A brief review of theory and traditional approaches to the problem of oral reading of Greek dating from the fall of Constantinople (1453) focuses on the importance of two major linguistic features of Byzantine pronunciation. The first examines the nature of the dynamic (stress) accent and the second is concerned with differences in vowel lengths in verse and prose. Henning's doctrine of the Latin accentual system of the "penultimate" rule is also examined. While the author recommends a reading of Greek verse with strict metrical ictus for a close natural rendering, he does not suggest the application of this system in prose due to an inevitable conflict with a Byzantine rendering of the accent. (RL)
One result of the fall of Constantinople in 1453 was a migration of Byzantine scholars to western Europe and a consequent acceleration in the development of Greek studies. But the pronunciation used by these scholars in their teaching of ancient Greek was naturally that of their current mother-tongue, i.e. virtually that of modern Greek. From the end of the fifteenth century this practice began to come under criticism as misrepresenting the original phonetic values, and the movement of reform culminated in the publication in 1528 of Erasmus's dialogue De recta Latina Graecique sermonis pronuntiatione, which sought, with considerable success, to reconstruct the classical pronunciation of both languages. Erasmus himself did not venture actually to practise his reforms, but such a course was vigorously pursued by two young English scholars, John Cheke and Thomas Smith, who in 1540 were appointed Regius Professors respectively of Greek and of Civil Law in the University of Cambridge. The opposition to their reforms—academic, religious and political—has already been described in connection with Latin, and it was not until Elizabeth's accession that they could proceed unhindered. Thereafter the so-called 'Erasmian' pronunciation of Greek became normal, and soon spread from England to the continent. But, ironically, English speakers were destined to be deprived of their pioneer advantages; for in the sixteenth century the 'Great English Vowel-shift', which characterizes the development from Middle to Modern English, and which was to transform the pattern of long vowels and diphthongs, had only just begun. The English

1 Cf. Allen, Didaskalos I, 1 (1963), 47; Vox Latina (cup, 1965), 104.
pronunciation of Greek changed pari passu with English itself, until by the nineteenth century it was as far divorced from ancient Greek as it had been before the reforms. Cheke, for example, rightly stated the value of η as a long open e sound (like that in French bête) and not an i sound as in modern Greek; since this sound occurred also in sixteenth-century English, with a standardized spelling ea, he was able to cite key words such as meat as a guide to the correct pronunciation. But in the seventeenth century the English sound changed to a long close e, and in the eighteenth century to a long i (approximately as in the modern English pronunciation of meat, etc.).

A new programme of reform was thus necessary if the English pronunciation of Greek were to approximate once more to the classical original; such a programme was sponsored by the University of Wales, and appeared in the form of a pamphlet on 'The restored pronunciation of Greek and Latin' by E. V. Arnold and R. S. Conway, which was first published by the CUP in 1895, and forms the basis of the pronunciation now general in this country.

But one outstanding feature of Byzantine pronunciation remained quite untouched and unquestioned by the sixteenth-century reformers. The classical Greek accent was, like that of e.g. Norwegian or Serbo-Croat, tonal—i.e. manifested by the pitch of the voice; it consisted essentially of a high pitch followed by a falling glide, the latter occurring either within the same syllable (which is then marked with the circumflex) or on the next syllable (the high pitch being then marked with the acute); thus, except under certain special conditions (pre-pausal intonation, interrogative words, enclitic combinations) a high pitch could not occur on the last syllable of a word, since there would be no following syllable to carry the fall; in such cases there occurred some modification of the pitch, the precise details of which are unknown, but which is indicated in our current texts by the grave sign. But in Byzantine, as in modern Greek, the tonal accent was replaced by a dynamic (stress)

2 A detailed account of the sixteenth-century reforms and their subsequent history will appear in my Vox Graeca (CUP).
3 This account of the Greek accentual system summarizes the findings of a paper contributed to the volume In Memory of J. R. Firth (Longmans, 1966), 8ff.
accent, occurring on the same syllables as bear any of the three current accent-marks.⁴

Misled in part by the Latin grammarians (cf. *Vox Latina*, 83), the sixteenth-century reformers failed to distinguish clearly between pitch and stress, and were not aware of any anachronism in following the Byzantine system of stressing the accentually marked syllables. This practice has survived in most countries up to the present day. But at Oxford in 1673 a treatise was published under the title *De poematum cantu et viribus rhythmii*; this was the work of a Dutch scholar, Isaac Vossius, who had received an honorary degree at Oxford in 1670 and a canonry of Windsor in 1673—though his eccentricities led Charles II to comment that 'there is nothing he will not believe if only it is not in the Bible'. In his Oxford treatise Vossius put forward the remarkable view that the accent-marks of Greek had nothing whatever to do with the ancient pronunciation; in itself this doctrine was negative in its content and effect, but it was seized upon by a certain Heinrich Christian Henning (self-latinized as 'Henninus'), a doctor of medicine from Utrecht, who in 1684 published an appropriately titled *Dissertatio Paradoxa* on the same subject. Accepting Vossius's rejection of the traditional accents, Henning went on to claim that in view of the close relationship of Greek and Latin, and particularly of their metrical structures, the Greek accentual system must have been the same as that of Latin—'ergo ut Latine pronunciamus ita et Graece erit pronunciandum'. The Latin accentual system is of course based on the so-called 'penultimate' rule, whereby a stress falls on the penultimate syllable if it is heavy, and on the antepenultimate if the penultimate is light.⁵

Henning's doctrine surprisingly found acceptance not only in Holland but also in England, where it seems to have been well established by the early eighteenth century,⁶ and the

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⁴ The tradition of accentual marking dates only from Alexandrian times and is generally associated with the name of Aristophanes of Byzantium (c. 257-180 BC); native Greek speakers naturally knew the accentuation, since it was part of their everyday speech, just as in the case of the English or Russian stress-accent; the marking was probably first introduced in Greek partly for philological reasons and partly for the purpose of teaching Greek to foreigners.


⁶ *Metamorphosis*, however, is still sometimes heard (and supported by the OED).
‘Henninian’ ('latinizing') pronunciation of Greek prose remains general in both countries to the present day. Elsewhere in Europe Henning’s ideas were sooner or later rejected as resting upon false premises, so that in Germany, Italy, the Slavonic countries, Scandinavia and Hungary, for example, the Byzantine system prevails. In the USA the Henninian system survived until the early nineteenth century, but then succumbed to German influence. Most French speakers follow neither the Byzantine nor the Henninian system, but pronounce Greek, like French, with a weak final stress.

Most English scholars nowadays are probably aware of the inaccuracy of the Henninian pronunciation as a rendering of the original Greek; but many are prepared to defend it against its rival on practical, pedagogical grounds, using arguments which have been handed down from the time of Vossius and Henning. Firstly, it is said, if the Byzantine method is used for Greek prose, it has to be abandoned in reading Greek verse, if the metrical rhythm is to be respected; whereas the latinizing method, being already ‘according to quantity’, is immediately suited to this purpose. However, whilst the principles of the latinizing stress are admittedly the same as for verse-ictus, to the extent that both are regulated primarily by quantity, their actual locations are far from being in agreement. A study of Greek iambics will show that the verse-ictus agrees with the latinizing stress of prose in less than 50 per cent of cases—scarcely more than with the marked Greek accents; hexameters are slightly more favourable to Henninism, but still only average around 60 per cent of agreement. In fact G. J. Pennington, writing on the subject in 1844, hardly exaggerated when he observed that ‘the Latin can no more claim to be read according to quantity than the Greek’—a random sample from the Aeneid, for instance, averages no more than 55 per cent.

Even Greek rules of quantity are disregarded where they differ from those of Latin: thus a word such as ἄραυ-άρος is generally stressed on the penultimate although this was light in Attic speech.


In the case of Greek proper names some independent encouragement may have come from the occurrence of many of them in Latin (but note e.g. Shakespeare’s Androcles).
The second argument concerns differences of vowel-length. It is well known that in Byzantine and modern Greek the change from a tonal to a dynamic accent has had as a corollary the loss of any independent distinction between long and short vowels, the stressed vowels being of rather longer duration than the unstressed regardless of their original values. The same effect is commonly found in current pronunciations of ancient Greek by Russian or Italian speakers, for example, in whose native languages duration is similarly a function of stress; and one of the objections made by the Henninian 'reformers' against the traditional practice in England was that it tended to lengthen accented short vowels and, more particularly, to shorten unaccented long vowels. Let us now consider this objection.

Languages may have either a fixed accent (i.e. always in a particular position in the word) or a free accent. In the latter case variations in position can have a distinctive function (as e.g. modern Greek πίνω 'I am hungry': πίνο 'I drink'); and where the accent is manifested by stress, there seems to be a typological tendency for such languages to eschew distinctions of vowel-length. But this does not apply to languages with a fixed stress-accent: in Hungarian, for example, where the primary stress is normally on the initial syllable, long vowels are distinguished from short even in polysyllabic words, e.g. felszabadítás 'liberation'. And indeed modern English, in spite of its free stress accent, provides numerous models for the pronunciation of stressed short vowels and unstressed long vowels (the latter more particularly in complex and compound words). As long ago as 1804, W. Mitford had pointed this out specifically in connection with the pronunciation of Greek,\(^9\) citing as examples of an unstressed long i such words as increase (noun), colleague, etc; and in 1852 J. S. Blackie observed\(^12\) that English speakers show no tendency to change visible to 'veesible' or housekeeper to 'house-keeper'; those who claimed that such changes were an inevitable corollary of stress in

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\(^10\) In Hungarian the acute indicates length, not stress.
\(^11\) An Inquiry into the Principles of Harmony in Language, 279.
\(^12\) The Pronunciation of Greek; Accent and Quantity, 56f.
English, said Blackie, 'had got their ears confounded by the
traditional jargon of teachers inculcating from dead books a
doctrine of which they had no living apprehension'. No doubt
there were English speakers who did exhibit some of the
tendencies complained of by the Henninians, but their
performance was due rather to carelessness or perversity\(^\text{13}\) than
to any irresistible constraints of the English language. The effort
required to maintain the correct values is certainly no greater
than is called for in, say, avoiding neutral vowels, or in pro-
nouncing double consonants, in words such as θέλωσσα or
corōlla.

As English models for unstressed long vowels, both pre- and
post-accentual (and often combined with stressed short vowels),
we may add a few other examples to those cited by earlier
writers—which readers will be able further to supplement
for themselves:

(for Greek \(ω\)):

\[
\text{audition, morônic, landlord, outlaw, blackwater, modth-organ.}
\]

(for Greek \(α\)):

\[
\text{carbôlic, partisan, pledge, broadcasting, telegraph (note also the distinction main-
ained between unstressed short neutral vowel in ldggard
and unstressed long \(a\) in blackguard).}
\]

(for Greek \(ω\)): \(\text{rheumdtic,}^{14}\) \(\text{slide-rule, bus-
route, ped-shooter.}\)

(for Greek \(η\), approximately): \(\text{whyfarer.}\)

Unstressed diphthongs of course present no problem, since
there is no possibility of confusion—for Greek \(α\), \(ω\) compare
English midnight, sîndowner, etc. (most English speakers will
also tend to diphthongize \(u\), in which case models are pro-
vided by e.g. sîndpaper, òperate).

\(^{13}\) They seem to have been deliberately taught in the Westminster School pro-
nunciation introduced by Richard Busby (headmaster 1638-95), whose pupil
Dryden even wrote òpeaex.

\(^{14}\) There is a tendency to shorten pre-accentual long \(u\) in English, but since there
is no short \(u\) sound in Greek \((υ = θ)\), no confusion can arise.
The pattern of stress on short vowels in English, even before single consonants (e.g. better, bitter, bitter, blitter, bitter, blitter), is so common that no one can take seriously the objection that in speaking Greek it must lead to a lengthening of the vowels in question.

It is true that long vowels and diphthongs in English are phonetically 'strong' in the sense of more commonly occurring in stressed than in unstressed positions; but, as we have seen, the reverse pattern is not unfamiliar. And in any case a number of short vowels in English are no less 'strong' in their distribution (thus the vowels of pet, pat, putt, pot), so that it would by no means be natural to substitute them for long vowels in unstressed positions; it is interesting to note that no objections are voiced to the unstressed pronunciation of i, o, a occurring in the second syllables of e.g. διψας, δοµας, δοκος, although they should fall into this category—presumably because most English speakers tend wrongly to replace them by the more familiar 'weak' short i or neutral vowel!

There is, then, no great problem for English speakers in pronouncing words like διψας or δοµας (favourite bugbears of the Henninians) with a stress on the accented syllable and correct vowel-lengths. Moreover, if the arguments of objectors to this practice were valid, they would equally apply to words like κολος, προταρχος, where the Henninian pronunciation should, according to them, produce changes in vowel-length which the Byzantine rendering avoids. In fact the only considerable difficulty arises in words like ποιον, since English does not provide models for short stressed vowels in hiatus—but ambiguity in such cases is very rare, and in any case the Henninian pronunciation can hardly claim any advantage in this respect, since it precludes the making of any distinction between e.g. δις and Δίς, or between ποίον 'fat' and πόλον 'having drunk'.

The Committee on Greek Accentuation set up by the Classical Association in 1926, having resolved by a majority of 8:3 that they 'cannot recommend any general attempt in teaching to give an oral value either by pitch or stress to the traditional

signs of Greek accent', proceeded by a narrow majority of 6:5 to recommend that 'where no oral value is given to the signs of accent the use of these signs in writing Greek be not insisted on in Schools or Universities'. So long as we pronounce Greek as we do, it is hard to deny the logic of this recommendation. In fact, as a consequence of Henninism, the accents were omitted from a number of Greek texts printed in England in the eighteenth century, and in 1759 this became the official policy of the Oxford University Press. But the practice was deplored by many scholars, including John Foster, fellow of King's College, Cambridge, whose admirable essay On the different nature of Accent and Quantity was first published in 1762; the restoration of accentuation in English printing is probably due largely to the influence of Richard Porson, who, in the first note to his Medea (published in 1801 'in usum studiosae juventutis'), insists upon its importance, and urges the reader to pursue its study 'scurrarum dicacitate et stultorum irrisione immotus'.

It does indeed seem deplorable that our students and future scholars should remain in ignorance of one of the most characteristic features of the Greek language (and deprived of a valuable aid to the learning of its modern form) for no better reason than that we persist in an oral rendering which is quite foreign to it at any time in its history; and it is the writer's opinion that we ought seriously to consider abandoning our isolationist policy and 'going into Europe', confident in the knowledge that our English speech-habits afford us a considerable advantage over most other scholars in the ability to combine a free stress-accent with a proper regard for vowel-length.

It is true that the Byzantine pronunciation, whilst it respects the position of the original accent, does not help us in determining when to write an acute and when a circumflex accent; but once the position is known, the rules which govern this choice can be very simply and briefly stated and learnt, as also can the few exceptions. It is true also that students would still have to learn the principles of quantity in order to scan Greek verse—but virtually all of them would already be familiar with

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these from Latin, so that their application would not at all depend upon a familiarity with them in Greek prose (where in any case, as we have seen, even the Henninian rhythmical patterns are quite different from those of verse). The external problems involved in such a change of practice are of course considerable; but the reform itself is slighter than was required, for example, by the ‘new’ pronunciation of vowels and diphthongs. The most daunting prospect is perhaps that we should then have to learn the accent as the Greeks themselves did, as most other scholars do, and as we have to when learning a modern language like Russian, namely as an *integral part of each word*.

It will perhaps seem surprising that no suggestion has been made for attempting a tonal rendering of the accent. The reasons for this are practical. Firstly, we know very little about Greek ‘tonal syntax’, i.e. the way in which the tonal patterns of Greek words interacted with one another and with sentence intonations in continuous speech—whereas, to judge from modern languages of the ancient Greek accentual type, these interactions may be extensive and complex. And secondly, few English speakers have any experience of tonal accentuation; the writer has listened to various recordings, old and new, of attempted tonal recitations of Greek, and has found none of them (his own included) even moderately convincing. Some are admittedly better than others, but generally speaking enthusiasm for this exercise tends to be in inverse proportion to phonetic experience, and, as W. G. Clark observed in 1868, its less gifted exponents ‘may fancy that they reproduce it when they do nothing of the kind’.

Finally it may just be mentioned that, to judge from a recent study, Greek words had in addition to their tonal accent an independent system of stress-patterning based on quantity (but not according to Latin rules!), and that in verse this agreed with the metrical rhythm in some 90-95 per cent of cases; various

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17 See e.g. E. Haugen and M. Joos, 'Tone and intonation in East Norwegian', *Acta Philol. Scand.* 22 (1952), 41ff.
18 *Journal of Philology* i. 2, 108.
19 Reported in a presidential address to the Philological Society in May 1966; an expanded version under the title 'Prosody and prosodies in Greek' appears in the Society's *Transactions* for 1966, pp. 107-48.
special restrictions, moreover, such as that of 'Porson's Law', have the effect of securing almost complete agreement at certain places, notably in the coda of the line. If, therefore, one reads Greek verse with strict metrical ictus, one is likely to be very close to a natural rendering (the principal conflicts in iambics seem to occur at the penthemimeral caesura). But this is another story; and too many of the details remain uncertain for one to recommend the general application of this system to the reading of prose, where it would inevitably conflict with a Byzantine rendering of the accent.

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