

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 —

By

Philemon Zachariou, Ph.D.

June 2024

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 *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

Contents

Introduction	3
Varieties of Koine pronunciation	4
Kantor on Erasmian	5
Spelling-mistakes methodology	6
Kantor's historical pronunciation of Koine Greek	6
β	6
φ	7
Aspirate <i>h</i>	7
Consonant gemination	8
η	9
α, η, φ	10
αυ, ευ, ηυ	11
υ, οι	12
Vowel quantity (length)	14
Conclusion	16
Works footnoted	17

— 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 voluminous work, not to mention its accompanying 132-page *Guide*. Word lists comprising spelling conventions extracted from numerous papyri and inscriptions written over nearly a 1,000-year span—beginning of the Hellenistic period in 332 BC to end of the late Byzantine period in 638 (per Kantor's dates)—along with detailed explanatory and postulational remarks, 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).

In that *PNTG* and the *Guide* deal with the same general topic as my recently published book,² and with both sources making several references to my work (albeit in a positive light), I feel it is incumbent upon me 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 the selection and discussion of items that differ the most from the historical Greek pronunciation (HGP) preserved in Neohellenic. The discussion of necessity brings into the picture relevant linguistic areas of determinative evidentiary value which Kantor at times barely touches on or altogether leaves out.

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

² Philemon Zachariou, *READING AND PRONOUNCING BIBLICAL GREEK: Historical Pronunciation versus Erasmusian* (Wipf & Stock Publishers, Eugene, Oregon). (Note: Originally published in 2020, and following some adjustments, the final print was released June 10, 2021.)

Varieties of Koine pronunciation

Kantor speaks of six regional varieties of Koine Greek pronunciation around the Mediterranean, which collectively comprise the General Koine Greek pronunciation, a pronunciation that developed from Attic Greek through Hellenistic and Byzantine times down to Modern Greek (*PNTG* 72, 78). In the limelight, however, is the Judeo-Palestinian regional variety of Koine pronunciation. It is this variety upon which Kantor bases “the historical pronunciation of New Testament Greek” and which he claims is pedagogically best for students learning the language” (*Guide* xiv).

Pondering over Kantor’s approach to varieties of Koine, rather than a mainstream Koine, I placed myself for a few moments in a beginning Greek student’s position, and a barrage of questions flooded my mind. I thought to myself, “What specifically is the New Testament Koine Greek pronunciation this author is recommending that I follow? The Judeo-Palestinian pronunciation? Wouldn’t that mean the pronunciation of Matthew, Mark, John, and Jesus himself, but not that of Luke’s and Paul’s, since both of these men were from outside the Judeo-Palestinian region? And in what sense could this pronunciation be pedagogically best for students learning the language?”

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. So I hadn’t really consciously paid attention to the *PNTG* subtitle before, for upon receiving this volume I started flipping the pages of a book whose impressive size seemed to promise me the latest findings on the true pronunciation of New Testament Greek. But now that I’ve had a taste of the book, I wondered why “Judeo-Palestinian Greek” in the subtitle hadn’t been placed more candidly as a heads-up for the reader in *PNTG*’s 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’ book, which recommended the pronunciation of Neohellenic as the right—and historical—pronunciation for New Testament Greek. But I wasn’t quite sure about it yet, as I still wished for 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*³ while enjoying all of those other benefits that come with it. And, come to think of it, I could now avow that I had just received a second opinion from a professional—Kantor himself—who so unequivocally was now 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 is in the form of an invitation to an amicable and scholarly conversation with users of Erasmian by establishing what he refers to as “the pronunciation of the Judeo-Palestinian Koine Greek at the time of the New Testament,” and comparing the findings with the pronunciation of other contemporary regional varieties of Koine (*PNTG* xliv).

But Kantor does not rush to a closure on the Erasmian issue; he devotes to it the entire first chapter in his *Guide* under the heading, “How Has Greek Been Pronounced in the Classroom since Erasmus?” (*Guide* 1–20). With respect to many scholars’ stance toward perpetuating the Erasmian pronunciation today, whether merely because of 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*,⁴ though only in part. For, apparently, and like the vast majority of scholars, Kantor sees Erasmian shortsightedly as nothing more than an issue of pronunciation. I find it therefore apropos to inject here the lingering thought that, as expounded in my work, Erasmian is more than just a pronunciation issue; it is the divider whose tremendous harm for the past 500 years since Erasmus has prevented scholars from conceding the significance of the later Greek (Byzantine and Modern), thereby depriving scholarship not only of a fuller linguistic tool for the interpretation of the Greek language and literature but also of being enlightened by the later history of the language. What is at stake as a result is the meaning of the Greek texts, which needs to receive light exegetically not just from the earlier (Attic, Hellenistic), but also from the later history of the language (Byzantine, Neohellenic). As Hasselbrook notes, “[T]he New Testament contains many features that have more affinity with Modern than Classical Greek.”⁵

³ *Ellas* is an alternative (formal) name for *Ellada* (informal).

⁴ Henceforth my book will be referred to by this shortened title, though more often as “my work.”

⁵ 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

It is beyond the scope of this paper to assess much of Kantor's detailed hypothetical and speculative thoughts and claims regarding the timing of presumed phonological changes in relation to multiple regional Koine dialects. The thrust in this section is to simply examine phonological features that are most arguable so as to assess the general validity of Kantor's claims. The focus will be the graphemes (letters), sounds,⁶ and other features listed below:

β,⁷ φ, ʰ (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 being φευρουβαρίου for φεβρουαρίου “February” (gen.) (*PNTG* 112). The evidence he posits is that υ in φευρουβαρίου 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 υ and β in cases such as

⁶ 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.

⁷ 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 /φ/, the voiceless equivalent of IPA /β/, is not the same as the Greek letter φ or φ.

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 *v* in *εv* as a bilabial fricative /β/ stems from the unfounded assumption that Attic *εv* was /eu/ (i.e., not /ev/) and which, after undergoing some intermediary stage as /ew/, it eventually developed in Hellenistic times into /eβ/ (*PNTG* 434). Kantor thus asserts that Judeo-Palestinian *εv* became /eβ/, 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, likewise 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 φ = /p^h/ → /φ/ (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” (*Kratylus* 427a), which means that in Plato's time φ was not an aspirated stop (as in *pot* /p^hot/) 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), and later adds that the consonant /h/ represented by the *spiritus asper* (^ˆ) 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.⁸ In New Testament times there was no trace of audible word-initial aspiration (οὔτος /utos/, ἕκαστος /ekastos/, ἡμέρα /imera/). Aspiration was only in standardized elision forms that were passed on from antiquity to Koine and to Neohellenic. Thus when Kantor, in referencing Sidney Allen's *Vox Graeca*, says that “the maintenance of appropriate aspiration in phrases like καθ' ἕκαστον continues until the second century CE” (*Guide* 58), one must be aware that “appropriate aspiration” did not cease to exist in the second century but is still operative today, as it is clearly audible in all ancient elision forms that reached Neohellenic. It is thus the θ in καθ' ἕκαστον (from κατά + ἕκαστον → καθ' ἕκαστον → Neohellenic καθέκαστον) that bears the elision effects diachronically to the present. The same applies to numerous other elision forms, such as with 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.

⁸ See YouTube video, *Greek Pronunciation 12 (Aspirate H)*, <https://youtu.be/TMkBXfZfjw>

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:⁹

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 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.)

⁹ Adapted from Zachariou, *Historical Pronunciation vs. Erasmian*, 42.

η

“Classical Greek η = /e:/,” assumes Kantor (*PNTG* 558). Plato, however, in his Socratic dialogues gives us an on-the-scene report regarding the way the newly-adopted Ionian symbol η into the Attic writing system, along with εἰ and ι, was treated:

νῦν δὲ ἀντὶ μὲν τοῦ ἰῶτα, ἢ εἰ [ἦ] ἦτα μεταστρέφουσιν
 “and so now instead of ι they change to εἰ or η.”

Plato's example:

οἱ μὲν ἀρχαιότατοι ἰμέραν τὴν ἡμέραν ἐκάλουν,
 οἱ δὲ [ὑστερον] εἰμέραν,¹⁰ οἱ δὲ νῦν ἡμέραν
 “the most ancients called ἡμέραν [*day*] ἰμέραν,
 and others [later] εἰμέραν, and now they call it ἡμέραν”
 (*Cratylus* 418c)

Plato's testimony regarding εἰ = 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 ἀθίνα ἀρις ἀρτεμις and signed himself as διμοσθενίς (for ἀθίνα ἀρτεμις ἀρης — δημοθενίς).¹¹ 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 εἰ (εἰ was pronounced as ι already by the 5th c. BC) becomes very frequent from 200 BC.¹² At the same time, Attic ε interchanges with 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

¹⁰ Other sources use ἐμέραν. This is in line with the fact that older Attic ε stood also for εἰ [i]. So ε(ι)μέραν [imeran] was read as ἰμέραν or ἡμέραν. Plato's point is with respect to the interchangeability of ι and εἰ, 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 (´).

¹¹ *SEG* 19:37, <https://epigraphy.packhum.org/text/291132?hs=30-36>

¹² Examples: τῆ βουλευί (376 BC) instead of τῆ βουλή, χαλκοθήκει (357–353 BC) instead of χαλκοθήκη, ἀφεικε (323 BC) instead of ἀφικε. Examples taken from Caragounis, *The Development of Greek*, 371.

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:¹³

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>
ΒΑΣΙΛΕΦΕΣ	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 Ϛ or something similar, until it appeared as Ι(ι). Over time, compensatory |

¹³ Adapted from Zachariou, *Historical Pronunciation vs. Erasmian*, 42.

as a mere conventional mark ended up giving the monophthongized *spurious diphthongs* AI, EI, OI the appearance of the monophthongized *genuine diphthongs* AI, EI, OI. As a result, the two sets became confused. Adding to the confusion was archaic E, which stood both for [e] and [i] sounds and which, from around the end of the 5th c. BC on, was represented by E(ε), EI(ει), H(η), or HI(ηι); and archaic O stood both for [o] and [u] sounds and which, from the end of the 5th c. BC on, was represented by O(o), Ω(ω), or OY(ου).

Thus compensatory I continued to cling for a while to A, H, Ω as a *silent adscript* (AI, HI, ΩI), 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., Λεví /levi/ *Levi*, Λευιτικόν /levitikon/ *Leviticus*, Εύα /eva/ *Eve*, Δαυίδ /davið/ *David*, Νινευή /ninevi/ *Ninevah*, Ἡσαυ /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 ἀμοιβάν, 6th c. BC; Εὐάνδρος side by side with Εὐβάνδρος, 4th c. BC; εὔδομον for ἔβδομον, 3rd c. BC.¹⁴

By contrast, Kantor postulates that Attic “long diphthong $\bar{\alpha}\upsilon$ = /a:u/ ... would simplify to /a:/ in General Koine (and subsequently merge with αυ) ...” (*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 αὐτός probably led to the ... pronunciation (e.g. [αβ]/[αφ]) ...” (*PNTG* 377).

Attic ευ, Kantor continues, developed thus: /eu/ → /εw/ → /εβ^(w),εφ^(w)/ → /εβ,εφ/ → /ev, ef/ (*PNTG* 434). Regarding ηυ, he says that “Attic long diphthong ηυ = /e:u/ eventually becomes /iv/ and /if/ in modern Greek, which indicates a development like the diphthong ευ = /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 αυ, ευ, ηυ 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

¹⁴ Caragounis, *Development of Greek*, 375.

became bilabial /β/, /ϕ/ before changing into labiodental /v/, /f/ in Neohellenic. The record, however, as seen earlier in this section, shows that the pronunciation of υ as /v/, /f/ in the digraphs αυ, ευ, ηυ 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 /β/, /ϕ/ before morphing into /v/, /f/.

υ, οι

Kantor says that the Modern Greek pronunciation of υ-οι = /i/ could be justified historically (*Guide* 90), though it was not until the medieval period that υ-οι merged with ι in Modern Greek (*Guide* 91). He thus lists υ, οι 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 οι with other ι-sound letters and their “roundness” that concerns us here. Let’s start by examining the table below.¹⁵

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	Σταγριται 5	Σταγειριται
	Καλλιγιτον 5	Καλλιγειτων	Χαροκλια 5	Χαροκλεια
	Χαλκιαται 5	Χαλκειαται	Αριστιδου 4	Αριστειδου
	εχις 4	εχεις	οριχαλκος 4	ορειχαλκος
I for Y	δακριον 6–5	δακρυον	Λισικλες 6	Λυσικλης
	Ηιποτελε 6–5	Ηυποτελε	Ηιποκιμενος 6–5	Ηυποκειμενος
	Τιρινθι 6–5	Τιρυνθι	Διονισια 5	Διονυσια
	Αριστονιμο 5	Αριστονυμω	Διονισιγενες 5	Διονυσιγενης
	Διονισος 5	Διονυσος	Λισιστρατος 5	Λυσιστρατος
	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	Ηπποκρατης	σιμα 4	σημα
	Πιδασης 5	Πηδασης	τινδε 4	τηνδε
OI for Y	μοιχον 5	μυχον	Ποιθικου 4	Πυθικου
	Κοιβων 4	Κυβων	Ποιτιος 4	Πυτιος
Y for YI	Ηιλεθυα 6	ιλεθυια	απαληλυθυας 5	απαληλυθυιας
	κωδυας 4	κωδυιας	οργυας 4	οργυιας
EI for OI	δυειν 4	δυοιν	τειχων 4	τοιχων
	Περιθειδης 4	Περιθοιδης	Φαληρει 4	Φαληροι
I for OI	περιαλιφην 4	περιαλοιφην	Μιραι 6	Μοιραι

¹⁵ Adapted from Zachariou, *Historical Pronunciation vs. Erasmian*, 19–20.

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.¹⁶ 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 ἦμυςυ for ἦμιςυ, Εὐτυχίς for Εὐτυχίς, Σύρυλα for Σύριλλα being attributed to assimilation.¹⁷ 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: δρῖος 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, ἕψος for ὕψος, ἰψηλός for ὕψηλός, ἰπέρ for ὕπέρ, ἰπαρ for ὕπαρ, all of which “show how easily υ was exchanged with ι.”¹⁸

Allen, on the other hand, cannot accept the stark evidence of such interchanges in Classical Greek. So when 4th c. BC inscriptions show ημυςυ for ἦμιςυ, while other inscriptions show βιβλίον for βυβλίον (from βύβλος), Allen tries to explain things away by saying that ημυςυ for ἦμιςυ “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].”¹⁹ So whether υ is represented by ι, or ι by υ, Allen resorts to “assimilation” as an explanation.

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., δακρῖον for δακρυον (6th–5th c. BC), Ηιποκειμενος 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.

¹⁶ Samples are from Caragounis, *Development of Greek*, 365–370; and Jannaris, *An Historical Greek Grammar*, 47–52.

¹⁷ Threatte, *Grammar of Attic Inscriptions*, 261–262.

¹⁸ Timayenis, *Modern Greek: Its Pronunciation*, 151–152.

¹⁹ Allen, *Vox Graeca*, 68.

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 τῶν. 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.”²⁰

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.

²⁰ Jannaris, *An Historical Greek Grammar*, 526.

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;²¹ for, again, in Classical Greek speech vowels were relatively neither long nor short but isochronous (equally-timed).²²

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:²³

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

2. A syllable is *long* (μακρά)—

a) *by position* (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) *by nature* (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.

²¹ 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.

²² 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.

²³ Τσαρτζάνου, *Γραμματική*, 9; and Davidson, *Thrax*, 7.

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.”²⁴ 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.*”²⁵ 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 earlier by Kantor's statement that essentially those who use a historical Koine pronunciation system or a Neohellenic (Modern Greek) pronunciation system will have linguistic and cultural resources open to them, among other benefits. Kantor equates his so-called historical pronunciation of Koine Greek with the Neohellenic pronunciation in terms of the same benefits to the student. But as the foregoing cursory study shows, Kantor's pronunciation system and that of Neohellenic are in major ways greatly dissimilar. In fact, there are additional, though perhaps minor, areas such as allophonic variations combining the use of nasals μ , ν with fricatives β , δ , γ , and prosodic features related to pitch/accent that were not pointed out in this critique, but whose treatment in Kantor's book shows degrees of deviation from the phonology of Neohellenic.

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

I must nevertheless gratefully acknowledge and hereby fully endorse Kantor's wise advice to study New Testament Greek using the Neohellenic pronunciation.



²⁴ Davidson, *Thrax*, 7.

²⁵ Davidson, *Thrax*, 7.

Works footnoted

- Allen, W. Sidney. *Vox Graeca: The Pronunciation of Classical Greek*. 3rd ed. Cambridge: Cambridge University Press, 1987.
- Caragounis, Chrys C. *The Development of Greek and the New Testament: Morphology, Syntax, Phonology, and Textual Transmission*. Grand Rapids: Baker Academic, 2006.
- Hasselbrook, David. *Studies in New Testament Lexicography: Advancing toward a Full Diachronic Approach with the Greek Language*. Tübingen: Mohr Siebeck, 2011.
- Jannaris, Antonios N. *An Historical Greek Grammar Chiefly of the Attic Dialect as Written and Spoken from Classical Antiquity down to the Present Time*. New York: MacMillan, 1897.
- SEG 19:37, <https://epigraphy.packhum.org/text/291132?hs=30-36>
- Threatte, Leslie. *The Grammar of Attic Inscriptions*. Vol. 1, *Phonology*. New York: de Gruyter, 1980.
- Timayenis, Telemachus T. *Modern Greek: Its Pronunciation and Relation to Ancient Greek*. Cambridge: Cambridge University Press, 1877.
- Tzartanos, Achilles. Γραμματική της Αρχαίας Ἑλληνικῆς Γλώσσης [Grammar of the Ancient Greek tongue]. Athens, 1965.
- Zachariou, Philemon. *Reading and Pronouncing Biblical Greek: Historical Pronunciation versus Erasmian*. Wipf & Stock Publishers, Eugene, Oregon.
- _____. *Greek Pronunciation 12 (Aspirate H)*, <https://youtu.be/TMkBXYFzfjw>