The Boeotian and Thessalian Narrowings of Long Vowels: A Comparative Study

In Thumb’s *Handbuch der griechischen Dialekte*, Heidelberg 1909, page 209, as well as in Scherer’s revised 2nd part of this work from 1959, page 5, we meet with a statement implying the indication that both Thessalian and Boeotian displayed a certain typical common and mutually related tendency to narrow the long e, no matter of what origin it was. From Boeotian the author quotes examples, such as ἀγί-μΟνδας IG VII 2456 = Schw. 465 (Thebes, ca. 500 B.C.), or subsequent to the introduction of the Ionic alphabet such forms as δεῖ = δῆ, μεῖ = μῆ, ὅειβῃς ᾃς = ὅηβαις, which are in Boeotian texts from the end of the 4th cent. B.C. a nearly regular phenomenon; in Thessalian we find quite analogical forms, e.g., δεῖ = δῆ, μεῖ = μῆ, ὀνέθευε = ὀνέθηκε etc.

We believe, however, that the above-mentioned Thumb’s formulation distorts somewhat the actual situation, and that conclusions drawn from it might result in wrong views of Thessalian and Boeotian as two Greek dialects that were mutually linked up with the same specific narrowing. The object of our study will be to show that the Thessalian narrowing of the long e and the Boeotian one originated each from different causes, and that the two cannot be classified as one and the same isogloss. We shall try to demonstrate this by performing an analysis of the Thessalian and Boetian long-vowel systems, following their development from the assumed proto-Greek condition down to those times when in the single Greek dialects one can already discern traces of the interdialectic penetration of Koine.

As to the long-vowel system in the proto-Greek period—we may take for granted that it contained five pure (monophthongal) long vowels (a, e, i, o, u) and six diphthongs (ai, ei, oi, au, eu, ou). This means that we should, in fact, believe both in Boeotian and Thessalian the starting form of the system to be a condition that may be demonstrated with a triangle with three grades of opening, accompanied with three i-diphthongs and three u-diphthongs. The design would be the following:

\[
\begin{array}{cccccc}
\hat{i} & \hat{u} \\
\text{ei} & \text{oi} & \hat{e} & \hat{o} & \text{eu} & \text{ou} \\
\text{ai} & \hat{a} & \text{au} \\
\end{array}
\]

We should like, however, to point out that owing to the presupposed polyphonematic character of the diphthongs au, eu in the classical era (at this stage they most likely represented a biphonematic combination a+w, e+w) it will be better to ignore these two diphthongs from the very beginning of our discourse and proceed in our analysis with the hypothetical assumption that already the proto-
Greek long-vowel system distinguished only nine independent phonemes (five pure long vowels and only four monophonematic diphthongal phonemes, namely ai, ei, oi, ou).

I. The development of the Boeotian system of long vowels

The development of the Boeotian long-vowel system (the diphthongs excepting) from proto-Greek to the disappearance of Boeotian as an independent dialect was dealt with very thoroughly by M. S. Ruipérez in his article *Esquisse d'une histoire du vocalisme grec*, *Word* 12 (1956), 67—81 (note specially pp. 77—81) and for this reason we shall be content with a critical reproduction of the main phases of the development sketched by Ruipérez. In contrast to Ruipérez we shall, however, omit the short-vowel schemes, partly because our study does not deal with the short-vowel problem at all, and partly because according to Ruipérez the short-vowel system remained in Boeotian essentially invariable (it was a triangular three-grade system, corresponding upon the whole with the purely monophthongal part of the proto-Greek long-vowel system). On the other hand, we shall amplify Ruipérez's method by adding to each of his systemic diagrams — in parentheses — also the monophonematic diphthongs to make the picture of the long-vowel system complete. Moreover, when considering it necessary to supplement Ruipérez's views with our own critical comments, we shall do so either in the text of our study in brackets, or in the annexed Notes.

The single phases of the development of the Boeotian long-vowel system are presented by Ruipérez roughly as follows:

1. Boeotian is said to have preserved for a very long time its assumed proto-Greek vocalism; Boeotian spelling does not show any traces whatsoever of differences between the primary long e-vowels and o-vowels, on the one hand, and on the other hand, between those that originated in the course of the 1st millennium B.C. through the different types of the compensatory lengthening or through the contraction of e+e, o+o, i.e. from the two innovation changes that resulted in the archaic period in many other Greek dialects in a significant systemic transformation, leading to two long e-phonemes and two o-phonemes.

2. The first unstable factor originated in the Boeotian long-vowel system according to Ruipérez between 500 and 450 B.C., assuming the form of monophthongization of ei into i; see as early an example as Μείξεων Λεοντο SEG II 185 (Akraifia, VI in.) — cf. Μείξεων Λεοντος (name of the hero) —, or later Ῥίον ουμένες IG VII 1888b = Schw. 478 B9 (Thespiai, post 424) and the like; it is specially the last document that points out to the fact that the vowel reproduced by the sign — had no more the value of mid long e, nevertheless, it was not yet quite identical with pure ι. About 450 B.C. the Boetian long-vowel system presented thus probably according to Ruipérez the following picture (including the monophonematic diphthongs, supplemented by us):

\[
\begin{array}{cccc}
\tilde{i} & \tilde{\varepsilon} & \tilde{\delta} & \tilde{ou} \\
(oi) & \varepsilon^* & \ddot{\delta} & (ou) \\
(ai) & \ddot{\alpha} &
\end{array}
\]

[To be sure, we do not know for certain whether we were quite right in introducing the diphthong ou into this scheme. It is true, of course, that actual traces of the spelling OY occurring for the original — and at the same time also the first safe proofs of the monophthongal pronunciation of the diphthong ou — cannot be demonstrated in Boeotian before the middle of the 4th cent. B.C. (cf. \(\Pi\)ουνθω =]
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Πυθίων IG VII 2418 = Schw. 467 (Thebes, 355–346; χυσινω = χυσιν l. c. 9 — beside χυσιν l. c. 12 and δυνω (ω l. c. 19), but taking into consideration that from the phonetic point of view the development of ou into ũ was sure to pass through close Ϸ, we may count with the possibility that the beginnings of this monophthongization are of a substantially older date than the middle of the 4th cent. B.C. It is, therefore, not altogether excluded that the Boeotian long-vowel system had about 450 B.C. a four-grade character also in the back row; thus its diagram would look as follows:

\[
\begin{array}{c}
(i) \\
(j) \\
(k) \\
(l)
\end{array}
\]

Ruipérez himself does not expressly deal with the chronology of the change ou > Ϸ > ũ, but he does not seem to place it before 450 B.C. This can be concluded from the fact that he says on page 78 of the above-mentioned work about his close Ϸ (traced back to ei) that it had no corresponding partner in the back row of the long-vowel system (cf. below sub 3). This passage leaves only two possibilities as to Ruipérez’s view of the chronological aspect of the change ou > Ϸ > ũ: either ou got completely transformed into ũ prior to the first phase of the liquidation of the diphthong ei, this, however, being very improbable, or the whole change ou > Ϸ > ũ ran its course subsequent to 450 B.C., which appears to be most likely. 11

3. Thus the new ϵ was not, according to Ruipérez, integrated in the long-vowel system, as it is supposed not to have had a partner either in the back row of the long-vowel system or in the short-vowel system; for this reason it soon fused with i (cf. as early an example as Πίθαγος VII 585 I 13 = Schw. 451 A 13 (Tanagra, post 426) and a few other samples of the same kind in the same inscription). 12 In this way there is supposed by Ruipérez to have originated in Boeotian in the beginning of the 4th cent. B.C. a new long-vowel system, corresponding, as to the pure monophthongical vowels at least, to the proto-Greek system. Together with the monophonematic diphthongs supplemented by us the system can be expressed with the following diagram:

\[
\begin{array}{c}
(i) \\
(j) \\
(k) \\
(l)
\end{array}
\]

[This scheme is again, of course, valid only if we take for granted that ou had not even then commenced its process of monophthongization. If, however, the opposite was true, which is not altogether impossible, the long-vowel system may have presented in the beginning of the 4th cent. either of two different faces. Either was ou already completely transformed into ũ, and in this case we should have to resort to the following diagram:

\[
\begin{array}{c}
(i) \\
(j) \\
(k) \\
(l)
\end{array}
\]

Or else the beginnings of the monophthongization of ou must be placed towards the very close of the 5th cent. B.C., with the assumption that this diphthong acquired in the beginning of the 4th cent. just its transition character of close Ϸ, which would mean that the system disposed at that time for the time being of two ϵ-vowels in contrast to one ϵ-vowel:
Such a system, however, was sure to have but little stability, and there is no doubt that it would have been undergoing a rapid transformation into a system with one  and one , identical with the former scheme, which was the most probable scheme in reference to the period towards the beginning of the 4th cent. B. C.

4. The long-vowel system discussed sub 3 was according to Ruipérez pretty soon upset once more by monophthongization of the diphthong , which was changing into through the medium of . It is true that the oldest demonstration of the spelling used instead of comes likely as early as from the 6th cent. B. C. ("A/mevokleia IG VII 590 = Schw. 452,2/Tanagra, litt. vetust., i. e. probably a 6th cent. document/), but the actual termination of the monophthongization change of as > ae > , as such, cannot be verified before the introduction of the Ionic alphabet into Boeotian, which took place within the second quarter of the 4th cent. B. C. (cf. e. g. 'Agisthymos = 'Agistaiymos[5] IG VII 2427,12/Thebes, 400—350/).

This newly arisen open is supposed to have pushed at that time the original mid long into the position of a close vowel, yet in the back row retained, of course, still its medial position. About 350 B. C. the Boeotian long-vowel system—together with the monophonematic diphthongs, supplemented by — represented the following picture:

\[
\begin{array}{c}
\tilde{i} & \tilde{u} \\
\tilde{e} & \tilde{a} \\
\end{array}
\]

\[ (oi) \quad \tilde{e} \quad \tilde{a}\]

[In this systemic scheme we have no more included the diphthong , the same having by that time certainly been transformed into (cf. the already quoted material of the type).

5. The last monophonematic diphthong to undergo monophthongization was , and it is obvious that it got transformed into through the medium of . The oldest demonstration of OE being used instead of comes, to be sure, from the 5th cent. B. C. already (cf. e. g. MoE(0)yxo(0) IG VII 585 Ia = Schw. 451 Aa/Tanagra, post 426), but also in this case the full accomplishment of this monophthongization process can be verified considerably later, not before the 2nd half of the 3rd cent. B. C. (cf. e. g. Θειβεών = Θεισαιοι BCH 23, 587/fanum Cabiri prope Thebas, ca. 250/ or Βοιωτό = Βοιωτολ, Πτωτίν = Πτωτη ΊG VII 2724c,2d, /Akraifia, III pars post./). Approximately about the same time the close (i. e. the original Indo-European along with the secondary arisen through contraction or compensatory lengthening) fused, according to Ruipérez, with , i. e. that originated from the diphthong (cf. the above-quoted Θειβεών BCH 23, 587 /prope Thebas, ca. 250/). In the 2nd cent. B. C. the picture of the long-vowel system in Boeotian appears to be, according to Ruipérez, as follows:
II. The development of the Thessalian long-vowel system

As far as the historical development of the Thessalian long-vowel system is concerned, we may assume in it only two systemic changes. One of them — we do not mean here to assert that it was chronologically the first of them — was the narrowing of any ē, ơ — i.e. both of the primary ē, ơ, and of the secondary ē, ơ, which originated through contraction from ē+ē, o+o — into the close ě, ō. This change took place at least in the latter instance doubtlessly before the beginning of the 4th cent. B. C.; we find a proof thereof in Kratyl by Plato, where we read in p. 405c as follows: Ἀπλων γάρ φαινει πάντες Θεταλοῖ τοῦτον τῶν θεῶν ["Ἀπλων stands here instead of Ἀπόλλων(ν)"; cf. also the frequent inscripional "Ἀπλωνος," "Ἀπλων." Otherwise, however, this change cannot be demonstrated until the Ionic alphabet had been introduced into Thessalian (i.e. towards the end of the first half of the 4th cent. B. C.); it was namely not until then that Thessalian inscriptions could use under the Attic-Ionic influence the spelling EI in the monophthongical function of the close ě, and ΟΥ in the function of ō /cf. e.g. the already quoted ὁνέθεως = ὁνέθηκε, or the frequent ἔδονκε = ἔδωκε in inscriptions written in Ionic alphabet/. The real absolute age of this change is, of course, hard to determine; in any case, we do not consider the change to be so late as to feel justified to take an odd Thessalian occurrence of the spelling H, Ω as a substitute of the primary ē, ơ (and of the ē, ơ originated from ē+ē, o+o) in the transition period subsequent to the introduction of the
Ionic alphabet (especially in Pharsalos)\textsuperscript{22} for a dying away manifestation of some previous phonological condition.

The second systemic change that the Thessalian long-vowel system passed through in the course of its historical development was the monophthongization of the diphthongs \textit{ei}, \textit{ou} into the close \textit{ι}, \textit{ο}, that is to say, a phenomenon known to us also from Boeotian and various other Greek dialects.\textsuperscript{23} The character of the change itself suggests that arguments in favour of its existence are to be looked for again in expressions of the type \textit{ἀνέθεικε} = \textit{ἀνέθηκε}, \textit{ἐδουκε} = \textit{ἐδωκε}, as we meet with them in Thessalian inscriptions written in the Ionic alphabet. Even if the introduction of the spelling \textit{EI} for close \textit{ι} and \textit{OY} for close \textit{ο} must in its beginnings be ascribed to the Ionic or Attic-Ionic example, it would namely have been impossible to employ in Thessalian this spelling both for the original \textit{ε}, \textit{ὀ} (or for \textit{ε}, \textit{ὀ} originated from \textit{ε+ε}, \textit{ο+ο}), and for the original \textit{ei}, \textit{ou} at the same time, had the monophthongization change \textit{ei} > \textit{ι}, \textit{ou} > \textit{ο} not run its course in Thessalian before.

Thus if we now compare the two discussed Thessalian systemic changes as to their chronology, we must admit that owing to the insufficient capacity of the Thessalian epichoric alphabet to differentiate any different qualities of \textit{ε} and \textit{ο} and also to the fact that the first traces of both these changes are distinguishable approximately at the same time, i.e. mainly subsequent to the introduction of the Ionic alphabet, it is really hard to decide which of the two changes was earlier. When namely considering Plato’s \textit{Ἀναλοῦν} we recognize in it, to be sure, a significant proof of a comparatively old age of the first of these two changes\textsuperscript{24} — all the more so, since in the light of this fact the mentioned odd occurrences (specially Pharsalian ones) of the spelling \textit{H}, \textit{Ω} for the primary \textit{ι}, \textit{ο} (and for the \textit{ε}, \textit{ο} originated from \textit{ε+ε}, \textit{ο+ο}) lose nearly altogether their documentary force — yet the possibility of an equally old or of even older existence of the other is by no means excluded.

Thus, in order to carry out our evolutionary analysis of the Thessalian long-vowel system, which we contemplate, unbiased, we shall try to sketch the development of each of the two chronological possibilities extra, i.e. on one hand the possibility of the narrowing of \textit{ε} > \textit{ι}, \textit{ο} > \textit{ο} being prior to the monophthongization \textit{ei} > \textit{ι}, \textit{ou} > \textit{ο},\textsuperscript{25} and on the other hand the assumption that the above-mentioned monophthongization preceded the process of narrowing. (A third possibility, i.e. the two changes running their course quite simultaneously, has to be put aside owing to the gross improbability of such precise chronological coincidence).

\textbf{a) The first hypothesis: the narrowing \textit{ε} > \textit{ι}, \textit{ο} > \textit{ο} is older.}

1. By the narrowing of the up till then existing \textit{ε}, \textit{ο} the number of the assumed members of the proto-Greek long-vowel system did not change in any way, and also the articulation scheme preserved its triangular form; only the vowels of the mid degree of opening (\textit{ε}, \textit{ο}) shifted in the direction of \textit{i}, \textit{u}, producing thus the following design:

\begin{center}
\begin{tabular}{ccc}

\textit{(ei)} & \textit{i} & \textit{ο} \\
\textit{(ai)} & \textit{ι} & \textit{ου}
\end{tabular}
\end{center}

To be sure, it is impossible so far to say what caused this narrowing process, nevertheless, it may have even been impulses not directly springing from the system itself; the latter had namely been fairly well balanced before and needed no integration. In contrast to it, it was just this newly arisen system whose balance was upset, for its characteristic feature was unequal articulation distance between \textit{ι} and \textit{i} or \textit{ο} and \textit{u}.\textsuperscript{26}
when compared to that between \( \ddot{e} \) and \( \ddot{a} \) or \( \ddot{o} \) and \( \ddot{a} \). (It would, no doubt, be quite interesting to try to find whether the Thessalian \( \ddot{a} \) may not have had a somewhat more close pronunciation, but any such investigation is so far beyond our reach; in such a case the narrowing would have been called forth by the pressure of the system after all, but again it remains to be explained why the pronunciation of the long \( \ddot{a} \) was closer.)

2. Through the second systemic change, i.e., the monophthongization of the diphthongs \( ei, ou \), new close \( \ddot{e}, \ddot{o} \) originated which very likely got identified from the very beginning of their existence phonematically fully with the close \( \ddot{e}, \ddot{o} \), which were discussed sub 1. This change resulted, to be sure, in the reduction of the total number of the long-vowel phonemes from 9 to 7 (there remained now no more than two monophonematic diphthongs — \( ai \) and \( oi \)), yet it did not upset in any special way the intrasystemic relations between the five monophthongal phonemes, as far as their systemic positions are concerned (it was only the functional taxation of the phonemes \( \ddot{e}, \ddot{o} \), specially when compared to \( \ddot{i}, \ddot{u} \), that was considerably increased). The Thessalian long-vowel system now therefore assumed the following appearance:

\[
\begin{array}{cccc}
\dddot{i} & \dddot{e} & \dddot{o} & \dddot{u} \\
\dddot{ai} & \dddot{oi}
\end{array}
\]

The remarkable thing about it is chiefly the fact that the close Thessalian \( \dddot{e}, \dddot{o} \) arisen from \( ei, ou \) did not proceed changing into \( \ddot{i}, \ddot{u} \), a tendency which was rather pronounced (even in pretty early stages) in some other Greek dialects. The explanation is, however, at hand: If this change had actually occurred in Thessalian, the outcome of it must have been (provided, of course, that the changes \( \ddot{e} > \dddot{e} \) and \( \ddot{o} > \dddot{o} \) were really older than the monophthongization \( ei > \dddot{e}, ou > \dddot{o} \)) the transformation into \( \dddot{i}, \dddot{u} \), along with the close \( \dddot{e}, \dddot{o} \) resulting from monophthongization, also of the \( \dddot{e}, \dddot{o} \) which — being quite identical with the former — arose through the narrowing of the original mid long \( \ddot{e}, \ddot{o} \). If it had been so, it would have left in Thessalian only three long vowels, \( \ddot{a}, \ddot{i}, \ddot{u} \), and such reduction of the long-vowel system without any Thessalian tendency to produce another \( \ddot{e}, \ddot{o} \) would have been felt to be a too radical process.

The just discussed peculiarity of Thessalian supplies us also with an indirect argument in favour of the chronological hypothesis which we are just expanding, viz. that the narrowing process \( \ddot{e} > \dddot{e}, \ddot{o} > \dddot{o} \) (concerning both the primary \( \ddot{e}, \ddot{o} \) and those arisen from \( e+e, o+o \)) was prior to the Thessalian change \( ei > \dddot{e}, ou > \dddot{o} \). If \( ei \) and \( ou \) had namely been monophthongized before this process of narrowing, it appears to be very probable that \( \dddot{e} \) and \( \dddot{o} \) as the resulting products of this monophthongization would hardly ever have fused with the new \( \dddot{e}, \dddot{o} \), arising from the primary \( \ddot{e}, \ddot{o} \) (as well as from the \( \ddot{e}, \ddot{o} \) which originated from \( e+e, o+o \)), but it would have more likely been shifted — just under the pressure of this new \( \dddot{e}, \dddot{o} \) — towards \( \dddot{i}, \dddot{u} \); it is all the more probable, since the functional taxation of the phonemes \( \dddot{i}, \dddot{u} \), comprising both the original \( \ddot{i}, \ddot{u} \), and the \( \dddot{i}, \dddot{u} \) that would arise from \( ei, ou \), would have been upon the whole well balanced in relation to the functional taxation of the neighbouring \( \ddot{e}, \ddot{o} \), comprising in this case only the primary \( \ddot{e}, \ddot{o} \) and the \( \ddot{e}, \ddot{o} \) originating from \( e+e, o+o \). In reality, however, the Thessalian phonemes \( \dddot{i}, \dddot{u} \) suffered from very small functional taxation, their historical phonic provenience remaining restricted merely to the original \( \ddot{i}, \ddot{u} \), whereas the Thessalian \( \dddot{e}, \dddot{o} \) was, on the other hand, rather strongly taxed from the functional point of view, comprising not only the primary \( \ddot{e}, \ddot{o} \) and the \( \ddot{e}, \ddot{o} \) arisen from
e+e, o+o, but also the monophthongal substitute for the former ei, ou. This demonstrated Thessalian condition with its functional balance considerably upset points most probably to the assumption that the monophthongs arisen through the liquidation of the diphthongs ei, ou, being surely in their quality very akin to — if not identical with — the close ê, ô, could not at the time of its birth but fuse with the already existing and finished ê, ô, which comprised both the historical primary ê, ô as well as the ê, ô that originated from e+e, o+o.

b) The second hypothetical possibility: the monophthongization of the diphthongs ei, ou is older.

1. In this case there would have likely arisen in the first evolutionary phase a four-grade system with close ê, ô as substitutes for ei, ou,28 while the primary ê, ô (and along with it also the ê, ô that arose from e+e, o+o) would probably have been moved towards the open ê, ô:

\[
\begin{align*}
\text{(ai)} & \quad \varepsilon \quad \ddot{o} \\
\text{(oi)} & \quad \ddot{e} \quad \ddot{a}
\end{align*}
\]

This view is endorsed to a certain extent in an interesting study by J. S. Lasso de la Vega: Sobre la historia de las vocales largas en griego, Emérita 24 (1956), 273. It was namely just L. de la Vega, who wanted to prove that in each of the Greek dialects there existed sometimes in its history the four-grade long-vowel system, and thus he holds the above-alluded to Pharsalian expressions ἀνέθηκε GDI 329A (Pharsalos, IV?), GDI 329B (Pharsalos, IV?), Λεωνίδας GDI 329B (Pharsalos, IV?), supposed to conceal in their spelling Η, Ω the open ê, ô, to be dying out manifestations of this condition.

In our opinion, however, as we have already said, these documents are not convincing enough. Thus, first of all, the proper name Λεωνίδας may indicate a person of non-Thessalian origin. No less problematic is the attempt to quote in this connection the expression ἀνέθηκε, all the more so, since it was used there in two dedicatory inscriptions, containing only three or four words (in one of these inscriptions we find also the above-mentioned proper name Λεωνίδας): the expression ἀνέθηκε „(he) dedicated“ bears here the stamp of a dedicatory technical term,28a and its spelling could have been, specially in the transition period of introduction of the Ionic alphabet, simply adopted from other dialects, since most of them knew at that time the graphic form ἀνέθηκε only.

The only L. de la Vega’s document that could be ascribed to greater weight is the expression ἄφικτων, for here we meet with the sign Ω used for the primary ô in the very inscription, in which otherwise we encounter three times the sign O representing long ô (in Σοσ[άν]φοσ Ἀράνδρος l. c.,23) — twice a secondary ô arisen from the contracted o+o, and once that arisen through the contraction of a+o, the resultant phonic quality of the latter process being as a rule23 the same as that of the primary ô. Of course, just this employment of the sign O even in Σοσ—(traced back to the original ἅσσω+(ι)σ-) alongside with Ω in ἄφικτων, seems to indicate that the double spelling is more likely an expression of the engraver’s perplexity, springing from the unsettled condition at the time of the introduction of the Ionic alphabet, than an indication of a phonetic change, just proceeding.

If we stress on the top of it that probably neither in the forms Ἀφθονέτω, Μάνιχεω IG IX 2, 405 = Schw. 573,1 (Skotussa, IV in.) does the sign Ω, corresponding here
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with the older \( o + o \), prove for certain the open pronunciation of the vowel \( \ddot{o} \), we have to consider L. de la Vega’s belief in the existence of a former Thessalian four-grade system as a hypothetical possibility, yet by no means provable from the preserved documents.

2. In the second phase the presupposed open \( \ddot{e}, \ddot{o} \) would have to fuse with the close \( \dddot{e}, \dddot{o} \), giving thus rise to the typical Thessalian three-grade system with the close vowels prevailing, as we know it from the end of the classical period:

\[
\begin{array}{cccc}
(oi) & (ai) \\
\ddot{e} & \dddot{e} & \ddot{o} & \dddot{o} & \ddot{u} \\
\dddot{a} & \\
\end{array}
\]

When considering the two phases together, however, we should find this development rather surprising. Even if we do not take into account that complicated development, assuming first the probable opening of the original mid long \( \ddot{e}, \ddot{o} \) into \( \ddot{e}, \ddot{o} \) (this was namely only a kind of systemic speculation on our part, even if it appeared upon the whole justified) and then again its quite reverse development to the position of \( \dddot{e}, \dddot{o} \), it will be — as we have already mentioned — highly improbable to presuppose within the frame of the second chronological possibility the origin of that comparatively great functional overtaxation of the phonemes \( \ddot{e}, \ddot{o} \), when, on the other hand, the neighbouring phonemes \( \dddot{e}, \dddot{o} \) were exposed to a very small functional taxation.

If we are therefore — in connection with all that was said here about the development of the Thessalian long-vowel system — to decide definitely in favour of either the first hypothetical possibility or of the second, purely systemic standpoints make us in the end prefer the first hypothesis. The complete fuse of the primary \( \ddot{e}, \ddot{o} \) both with the secondary \( \dddot{e}, \dddot{o} \), arisen from \( e + e, o + o \), and specially with the monophthongs resulting from the liquidation of the diphthongs \( ei, ou \), suggests namely that the monophthongization of the said diphthongs was probably the later process of the two.

Towards the end of our discussion of Thessalian we shall try to sum up the most important characteristics of the Thessalian vocalism, as far as they concern the narrowing of vowels: Thessalian knew only one narrowing, namely a special, typically Thessalian process of narrowing, which is nearly sure to have been accomplished before the 4th cent. B. C. in both vocalic rows, the front row and the back row, affecting here the original mid \( \ddot{e}, \ddot{o} \), which in result of it was moved to the close \( \dddot{e}, \dddot{o} \). No other narrowing occurred in Thessalian.

* * *

One thing remains to be done: to compare now the Thessalian type of narrowing with the Boeotian one and draw any conclusions, if possible, about the mutual relations of these two narrowing processes. After our analysis one can see at first sight that in either case we face quite different narrowing tendencies. When comparing the two dialects carefully, we can namely notice the following differences:

a) The differences in the formation of the systems: The systems of these two dialects expressly differed from each other at least between 450 and 200 B. C. We can see that when perusing the above-inserted tables, giving the development of the Boeotian and Thessalian long-vowel systems in stages. The difference in the development of the two systems is clear both as far as the monophthongs are concern-
ed (Thessalian had throughout this period — if we take into consideration only our first hypothesis a) — a triangular system of three grades of opening, the \( \ddot{e}, \ddot{o} \) being close, while the Boeotian scheme of long monophthongs never had precisely the same form, displaying, moreover, often the tendency to form a four-grade system), and also as far as the number of accompanying monophonematic diphthongs is concerned (Boeotian characteristic feature is a relatively early liquidation of all these four diphthongs).

\( \beta \) The differences in the functional taxation of the single phonemes and in their historical provenience: The most pronounced is here the difference between the continually increasing functional taxation of the Boeotian \( \ddot{i}, \ddot{u} \) (specially \( \ddot{i} \)) and between the upon the whole rare frequency of these phonemes in Thessalian. And as far as the \( \ddot{e} \)-vowels and the \( \ddot{a} \)-vowels are concerned, there existed a considerable difference between the two dialects especially in the provenience of some parallel phonemes of this type. As we have already mentioned, this concerns those Boeotian and Thessalian phonemes which were in their essential character a continuation of the proto-Greek \( \ddot{e} \) and \( \ddot{o} \). Thus in Thessalian the relevant phonemes \( \ddot{e}, \ddot{o} \) surely comprised as early as 350 B.C. not only the primary \( \ddot{e}, \ddot{o} \) and the \( \ddot{e}, \ddot{o} \) arisen from the contracted \( e+e, o+o \), but also the monophthongs originating from the diphthongs \( ei, ou \), while the relevant Boeotian \( \ddot{e}, \ddot{o} \) did not contain the monophthongal products of the liquidation of these diphthongs. (It comprised, however, the \( \ddot{e}, \ddot{o} \) which resulted from compensatory lengthening, so that owing to no occurrence of compensatory lengthening in Thessalian the sum-up of functional taxation of each of the two mentioned Boeotian phonemes did not after all differ essentially from the sum-up of functional taxation of the Thessalian \( \ddot{e}, \ddot{o} \) of that time. Different was only their provenience, producing thus, of course, also a different pronunciation of many words in the two dialects.)

\( \gamma \) Difference as to the quantitative extent and chronological classification of the narrowing processes, specially in reference to how many phonemes were affected by the narrowing, what places these phonemes had in the system, when the narrowing occurred, and finally whether it was a one-phase or a recurring process: As we have pointed out before, in Thessalian there was only one type of narrowing; it concerned the couple of the Thessalian universal \( \ddot{e}, \ddot{o} \) (i.e. of the primary \( \ddot{e}, \ddot{o} \) and of the \( \ddot{e}, \ddot{o} \) arisen from the contracted \( e+e, o+o \)), and occurred both in the front row and in the back row, each time affecting just one vowel. The process consisted, therefore, of one phase only, which did not recur, and the process was accomplished in a comparatively early period of Thessalian (before the introduction of the Ionic alphabet). In contrast to it, in Boeotian there occurred, in fact, two processes of narrowing. First it was the monophthongal substitutes of the diphthongs \( ei, ou \) that got transformed into \( \ddot{i}, \ddot{u} \) (on the contrary no Thessalian \( \ddot{e}, \ddot{o} \) underwent any further narrowing). Thus also this phenomenon — even though it was not identical with the above-mentioned Thessalian phenomenon, both of them producing quite different results in their systems — affected only one phoneme both in the front row and in the back row of the long-vowel system, and had just like the before-mentioned Thessalian phenomenon a one-phase, non-recurring, and comparatively early character.—But the most important Boeotian narrowing, which quite markedly characterizes the Boeotian phonetic conditions, and which scholars have principally in mind when speaking about the Boeotian tendency to vocalic narrowing, is, however, the narrowing that affected only the front long-vowel row, producing in it within the period from 400 to 200 B.C. successively several changes, linked with one another (\( \ddot{a} \ddot{e} > \ddot{e} \ddot{e} > \ddot{e}, \ddot{e} > \ddot{i} \)). Thus we have to deal here with a tendency of longer duration
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(proceeding partly even in the same way which characterized before the older "first" narrowing /ei > /i > i), a tendency which in spite of its comparatively early start died away as late as in the Hellenistic period.

δ) Differences in the causes of the narrowings: While in Boeotian the "second" narrowing is quite sure to have been called forth by the monophthongization of the Thessalian ai into i, and was connected with thus originating overtaxing of the front long-vowel row (the "first narrowing" /ei > /i > i might have served, to be sure, as a kind of technical model for the succeeding narrowing processes, but it was certainly not a direct impulse of the "second" narrowing), in contrast to it the Thessalian narrowing had nothing whatsoever in common with any monophthongization of diphthongs. We have already asked the question whether the system itself had given any impulse to this Thessalian change at all, i.e. whether the change was in any way connected with conditions prevailing in the system at the time in question. It is true, we have already indicated that the Thessalian shift of e > e, o > o might have been connected with the possible shift of the phoneme α to a closer position, but we have also said that this was a mere speculation that has found as yet no positive support. Thus it would neither be altogether impossible that, after all, this Thessalian narrowing had a quite spontaneous character, and that it was perhaps caused by some external influences, e.g. by a substratum.

We, therefore, hope that our analysis has clearly shown that it is impossible to put the same Boeotian and Thessalian graphic forms of the type dei, μel and the like on a level. We have pointed out a number of partial differences between the Boeotian and the Thessalian development of the long-vowel systems, differences that speak in favour of our view, and on the basis of all these facts we may now draw a more complex conclusion, viz. that also in the development of the long-vowel system Boeotian displays, similarly as in the development of its consonantal system, the character of a very progressive dialect, while Thessalian in comparison with it appears to be comparatively conservative. The mutual genetic affinity of the two dialects was, of course, not affected by our discussion, and rests beyond any doubt. It was only the further progress of Thessalian and Boeotian that was striking different paths, displaying in Boeotian an essentially higher speed.

NOTES

1 Cf. Thumb—Scherer, l. c.: Sind sie (die boiotisch-thessalischen Übereinstimmungen — A. B.) ... auf das Böiotische und Thessalische beschränkt, wie der Wandel von η zu ει, so brauchen sie darum noch nicht uraisolisch zu sein: Sie können sich infolge geographischer Berührung gemeinsam nach der Abwanderung der kleiasiatischen Aioler entwickelt haben.
2 Cf. Thumb—Scherer 21sq.
3 Cf. Thumb—Scherer 57.
4 This opinion was for the first time expressed by M. S. Ruipérez in the study quoted by us on p. 79, Note 28.
5 When using the expression "proto-Greek", we have in mind the language which is the common cradle of all the gradually arising dialectical differences, ascribing it, at least theoretically, a uniform consonantal and vocalic system. It is, of course, possible that in our effort to reconstruct this proto-language on the basis of analyzed material, which is mostly many centuries younger, we have substantially simplified the conditions that actually existed in those ancient times, and that our assumption of a uniform long-vowel system in the 2nd millennium B. C. is rather an a priori speculation. Anyway, so far we are utterly unable to say anything more definite about the potential dialectical differences of that time, especially with regard to the question whether such differences, if any, had already there a real systemic significance.

12 Sbornik práci FF, A-10
Monophonematic diphthongs are usually included into the system of long vowels; see, e. g., the formulations concerning German in N. S. Trubetzkoy's work Grundzüge der Phonetik, Prague 1939, p. 106 sq. As for the proto-Greek, of course, our conception of all the four diphthongs having monophonematic character is purely hypothetical, nevertheless, the potential disproval of this conception could in no way negatively influence our further arguments.


7 Only in the 2nd cent. B. C. the original mid short e, o had possibly occupied the position of the close e, o according to Ruipérez 81; this change, however, is left without any documentation in the quoted Ruipérez's study.

8 See A. Bartoněk, Problem of Double e-, o- Sounds in Ancient Greek Dialects, Charisteria Francisco Novotný, Praha 1962, pp. 79—92.

9 As it is very probable that the system in question was of no long duration [see, e. g., the coexistence of T—ouµen̂e and Αµυνοµένε IG VII 1888 b—or c = Schw. 478 B—or C (Theespie, post 424)], it is not necessary to ascribe the original mid long e the open quality; for this reason we have left the sign for open quality in parentheses.

10 Also the open quality of the original mid long o is probably only theoretical here (cf. Note 9).

11 According to F. Antkowski, La chronologie de la monophongaison des diphtongues dans les langues indo-européens, Poznań 1956, pp. 15 sqq., the monophongization of ei had from the physiological point of view greater probability of a prior realization than the monophongization of ou. Also for this reason our first scheme (with ou) may be considered more acceptable at the time of the very beginning of the monophongization processes in Boeotian.

12 Cf. also the form Αµυνοµένε from Thespiea quoted in Note 9.

13 See Note 10.

14 As for the stability of the vowel systems, see again F. Antkowski, o. c. 14 sqq.

15 According to Ruipérez 78 the later chronology of this process — as compared with the changes ei > e > i — is revealed by the inscriptions IG VII 1888 and 586, which both still preserve — partly at least — the spelling AI, but have ι- or I for ei at the same time.

16 The spelling AE for ai is in Tanagra extraordinarily frequent.

17 In contradiction to the monophongization changes ou > o > u, ei > e > i, where the monophongization process proper was in progress at the very beginning of the two changes, the monophongization process proper within the changes ai > ae > e [and also oi > ae > a] (see sub 5) took place as late as during the last phase of the whole change.

18 Cf. Κρᾶτες IG VII 24271 (Thebes, 400-350).

19 See also W. S. Allen, Some Remarks on the Structure of Greek Vowel System, Word 15 (1959), 247; the older view, according to which this o was of open quality (cf., e. g., F. Bechtel, Die griechischen Dialekte I 235, M. Lejeune, Traité de phonétique grecque 203, etc.), was probably based on the wrong assumption that under the spelling Ω the open quality of o had to be hidden in all Greek dialects.

20 Even the spelling OE for oi is very frequent in Tanagra.

21 The Thessalian origin of the form Κάµον α GDI 373 (?), in epichoric alphabet) on the other hand, is not quite certain (cf. R. Meister, Die griechischen Dialekte I 297).

22 Concerning this see more on p. 168.

23 Cf. A. Bartoněk, Remarks to the Chronology of the ei, ou Monophongization in Greek, Sborník prací filosofické fakulty brněnské university E 6 (1961), 135—146.

24 This holds good, of course, only if Plato's Απίλον with its OE is not based on some contemporary genuine Thessalian spelling; if it were, we must admit that the form Απίλον would be an argument in favour of an early realization of both the changes in question. But the first possibility is more probable: Απίλον is apparently Plato's own transcription of the Thessalian [apilon], the spelling OE standing here for some vowel, which was akin to the contemporary Attic substitute for secondary o, no matter if the latter had still the quality of o or already that of u at those times.

25 In spite of Antkowski's theory alluded to in Note 11, we take in Thessalian both the
monophthongization processes for simultaneous; there is namely no linguistic evidence which
would indicate the existence of a chronological difference between them as it was the case in
Boeotian.

26 About the possible occurrence of this phenomenon in the short-vowel system of the Attic-
-Ionic dialects see in Allen's Remarks, Word 15 /1959/, 248.

27 See Note 20.

28 Our conviction concerning the close ɛ-, ɔ- outcome of the ei, ou- monophthongization process
is based on the fact, that in no Greek dialect we find forms which would imply the existence of
other than the close ɛ-, ɔ- substitutes for ei, ou.

29 'Avéθψε is attested even in some other inscriptions written in epichoric or transitional
alphabet.

29 Exceptionally we come across here also with ā (see Schwyzer, Griechische Grammatik I
250).

30 See Thumb-Scherer 57.

31 See A. Bartoněk, Vývoj konsonantického systému v starých řeckých dialektech = Develop-

Translated by S. Kostomlatský

K OTÁZCE BOJOTSKÉHO A THESALSKÉHO ÚZENÍ
DLOUHÝCH SAMOHLÁSEK

Autor ukazuje na detailním rozboru bojotského a thesalského dlouhovokalického systému, že
nelze bojotské a thesalské doklady úzení dlouhých samohlásek spojovat do jedné a též izoglosy.
V každém z obou dialeků probíhalo úzení samostatně, vycházelo z odlišných příčin a projevovalo
se v systému rozdílným způsobem.

K ВОПРОСУ О СУЖЕНИИ ДОЛГИХ ГЛАСНЫХ В БЕОТИЙСКОМ
И ФЕССАЛИЙСКОМ ДИАЛЕКТАХ

Автор доказывает на основании подробного анализа беотийской и фессалийской
системы долгих гласных, что беотийские и фессалийские примеры сужения долгих
гласных нельзя соединять одной и той же изоглоссой. В каждом из обоих диалектов
сужение происходило самостоятельно, имело разные причины и проявлялось в системе
разным образом.

Перевел С. Жажа