The Alphabet; Pronunciation

1. The Alphabet. In the late ninth or early eighth century B.C.E. the Greeks borrowed a group of twenty-two letter symbols from the Phoenicians. They reinterpreted symbols for sounds not present in Greek to serve as symbols for the vowel sounds. (Phoenician, like other Semitic languages, represented only consonants in writing.) The earliest Greek alphabets included the letters vau (F or ρ), koppa (Ω or Ω), and san (an alternative to sigma that looked much like our capital M and followed Ω in some alphabets). At this stage, the symbol H stood for the sound of Ω 1, and the letters xi, phi, chi, psi, and omega had not yet been invented. The inherited forms were originally arranged thus:

ΑΒΓΔΕΓΖΗΘΙΚΛΜΝΟΠΜΟΡΣΤΥ

In the early period there were many local variations in letter forms and even in correspondence of letter to sound, especially among the symbols added in some dialects to represent double consonants. For instance, X represented the sound of ks (xi) in western Greece, whence it passed into the Latin and the modern Roman alphabet as x, whereas in eastern Greece (including the Attic and Koine dialect areas) X represented the sound of kh (chi). The Attic alphabet before about 450 B.C.E. lacked omega, xi, and psi, and still used H for the sound of h. The Ionians, however, had generally lost that sound and used the symbol H instead for a long open-e vowel; their alphabet had added omega (to represent a long open-e vowel) and the double-consonant symbols, xi and psi. From about 450 some of the Ionic letters were used sporadically in Athens, more often by private citizens than by the public secretaries

who provided texts (of laws and decrees) for stonemasons to carve as inscriptions. In 403, the Athenian government officially made the transition to the Ionian alphabet (although use of the old system continued sporadically until about 350). During the fourth century the twenty-four-letter Ionian or New Attic alphabet won acceptance throughout most of the Greek world and became the standard in Koine and ever after.

The ancient Greeks used only what we call capital letters (although after the fourth century there were more and less formal or cursive ways of writing them):

The lowercase letter forms of present-day Greek type fonts are more or less closely derived from cursive letter forms of handwritten Greek used in the Middle Ages and the Renaissance:

Lowercase handwritten forms of some letters may differ slightly from those of the Greek font of this book. (It is recommended that instructors demonstrate the handwritten forms for their students.)

2. Classification of Sounds. (NOTE: The technical terminology introduced here is provided for the sake of explanation only and is not to be memorized by the student. The essential thing to learn is the recommended pronunciation, but some of the concepts in this section will turn out to be helpful in understanding features of morphology and word formation learned later.)

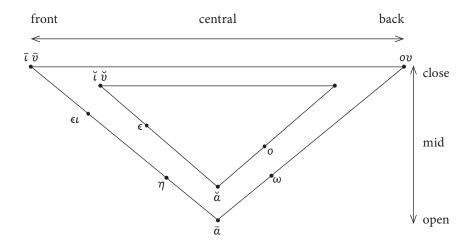
The number of syllables in an utterance generally corresponds to the number of high points in a diagram of sonority or acoustic power. Sounds characteristically occurring at high points in such a diagram are *vowels*. Those that occur at low points are *consonants*. A sound that can occur in either position is a *semivowel*.

Vowels are classified in two important ways. First, they are termed *front*, *central*, or *back* according to the areas of the tongue and palate involved in pronunciation. Second, they are termed *close*, *mid*, or *open* according to the degree of raising of the tongue, which determines the size of the passage through which air must pass during the pronunciation of the sound. In addition, the quality of a vowel can be altered by *lip rounding* or by *nasalization*. (In nasalization the velum or soft palate is not raised, with the result that the nasal passages are open when the vowel is pronounced.)

A *diphthong* is the coalescence of two vowel sounds within a single syllable. The speaker begins by articulating the first vowel, which is normally the more open of the two, and glides into the articulation of the second vowel, which is normally the more close.

Vowels have *length* or *quantity*, either *long* or *short*, roughly corresponding to a greater or a lesser duration of pronunciation. Note that the vowels α , ι , and v may

be long or short, whereas ϵ and o are short and η and ω are long. The relations of the vowel sounds of classical Attic can be conveniently displayed on a vowel diagram:



Consonants are classified in three important ways. First, according to whether or not the vocal cords draw together and vibrate, they are termed *voiced* or *voiceless*. To understand this distinction, pronounce b, then p, either with your ears stopped up or with a finger on your throat: you should hear or feel a vibration when the voiced consonant b is uttered, but not when the voiceless p is pronounced.

Second, according to the position or organ of articulation, consonants are described as follows:

labial (or bilabial)	lips
labio-dental	upper teeth and lower lip
dental	tongue-tip and upper teeth
alveolar	tongue-tip and upper gums
palatal	mid-tongue and hard palate
velar	back-tongue and soft palate

Third, consonants are classified according to the manner in which air is released during pronunciation. When there is a complete closure of the speech organs, the sound is called a *stop*; when the stop is released suddenly, the consonant is termed a *plosive* (p, b, t, d, k, g). The nine classical Greek plosives may be arranged in a table as follows:

position	voiced	voiceless	aspirated (voiceless)
labial	β	π	φ
velar	γ	К	χ
dental	δ	τ	θ

When there is no complete closure of the speech organs, the sound is a *continuant*. One type of continuant is the nasal, pronounced with tongue or lips closed but air escaping through the nose (m, n). A second type of continuant is the *liquid* (a term taken over from the Latin grammarians, who thus translated the Greek grammarians' term *hugros*, which was probably in origin a metrical term): for example, l, a lateral continuant (air escapes on both sides of the tongue); r, an alveolar continuant. If the air passage is so narrow as to create an audible effect, the continuant is termed a *fricative* (only s in classical Greek). The aspirate (the sound of h) is also a continuant.

For further details on reconstructing the pronunciation of classical Attic, W. Sidney Allen, *Vox Graeca: A Guide to the Pronunciation of Classical Greek*, 3rd ed. (Cambridge 1987), is highly recommended.

3. Recommended Pronunciations. Audio examples of the recommended pronunciations are available in the online tutorials associated with this textbook. The recommendations below reflect a pedagogically practical compromise involving the admixture of the treatment of some sounds as they developed in late classical or postclassical pronunciation. One may attempt a more purist pronunciation (for instance of theta and phi), but this has been found to cause many students to commit spelling errors that are avoided with the compromise system. In the following, a letter or group of letters in square brackets, such as [u], represents a phonetic transcription based on conventional values in the International Phonetic Alphabet (IPA).

alpha	
ă	like the first <i>a</i> in English <i>aha</i> (or the first <i>a</i> in Italian <i>amare</i>): a short open central vowel
\bar{a}	like the second <i>a</i> in English <i>aha</i> (or the second <i>a</i> in Italian <i>amare</i>): a long open central vowel
αι	like the vowel in English <i>high</i> : a diphthong
ą (āι)	generally pronounced by present-day students exactly like a plain long alpha: a so-called long diphthong. The classical pronunciation was a long alpha gliding into iota. (See §7 below.)
αυ	like the vowel in English <i>how</i> : a diphthong
beta	
$oldsymbol{eta}$	like English b: a voiced labial plosive
gamma	
γ	like hard g in go : a voiced velar plosive, except before γ , κ , χ , and perhaps μ , where it is a velar nasal, like n in ink or ng in $song$
delta	
δ	like French d (similar to English d , but English d tends to have a slight aspiration absent in the Greek): a voiced dental plosive

epsilon	
€	like <i>e</i> in English <i>pet</i> : a short front mid vowel
€l	like the vowel of German <i>Beet</i> (similar to the vowel in English <i>eight</i>): a digraph (two-letter symbol) representing a single sound (monophthong): a long front close-mid vowel
€υ	a diphthong pronounced by combining ϵ with [u] (i.e., oo as in English pool) in one syllable. (Compare the vowel in English feud.)
zeta	
ζ	like [zd] in English <i>wisdom:</i> a monograph (single symbol) representing a double-consonant group. From about 350 B.C.E. on, ζ came to be pronounced as a single fricative, [z] as in English <i>doze</i> or <i>rose</i> , and you will often hear it pronounced that way.
eta	
η	like the \hat{e} in French $t\hat{e}te$: a long open vowel (similar to $\epsilon\iota$, but η is more open and more central)
η (ηι)	generally pronounced nowadays exactly like plain η : a so-called long diphthong. The classical pronunciation was eta gliding into iota. (See §7 below.)
ηυ	a diphthong very similar in sound to ϵv , made up of η gliding into [u] (i.e., oo as in English $pool$): very hard for English speakers to distinguish from ϵv , and the Greeks themselves lost the distinction of these two sounds in the fourth century B.C.E.
theta	
θ	pronounced by most people today like fricative th in English $thin$, but pronounced in classical Attic like the t in English top : an aspirated voiceless dental plosive (i.e., an aspirated tau). The fricative pronunciation arose in Attic and Koine during the Roman imperial period (or even earlier in some dialects) and is recommended in this course because it avoids confusion between τ and θ for English speakers.
iota	•
ĭ	like <i>i</i> in French <i>vite</i> : a short close front vowel, unrounded. (The sound in English <i>bit</i> is similar, but more open.)
ī	like <i>i</i> in French <i>vive</i> : a long close front vowel, unrounded
kappa	
К	like English k (but completely unaspirated): a voiceless velar plosive. In the preposition $\hat{\epsilon}\kappa$, kappa is assimilated in pronunciation to the following consonant: that is, it is aspirated to [ekh] before θ or ϕ , or voiced to [eg] before β , δ , δ , and sometimes γ .
lambda	
λ	like a clear l in French, or like English l before vowels: a liquid

mu	
μ	like English <i>m</i> : a labial nasal
nu	
ν xi	like n in English net : a dental nasal. Nu is often assimilated to the following consonant in compounds or in phrases pronounced as a unit: it is assimilated to the following consonant before λ , μ , ρ , σ , labialized to μ before the labial plosives (β , π , ϕ), and converted to the velar nasal γ before the velar plosives (κ , γ , χ).
ξ	like English <i>x</i> in <i>fox</i> : a double consonant, [ks]
omicron	
o	like <i>o</i> in German <i>Gott</i> : a short back mid vowel
οι	like the vowel in English boy or coin: a diphthong
ov	like <i>oo</i> in English <i>pool</i> or <i>ou</i> in French <i>rouge</i> : a digraph representing (during most of the classical period) a long close back vowel, [u]
pi	
π	like French p or noninitial p in English (that is, totally unaspirated): a labial voiceless plosive
rho	
ρ	rolled r as in Italian or Scottish: a trilled alveolar liquid
sigma	
σ, ς, ς	like the English soft s in <i>mouse</i> : a voiceless fricative, $[s]$, except before the voiced consonants β , γ , δ , μ , where it is a voiced fricative, $[z]$, like the s in English <i>muse</i> . In most printed books, following an orthographic convention of late Byzantine times, sigma appears as σ -at the beginning of a word or within it, but as - s at the end of a word. In some books you will also see the older letter form ϵ (lunate sigma) printed in all positions.
tau	
Τ	like French t or noninitial English t (completely unaspirated): a voiceless dental plosive
upsilon	
ν̈́	like short French u or German \ddot{u} , pronounced like the u in French $lune$: a short close front rounded vowel (but in earlier Attic a close back rounded vowel, [u], the value it retained in most diphthongs).
$ar{v}$	like long French u or German \ddot{u} , pronounced like the u in French $ruse$: a long close front rounded vowel
υι	a diphthong combining the rounded vowel [ü] with semivocalic <i>i</i> (i.e., the sound [y]). The full pronunciation was [üy] or [üyy], but in classical times the iota was weakened to a glide between vowels and sometimes omitted in spelling.

phi	
φ	pronounced by most people today as fricative f (as in English $foot$), but in classical times equivalent to an aspirated pi, like p in English pot : an aspirated voiceless labial plosive. Phi became fricative in postclassical times, and the pronunciation as fricative f is recommended in this course because it avoids confusion between π and ϕ for English speakers.
chi	
χ	pronounced like the <i>c</i> of English <i>cat</i> or like <i>ch</i> in Scottish <i>loch</i> : an aspirated voiceless velar plosive (aspirated kappa)
psi	
ψ	like <i>ps</i> in English <i>lapse</i> : a monograph representing a double consonant [ps]
omega	
ω	like <i>aw</i> in English <i>saw</i> : a long open central-back vowel. (But you will also hear it pronounced like English long <i>o</i> in <i>go</i> .)
ώ (ω <i>ι</i>)	generally pronounced nowadays exactly like plain ω : a so-called long diphthong. The classical pronunciation was omega gliding into iota. (See §7 below.)
Breathing Signs	
•	aspirate or rough breathing: a sign placed over an initial vowel or initial

aspirate or rough breathing: a sign placed over an initial vowel or initial rho to indicate an initial sound *h*. (The sign derives from the use of the left half of H to indicate [h] after H had been converted to a vowel symbol.)

smooth breathing: a sign placed over an initial vowel to indicate the absence of aspiration

4. *Punctuation and Capitalization*. The Greek comma (,) and period (.) are used in the same way as in English. The Greek semicolon or colon is a single dot raised above the line (·). The Greek question mark looks like the English semicolon (;).

The Athenians of classical times used only capital letters and rarely punctuated; often they left no space between words. Punctuation was gradually introduced in books in postclassical times but was consistently applied only in Byzantine and modern times. In printed editions of Greek, punctuation is used throughout, and lowercase letters are used except for the first letter of proper names or proper adjectives and sometimes for the first letter of a section, paragraph, or quoted speech.

5. Elision and Crasis. A short vowel at the end of a word (especially of certain relatively weak words, such as particles, adverbs, and prepositions) is usually eliminated (elided) before a following word beginning with a vowel. Elision is marked by an apostrophe ('), a symbol invented in postclassical times but applied consistently only in Byzantine and modern times. For example:

$$\dot{a}$$
λλὰ $\dot{\omega}$ φελήσω \longrightarrow \dot{a} λλ' $\dot{\omega}$ φελήσω
παρὰ ὑμῶν \longrightarrow παρ' ὑμῶν

If the following word begins with a vowel that has rough breathing, then an unaspirated unvoiced plosive (π, τ, κ) at the end of the elided word is changed to the corresponding aspirated plosive (ϕ, θ, χ) :

$$\dot{v}\pi\dot{o}\ \dot{v}\mu\hat{\omega}\nu \longrightarrow \dot{v}\phi'\ \dot{v}\mu\hat{\omega}\nu$$

Similar elisions and spelling changes occur in compound words formed with prepositional prefixes:

παρα- + ἄγω
$$\longrightarrow$$
 παράγω κατα- + ἵστημι \longrightarrow καθίστημι

In other cases a final vowel is not elided but undergoes contraction or *crasis* ("mixing") with a following vowel: this occurs, for instance, with the prefix $\pi\rho\sigma$ - and with the article. The symbol called *coronis* ("curved stroke"), identical to the smooth breathing sign ('), is usually placed over the vowel formed by contraction:

$$προ έδοσαν \rightarrow προ ὕδοσαν$$
τὸ ἔλαττον \rightarrow το ὕλαττον

But when the first vowel in crasis is a form of the article with a rough breathing, the resulting vowel has a rough breathing rather than a coronis:

$$δ$$
 αὐτός $→$ αὑτός $δ$ ἄνθρωπος $→$ άνθρωπος

Finally, when the second vowel in crasis has a rough breathing, the aspiration is transferred to any unaspirated consonant of the preceding syllable and the coronis replaces the rough breathing:

καὶ ὁ πόνος
$$\longrightarrow χὧ πόνος$$

τὰ ἱμάτια $\longrightarrow θαἰμάτια$

- 6. *Some Typographic Conventions*. The following information is for later reference. Not all the phenomena described here will be seen in this book, but students will meet them in reading Greek texts.
- a. Diacritical marks (accents, breathings, coronis) belonging to a diphthong or vowel digraph are conventionally printed over the second of the two vowels: $\alpha \dot{v} \tau \dot{o}s$, $o \hat{v} \tau o s$, $\pi \epsilon \hat{i} \rho \alpha$, $\eta \dot{v} \rho o \mu \epsilon v$.
- b. When such a word is capitalized, only the first vowel of the diphthong is capitalized, and the diacritical marks remain on the second vowel: for example, $\alpha \dot{v} \tau \dot{o} s$ when capitalized is written $A \dot{v} \tau \dot{o} s$.

- c. When an initial single vowel is capitalized, its diacritical marks are printed before it: for example, $\ddot{a}\nu\theta\rho\omega\pi\sigma\sigma$ when capitalized is written $\ddot{A}\nu\theta\rho\omega\pi\sigma\sigma$.
- d. When a long diphthong is capitalized, the main vowel is printed as a capital, lowercase iota is printed beside it, and diacritical marks are placed before the capital: for example, $\ddot{\alpha}\delta\eta s$ when capitalized is written $\Delta \iota \delta \eta s$.
- e. When two adjacent vowels that could form a diphthong are pronounced separately, the second vowel has a mark of separation printed over it (that mark is called a *diaeresis*; it is written as two dots above the second vowel): for example, $\gamma\rho\alpha\hat{i}$, $\beta\circ\hat{i}$ (two syllables, not one).

7. Historical Notes.

Long diphthongs and the silent iota. The term long diphthong used in connection with α , η , or ω is slightly misleading: all diphthongs are normally long vowels, but the three long diphthongs are formed from the combination of a long vowel and an iota. In classical times these were true diphthongs (long alpha gliding into iota, eta gliding into iota, omega gliding into iota), but between the fourth and second centuries B.C.E. the iota weakened to a mere glide (like a consonantal y-sound) and then came not to be pronounced at all (hence the modern pronunciation and the term silent iota sometimes applied to this letter). The practice of writing a small iota under the vowel (called *iota subscript*: α , η , ω) was developed in the Middle Ages and has been followed in most printed texts, though you will also eventually encounter texts with the iota written after the long vowel (called *iota adscript*: $\alpha \iota$, $\eta \iota$, $\omega \iota$). In antiquity the adscript iota was always present when still pronounced (as in classical inscriptions), but once the letter became silent many writers simply omitted it. Inclusion of the silent iota was a mark of someone who had been trained to include it, in the same way that writers of English need to be trained to spell words with letters that are no longer pronounced.

The names of the Greek letters. The names are sometimes ancient, sometimes postclassical or later. In classical times, the Greeks called what we call epsilon simply $\epsilon \hat{l}$; the Byzantines used the name $\tilde{\epsilon}$ $\psi \iota \lambda \acute{o} \nu$ (that is, plain e) to distinguish ϵ from the letter pair $\alpha \iota$, which in postclassical times became identical in pronunciation to ϵ . Likewise, they called what we call upsilon simply \hat{v} , but by Byzantine times it shared the same pronunciation with $o\iota$ and was given the name \hat{v} $\psi \iota \lambda \acute{o} \nu$ (plain u) to distinguish it from the diphthong $o\iota$. In postclassical times the distinction in vowel length between o (once called simply $o\hat{v}$) and ω was lost, and the names \mathring{o} $\mu \iota \kappa \rho \acute{o} \nu$ (little o) and $\mathring{\omega}$ $\mu \acute{e} \gamma \alpha$ (big o) were introduced to distinguish the letters.

Genuine and spurious diphthongs. In earlier Attic $\epsilon\iota$ represented a real diphthong (the sound of ϵ gliding into the sound of ι), but the sound became a single vowel during classical times. This single long vowel represented by the digraph $\epsilon\iota$ also occurred

in some words as a result of contraction or compensatory lengthening. In the former type of occurrence, $\epsilon\iota$ is called a *genuine dipthong*, whereas in the latter type of occurrence it is traditionally referred to as a *spurious diphthong*. (This distinction will turn out to be significant in Unit 30 and elsewhere.) A similar story applies with ov. In earlier Attic, ov represented a real diphthong, [ou] (the sound of ov gliding into the originally back rounded sound of ov), but the sound became a single vowel during classical times. This single vowel represented by the digraph ov also occurred in some words as a result of contraction or compensatory lengthening. In the former type of occurrence, ov is called a genuine diphthong, whereas in the latter type of occurrence it is traditionally referred to as a spurious diphthong.

WHAT TO STUDY AND DO

- 1. Learn to write the Greek alphabet, especially the lowercase forms.
- 2. Learn to recite the Greek alphabet.
- 3. Practice pronunciation by reading aloud the vocabulary words found in Units 3, 4, and so forth. It is recommended that you give a slight stress to the accented syllable. You may also wish to begin memorizing the meanings of the words in Units 3 and 4.