

Benjamin Kantor's

THE PRONUNCIATION OF NEW TESTAMENT GREEK:
Judeo-Palestinian Greek Phonology and Orthography
from Alexander to Islam

and

A SHORT GUIDE
to
The Pronunciation of New Testament Greek

— A CRITIQUE —
(Revised)

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Benjamin Kantor's *THE PRONUNCIATION OF NEW TESTAMENT GREEK: Judeo-Palestinian Greek Phonology and Orthography from Alexander to Islam*, and *A SHORT GUIDE to The Pronunciation of New Testament Greek* were published by William B. Eerdmans Publishing Company, Grand Rapids, Michigan in 2023. The first book will be referred to here as *PNTG* (the acronym Kantor uses), and the second as the *Guide*.

Kantor's breakdown of Greek periods:

Hellenistic	332–37 BCE
Early Roman	37 BCE–135 CE
Late Roman	135–324 CE
Early Byzantine	324–500 CE
Late Byzantine	500–638 CE

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— A CRITIQUE —

Introduction

If YOU CAN'T JUDGE a book by its cover, try judging it by its size. Kantor's *PNTG* is an impressive 841-page work, not to mention its accompanying 132-page *Guide*. Word lists comprising spelling conventions extracted from numerous papyri and inscriptions written over nearly a millennium, from the beginning of the Hellenistic period in 332 BC to end of the late Byzantine period in 638 (per Kantor's dates). Together with detailed explanatory and postulational remarks, these lists occupy about 80 percent of *PNTG*.

According to Kantor, data amassed from said spelling conventions are used in *PNTG* to reconstruct specifically the pronunciation of Judeo-Palestinian Greek during the early Roman period (37 BC–AD 135) or New Testament times. The purpose of the *Guide*, on the other hand, is pedagogical in that it is a guide for the Judeo-Palestinian pronunciation, which Kantor names “the historical pronunciation of New Testament Greek” (*Guide* xiv). The *Guide* also devotes space to comparative descriptions of Koine Greek sounds in other regions around the Mediterranean. Kantor holds that the character of the historical Koine Greek pronunciation, which is specific to the Judeo-Palestinian region in New Testament times, is much in line with other varieties of pronunciation of Koine¹ around the Mediterranean (*PNTG* 776).

Because *PNTG* and the *Guide* deal with the same general topic as my recently published book—and both sources reference my work, albeit positively—I feel compelled to share some of my views on Kantor's work.

The present critique follows Kantor's “Summary of Historical Koine Greek Pronunciation” (listed in his *Guide* 110–112) as a road map for selecting and discussing items that differ most from the historical Greek pronunciation (HGP) preserved in Neohellenic. This discussion necessarily brings into the picture relevant linguistic areas of determinative evidentiary value, which Kantor at times barely touches upon or altogether omits.

¹ Koine “common” is the traditional transliteration of Κοινή /kini/.

Varieties of Koine pronunciation

Kantor identifies six regional varieties of Koine Greek pronunciation throughout the Mediterranean, which collectively constitute a General Koine tradition that evolved from Attic Greek through the Hellenistic and Byzantine eras into Modern Greek (*PNTG* 72, 78). However, Kantor's primary focus centers on the Judeo-Palestinian regional variety. He establishes "the historical pronunciation of New Testament Greek" based on this specific variety, arguing that it is pedagogically superior for students acquiring the language (*Guide* xiv).

Considering Kantor's focus on regional varieties of Koine rather than a mainstream standard, I approached the text from a beginning student's perspective, which raised several questions. Specifically, which New Testament pronunciation does the author recommend? The Judeo-Palestinian dialect? If so, does this mean we should follow the pronunciation of Matthew, Mark, John, and Jesus, but not Luke and Paul, who hailed from outside that region? Furthermore, how is this localized pronunciation pedagogically beneficial for students?

Suddenly, I began to see Kantor's main book title in a different light. My impression was prompted by the faded small print dwarfed in the shadows below the towering main title. The small print read, *Judeo-Palestinian Greek Phonology and Orthography from Alexander to Islam*—a subtitle not shown on the cover of the *Guide*, which I had purchased first. Consequently, I hadn't paid conscious attention to this subtitle before. Upon receiving the volume, I simply started flipping pages, drawn in by an impressive size that seemed to promise the latest findings on the true pronunciation of New Testament Greek. But now that I've had a taste of the book, I wonder why "Judeo-Palestinian Greek" hadn't been placed more candidly as a heads-up in the main title.

As I opened the *Guide* once again and half-heartedly started flipping its pages, my true concern returned. But it was more than the concern about Kantor's book title now, more than the name Judeo-Palestinian. It was my need for a pronunciation other than Erasmian, for sure, yet one I could adhere to for good. I had heard of Zachariou's book, which recommended the Neohellenic system as the right—and historical—pronunciation for New Testament Greek. But I wasn't quite sure about it yet, as I still wanted a second expert opinion.

Then, thumbing through the last pages, I made a stunning discovery under the heading, "Open the Door to Ellada" (*Guide* 121). I happened to know the word *Ellada*—Greece. Curious, I went on reading until I saw something that made my jaw drop:

Anyone using a historical Koine pronunciation system or a Neohellenic (Modern Greek) pronunciation system will have this invaluable resource open to them [*sic*] from the very beginning of their [*sic*] Greek study.... All in all, using a historical (or Neohellenic) pronunciation of Koine Greek will open one up to countless linguistic and cultural resources that will prove invaluable for growing in one's understanding of New Testament Greek and Greek in general (*Guide* 121–122).

Puzzled by the way the book ended, but just as excited by the uncanny twist of things, I thought I should explore the still-living historical sounds of Ellas while enjoying its inherent benefits. Indeed, I could now avow that I had just received a second opinion from a professional—Kantor himself—who was now unequivocally recommending the Neohellenic pronunciation for New Testament Greek.

Kantor on Erasmian

Right from the start, Kantor challenges those who use an Erasmian pronunciation to teach Biblical Greek (*Guide* xiii–xiv; *PNTG* xliii–xliv). His challenge takes the form of an invitation to an amicable and scholarly conversation with users of the Erasmian system. He does this by establishing what he refers to as “the pronunciation of Judeo-Palestinian Koine Greek in the New Testament era” and comparing his findings with other contemporary regional varieties of Koine (*PNTG* xliv).

Kantor does not rush to close the Erasmian issue. Instead, he devotes the entire first chapter of his *Guide* to it, under the heading, “How Has Greek Been Pronounced in the Classroom since Erasmus?” (*Guide* 1–20). He specifically examines many scholars’ stance toward perpetuating the Erasmian pronunciation today, whether due to convention or unconvincing alternatives. Kantor says,

Indeed, one wonders if the scholars of Erasmus’s generation would have felt the need to jettison the Byzantine pronunciation had they known what we know about the pronunciation of Koine Greek Therefore, the notion that “majority use” or “convention” are sufficient enough reasons to perpetuate the status quo when we now know much more than our predecessors did about the continuity between Koine Greek and Modern Greek is neither academically defensible nor historical (*Guide* 19).

Kantor’s view of Erasmian resonates with my treatment of this subject in *Historical Pronunciation vs. Erasmian*,² though only in part. Like the vast majority of scholars, Kantor views Erasmian shortsightedly as merely an issue of pronunciation. However, as expounded in my work, Erasmian is far more than a phonetic dispute. For the past 500 years, this divisive paradigm has prevented scholars from recognizing the significance of later Greek (Byzantine and Modern). This oversight deprives scholarship of a comprehensive linguistic tool for interpreting Greek literature and ignores the insights provided by the language’s later history. Ultimately, this compromises our understanding of Greek texts, which must be illuminated exegetically by both its earlier (Attic, Hellenistic) and later (Byzantine, Neohellenic) developments. As Hasselbrook notes, “[T]he New Testament contains many features that have more affinity with Modern than Classical Greek.”³

² Henceforth my book will be referred to by this shortened title, though more often as “my work.”

³ Hasselbrook, *New Testament Lexicography*, 48–49.

Spelling-mistakes methodology

It is noteworthy that in trying to establish the pronunciation of New Testament Greek, Kantor employs the same general spelling-mistakes methodology (*Guide* 21–23) as that employed in my work. This is not surprising given the fact that, when rightly applied, the comparison of the spelling of words in older Greek texts that contain repeated interchanges of different alphabet letters that stand for the same sound is the surest method of determining the pronunciation of Greek.

But here is the caveat: the spelling-mistakes method can be relied upon only to the extent that (a) the basis for the sound system against which Koine Greek words are compared is not flawed, and (b) the data gathered are not seen in the wrong historical light. With this significant point in mind, let us now proceed with an examination of Kantor's Koine Greek sounds.

Kantor's historical pronunciation of Koine Greek

Assessing the full extent of Kantor's speculative claims regarding the timing of presumed phonological changes across multiple Koine dialects is beyond the scope of this paper. Instead, this section examines the most prominent phonological features in order to evaluate the general validity of Kantor's arguments. The focus will be on the graphemes, sounds,⁴ and other features listed below:

β⁵ φ ' (aspirate) CC "gemination"
 η, α, η, ω, αυ, ευ, ηυ, υ, ου
 vowel length (quantity)

β

As is the case with scholars who expound their ideas on the development of Koine sounds while relying upon some fixed traditional set of theoretical Attic forms, Kantor says that Attic β was /b/ (i.e., not /v/) (*PNTG* 112). He gives no explanation for his claim, however. He then fast-forwards to the Koine period, saying, "The subtle shift of β = /β/ to /v/ probably occurred during the Byzantine period [and] The fricativization of β likely took place by the first century BCE or the first century CE in the majority of Koine dialects" (*Guide* 44). Kantor then draws attention to some spelling errors. One such error is φευρουβάρου for φεβρουαρίου "February" (gen.) (*PNTG* 112). The evidence he posits is that υ in φευρουβάρου was used in place of β in φεβρουαρίου, meaning that the υ in ευ was like β, a bilabial fricative like the β in Spanish *sabes* [saβes] (*Guide* 79). But while fricativized Koine

⁴ A letter (grapheme) is not a sound; it is a symbol that represents a sound. In this paper, a letter conveniently referred to as a sound must be understood as the phonetic value assigned to it.

⁵ It is assumed here that the reader is familiar with the basic International Phonetic Alphabet (IPA) terms and symbols. For what it is worth, however, it must be noted here that the Greek letter β is not the same as the IPA symbol /β/. IPA [β] (phonetic) or /β/ (phonemic) stands for a voiced bilabial fricative sound, that is, a sound formed with air passing between the two lips while the vocal chords are in vibration. Likewise, IPA /β̥/, the voiceless equivalent of IPA /β/, is not the same as the Greek letter φ or φ̥.

υ and β in cases such as this doubtless represented the same sound, it does not necessarily mean that they were bilabial / β / (as in Spanish *sabes*) and not labiodental / v / (as in English *saves*) (see p. 11).

Kantor's description of Koine υ in $\epsilon\upsilon$ as a bilabial fricative / β / stems from the unfounded assumption that Attic $\epsilon\upsilon$ was / eu / (i.e., not / ev /) and which, after undergoing some intermediary stage as / ϵw /, it eventually developed in Hellenistic times into / $e\beta$ / (*PNTG* 434). Kantor thus asserts that Judeo-Palestinian $\epsilon\upsilon$ became / $e\beta$ /, so also in most regional varieties of Koine at the time of the New Testament (*Guide* 44). Kantor's customized description of Koine β , particularly as the Spanish bilabial fricative / β /, is rather odd.

φ

Attic φ , claims Kantor, was / p^h /, which in General Koine became a fricative / ϕ / (or / f /) (*PNTG* 137). He adds that φ seems to have maintained its aspirated realization of / p^h / during the Roman period in Judeo-Palestinian, with other regional varieties exhibiting $\varphi = /p^h/ \rightarrow / \phi/$ (or / f /) (*PNTG* 145).

Attic φ as an aspirated stop / p^h / hardly comports with its description by Plato, who compares φ to fricatives ψ , σ , ζ . Plato describes these as πνευματώδη γράμματα “letters [pronounced] with ample breath” (*Cratylus* 427a). This means that in Plato's time φ was not an aspirated stop (as in *pot* / $p^h\alpha t$ /) but a continuant like the fricatives ψ , σ , ζ . It follows that Attic φ / f /, along with β / v /, entered the Hellenistic period in its definitive phonological state not as / p^h / or bilabial fricative / ϕ /, but as / f /, the voiceless labiodental fricative counterpart of / v /.

Aspirate *h*

“[T]he evidence for rough breathing is linked to that of the aspirated stops,” says Kantor (*PNTG* 155). Later he adds that the consonant / h / represented by the *spiritus asper* (') had already begun to fall out of the language by the early Roman period, though / h / was still maintained in the speech of some during the same period (*PNTG* 169).

Contrary to Kantor's postulations, the aspirate had long been a relic of the distant past even by classical times, as the Attic inscriptional record indicates.⁶ In New Testament times there was no trace of audible word-initial aspiration (οὗτος / $utos$ /, ἕκαστος / $ekastos$ /, ἡμέρα / $imera$ /). Aspiration was only in standardized elision forms that were passed on from antiquity to Koine and to Neohellenic. When Kantor, in referencing Sidney Allen's *Vox Graeca*, says that the maintenance of appropriate aspiration in phrases like καθ' ἑκάστον continues until the second century CE (*Guide* 58), one must be aware that “appropriate aspiration” did not cease to exist in the second century and that it is still operative today. Words and phrases affected by elision are clearly audible in ancient forms that reached Neohellenic. The θ in καθ' ἑκάστον (from κατά + ἑκάστον $\rightarrow$ καθ' ἑκάστον $\rightarrow$ Neohellenic καθέκαστον) is but one of many examples that serve as diachronic evidence of the effects of elision down to the present day.

⁶ See YouTube video, *Greek Pronunciation 12 (Aspirate H)*, <https://youtu.be/TMkBXZFzfjw>

The same applies to numerous other elision forms involving ϕ (ἀπό οὐ → ἀφ' οὐ, ἐπί + ὅσον → ἐφ' ὅσον, Neohellenic αφού /afu/, εφόσον /efoson/ respectively. Elision effects are not predicated upon the concurrent use of the aspirate.

Consonant gemination

“At the time of the New Testament,” says Kantor, “many speakers of Koine Greek around the Mediterranean no longer pronounced gemination in their everyday speech. In certain dialects,... however, phonetic gemination of consonants was maintained” (*Guide* 78). Doubtless, such a statement implies that prior to Hellenistic times, i.e., in Classical Attic, consonant gemination was part of daily speech. If so, the Athenians, whether educated or uneducated, must have been cognizant of the need to hold the geminate consonant sound for 150 milliseconds, or 0.5 times longer than a single consonant (*Guide* 77).

Identical geminates are seen in compounds, e.g., ἐκκόπτω (ἐκ + κόπτω), ἔννομος (ἐν + νόμος). Then there are words whose identical geminates reflect the loss of some consonant sound earlier in time. It is this latter type of words that we will examine here briefly. But first, some historical background.

Following the Dark Age of Greece, from the 7th c. BC to the beginning of the inscriptional period (600 BC), the Greeks became aware of the need for a national education system. As the basis for learning, they adopted their ancestral literature, which was chiefly in Homeric verse. Right from the outset the Greeks realized that in their own dialect, more notably in Attic, the current pronunciation of their ancestral Homeric literature reflected changes that entailed the loss of consonants and of vowel sequences that caused versification to be phonetically and metrically anomalous. *Attic contractions, which would have been foreign to Homer, now necessitated artificial lengthening to satisfy meter* (emphasis intentional).

Shown below is one of the types of phonological changes and what schoolmasters early in post-Homeric times did to compensate for sound loss in metrically affected syllables. The table shows that the consonant next to (before or after) the missing sound was doubled:⁷

Older form	Consonant loss	Missing consonant (') to be doubled	New Attic form	Meaning
ΑΡΣΗΝ	Σ	> ΑΡ ' ΗΝ	> ΑΡΡΗΝ	<i>male</i>
ΘΑΡΣΟΣ	Σ	> ΘΑΡ ' ΟΣ	> ΘΑΡΡΟΣ	<i>courage</i>
ΜΕΛΙΤΣΑ	Τ	> ΜΕΛΙ ' ΣΑ	> ΜΕΛΙΣΣΑ	<i>bee</i>
ΠΑΝΡΗΣΙΑ	Ν	> ΠΑ ' ΡΗΣΙΑ	> ΠΑΡΡΗΣΙΑ	<i>boldness</i>
ΑΛΙΟΣ	Λ	> ΑΛ ' ΟΣ	> ΑΛΛΟΣ	<i>other</i>

The double consonant spelling and meaning of these Attic words is retained in Neohellenic

It must be understood that Attic verse was predicated not upon any inherent quantity within the Attic phonological system but upon artificial metrical principles handed down to the Athenians by pre-classical originators. Consonant gemination applied to metered verse in terms of quantity, such as Kantor suggests, had nothing to do with the pronunciation in the

⁷ Adapted from Zachariou, *Historical Pronunciation vs. Erasmian*, 42.

Attic vernacular, notwithstanding the double consonant spelling. There is no historical evidence that in mainstream Greek speech geminate consonants (save γγ = [ŋg]/[g]) have not always been pronounced as single consonants. (Gemination is used in Cyprus today, but that is a feature peculiar to the Cypriot dialect, not standard Greek in mainland Greece.)

η

Kantor assumes that Classical Greek η = /e:/ (*PNTG* 558). However, in his Socratic dialogues in *Cratylus*, Plato informs us of the way η was treated, along with ει and ι, as a newly-adopted letter in the Attic dialect:

νῦν δὲ ἀντὶ μὲν τοῦ ἰῶτα, ἢ εἰ [ἦ] ἦτα μεταστρέφουσιν

“and so now instead of ι they change to ει or η.”

(*Cratylus* 418b–c)

οἱ μὲν ἀρχαιότατοι ἡμέραν τὴν ἡμέραν ἐκάλουν,
οἱ δὲ [ὑστερον] εἰμέραν,⁸ οἱ δὲ νῦν ἡμέραν

“the most ancients called ἡμέραν [*day*] ἡμέραν,
and others [later] εἰμέραν, and now they call it ἡμέραν”

(*Cratylus* 418c–d)

Plato's testimony regarding ει = η = ι must be understood within the context of the confusing orthographic (spelling) issues Plato himself faced during Athens' transition to a new writing system in 403 BC.

Plato's testimony is corroborated by that of a 5th c. BC Athenian schoolboy, probably one of Plato's contemporaries, who wrote on his slate the names αθινα αρις αρτεμις and signed himself as διμοσθενις (for αθινα αρτεμις αρης — δημοθενης).⁹ The fact that the boy wrote ι in place of η four consecutive times is no coincidence. Obviously, his writing was a phonetic transcription, as it was led by his ear. Had the Attic sound represented by η been any different from that of ι /i/, the only choice other than η for the schoolboy would have been the letter ε /e/. Contrary to Kantor's assumption that Attic η = /e:/, Plato's and the Athenian schoolboy's testimony is that Attic η ≠ /e:/.

From the 3rd c. BC on, the frequency of the interchange of η with ι in the Ptolemaic papyri increases dramatically. The interchange of η with ει (ει was pronounced as ι already by the 5th c. BC) becomes very frequent from 200 BC.¹⁰ At the same time, Attic ε interchanges with

⁸ Other sources use ἑμέραν. This is in line with the fact that older Attic ε stood also for ει [i]. So ε(ι)μέραν [imeran] was read as ἑμέραν or ἡμέραν. Plato's point is with respect to the interchangeability of ι and ει, and now also η (see first quote above) with no hint at any difference in quality or quantity between these three vowels—nor at the use of the aspirate (').

⁹ *SEG* 19:37, <https://epigraphy.packhum.org/text/291132?hs=30-36>

¹⁰ Examples: τῇ βουλευι (376 BC) instead of τῇ βουλη, χαλκοθήκει (357–353 BC) instead of χαλκοθήκη, ἀφεικε (323 BC) instead of ἀφηκε. Examples taken from Caragounis, *The Development of Greek*, 371.

Ionic η down to Byzantine times partly due to the persistence of the old Attic writing system, and partly due to alternative formal vs. informal usage, error, or regional peculiarities. But that is of no consequence; for we are speaking not of regional peculiarities—such as Judeo-Palestinian—or relics of pronunciation in isolated places, but of the mainstream historical Greek pronunciation (HGP) that lived and developed through the centuries down to Neohellenic. Once the significance of this is realized, it is frivolous to cite any example of the confusion of η and ε in mainstream Greek. One therefore can be assured that the origin of today's equation $\varepsilon\iota = \eta = \iota$ in Neohellenic is not a “modern” novelty, but a phonological phenomenon diachronically traceable to Plato's day.

Regarding $\eta = \iota$, Kantor says that “In some ... regional varieties during the Roman period (and in Modern Greek) the vowel η had already merged with ι - $\varepsilon\iota$ and was pronounced as a front close unrounded vowel /i/ ...,” adding that “it is acceptable historically (in some regional varieties) to pronounce η as ι - $\varepsilon\iota = /i/$ ” (*Guide* 94). Kantor's statement is partly correct in the sense that the “merging” (equation) of $\eta = \iota$ originated several centuries prior to the Roman period.

α η ω

These subscripted letters are traditionally known as “improper” or “spurious diphthongs.” Kantor introduces them individually as follows:

“Great Attic $\bar{\alpha}\iota$ (α) = /a:i/, which would monophthongize to /a(:)/
in General Koine” (*PNTG* 349).

“Great Attic $\eta\iota$ (η) = /e(:)/, which would monophthongize to /e(:)/
in General Koine” (*PNTG* 353).

“Great Attic $\omega\iota$ (ω) = /o(:)/ (< */ $\omega\iota$ /), which would monophthongize to /o(:)/
in General Koine” (*PNTG* 365).

But “spurious” sounds too curious to pass over. To ascertain that α , η , ω were diphthongs in Classical Attic, as Kantor claims, we must first look at their historical development.

As we saw earlier, Greek schoolmasters compensated for the loss of certain Homeric consonant sounds by doubling the consonant in the syllable that was metrically affected by the loss. Greek schoolmasters compensated for the loss of Homeric vowels as well. The table below reflects how the vowels α , ε , ω were treated when they were found before a lost sound (which was not always traceable). To compensate for the loss, a vertical stroke | was placed after the vowel of the metrically affected syllable:¹¹

¹¹ Adapted from Zachariou, *Historical Pronunciation vs. Erasmian*, 42.

Older form	Reduced form	Compensatory mark (stroke)		New Attic form	
ΔΕΕΤΕ	ΔΕ' ΤΕ	ΔΕ ΤΕ	>	ΔΕΙΤΕ	<i>you bind</i> (pl.)
ΦΕΡΕΕΝ	ΦΕΡΕ' Ν	ΦΕΡΕ Ν	>	ΦΕΡΕΙΝ	<i>to bring</i>
ΒΑΣΙΛΕΨΕΣ	ΒΑΣΙΛΕ' Σ	ΒΑΣΙΛΕ Σ	>	ΒΑΣΙΛΕΙΣ	<i>kings</i>
ΕΝΣ	Ε' Σ	Ε Σ	>	ΕΙΣ	<i>into</i>
ΑΡΧΑΝΣ	ΑΡΧΑ' Σ	ΑΡΧΑ Σ	>	ΑΡΧΑΙΣ	<i>authorities</i>
ΤΟΝΣ	ΤΟ' Σ	ΤΟ Σ	>	ΤΟΥΣ	<i>the</i> (acc. m. pl.)
ΕΣΝΑΙ	Ε' ΝΑΙ	Ε ΝΑΙ	>	ΕΙΝΑΙ	<i>to be</i>

As a compensatory mark, the vertical stroke | originally served as a silent guide. Initially this stroke | was not confounded with *iota* Ι, because the latter's archaic Attic form (prior to 6th c. BC) was Ϝ or something similar, until it appeared as Ι(ι). Over time, compensatory | as a mere conventional mark ended up giving the monophthongized *spurious diphthongs* ΑΙ, ΕΙ, ΟΙ the appearance of the monophthongized *genuine diphthongs* ΑΙ, ΕΙ, ΟΙ. As a result, the two sets became confused. Adding to the confusion was archaic Ε, which stood both for [e] and [i] sounds and which, from around the end of the 5th c. BC on, was represented by Ε(ε), ΕΙ(ει), Η(η), or ΗΙ(ηι); and archaic Ο stood both for [o] and [u] sounds and which, from the end of the 5th c. BC on, was represented by Ο(ο), Ω(ω), or ΟΥ(ου).

Thus compensatory | continued to cling for a while to Α, Η, Ω as a *silent adscript* (ΑΙ, ΗΙ, ΩΙ), and later, from the 12th century on, as a *silent subscript* (α, η, ω). The presence or absence of the silent subscript, therefore, made no difference in the pronunciation of these vowels. It follows that these so-called "improper" or "spurious diphthongs" α, η, ω have always stood for the same sound as their monophthongal vowel counterparts α, η, ω respectively. Kantor's assumption that α, η, ω in Classical Attic were long diphthongs that later became monophthongs is unfounded.

αυ, ευ, ηυ

These vowel digraphs have one phonological feature in common: fricativized υ = /v/, /f/. In Neohellenic, as in Koine, this υ = /v/ before vowels and voiced consonants, and /f/ before voiceless consonants or in final position.

The fricativization of υ in these digraphs is traced to LXX, where Hebrew /v/ is transliterated as υ, e.g., Λευί /levi/ *Levi*, Λευιτικόν /levitikon/ *Leviticus*, Εύα /eva/ *Eve*, Δαυίδ /ðavið/ *David*, Νινευή /ninevi/ *Ninevah*, Ἰσααϋ /isaf/ *Esau*.

The fricativization of υ as /v/, /f/ reflected in the LXX was actually in place well before the beginning of the Hellenistic period. Attic *digamma* Ϝ, an archaic Phoenician symbol that sounded like υ in *vine*, was since the 5th c. BC substituted by β /v/ or fricativized υ /v/. Examples: ἀμοιράν for ἀμοιράν, 6th c. BC; Εὐάνδρος side by side with Εὐβάνδρος, 4th c. BC; εὐδομον for ἔβδομον, 3rd c. BC.¹²

¹² Caragounis, *Development of Greek*, 375.

By contrast, Kantor postulates that Attic “long diphthong $\bar{\alpha}\upsilon = /a:u/$... would simplify to $/a:/$ in General Koine (and subsequently merge with $\alpha\upsilon$) ...” (*PNTG* 375), though he admittedly lacks enough material to make firm conclusions regarding $\bar{\alpha}\upsilon = /a:u/$ in Judeo-Palestinian (*PNTG* 377). He also figures that eventually “analogical pressure from forms like $\alpha\upsilon\tau\acute{o}\varsigma$ probably led to the ... pronunciation (e.g. $[\alpha\beta]/[\alpha\phi]$) ...” (*PNTG* 377).

Attic $\epsilon\upsilon$, Kantor continues, developed thus: $/eu/ \rightarrow /ew/ \rightarrow /e\beta^{(w)}, e\phi^{(w)}/ \rightarrow /e\beta, e\phi/ \rightarrow /ev, ef/$ (*PNTG* 434). Regarding $\eta\upsilon$, he says that “Attic long diphthong $\eta\upsilon = /e:u/$ eventually becomes $/iv/$ and $/if/$ in modern Greek, which indicates a development like the diphthong $\epsilon\upsilon = /eu/$ ” (*PNTG* 377). The few examples Kantor lists here and his meandering speculative remarks do not warrant the formation of a counterargument. In any case, Kantor assumes that the υ in $\alpha\upsilon$, $\epsilon\upsilon$, $\eta\upsilon$ was not fricativized during the Classical Attic period but that its fricativization took place later in Hellenistic or Roman times (*Guide* 81); and that when fricativized, υ first became bilabial $/\beta/$, $/\phi/$ before changing into labiodental $/v/$, $/f/$ in Neohellenic.

The record, however, as seen earlier, shows that the pronunciation of υ as $/v/$, $/f/$ in the digraphs $\alpha\upsilon$, $\epsilon\upsilon$, $\eta\upsilon$ was in place, or originated, within the classical period, and was subsequently passed on through Koine and Byzantine times to Neohellenic. Kantor provides no convincing evidence that fricativized Koine υ was $/\beta/$, $/\phi/$ before morphing into $/v/$, $/f/$.

υ , $\omicron\iota$

Kantor says that the Modern Greek pronunciation of υ - $\omicron\iota = /i/$ could be justified historically (*Guide* 90), though it was not until the medieval period that υ - $\omicron\iota$ merged with ι in Modern Greek (*Guide* 91). He thus lists υ , $\omicron\iota$ under “historical Koine Greek pronunciation” as $/y/$ (*Guide* 112), which is essentially $/i/$ but with the lips rounded. It is the interchange of the υ and $\omicron\iota$ with other ι -sound letters and their “roundness” that concerns us here. Let’s start by examining the table below.¹³

Interchange of ι -sound letters in the pre-classical and classical period

Interchange	Misspelling / c. BC	Correct spelling	Misspelling / c. BC	Correct spelling
I for EI	Αριστοκλιδης 6–5	Αριστοκλειδης	Κλιταρχος 6	Κλειταρχος
	Νεοκλιδης 6–5	Νεοκλειδης	Αριστογιτον 5	Αριστογειτων
	Θαλια 6	Θαλεια	ευτελια 5	ευτελεια
	Χιρων 6	Χειρων	Σταγιριται 5	Σταγειριται
	Καλλιγιτον 5	Καλλιγειτων	Χαροκλια 5	Χαροκλεια
	Χαλκιαται 5	Χαλκειαται	Αριστιδου 4	Αριστειδου
	εχις 4	εχεις	οριχαλκος 4	ορειχαλκος
	δακριον 6–5	δακρυον	Λισικλες 6	Λυσικλης
	Ηποτελε 6–5	ΗΥποτελε	Ηποκιμενος 6–5	ΗΥποκειμενος
	Τιρινθι 6–5	Τιρυνθι	Διονισια 5	ΔιονΥσια
I for Y	Αριστονιμο 5	ΑριστονΥμω	Διονισιγενες 5	ΔιονΥσιγενης
	Διονισος 5	ΔιονΥσος	Λισιστρατος 5	ΛΥσιστρατος

¹³ Adapted from Zachariou, *Historal Pronunciation vs. Erasmian*, 19–20.

			Κρισευς	5	Κρυσευς	Κρισηις	5	Κρυσηις
			Πιθις	5	ΠΥθις	ημΥσυν	4	ημισυ
I	for	H	Αθινα	5	ΑθΗνα	Αρις	5	Αρης
			Διμοσθενις	5	ΔημοσθενΗΣ	Ευφιβος	5	Ευφηβος
			Ηπποκρατης	5	Ιπποκρατης	σιμα	4	σημα
			Πιδασης	5	ΠΗδασης	τινδε	4	τηνδε
OI	for	Υ	μοιχον	5	μΥχον	Ποιθικου	4	ΠΥθικου
			Κοιβων	4	ΚΥβων	Ποιτιος	4	ΠΥτιος
Υ	for	ΥΙ	ΗιλεθΥα	6	ιλεθΥια	απαληλυθΥας	5	απαληλυθΥιας
			κωδΥας	4	κωδΥιας	οργΥας	4	οργΥιας
EI	for	OI	δυΕΙν	4	δυΟΙν	τειχωι	4	τοιχωι
			Περιθειδης	4	Περιοιδης	ΦαληρηΕΙ	4	ΦαληρηΟΙ
I	for	OI	περιαλιφην	4	περιοιοφην	Μιραι	6	Μοιραι

Listed in the above table are lists of misspellings involving the interchange of all ι-sound single vowel graphemes and digraphs in Greek: ι, η, υ, ει, οι, υι.¹⁴ The interchange includes samples from the pre-classical and classical period (6th to 4th c. BC) in the regions of Attica, Boetia, and Euboea. Notably, these are also all the ι-sound single vowel graphemes and vowel digraphs in Neohellenic!

Evidence of υ = ι in the late archaic period (from 600 BC) is cited by Threatte, e.g., Ἀριστονίμο for Ἀριστονύμο, Διονισιγένης for Διονυσιγένης, Τύρινθι for Τίρυνθι, etc., with words such as ἥμισυ for ἥμισυ, Εὐτυχίς for Εὐτυχίς, Σύρυλα for Σύριλλα being attributed to assimilation.¹⁵ The confusion of υ and ι is further corroborated by the fact that (a) υ interchanges with η and οι, both of which had also begun to acquire the sound of ι already by the 4th c. BC; and (b) υ interchanges also with ει by the 5th c. BC (see table above).

Timayenis says that in the 6th c. BC “the pronunciation of υ as an ι was not unknown to the ancients” and cites: δρίος for δρύον, μόλιβος and μολύβδαινα, τρυφάλεια for τριφάλεια, μυστίλλω for μιστύλλω, μίτυλος for μύτιλος, βύβλος for βίβλος, ρύπτω for ρίπτω, ψιμύθιον for ψιμίθιον, πύστις for πίστις, ὕψος for ὕψος, ἰψηλός for ὕψηλός, ἰπέρ for ὕπέρ, ἰπαρ for ὕπαρ, all of which “show how easily υ was exchanged with ι.”¹⁶

Allen, on the other hand, cannot accept the stark evidence of such interchanges in Classical Greek. So when 4th c. BC inscriptions show ημισυ for ἥμισυ, while other inscriptions show βιβλίον for βυβλίον (from βύβλος), Allen tries to explain things away by saying that ημισυ for ἥμισυ “means only that the unrounded ι [i] was assimilated to the following rounded υ [ü] in this word,” and “the substitution ... of βιβλίον for βυβλίον simply indicates an assimilation of [ü] to the following [i].”¹⁷ So whether υ is represented by ι, or ι by υ, Allen resorts to “assimilation” as an explanation.

¹⁴ Samples are from Caragounis, *Development of Greek*, 365–370; and Jannaris, *An Historical Greek Grammar*, 47–52.

¹⁵ Threatte, *Grammar of Attic Inscriptions*, 261–262.

¹⁶ Timayenis, *Modern Greek: Its Pronunciation*, 151–152.

¹⁷ Allen, *Vox Graeca*, 68.

There are inscriptions, however, as shown in the table above, in which υ is substituted by ι in syllables that are neither preceded nor followed by υ or ι, e.g., δακριον for δακρυον (6th–5th c. BC), Ηυποκειμενος for Ηυποκειμενος (6th–5th c. BC), Διονισος for Διονυσος (5th c. BC). Such examples clearly speak not of assimilation but of misspellings through the use of interchangeable letters that stand for acoustically similar or otherwise indistinguishable sounds.

There is ample evidence of these types of interchange of letters and attendant spelling errors in the Hellenistic and Byzantine record but to which space cannot be devoted here. Suffice it to say that the foregoing pieces of evidence cannot be viewed as belonging outside the purview of Kantor's discourse relating to the pronunciation of New Testament Greek, nor can the same evidence be used in a way that would provide much support for Kantor's thesis regarding the origin, spread, development, and interpretation of such interchanges.

Vowel quantity

“In Classical Greek and Great Attic,” says Kantor, “vowel length (or quantity) was phonemic. This means that holding a vowel sound for longer—typically anywhere from 1.2x–2.5x longer than the duration of a short vowel—was an essential feature of its pronunciation and necessary for conveying proper meaning” (*Guide* 103, *PNTG* 750). As an example, Kantor gives the Attic word καθαρά “clean,” which could be either a feminine adjective, nominative, singular, in which case the final -α would supposedly be long; or a neuter adjective, nominative, plural, in which case the final -α would be comparatively short.

The word καθαρά is spelled and understood in Neohellenic the same way as in Koine and in Attic. In Neohellenic, though, the difference in meaning is determined only by the context, whereas in Attic, where vowel length was supposedly phonemic, the difference in meaning was determined contextually as well as acoustically. Unfortunately, since the Athenians of the classical period had no voice recorders, we cannot ascertain that καθαρά was pronounced in two slightly different, yet unmistakably distinct, ways. Nor can any linguist today assure us that Kantor's diagnosis is valid.

In the Roman period, Kantor continues, vowels were no longer distinguished by length (*Guide* 103, cf. *PNTG* 750). The result, he says, was vowel isochrony (equal-time), that is, Greek long vowels lost their distinctive phonemic feature of length and became equal in length to their short counterparts (*Guide* 104). “By the middle of the Byzantine period,” Kantor remarks, “everyone agrees that isochrony was universal” (*PNTG* 751).

Among the examples of the spread of vowel isochrony during the Koine period Kantor lists are ποδαγρικον for ποδαγρικων, τον for των, θεοδορ(ου) for θεοδωρ(ου), αριστον[ος] for αριστων[ος], βασιλεος for βασιλεως (*PNTG* 752). Thus, no one now could tell whether the pronunciation, e.g., [ton] meant τόν or τών. Apparently, the cause behind the interchange of ο and ω all along was illiteracy, but now this ill was compounded by isochrony.

Like Kantor, many scholars commonly theorize that in Classical Greek certain vowels required longer time to pronounce than other vowels, but that this distinction, known as

quantity, was lost in Koine. This is a misconception. Vowel length in Greek speech has never been phonemic, for all vowels in a word orthophonically pronounced (e.g., in isolation and free of any idiosyncratic conversational effects) are isochronous, that is, equally-timed.

“[T]here is not a word in the whole classical literature about quantity, as understood by us;” says Jannaris, “nothing about short, long, or common syllables or vowels, ... all these technical terms having made their first appearance in late grammatical treatises, that is in Greco-Roman times.”¹⁸

As we saw earlier, post-Homeric schoolmasters compensated for the loss of certain Homeric consonant sounds by doubling the consonant in the syllable that was metrically affected by the loss; and for the loss of Homeric vowels by inserting a stroke by the affected vowel. Around the mid-5th c. BC, the Athenians adopted Ionic η and ω not out of a need related to speech, but for quantitative prosodic features related to metrical verse, the lifeblood of Greek drama. Thus, from the mid-5th c. BC on, η and ω were used in Attic verse as compensatory symbols to mark the position of accented and therefore metrically lengthened syllables where ε and ο respectively had hitherto been placed and viewed as “long by position.”

As time went by, the repeated use of positionally long η and ω caused them to be regarded as “long” vowels, while vowels not long in the same sense were by default considered “short.” So η and ω, both of which eventually crept into the new Attic alphabet in 403 BC and were officially reckoned as alphabet letters, were still considered long not by virtue of any intrinsic phonological qualities, but technically, that is, metrically or grammatically;¹⁹ for, again, in Classical Greek speech vowels were relatively neither long nor short but isochronous (equally-timed).²⁰

As already mentioned, prior to the adoption of η and ω the Greeks knew nothing of “long” or “short” vowels in their speech. Such concepts were in fact invented later by Hellenistic grammarians, e.g., Dionysios Thrax, who developed rules governing metrical verse as follows:²¹

1. A syllable is *short* (βραχεῖα)—

if it has a “short” vowel ε or ο
followed by another short vowel, a
single consonant, or nothing, as
νέ-ος, λό-γος, λύ-ε-τε

¹⁸ Jannaris, *An Historical Greek Grammar*, 526.

¹⁹ The letter ο is called μικρόν *omicron* “small” (not “short”), and ω μέγα *omega* “large/great” (not “long”). These Byzantine names hint at the comparative size of the two letters, not their phonetic/acoustic length.

²⁰ It cannot be contended, for instance, that in normal speech the ancient Greeks made any perceptible distinction between ἀνώτερος and πότερος, κλήματα and κρίματα, λύωμεν and λύομεν, or that the ου in σπουδάζουσιν was longer than the α in βαπτίζουσιν.

²¹ Τζαρτζάνου, *Γραμματική*, 9; and Davidson, *Thrax*, 7.

2. A syllable is *long* (μακρά)—

- | | |
|---|---|
| a) <i>by position</i> (θέσει μακρά)
if it has a “short” vowel ε or ο
followed by two or more consonants
or one double consonant, as
ἐ-κτός, ἐ-χθρός, ὄ-ντος, δό-ξα
or ends in a double consonant, as ἄλς | b) <i>by nature</i> (φύσει μακρά)
if it has a “naturally long” vowel
η or ω, as κῆ-πος, ᾠ-δή,
a diphthong, as κρού-ω, χαί-ρειν,
or a doubtful element is assumed
long, as Ἄρης |
|---|---|

Obviously “short” ε and ο may be considered “long” as well (#2.a), though not by any distinctive phonological designation but by their very *position* (i.e., arbitrary imposition) in the foot of rhythmical verse. Thus it cannot be argued that a syllable with a “short” ε or ο followed by two or more consonants, e.g., the ε in ἔστω or the ο in ὄντος, becomes acoustically shorter when followed by a syllable with a single consonant, e.g., ἔσω, ὄνος.

As a final point respecting quantity it must be noted that according to Dionysios Thrax, “A long syllable may come about in eight ways, three by nature and five by position.”²² This in itself shows that “quantity is not fixed phonetically or physiologically but merely rests on tradition ... κατὰ τὴν παράδοσιν καὶ χρήσιν τῶν παλαιῶν *according to the tradition and usage of the ancients.*”²³ Such comments are an allusion to the artificiality of quantity applied to versification in ancient times and passed down to the Attic poets—artificialities that were in turn passed on to post-classical and Byzantine versifiers.

Clearly, vowel quantity in Attic Greek is a technicality of the art of metrical verse, not of ordinary speech. Kantor’s assumption that in Classical Attic the Athenians used long and short sounds in their daily speech and that this feature began to fade in Roman times has no evidentiary basis.

Conclusion

I was intrigued by Kantor’s claim that both historical Koine and Neohellenic pronunciation systems unlock identical linguistic and cultural resources. Kantor equates his proposed historical pronunciation with Modern Greek, promising the same benefits to the student. But as this cursory study shows, the two systems differ significantly. In fact, additional areas—such as how nasals (μ, ν) blend with fricatives (β, δ, γ), and how pitch and accent function prosodically—were omitted from this critique, yet their treatment in Kantor’s book further demonstrates his deviation from Modern Greek phonology.

As impressive as Kantor’s work is, with its remarkable lists of data, valuable linguistic and historical information, and clear stance against Erasmian, I find that its approach to New Testament Greek pronunciation clashes head-on with the caveat given earlier in this paper: the

²² Davidson, *Thrax*, 7.

²³ Davidson, *Thrax*, 7.

basis for the Attic Greek sound system against which Koine Greek words are compared is flawed, and as a result, the data are often interpreted in the wrong historical context.

I nevertheless endorse Kantor's valuable advice to study New Testament Greek using the Neohellenic pronunciation.



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