⁶ In Pamphylian no EI for the secondary *ē* is established. On the other hand, OY occurs for *o + o* in late forms, such as *Φορδισίον* (Lanckoroński, *Les villes de la Pamphylie et de la Pisidie* I, Paris 1890, No. 87₃ and 90₂ /II^a/). Cf. also the spelling Y in *ἀργύρον* GDI 1260₄, 1261₅ (Aspendos,?), etc. In all the above-mentioned specimens the influence of Koine is possible, but hard to prove.

¹⁷ Cf. *Bechtel* I 217 and *Thumb—Scherer* 23.

¹⁸ *Bean = G. E. Bean*, *Jahrb. für kleinasiatische Forschung* 2 (1952—1953), 201 sqq.

¹⁹ The signs H, Ω were, on the other hand, exclusively used do denote either the long open *ē*, *ē* or the long mid *ē*, *ō*.

²⁰ In Elean, however, the existence of the two kinds of *ē* cannot be excluded: the primary *ē* is sometimes written by the sign A (e. g. *Ἐράτρα*, and *ἔα* = Attic *εἶη* /very often/) whereas the secondary *ē* resulting from compensatory lengthening or contraction is never recorded in this way.

²¹ In regard to the sometimes assumed two kinds of *ē/ō* vowels in Cyrenaean and in Central Cretan see *Charisteria F. Novotný*. 86 sq. Cf. also our Note 14.

²² Even in Thessalian and Boeotian the sounds *ē*, *ō* resulting from compensatory lengthening (in Boeotian only) or contraction (in both the dialects) merged with the primary *ē*, *ō*. But in the course of time Thess. *ē*, *ō* was shifted to *ē*, *ō*, and Boet. *ē* to *ē*.

²³ For sporadic Cyrenaean EI see Note 14.

²⁴ The form a-ro-u-ra = *ἀρουρα* *Schw.* 679₉ (Edalion, ca. 450*) is considerably older and therefore inconclusive for the period about 350 B. C.

²⁵ Cf. *Schwyzler*, GG I 194.

²⁶ Cf. *Schwyzler*, l. c.

²⁷ Cf. *Bechtel* II 661.

²⁸ *Schwyzler*, GG I 194, also points out that the original *ou* is never represented by O in Delphi; this, of course, does not prove that Delphian *ou* remained unmonophthongized until the adoption of the Ionic alphabet.

^{28a} See the respective pages in *Thumb—Kieckers* and *Thumb—Scherer*.

²⁹ A systematic analysis of these problems may be found here on p. 139 sqq.

³⁰ According to the hypothesis explained in *Charisteria*, a decisive systemic differentiation concerning the number and the quality of the \bar{e} , \bar{o} vowels may have taken place as early as at the time of the first compensatory lengthening (type $esmi > \bar{e}mi$). At the time of their emergence the \bar{e} and \bar{o} sounds that had arisen in this way were likely of rather different qualities according to the various dialects. In some Greek dialects these vowels became phonemically identical with the primary \bar{e} , \bar{o} (which was apparently the case in Arcadian /and perhaps in Cyprian, too/, then in Laconian, Elean, Cretan, Boeotian, Pamphylian, Argolic and in East Aegean Doric), the actual quality of this universal, essentially more taxed \bar{e} , \bar{o} being not a matter of major importance for us. Or else this newly arisen secondary \bar{e} , \bar{o} assumed the place of a new independent \bar{e} or \bar{o} phoneme, whose characteristic feature was for sure a close quality (this situation existed most likely in the rest of the Greek dialects, with the exception of Thessalian and Lesbian, in which the first compensatory lengthening did not take place). This process reoccurred afterwards in the later types of the compensatory lengthening and also in the course of the equivocalic contraction $e + e$, $o + o$, even though the quality of the resulting long vowel may have been influenced in each type of the just-mentioned phonic changes by the co-existing quality of the short \bar{e} , \bar{o} in any of the dialects. This was most likely the cause giving rise to the close \bar{e} , \bar{o} , produced by contraction or partly by the third lengthening in Pamphylian, Argolic and East Aegean Doric (as for Cyrene — and also the most ancient Crete — see *Charisteria*), in opposition to the \bar{e} , \bar{o} , originating here from the 1st, or partly the 2nd compensatory lengthening (the situation in Argos with its open outcome of the third lengthening was different in this detail only). As to these dialects, one may adhere to Vega's opinion, who believed in a special, somewhat more close outcome of the \bar{e} and \bar{o} equivocalic contraction, and Argos excepting even of the latest compensatory lengthening. In the other dialects, however, one should assume that the resulting vowel of the \bar{e} or \bar{o} shade simply always found its place in the existing long-vowel system.

³¹ The terms „three-stage basis“ and „four-stage basis“ refer here to the theoretical number of stages of aperture as assumed for the period following the accomplishment of the compensatory lengthenings and of the contractions.

³² In contradiction to *Lusso de la Vega*, *Emérita* 24 (1956), 273, we have taken for granted that the Thessalian diphthongs ei , ou were monophthongized only after the Thessalian pair of the universal long mid \bar{e} , \bar{o} vowels (representing the primary, and the secondary \bar{e} , \bar{o} arisen by contraction) had passed into close \bar{e} , \bar{o} . In our opinion, therefore, no Thessalian system comprising two series of \bar{e} , \bar{o} vowels had ever existed.

³³ It has to be added, however, that before 350 B. C. a similar narrowing affecting either ei or ou occurred even in some of those dialects whose system of long vowels had been markedly four-staged as early as either in the period of first compensatory lengthening or in that of the $e + e$, $o + o$ contraction. Nevertheless, in contradistinction to Boeotian it was not only the \bar{e} , \bar{o} resulting from the monophthongization of ei , ou , that underwent complete narrowing in these dialects, but also the \bar{e} , \bar{o} that was formed by compensatory lengthening or contraction. (In Boeotian, on the other hand, the \bar{e} , \bar{o} of the latter origin was part of the universal \bar{e} , \bar{o} and had been clearly separated from the completely narrowed results of the ei , ou monophthongization still by 350 B. C. and certainly even later; see *Ruipérez*, *Word* 12 (1956), 77.) Before 350, the above-mentioned phenomenon is found among the basically four-stage dialects, as far as the change $ei/\bar{e} > \bar{e}$ is concerned, in Argolic (only in Argos; cf. $\tau\epsilon\lambda\acute{\iota}\tau\bar{o}$, $\acute{\alpha}\rho\alpha\iota\sigma\tau\bar{o}\nu$ *Schw.* 83 A₁₃, B₉ /Argos, ca. 450*), and in regard to the change $ou/\bar{o} > \bar{o}$, in Corinthian (cf. $\acute{\alpha}\chi\iota\lambda\epsilon\upsilon\acute{o}\varsigma$ = $\acute{\alpha}\chi\iota\lambda\epsilon\upsilon\acute{o}\varsigma$ *Schw.* 121, 4 /Corinthus, VII*?) and also in Attic (cf. the above-mentioned fact, that about 350 B. C. Boeotian borrowed the graphic spelling OY for its \bar{u} apparently through

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

	ION	ATT	ARC	CYP	PAM	LES	THES	BOE	N-W	EL ⁴⁰	LAC	COR	MEG	WEST ARG	EAST ARG	CEN-TRAL CRET	OTHER CRET	THER	CYR	RHOD
Primary ē, ō	+	+	+	[+]	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Secondary ē, ō 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	(+)	exceptional	+	prevalence of close ē, ō	⊥	} 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
-	not established	(-)	phenomena	+	prevalence of mid ē, ō	+	
		(⊥)	(not due to the influence of Koine)	+	prevalence of open ē, ō	+	
⊥	a comp. diphthong occurring instead of the comp. long vowel	[+]	} plausible inference	+	ē, ō passing into ī, ū before 350 B. C.	+	} in the given symbols' the first mark under the plus sign refers to ē, the second to ō
		[-]		+	ē, ō quality uncertain	+	
				?		+	

Attic) and in Ionic (e. g. *Ἐὐρωσθέωνος* = -εύς GDI 5711₆ /Samos, IV/); on the other hand, the Pamphylian forms, the examples of which were given in Note 16, as well as the isolated Delphian *πο(ι)ευσά* = *ποιέουσα* (cf. *Rüsch*, *Gramm. der delph. Inschriften* I, Berlin 1914, p. 139) or *σουδρον* in Paeon Delphicus 5/II* (see *Collectanea Alexandrina*, Oxford 1925, p. 141 sqq.) testify only to a later replacement of *ou/ō* by *ū*. — In consequence, there is no doubt that at least the four-stage long-vowel systems of Argolic, Corinthian, Attic and Ionic were somewhat affected by this phenomenon. But owing to the absence of records testifying to a complete narrowing before 350 B. C. of both the close *ē* and the close *ō* in each of these dialects, it can hardly be maintained that a complete transformation of the four-stage long-vowel system into a three-stage one had taken place in them as early as about 350 L. C.

³⁴ In Boeotian, of course, the originally universal *ē* was shifted to a close *ē* after the open *ē̄* had arisen from *ai* about 400 B. C., the earliest examples of the latter phenomenon being *τῆλεστῆος* and *Ἀρίστηχμος* IG VII 2427_{11.5} /Thebes, IV pars prior/. (The older spelling with AE, e. g., *ταῖ Δάματρι Schw. 475* /Plataiai, VI/V*, could at most be interpreted as pointing to a glide-diphthong). Anyhow, the existence of open *ē̄* in the Boeotian system of about 350 B. C. in no way affects the functional load of the Boeotian originally universal *ē*, *ō*.

³⁵ With the proviso alluded to in Note 20.

^{35a} One must admit, nevertheless, that the occurrence of the third lengthening was not as frequent as that of the second lengthening, so that the loads of Cretan *ē*, *ō* were somewhat smaller than the loads esp. of Boeotian and Laconian. This holds good, however, only for Central Cretan, as in the remaining regions of Crete also the second lengthening took place, even if only medially.

³⁶ With the proviso alluded to in Notes 14 and 21.

^{36a} No doubt, if we had taken for proved monophthongization of *ei*, *ou* in all the „three-stage“ dialects as early as before 350 B. C., the Laconian *ē*, *ō* vowels would be as much loaded as e. g. those of the „four-stage“ Megarian, the respective total amounts of the functional loads of Cyrenaean *ē* or *ō* being at the same time still greater.

³⁷ In Argolic, Corinthian, Attic and Ionic all the following arguments hold good only in regard to the period preceding their one-sided change of *ei/ē̄* > *ī* and *ou/ō̄* > *ū* (see Note 33). Simultaneously with this liquidation of either *ē̄* or *ō̄* it was the functional load of either the phoneme *ī* or *ū* that after this period considerably increased in the dialects concerned. (In Attic-Ionic, however, the resulting *ū* was loaded so heavily as to bring about the shift of the original *ū* to *ȳ* (and at the same time even that of *ū* to *ȳ*).

³⁸ There were even here admittedly some divergencies caused i) by the presence of the third compensatory lengthening (in Ionic, East Aegean Doric and in West Argolic /Argos and its neighbourhood/); ii) by the absence of the second lengthening either in all positions of the word (Argolic), or at least finally (East Aegean Doric); iii) by the Attic-Ionic change *ā* > *ā̄* > *ē̄*.

³⁹ Among the just-mentioned dialects this fully applies only to non-Cyrenaean East Aegean Doric, West Argolic having open *ē̄*, *ō̄* as the results of the third lengthening, and East Argolic as well as Pamphylian being without the third lengthening.

⁴⁰ We do not take here into consideration the possible existence of the two kinds of Elean *ē̄* referred to in Note 20.

Translated by B. Pavlik

POZNÁMKY K CHRONOLOGII MONOFTONGIZACE DVOJHLÁSEK *ei*, *ou* V STARÉ ŘEČTINĚ

Článek navazuje na stať *The Problem of the Primary and Secondary ē, ō in Ancient Greek Dialects*, uveřejněnou ve sborníku *Charisteria Francisco Novotný, Praha 1962*, v níž se za nejdůležitější diferenční samohláskovou izoglosu v historii řeckých dialektů pokládá přeměna předpokládaného prařeckého trojstupňového systému dlouhých samohlásek v systém čtyřstupňový — jak k této přeměně došlo někdy kolem r. 1000 př. n. l. v severozápadních dialektech, v korintsko-megarské a v ionsko-attické oblasti v souvislosti s novým, sekundárním *ē, ō*, vzniklým tzv. prvním náhradním dloužením (typ *esmi* > *ēmī*), dále jak se později v téže oblasti ona inovace utvrdila po realizaci druhého náhradního dloužení (typ *ens* > *ēs*) a jak se nakonec rozšířila v souvislosti s třetím náhradním dloužením (typ *ksenwos* > *ksēnos*), a hlavně se stejnovokalickým stahováním *e + e, o + o* při nejmenším ještě do Argolidy, Pamfylie a do východní dórské Egeidy.

V tomto článku se pak můžeme přesvědčit, že onen starý systémový rozdíl mezi řeckými dialekty nebyl patrně před r. 350 př. n. l. v zásadě narušen ani tendencí k monoftongizaci dvojhhlásek *ei*, *ou*. Kdežto totiž doposud se obvykle pokládala tato monoftongizace apriorně za jev, který proběhl ve všech řeckých dialektech již před převzetím jednotné ionské abecedy, plyne naopak z rozboru materiálu, který autor v tomto článku sebral, že zcela pozitivně lze prokázat pro dobu před r. 350 př. n. l. monoftongizaci dvojhhlásek *ei*, *ou* pouze v těch dialektech, v nichž se zcela bezpečně již dříve buď vyvinulo vedle původního universálního *ē, ō* nové, zavřené *ē, ō* jako výsledek náhradního dloužení nebo stejnovokalického stahování (v ionsko-attických dialektech, pamfylštině, severozápadních dialektech, korintštině, megarštině, argolštině a v dialektech z východní dórské Egeidy /až snad na kyrénštinu/ anebo v nichž vzniklo zavřené *ē, ō* jakkoli motivovaným posunutím universálního *ē, ō* do zavřené polohy (v thesalštině a bojoťštině; v bojoťštině se ovšem zužovalo jen *ē*, kdežto *ō* zůstávalo stále ve své střední poloze). Naproti tomu v dialektech, v nichž nelze před r. 350 bezpečně prokázat fonematically samostatné zavřené *ē, ō* vzniklé některým z těchto způsobů, nelze před tímto datem zcela najisto počítat ani s monoftongizací dvojhhlásek *ei*, *ou* jako s nějakým dokázaným faktem (to platí pro arkadštinu, kyperštinu, lesbičtinu, elejštinu, lakonštinu, a patrně i pro krétštinu a kyrénštinu).

Jak je vidno, měly tedy ony staré rozdíly v počtu dlouhovokalických fonémů značně veliký klasifikační význam ještě i kolem r. 350 př. n. l. Přitom lze zároveň pokládat za velmi pravděpodobné i to, že počet dlouhých e-ových a o-ových fonémů na jedné straně a celkové funkční zatížení všech těchto fonémů dohromady na straně druhé byly v tom či onom nářečí veličiny, které byly vždy navzájem v těsné souvislosti. Z připojené tabulky je totiž dobře patrné, že se v nářečích s trojstupňovým dlouhovokalickým základem (tj. v dialektech, v nichž nikdy nevnikalo náhradním dloužením ani stejnovokalickým stahováním druhé fonematically samostatné *ē, ō*) uplatnilo vcelku menší množství hláskových změn vedoucích k vzniku sekundárního *ē, ō*, než tomu bylo v dialektech, v nichž byl systém dlouhých vokálů založen po provedení různých druhů náhradního dloužení a po provedeném stejnovokalickém stahování na základě čtyřstupňovém.