

Ἡ Κοινὴ Προφορὰ *Koiné Pronunciation* Notes on the Pronunciation System of Koiné Greek,

(These notes are of a technical nature beyond language learning, intended primarily for teachers.)

When a person wants to use living language methods to learn a language, one is required to make some choices about what kind of pronunciation system to use. As long as students only need to write Greek or to look at Greek on a printed page, the pronunciation system is not a very important issue. As soon as students set their sights on a higher goal and want to include language learning methodologies that will lead to a fluent control of the language, they must come to grips with the need to include audio and oral material in a program. And audio material for an ancient language means that decisions must be made about the kind of pronunciation system to be used.

Principles Governing the Pronunciation in this Course

1. The pronunciation system is primarily intended for persons wishing to learn Koiné Greek, the general Greek dialect used from the third century before the Common Era (BCE) to the fourth century of the Common Era (CE). In particular, the focus is on the Koiné Greek of what is historically the Roman period in the land of Israel, 63 BCE to 325 CE.

2. The pronunciation should preserve the same significant sound distinctions that were used in the Roman period. This means that the pronunciation system should be *phonemic*. This term will be explained below.

3. The pronunciation system should, as far as practical, be historical. That is, it should reflect the way in which the language sounded in the Roman period.

4. When options were available, the pronunciation should help students with adapting to other dialects of Greek so as to become a bridge to the whole Greek language. When in doubt, decisions should fit with the known historical outcome.

5. When options were available, the pronunciation should be practical for speakers of English, Spanish, French and German.

Why Use a Koiné Pronunciation?

A phonemic Koiné results in a dialect in which the user will appreciate the sounds and writings of the first three Christian centuries in a manner in which the original audiences would have perceived them. ἡ κοινὴ προφορὰ was their system. It provides an additional perspective on word choices by an author. Assonance, rhyme, and avoidance of ambiguity become clearer.

Pronunciation may only become an issue when someone wants to invest the time and energy to become truly fluent in the language, able to think, to listen and to read at normal conversational speeds. After such work would the student like to end up feeling like and sounding somewhat Greek? Hopefully. For those coming from a different system, a relatively small change at the beginning of the renewal effort is worthwhile. Additionally, the phonemic Koiné is close enough to Modern Greek so that Greek speakers accept it as ‘something Greek’ and ‘non-offensive’, even if not the same dialect.

The Phonemic Principle

What does *phonemic* mean? It refers to the sounds of a language that make a distinction in meaning.

For example, in English the vowel sound in the words “top”, “tape” and “tip” distinguish

different words and different meanings. Those three vowel sounds are *phonemic* for standard English. English speakers use those three sounds for making different words.

On the other hand, English speakers pronounce the *t* sound in the English words “top” and “stop” in slightly different ways. The *t* in “top” has a puff of air after it that the *t* in “stop” does not have. To perceive this distinction, put the palm of your hand on your lips directly on your mouth. Slowly pronounce “top” and then slowly pronounce “stop”. Repeat the *t* part of “top” and “stop”, as necessary. This can be dramatically demonstrated with a candle where a speaker can blow out a candle with “top” but will leave it burning with “stop”. English speakers consistently make these different *t* sounds but they do not use these different sounds to make different words. In fact, English speakers are not usually aware of the distinction of these *t* sounds until it is pointed out to them. The *t* of “top” is called *aspirated* by linguists [t^h], and the *t* of “stop” is called *unaspirated* [t]. These phonetic sound distinctions [t^h] and [t] are real but they are not *phonemic* for English. They are *etic* (i.e., they exist as different sounds but do not change semantic meaning). They are not *emic* (they do not make a difference in semantic meaning).

In addition to phonemic distinctions, English also has different words that are spelled differently but are pronounced identically (commonly called *homonyms*). For example:

beet	‘a vegetable’ and
beat	‘musical rhythm’. (It is also a verb, ‘to hit’.)

The words “beet” and “beat” are pronounced exactly the same but are spelled differently. Even though there is a difference of meaning, the exact same *phonemic* sounds are used. An English speaker hears these words as identical in sound.

Consider an analogy: good English courses train English learners to hear the phonemic distinctions of English, but they do not train English learners to artificially differentiate homonyms. Therefore, a good Koiné Greek course will train learners to hear distinctly the words that Josephus, Paul, Luke, and Epictetus heard as distinct. Likewise, those words that Josephus, Paul, Luke, and Epictetus heard as identical in sound, the student will learn to hear as identical. This will allow students to approach the kinds of language associations that the Koiné speakers had in the Roman period and to feel which words might rhyme or clash or to recognize which words might be avoided in order avoid ambiguity with other words.¹

Fortunately, a phonemic pronunciation system is fairly straightforward to determine for Koiné Greek. We have thousands of documents from the time period whose misspellings show us which sounds were exactly the same for Koiné Greek speakers and which sounds were distinct and *phonemic* in their ears. This needs some caution, of course. Some misspellings reflect dialect differences and some misspellings are just haphazard mistakes. However, when hundreds and thousands of examples of the same kind of misspellings are found all over the Greek world, then we have found items that sound alike to Koiné Greek speakers.

Phonemic Vowels in Koiné Greek

There are seven phonemic vowel sounds in Koiné Greek. The following four pairs of vowel symbols are known to be equivalent in sound and length of phonemic time within respective

¹ The so-called Erasmusian system contravenes these phonemic and historical principles in several inconsistent ways. See pages 225-227.

dialects² throughout the Mediterranean world of Koiné Greek:

- Pair 1: [εἰ] was pronounced the same as [ι].
 Pair 2: [αἰ] was pronounced the same as [ε].
 Pair 3: [ὦ] was pronounced the same as [ο].
 Pair 4: [οἰ] was pronounced the same as [υ].

A few representative examples will help to make this clear.³ The illustrations below are mainly from the few Dead Sea Scroll documents that we have in Greek, supplemented with papyri from the Loeb Classical Library⁴.

Pair 1: The interchange of εἰ for ι and ι for εἰ. These represent only one vowel sound-unit.

It is certain that εἰ and ι were both pronounced [i] for the Roman period Koiné.⁵ Likewise, there was no distinction between long and short time. There was no "short ἰωτα" and "long ἰωτα". Interchanges between these two spellings are so common as to be almost uninteresting. Nevertheless, a few examples from the Dead Sea Babatha archive⁶ (124-31 CE), a Ben Kosiba (Bar Kokhba) letter⁷ (132-135 CE), and an Egyptian Greek letter (100 CE) may be of representative interest:

	attestation	normalized	English
Ben Kosiba 1.9	ἰσ	εἰς	'to, for' (132-135 CE)
Ben Kosiba 1.7	συνεξελθιν	συνεξελεθῖν	'go out with'
Babatha 25.4	επιδη [=epidé]	ἐπειδή [=epidé]	'since' (131 CE)
Babatha 25.6	νυνοι	νυνί	'now'
Babatha 15.8	υμειν	ὕμῖν	'for you' (125 CE)
Papyrus 109.2	τωι οἰειωι	τῶ υἱῶ	'to the son' (100 CE)

² PLEASE NOTE: this does not mean that an ω-μέγα would sound exactly the same as an ο-μέγα in another dialect. To the contrary, we may assume that there would be continual small changes from dialect to dialect and even from village to village in some cases. What the above equivalencies mean is that within any particular dialect, the ω-μέγα, however it is pronounced, will be pronounced like ο-μικρόν in that dialect.

Likewise, the equivalencies do not mean that marginal dialects would not exist that did not follow the equivalencies of the major, majority dialects. The equivalencies above point out what a traveller would hear in the majority dialects all over the Mediterranean, from Rome to Judea, from the Aegean to Egypt.

³ For further examples and discussion, see Francis Thomas Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*. Volume One: *Phonology*. Milan 1976.

More readable and with good grasp of linguistic development is: Geoffrey Horrocks, *Greek, A History of the Language and its Speakers*. Longmans, 1997.

See also: Harry Leon, *The Ancient Jews of Rome*. Jewish Publication Society. 1960.

⁴ A.S. Hunt and C.C. Edgar, *Select Papyri*, vol. 1. Loeb Classical Library. Harvard University Press, 1932.

⁵ The sound [i] is written with square brackets to refer specifically to the *sound*. When a *phoneme* is referred to, that is, the abstract meaningful sound-unit, the symbol will be written with slashes /i/. The symbol "i" is the International Phonetic Alphabet symbol for the sound that is like the English vowel sound in "bee" or "beat".

⁶ Naphtali Lewis, *The Documents from the Bar Kokhba Period in the Cave of Letters, Greek Papyri*. Jerusalem: Israel Exploration Society, 1989.

⁷ Baruch Lifshitz, "Papyrus grecs du désert de Juda", *Aegyptus* 42 (1962):240-258.

A comment on *iota adscript*, written in some texts⁸:

The fact that a grammatical *iota* is often left off in writing shows that it was no longer pronounced in the first century. It was a grammatical spelling when correctly added, as in Papyrus 109.2 above. Cf. the lack in of the *iota* in

Bab. 21.24 ἐνὶ ἐκάστῳ ἐνὶ ἐκάστῳ 'for each one'

Pair 2: The interchange of αἰ for ε and ε for αἰ. These represent only one vowel sound-unit.

This is also a widespread, certain vowel development by the Roman period Koiné. They are the same sound and do not differ in vowel height or vowel length⁹. IPA [ɛ]

	attestation	normalized	English
Papyrus 99.4	εἰδηται	εἰδῆτε	'you would know' (154 BCE)
Ben Kosiba line 11	ποιησεται	ποιήσητε	'you should do'
Babatha 16.16	αἰνγαδδων	(gen. pl.)	En Gedi (127 CE)
Babatha 11.1	ενγαδοισ	(dat pl.)	En Gedi (124 CE)
Babatha 37.8	εταιροισ	ἑτέροις	'for others' (131 CE)
Babatha 24.18	αποδιξε	ἀποδείξει	'to declare' (130 CE)

Pair 3: The interchange of ω for ο and ο for ω. These represent only one vowel sound-unit.

This is another certain, widespread substitution in the Roman period Koiné. As with all of these vowel equivalencies there is only one vowel length. ω had originally been longer in time. ο had been shorter in time. In Koiné Greek they had the same time length. They had the same vowel height, IPA [o] or [ɔ]. Note well: either [o] or [ɔ] in any dialect, but without distinction. There was no difference in meaning.

Papyrus 100.2	ομνυο	ὀμνύω	'I adjure' (152 BCE)
Babatha 15.10+11	ηγεμωνοσ	ἡγεμόνος	'of governor' (125 CE)
Babatha 20.16+40	ανθομολογημενης	ἀνθωμολογημένης	'acknowledged'
Papyrus 109.14	αυτον	αὐτῶν	'of them' (100 CE)
Papyrus 109.15	ενπιροσ	ἐμπείρωσ	'skillfully'

⁸ There was no writing of *iota subscript* in antiquity. That was a writing convention that developed after 1000 CE. In pre-Koiné Greek there were three special diphthongs that ended in ι: ωι, ηι, αἰ. They were especially common in certain grammatical contexts like in nouns in the δοτική (dative) and in verbs in the ὑποτακτική (subjunctive). These were pronounced ω, η, α, in Koiné Greek. Sometimes ancient Koiné writers wrote the ωια vowel on the line in order to show the historical spelling and such a ωια is called ωια adscript. Sometimes they ignored the ωια in order to show the correct pronunciation. The ωια subscript after 1000 CE was a compromise. It was written under the main vowel in order to show that it was NOT pronounced, but it was written, nevertheless, in order to help to mark the grammatical category.

⁹ Vowel height refers to the relative position of the tongue in the mouth when making various vowel sounds. Vowel length refers to the relative length of time of the vowel sound. [Note well: this is NOT related to the colloquial English term 'long vowel' which many English speakers use to refer to different vowel heights. English speakers say the words 'note', 'not', 'knot', and 'naught', with the same vowel length even though they frequently refer to the 'o' in 'note' as 'long-o'. Technically, the 'o' in English 'note' has a different vowel height.

Pair 4: The interchange of ΟΙ for Υ and Υ for ΟΙ. These represent only one vowel sound-unit.

This is another certain, widespread substitution in the Roman period Koiné, IPA y, German ü.

Papyrus 103.12	εΠΥΗΣΕΝ	ἐποίησεν	‘did’ (95 BCE)
Papyrus 109.2	τωι ΟΙΕΙΩΙ	τῷ υἱῷ	‘to the son’ (100 CE)
Papyrus 109.3	ΠΥΗΣΑΣ	ποίησας	‘having done’
Papyrus 110.14	ΛΥΠΟΝ	λοιπόν	‘remaining’ (100 CE)
Babatha 20.30	ηΝΥΓΜΕΝΟΝ	ἠνοιγμένον	‘opened’ (130 CE)

There are two additional points on υ:

a. οι and υ had not yet merged with /[ει, ι]/ as the modern, *itacistic* change.¹⁰

b. Notice the extra ι in the next document, probably reflecting a rounded-front vocalic [ü] pronunciation of υ.

Babatha 21.17, 25	δια ενγυιου	διὰ ἐγγύου	‘by guarantor’ (130CE)
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The Status of η

While the decision on the above four phonemic vowel sounds was easy and unambiguous, there are several points where a more cautious judgment and approach are necessary. The vowel η has a more stable spelling history in spite of apparent changes in sound.

The vowel η became like ι and ει by the third century CE.¹¹ Gignac is of the opinion that η merged with ι in sound in the second century CE¹². This means that some might want to drop this distinct sound from their Koiné inventory. Such a decision would fit with the general trend of the language and fits smoothly with Modern Greek (Principle #4). However, because of the long stability of distinction of [η] from [ι] during 300 BCE to 150 CE, the spelling of η appears to be more stable in the following centuries as a "historical spelling".¹³ The sound had changed but most people kept spelling words correctly according to the older spelling tradition. Historical spelling is a common phenomenon among languages. Broadly speaking, it would appear that most people correctly used η as an equivalent for a close/mid-high [e] sound in the early Roman period. Consequently, we may conclude that most speakers in the first century still maintained η as a separate phoneme. We may, for example, expect that Luke's audiences expected to hear it or that Paul used it when preaching all over the Mediterranean. Nevertheless, there were people using Greek who were controlling this η vowel in a substandard manner and by the end of the Roman period it had disappeared from Greek speech, probably first among the uneducated and then by the upper class.

η: The interchange of ει/ι for η and η for ει/ι. These are late second century CE.¹⁴

¹⁰ The modern Greek vowels have ει, η, οι, υ, ι, υι all being pronounced as [i]. The process of the change is called *itacism*, since the various historical vowels changed their sound into *iota*.

¹¹ W. S. Allen, *Vox Graeca*, 3rd ed., Cambridge U.P., 1987:74 "confusion between η and ι in Attic inscriptions begins around 150 A.D."

¹² Gignac, 1976: 242, n. 1.

¹³ Of course, there were early examples of substandard dialects where η was already changing. See for example the discussion where Plato was already aware of this phenomenon: [418c] “and that is especially true of the women, who are most addicted to preserving old forms of speech. But nowadays people change *iota* to *eta* or *epsilon*, and *delta* to *zeta*, thinking they have a grander sound. [Hermogenes] How is that? [Socrates] For instance, in the earliest times they called day ἡμέρα, others said ἐμέρα, and now they say ἦμέρα. [Hermogenes] That is true.

¹⁴ Examples from Grace Sharon, private communication. Also p46 Eph 5:15 περιπατήτε for περιπατεῖτε.

John 10:41 p66	ειν (corrected to ην)	ἦν	'was' (200 CE)
John 11:44 p66, 75	κηριας	κειρίας	'cloth strips' (200 CE)
2Cor 12:21 p46	ταπεινωσει	ταπεινώση	'humbles' (200 CE)

These manuscripts were written at a time when ει sounded like ι and they show such confusion of ει as ι elsewhere in their writing (e.g., p46 Rom 8:32 ημειν for ἡμῖν. P66 and p75 John 3:10 γεινωσκες for γινώσκες) so these alternations of η and ει appear to reflect the [i] sound for η.¹⁵

Living Koine Greek includes η as a separate vowel sound. It appears to have still had popular phonemic status in the early Roman period, so the phonemic principle (#2) supports this inclusion of a separate sound for η. It also carries a fairly heavy functional load within the phonological system so this is worthwhile keeping.¹⁶

υ as a Consonant

During the Roman period the υ *upsilon* after vowels (αυ, ευ, ηυ) also began to be assimilated to (φ, β). Because 'length' had dropped out of the phonological system, the second vowel was functioning as a consonant. Throughout the Roman period speakers were using consonantal patterns of a [w]-glide¹⁷, perhaps becoming an unrounded glide and finally a bilabial fricative [β].¹⁸ This Koiné innovation of [β] has also been included in *Living Koine Greek* as consistent with the decision on consonants. See below. It is certainly the outcome of the Koiné process.

Discussion of Consonants

Consonants are trickier to evaluate than the vowels because they tended to remain phonemic and are often preserved with a correct spelling regardless of how they were pronounced. Thus, the correct pronunciation is actually less important for them than for the vowels. The consonants were in a state of "etic" [non-significant, non-meaningful] change throughout the Roman Koiné period. They preserved their independent, phonemic status. Thus, π, τ, κ were distinguished from φ, θ, χ, all six were preserved, but their pronunciation changed.

The ancient voiced stops β, δ, γ appear to have become fricatives first [IPA β, δ, γ], before the

¹⁵ Chrys Caragounis, *Development of Greek and the New Testament*, (Baker, 2006:503-508) lists 155 examples of ι for ει in p66 of John, and also 139 examples of ει for ι in p66 of John.

¹⁶ η is the most distinctive difference between Koine and Modern Greek. Modern Greek speakers accept υ and οι when pronounced [i] because their ears interpret the sound as [i]. However, η as [e] is rejected because they hear it as [ε] though they would expect to hear [i]. For example, for ἤδη 'already', one must say [iði] 'already' and not [éðe] in order to be understood in Greece today. Students wanting to speak both Modern Greek and Koine will need to be careful with η and may want to adopt the later, 6-vowel Koine dialect without [e].

¹⁷ For example, in our Dead Sea material, notice the extra υ (probably=consonantal [w] or even a faint bilabial) Babatha 21.2, 22.2 ΦΛΑΥΟΥΙΟΥ for Φλαουίου (Flavius).

¹⁸ A remarkable example, though uncharacteristically early, is in a Ptolemaic papyrus with ραυδους for ράβδους (3 times). (See Gignac 1976:68, n.1).

Another interesting, early example comes from a papyrus from 35/36 CE. The first hand wrote Πνεβτῶνι, while a second hand corrected this to Πνευτῶνι. (Gignac 1976:70).

Horrocks (1997:111) writes: "The progressive narrowing of the articulation of the second element of the original diphthongs /au,eu/, beginning in the third century BC and leading via [aw,ew], to audible friction, i.e. [... aβ^w, ... eβ^w], is first attested in the spellings a(u)ou/e(u)ou, which seem to reflect the consonantal character of the second element. By the Roman period, after the loss of simultaneous lip rounding, we seem to be dealing simply with a pronunciation [.../aβ, .../eβ], or perhaps even [af/av, ef/ev] as in modern Greek. Spellings with β ..., become increasingly common in late Roman and early Byzantine documents."

ancient stops φ, θ, χ. Already at the beginning of the Roman period βῆτα was becoming a 'soft' bilabial fricative, probably like Spanish sound of 'b' in Havana/Habana (the city). γάμμα became a velar fricative, and even a palatal fricative in conjunction with front vowels. During the Roman period δέλτα eventually became fricativized everywhere (like the English sound in 'this')¹⁹.

Notice the following examples of Latin words with [v,w] transcribed in Greek with [β].²⁰ Historically, the Latin sound was transcribed with ου in Greek.

Σαλβίου	for the Latin [Salvius] (1 st century CE).
πρεβέτοις	for the Latin [privatus] (1 st century CE)
Φλαβία	for the Latin [Flavia] (149 CE)
Φλαουβίου and Φλαυβίας	for the Latin [Flavius/-a] (120 CE)

Also, our earliest extensive NT papyri, p46 (late 2nd century), already has Σιλβανοῦ at 2Cor 1.19, corrected to Σιλουανοῦ. These suggest that a Koiné pronunciation should either use a Spanish 'v' (#3) or an English 'v' or 'f' (both #3 and #4).

Likewise, notice the examples of γάμμα reflecting a fricative abound, in some cases approaching a palatal [y] sound.²¹ The insertions and the substitutions with ι would not be probable without γάμμα having become a soft fricative.

ιγερου	for	ἱεροῦ	'of a temple, of holy' (from 5 BCE)
υγιου	for	υἱοῦ	'of a son' (from 16 CE)
εριευς	for	Ἐργεύς	(frequent in 1c CE)

It appears that the ancient voiced stops β, γ had already gone *soft* by the first century and should be pronounced like International Phonetic Alphabet [β, γ].

On the other hand, it is impossible to know just when and where the corresponding voiceless stops φ, θ, and χ, became fricatives like typical Erasmian 'f', 'th' and 'ch'. Most of our colloquial papyri come from Egypt where the local Coptic seems to have encouraged a hard p^h, t^h, k^h. With the voiceless fricatives we have Attic inscriptions with some evidence of soft forms already in the second century CE. We might assume that the complete 'soft' system [for β, φ, δ, θ, γ, χ] started in the north/Asia Minor. Some ancient Greek dialects were 'soft', like Laconian σιος [=θεός]. In any case, the Egyptian system of soft voiced consonants *v, dh, gh* [IPA β/v, δ, γ], and hard voiceless p^h, t^h, k^h, is a complete inversion of current Erasmian practice, where Erasmian voiced stops are 'hard' *b, d, g*, and voiceless aspirated stops are fricatives *f, th, ch*. For the voiceless consonants φ, θ, χ, the typical *Erasmian* soft pronunciations of φεῖ, θῆτα and χεῖ, common in academic circles today, were taken directly from Modern Greek. Historically, these modern sounds probably entered Greek pronunciation during the Roman imperial period. See below for a Dead Sea example where θῆτα may still have been hard, aspirated *t* just like modern English *t*. The ancient Greek distinctions φ,θ,χ vs. π,τ,κ were between hard, aspirated stop sounds like English 'p' 't' 'k' and between unaspirated Spanish 'p' 't' 'k'. Notice:

BenKosiba 1.8 αναςθησεται ἀναστήσεται 'he will stand up'

¹⁹ According to Gignac (1976:75), δέλτα first became fricativized before ι, around the first century.

Interchanges between δ and ζ, as mistakes to be sure, only begin from the third century, and Gignac takes this as evidence of the complete fricativization of δέλτα.

²⁰ Examples are from Gignac (1976:68-70). See also footnote 9: Πνεβτῶνι/Πνευτῶνι.

²¹ Examples are from Gignac (1976:71-70).

If the soft pronunciation is accepted for the voiceless consonants (φ, θ, χ) as in Erasmian, then consistency would demand that the historically earlier, and more certain, voiced fricatives (β, δ, γ) are also used.

A practical approach on these consonants [β, δ, γ, φ, θ, χ] is outlined here.

1. To recognize that whichever pronunciation we follow, we will be able to preserve its phonemic status to a high level of consistency. *Theta* will still pattern as *theta*, whether pronounced as a hard *t^heta* or soft *theta*.
2. To accept the flow of the language and recognize that the *etic* pronunciation of the consonant system was undergoing change, (already in the first century, especially in northeastern/Aegean dialects), and changing towards a later stabilization where they are all fricatives. Principle #4 would support the soft fricative pronunciation. Depending on where someone like Luke was on this continuum, he may have sounded like lisping when speaking *f*, *th*, *ch*, in Jerusalem, or he may have sounded 'sharp' when speaking around Ephesus.
3. For consistency within the linguistic system, it would be simplest theoretically and practically to either keep all six [b, p^h, d, t^h, g, k^h] 'hard', or all six 'soft' [β, φ, δ, θ, γ, χ]. Principle #3 supports a 'soft' pronunciation for at least β, δ, γ, and consistency would make them all soft for an assumed "Aegean" Koiné dialect.
4. To recognize that the contrast [p^h, t^h, k^h] versus [p, t, k] is not phonemic in Western European languages. Principle #5 would support the soft pronunciation.
5. Thus, for phonemic Koiné Greek we may accept the modern (=Erasmian) voiceless fricatives [φ, θ, χ] on historical grounds, #3 and #4. This was the direction in which the consonants were already in the process of moving. The voiced fricatives [β, γ, partly δ] can be accepted on historical principles already for the first century, #3, for both the Aegean and Egypt. In sum, the most practical and most historical mix would be to use something close to the Modern Greek consonants for Koiné.

Aspiration

During ancient times most dialects of Greek had a /h/ phoneme that would be used at the beginning of some words. Words beginning with υ always had this, as well as the demonstrative words and relative pronouns (οὗτος, ὁ, ἡ, ὅς, ὅ). However, even in some dialects in early times, like Ionic, this /h/ did not exist and was not pronounced. In the Athenian spelling reform of 403 BCE, the ancient sign for this aspiration Η was dropped out of the general writing system. Instead, they started using that old aspiration symbol for the long form of the ε vowel. This is now our η, the vowel that has become [e] in Koiné.²²

Gignac lists many examples where there is consonant confusion in Koiné times between (π, τ, κ) and (φ, θ, χ) before words beginning with aspiration. For example, with οὐ 'not' before words that begin with vowels with rough breathing (historical /h/) one expects οὐχ, as in οὐχ ἕξ 'not six'. Before words with an initial vowel without rough breathing one expects οὐκ: οὐκ ἐξ αὐτοῦ 'not out of it'. The lack of consistency of this phenomenon in both directions in Koiné texts shows that aspiration had fallen out of common use. Gignac writes: "[these data-RB]...point to a loss of initial aspiration in the speech of many writers. Aspiration has not survived into Modern Greek. It was lost during the period of the Koiné." (Gignac 1976:137-138.) Some of Gignac's

²² Conservative spelling continued to mark aspiration in some of the ancient inscriptions by using the front half of the old letter for aspiration (ἰ).

examples follow.

ἐπ οἰς	for	ἐφ’ οἷς	‘on which’ (46 CE)
απηλικος	for	ἀφήλικος	‘of a minor’ (134 CE)
καθ ετος	for	κατ’ ἔτος	‘annually’ (26 BCE)
εφιδη	for	ἐπίδη	‘he might oversee’ (37 CE)
εφιορκουντι	for	ἐπιορκουντι	‘perjuring’ (30 BCE)

Since aspiration fell out of common speech during Koiné times, since the sound was not part of the writing system in Koiné times, and since it does not fit with Modern Greek²³, it seems in keeping with the Koiné pronunciation of consonants to drop aspiration from the pronunciation system. This follows principle #4, and principles #2 and #3 for the majority of Koiné speakers. (For Koiné access to this information, see footnote.²⁴)

Why Not Use a Koiné Pronunciation?

As mentioned above, pronunciation becomes an issue when someone wants to invest the time and energy to become truly fluent in the language, able to think, listen and read at normal conversational speeds. A phonemic Koiné results in a dialect in which the user will appreciate the sounds and writings of the first three Christian centuries in a manner in which the original audiences would have perceived them. ἡ κοινὴ προφορὰ was their system. It provides another perspective on word choices by an author. Assonance, rhyme, and avoidance of ambiguity become clearer.

So why wouldn't someone want to use a Koiné pronunciation? Some persons are primarily interested in an older literature like Homer's epics or the Attic playwrights. For such people an older pronunciation could be recommended. It is described below as Restored Attic (Allen-Daitz). Restored Attic is an Erasmian type that has been fitted linguistically to the fifth century BCE Athenian dialect. It preserves a single symbol-sound correspondence, although it should be distinguished from the various other systems that go by the name "Erasmian." However, applying Restored Attic to later Greek dialects is problematic. Such an approach goes against historical and natural language use that we see in every other language. While some people in English may rightly justify the reading of Chaucer in an ancient Chaucerian pronunciation, no one would argue that English learners should use Chaucerian when reading Shakespeare and certainly not when using modern English. The “cost” of this approach in Greek leads to a system that does not match the papyri, does not match the language choices in the NT, and sounds

²³ A century ago, Moulton wrote, “de-aspiration was the prevailing tendency ... part of the general tendency which started from the Ionic and Aeolic of Asia Minor and became universal, as Modern Greek shows.” (James Hope Moulton, *A Grammar of New Testament Greek*, vol. 1 Prolegomena, 3rd ed. Edinburgh: T. and T. Clark, 1908, p. 44)

²⁴ Students are free to add aspiration as they wish, though one may imagine that such would have been thought stuffy or snobbish in the first century. There may still have been some features of a classical Greek that were consciously learned by the upper classes and in which [h] would be learned and heard.

In keeping with later medieval practice, the rough breathing marks are written in *Living Koine Greek* wherever the miniscule [small letter] writing system is used. Thus, ἑλληνική is written with extra marks when written with miniscule letters, but the uncial/capital writing style does not have extra marks: ΕΛΛΗΝΙΚΗ.

Access to the information about rough breathings is provided in the writing system and by correct drilling of the consonant harmony in words like καθ’ and οὐχ. Homonyms that are distinguished by ‘ in the writing system will be pointed out in *Living Koiné Greek*.

cacophonous to Modern Greek users. Like with English, later dialects are best learned in a later pronunciation and a special reading dialect can be used for reading earlier dialects.

Some also argue that Greek should be taught with any artificial sound system that simply differentiates every graphic distinction in the Greek writing system, regardless of what actually happened in the fifth century BCE. See the “US Erasmian” below. Such a system would still help students learn to spell. The same objections apply to this suggestion as apply to using Restored Attic for the Koiné. The English vowels and consonants have changed even more than the Greek vowels. So if we don't do this for English and its spelling system, we have even less of a reason to demand this for Greek. In addition, such systems are historically inaccurate if deviating significantly from Restored Attic, and others, like “US Erasmian,” mix some of the sounds and symbols together incorrectly and ambiguously (see below).

From another direction: professional conferences are not a good reason for preserving a system that is historically out of sync or that joins some phonemes incorrectly. (See the incorrect vowel pairings of US Erasmian below.) At professional conferences audiences can only be assumed to follow extended texts when written, so that pronunciation systems become irrelevant to the question. Also, speakers usually have the option of using whatever pronunciation system they wish, along a trajectory from Modern to Restored Attic.

It is a true advantage to be able to listen to Koiné texts and perceive them rapidly and within the same linguistic framework as the original audience. One can read ancient papyri as spelled, can appreciate the original spelling of the Greek New Testament²⁵, and have better linguistic instincts about which words and choices may have been influenced by sound. Plus, the system is accepted as compatible with “Greek” by Modern Greek speakers.

Comparison of Other Systems of Pronunciation

There are approximately four different kinds of pronunciation systems available for reading Greek. They are summarized below and followed by a comparative table of their vowels.

Alternative Pronunciation 1 Modern Greek

- ι = εἰ = η = υ = οἰ are pronounced the same,
- αἰ = ε
- ω = ο
- Consonants β, δ, γ, φ, θ, χ are all soft, fricatives.

This would be a good option based on principle #4. However, it contradicts the phonemic character of Koiné Greek by ignoring two vowel phonemes. This is probably best reserved for those who are already fluent in the modern language. A compromise between Modern and Koiné would be to use a 6-vowel Koiné, dropping the phoneme η [e] from the Koiné and adding one phoneme οἰ/υ [ü] to the Modern system. This would fit the 2-3rd century CE and later and either the 6-vowel or 7-vowel Koiné could be used as a reading dialect by modern speakers.

²⁵ Many are unaware that the oldest papyri and oldest uncial manuscripts all reflect a 1st century Koiné pronunciation in their spelling. Westcott and Hort followed many of these, correctly, though the editors of the NA/UBS text have artificially re-spelled the earliest strata of the Greek New Testament, apparently to accommodate an incorrect Erasmian pronunciation. See, e.g., Δαυεῖδ, Πειλᾶτος, Ἡλείας, and χρεοφιλέται.

Alternative Pronunciation 2
Restored Attic (Allen-Daitz)

- ω is longer and phonetically lower than ο (τῶ, τό vowel heights are opposite from Erasmian)
- η is longer and phonetically lower than ε (ἔτι, ἦδη vowel heights are opposite from Erasmian)
- The vowels ι, α, υ have long and short phonemes that should be distinguished.
- Consonants β, δ, γ are 'hard' and φ, θ, χ are also hard, aspirated-stops.

The Allen-Daitz system scores high on principles #2 and #3 for its own period, 8th-5th centuries BCE. But it contravenes principle #1. It is true to the old poetic tradition and should be given consideration for those mainly interested in Greek epic, poetry and plays. It is for those who would also like to read English Chaucer in Chaucerian pronunciation, so Restored Attic can serve as an optional, special reading dialect for pre-Koiné literature.

However, it is a relatively difficult system for speakers of English, Spanish, French and German. It requires phonemic contrasts that are not in use in the above languages (unaspirated voiceless stops to be readily produced and distinguished from aspirated voiceless stops, plus phonemic vowel length). In addition, it adds features of tone (acute accent versus circumflex) that require higher processing energy for those who are generating speech and not simply reciting or reading texts. So, principles #1 and #5 argue for other systems. Principles #2 and #3 are contradicted for the Koiné period, and it likewise is unredeemably distant from fulfilling #4 and any acceptance with Modern Greek.

Alternative Pronunciation 3
Erasmian (US version):

- υ (before vowels) = ου. E.g., λύω 'I untie' = λούω 'I wash', pronounced identically. Ancient and Koiné [ü] (IPA y) is ignored.
- ει = η. E.g., βλέπει = βλέπη 'he sees', both indicative and subjunctive pronounced identically.
- ο is lower than ω, (τῶ, τό are pronounced [to],[tə/ta]. This is reversed from the historical development of these vowels.) In addition, some US Erasmians pronounced ο as α! This should be rejected and resisted. It produces amusing miscommunications like αἰνεῖτε τὸν θεόν being pronounced as Doric song for αἰνεῖτε τὰν θεάν 'praise the female goddess'.
- Vowel length timing is ignored. (This contradicts the Restored Attic Allen-Daitz system).
- ε is lower than η (ἔτι, ἦδη) (Probably reversed from the historical development of these vowels.)
- Consonants φ, θ, (χ) are soft, fricative, but β, δ, γ are hard. (Historically backwards from 1st century!)

The vowels contradict the phonemic principle (#2) in two directions. Three vowel symbols (ει, υ, ο) are joined by US Erasmian to the *wrong* phonemes for Koiné. US Erasmian joins some υ to ου, and ει to η, and ο to α. Then in the opposite direction, several vowels are artificially differentiated (αι from ε, οι from υ, ο from ω), so that homonyms, rhyme and ambiguity for the original Koiné audiences are masked over. Principle #3 is also contradicted in two directions. The voiced fricatives are pronounced hard, but the voiceless aspirated stops are pronounced soft as fricatives. It is also out of step with principle #4, since it neither leads on to Modern, nor is it true to the classical Attic. Its main claim is that it represents an academic status quo in North America, with parallels elsewhere. This last concern would seem irrelevant for those interested

in becoming fluent in Koiné. Academic audiences rely on written texts and cannot be assumed to follow any extended speech, even in US Erasmian pronunciation.²⁶

Koiné Option
Roman Period Koiné Greek (Imperial Koiné)

The Koiné pronunciation adopted in this course reasonably meets all of the criteria listed at the beginning of this chapter.

- #1 It is specific for the Koiné of the Roman period.
- #2 It preserves the phonemic system that the speakers of the period were using. Most importantly for understanding what sounded the same and different and for understanding the spelling within actual manuscripts, the vowels are correct.²⁷
- #3 It partially meets the historical criterion. The voiced consonants β and γ are correctly fricatives. With regard to aspirated voiceless consonants it has chosen the fricative set as a potential minority dialect for the first century and in line with principles 4 and 5 for the later Roman period. (Voiceless fricatives [φ, θ, χ] also match Modern and Erasmian).
- #4 It is quite close to a modern pronunciation. Students will find themselves partially prepared for the Modern dialect, should they choose to learn it.
- #5 It is practical, choosing to follow φ, θ, χ from the majority dialect at the end of the Roman period because of ease of learning and their fit with principle #4.

Koiné offers both the historical integrity that scholars will appreciate (principles #2 and #3) and a Greek-sounding dialect that is more harmonious for those who use the modern language (principle #4).

²⁶ The author of this book has had to use all four of these systems at various stages in his career. Switching from one to the other is certainly possible at various stages, especially when one is not fluently speaking the language but only reading written texts. The Erasmian system cannot be recommended for new students and even teachers with years of experience are strongly encouraged to overcome any inertia factor. When building toward fluency, it is recommended to use the system that one plans to end up with.

²⁷ Those interested in papyrology, reading ancient documents and textual criticism will find that a Koine pronunciation is more helpful than either of the classical options. A full modern pronunciation becomes useful for texts from the end of first millennium CE, meaning that οι, υ, and η had all joined with ει, ι by that time and were often confused by scribes.

The 7-vowel²⁸ phonemic sound system in Koiné Greek,
written with 11 symbol combinations:

IPA	Greek symbols
1. [i]	ι or ει
2. [e]	η
3. [ɛ]	ε or αι
4. [a]	α
5. [o]	ο or ω
6. [u]	ου
7. [y]	υ or οι

Tongue Position Chart for Roman Period Koiné

	front	rounded	central	back
high	ι,ει	υ,οι		ου
mid	η			
mid/low	ε,αι			ο,ω
low			α	

The sound that is written with ι or ει is made with the highest part of the tongue relatively forward and high for a vowel. The lips are unrounded.

The sound that is written with η is made with the highest part of the tongue relatively forward and with medium height for a vowel. The lips are unrounded.

The sound that is written with ε or αι is made with the highest part of the tongue relatively forward and medium-low for a vowel. The lips are unrounded.

The sound that is written with υ or οι is made with the highest part of the tongue relatively forward and high for a vowel, like ι and ει. Plus, the lips are tightly rounded like ου.

The sound that is written with α is made with the highest part of the tongue relatively central and low for a vowel. The lips are unrounded.

The sound that is written with ου is made with the highest part of the tongue relatively back and high for a vowel. The lips are rounded.

The sound that is written with ο or ω is made with the highest part of the tongue relatively back and medium to medium-low height for a vowel. The lips are rounded.

²⁸ The 6-vowel, Koiné-EarlyByzantine system, from the 2-3rd century CE and following, removes the second vowel in the 7-vowel list: η, resulting in six phonemic vowel sounds, [i], [u], [ɛ], [α], [o], [ou].

Table of Vowels in Comparative Pronunciation Systems

Each horizontal solid line divides a single sound-group, a *phoneme*, into the orthographic representations for each system. That is, within each phoneme band in the table, there are lists of the various ways that each system maps symbols to that sound unit. (*The vowel lengths of the Allen-Daitz system have been ignored for this table and are merged into the distinctive vowel heights. Thus, only one phoneme is listed for ι, υ, and α, though both long and short phonemes of these three were in the Attic system.)

For example, the first sound listed, a high front unrounded vowel /i/, has five Modern Greek orthographic representations, two Roman period Koiné representations and only one Attic and Erasmian representation. The second sound listed, a high front rounded vowel /ü/, does not have a Modern representation or a US Erasmian representation but is mapped to two Koiné orthographic representations and one Attic orthographic symbol.

(Phoneme)	Attic (Allen-Daitz)	Erasmus (U.S. version)	Koiné (Roman Period)	Modern
/i/	ι	ι	ι	ι
			ει	ει
				η
				οι
				υ
/ü/	υ		υ	
			οι	
/e/	ει	ει	η	
		η		
/ε/	ε	ε	ε	ε
			αι	αι
/æ/	η			
/a/	α	α	α	α
/ɔ/	ω	ο		
/o/	ο	ω	ο	ο
			ω	ω
/u/	ου	ου	ου	ου
		υ		
/o+i/	οι	οι		