5 | Greek Phonology
Sight and Sounds of Words (Part 3)
Consonants, Vowels and Diphthongs

5.0 Introduction

Lesson Five concludes an introductory three-part study of Greek phonology. Lesson Three presented a bird's-eye view of Greek vowels and consonants. Lesson Four concentrated on the organization of the Greek consonants and their phonetic relationship to one another. Finally, this lesson focuses on the vowel sounds, including the diphthongs and their phonetic relationship with words beginning with other vowel sounds, and several editorial diacritical phonetic markings associated with vowels and diphthongs.

Whereas Greek consonants are the most stable phonetic sounds among the letters, pronunciation of the Greek vowels proposes a formable challenge to any NTGreek student. For the beginning Greek student, however, learning a few diacritical phonetic markings will aid in pronouncing consistently the vowel sounds and syllables in words. These diacritical markings primarily include breathing marks (smooth and rough), accent marks (acute, grave, and circumflex) and the punctuation marks (comma, colon, period and interrogative).

It must be pointed out from the outset that these diacritical markings are editorial. By editorial, it is meant that the earliest manuscripts of NTGreek did not contain any of the breathing, accentual or punctuation markings. They were added later than NTGreek times by copyists of the Greek manuscripts to assist in the phonetic pronunciation of Greek by those to whom the language was foreign. Therefore, these markings are not part of the inspired text. This should not insinuate, however, they are arbitrary or of little benefit, and therefore should be ignored. For the beginning Greek student these editorial diacritical markings distinguish between words that would otherwise appear the same (φόβου - "of fear", φοβοῦ - "Fear!"; ὁ - "the", ὅ - "which"; ἥν - "which", ἦν - "was").

Many Greek instructors choose to teach NTGreek without utilizing any of the before mentioned editorial diacritical markings. Nevertheless, they are excellent phonological tools for the nonnative speaker when it is remember why ancient copyists employed them in the first place. Therefore, this grammar will follow the copyists' pedagogical approach and make the most of the diacritical markings to aid in the pronunciation of NTGreek vowels and diphthongs where applicable.

5.1 The Greek Breathing Marks

A very important diacritical phonological marking is the breathing. There are two breathing marks, the ***smooth breathing*** (᾽) and the ***rough breathing*** (῾). These complementary breathing marks modulate or regulate the aspiration of every initial vowel and diphthong. A smooth breathing specifies that there is no aspiration; a rough breathing indicates aspiration. When aspiration occurs (as in only the rough breathing mark), it is pronounced as the aspirated "h" in English.

> There is not a Greek letter to represent the phonological aspirated "h" sound (as in English; "heat", "helix", "hinge", etc.). It is believed that the bisection of the Greek capital letter, H (├ ┤), became to represent the two breathing marks (├ = rough and ┤ = smooth; ca. VII A.D.) after the letter had lost its original aspiration long before the NTGreek Era. These diacritical marks later evolved to └ and ┘ (ca. XI A.D.) to the modern breathing marks, ῾ (rough breathing) and ᾽ (smooth breathing).

Because the breathing marks are phonologically important to every initial vowel and diphthong, it would be wise to learn and use these markings until you know Greek vocabulary very well. Under no circumstances should breathing marks be omitted when practicing writing Greek words in the exercises.

5.1.1 The Smooth Breathing Mark. If the breathing mark over the vowel or diphthong is curled to the left like a closing single quotation, ᾽ , then it is the *smooth breathing* mark, indicating that the initial vowel or diphthong is <u>not</u> aspirated. The smooth breathing never effects the aspiration of an initial vowel or diphthong. The following examples are the names of the Greek vowels.

listen ἀλφα, ἐψιλον, ἠτα, ἰωτα, ὀμικρον, ὐψιλον, ὠμεγα

When a word begins with a vowel which is also a capital letter, the smooth breathing cannot go above it because of the letter's size; therefore, it is placed before the letter.

listen ᾽Αλφα, ᾽Εψιλον, ᾽Ητα, ᾽Ιωτα, ᾽Ομικρον, ᾽Υψιλον, ᾽Ωμεγα

When a word begins with an initial diphthong, the smooth breathing mark always appears over the second vowel whether or not the initial vowel is capitalized.

listen αὐτος, Αὐτου, οἰκει, Οἰκος, αἰων, Αἰωνια

5.1.2 The Rough Breathing Mark. If the breathing mark over the vowel or diphthong is curled to the right like an opening single quotation, ῾, then it is the *rough breathing* mark, indicating that the initial vowel or diphthong is aspirated. The rough breathing always effects the aspiration of an initial vowel or diphthong.

listen ὁ, οἱ, αἱ, ἑξ, ὁδος, ῥω, ἅγιος
(ho) (hoi) (hai) (hexs) (hodos) (rho) (hagios)

When a vowel begins a word which is also a capital letter, the rough breathing cannot go above it because of the letter's size; it is placed before the letter.

listen ῾Ο, ῾Η, ῾Εξ, ῾Οδος, ῾Ος, ῾Ωρᾳ, ῾Ετερος

When a word begins with an initial diphthong, the rough breathing mark always appears over the second vowel whether or not the initial vowel is capitalized.

listen αὐτη, Αὐτη, οὐτος, Οὐτος, εὑρισκω, Εὑρισκω

5.1.3 Special Considerations. There is also a consonant associated with a breathing mark. When *rho* (Ρ ρ) begins a word, it always carries the rough breathing mark. However, it is pronounced as "rh" instead of "hr". Paragraph 4.3.5 (page 70) introduced the semi-consonant *rho* (Ρ ρ). At the beginning of a word, *rho* acquires characteristics of a vowel. This is the reason its alphabetical name is spelled with an aspirated "r" (***rho***). A number of English words that have been brought over from Greek begin with "rh", instead of "r" ("rhapsody", "rhino", "rheostat", "rhetoric", "rhubarb", "rhythm", etc.). As in the case of initial vowels, the rough breathing occurs before a capitalized letter.

listen ῥαπιζω, ῾Ρεβεκκα, ῥηγμα, ῾Ριζα, ῥιπτω

When *upsilon* (Υ υ) or the diphthong *upsilon* + *iota* (Υι/υι) begins a word, it always has a rough breathing mark. There is never an exception!

listen ὑπερ, ῾Υαλος, ὑβριζω, ὑπο, υἱος, Υἱοθεσια

The alphabetical name of Υ υ (*upsilon*) is technically not a contradiction to the above principle. Whereas Υ υ is spelled as *upsilon* (not as "*hupsilon*") in English, the actual Greek spelling of the letter's name is ὑ ψιλον with a space between "ὑ" and "ψιλον".

5.2 Syllabification

Syllabification is the division of words into their individual syllables. In order to pronounce Greek words phonetically and consistently correct, one must first be able to divide words into their individual syllables. Many Greek words have only one syllable. However, most words have more than one syllable, and therefore, guidelines of syllable division are needed to manage their division. Hyphens are used in the examples below to indicate a word's correct syllable division.

5.2.1 Principles of syllabification. The following general principles of syllabification are an attempt to describe the phonetic and linguistic process. An apparent exception to these principles may appear time to time, indicating only that there is another principle involved to be perceived and understood. The following eight principles of syllabification are in their order of importance.

1. Every word has as many syllables as it has separate vowels and/or diphthongs. Thus, every syllable must have one (and only one) vowel or diphthong.

   The following words have only one syllable.

   listen ἐν, οἱ, δε, ἡν, εἰς, ἐκ, και, συ, γαρ

   The above examples exemplify that a syllable may begin with a consonant, a vowel, or diphthong. A syllable may end with a consonant, a vowel, or diphthong. In fact, a syllable may not have any consonant at all. The combined quantity of vowels or diphthongs determines the number of syllables in a word. Therefore, the vowel or diphthong stands at the focal point of every Greek syllable. Study the following examples.

   The following words have two syllables.

   listen σῳζω, ἐτι, θητα, οὐτε, ἐκει, σιγμα

   The following words have three syllables.

   listen μεριζω, Μαρια, λαλεω, ἰωτα

   The following words have four or more syllables.

   listen φοβεομαι, ἀκηκοαμεν, ἑωρακαμεν

2. Two consecutive vowels which do not form a diphthong are divided.

ἐθεασαμεθα	ἐ-θε-α-σα-με-θα
ἀκηκοαμεν	ἀ-κη-κο-α-μεν
ἑωρακαμεν	ἑ-ω-ρα-κα-μεν
κενοω	κε-νο-ω
θεε	θε-ε
δια	δι-α
εὐωδια	εὐ-ω-δι-α
Σπανια	Σπα-νι-α
ἱερον	ἱ-ε-ρον
λυομεν	λυ-ο-μεν

3. A single consonant surrounded by vowels normally begins a new syllable. Another way of stating this principle, a single consonant is pronounced with the following vowel or diphthong.

μαθητης	μα-θη-της
λυμαινω	λυ-μαι-νω
θελετε	θε-λε-τε
λογος	λο-γος
παλαι	πα-λαι
ἡγετο	ἡ-γε-το
ἐγενετο	ἐ-γε-νε-το
ἐπεχω	ἐ-πε-χω
λειπομεθα	λει-πο-με-θα
ἀγοραζω	ἀ-γο-ρα-ζω

4. Syllables are divided between double consonants with their respective consonant being pronounced with their vowel or diphthong.

Θαδδαιος	θαδ-δαι-ος
ἄγγελος	ἄγ-γε-λος
γλωσσα	γλωσ-σα
σαββασιν	σαβ-βα-σιν
πορρω	πορ-ρω
ἐκκλειω	ἐκ-κλει-ω
Μαθθαιος	Μαθ-θαι-ος
γαμμα	γαμ-μα
καππα	καπ-πα

5. Two or more consonants together within a word begin a syllable if they can begin a word. This inseparable grouping of consonants is called a ***consonant cluster***. NTGreek neophytes do not know what constitutes inseparable consonant clusters, because Greek words can begin with many consonant combinations that English does not. A catalog of all the common consonant clusters is provided on the following page.

ῥαβδον	ῥα-βδον
ἐστιν	ἐ-στιν
τεκνον	τε-κνον
Χριστος	Χρι-στος
ἄνθρωπος	ἄν-θρω-πος
ζωγρεω	ζω-γρε-ω
λελυσθε	λε-λυ-σθε
φοβητρα	φο-βη-τρα
ἐπληρωθη	ἐ-πλη-ρω-θη

GREEK CONSONANT CLUSTERS

Any potential consonant cluster can be verified by a **Greek-English lexicon**. A consonant cluster is established by whether or not it begins a Greek word. For example, the consonants θλ in the table below constitute a cluster because they can begin a Greek word (θλιψις). Therefore, consonant clusters are never to be divided between syllables, and are always pronounced in conjunction with their following vowel or diphthong (they never end a syllable).

A consonant cluster is pronounced like their individual consonants, except that they are quickly blended together. Fluency with consonant clusters will be gained in time by practicing of reading NTGreek.

Nine consonant clusters below are not attested in NTGreek as beginning a word. Their attestation is derived, however, from Classical Greek words. These clusters have been included because of their frequency within NTGreek words. They are indicated by an asterisk to the right of the consonant cluster.

βδ	βδελυγμα
βλ	βλεπω
βρ	βρεφος
γλ	γλωσσα
γν	γνους
γρ	γραφω
δμ*	δμητος
δν*	δνοφεος
δρ	δραγμα
ζβ	ζβεννυμι
ζμ	Ζμυρνα
θλ	θλιψις
θν	θνῃσκω
θρ	θριξ
κλ	κλεπτω
κμ*	κμητος
κν	κνισα
κρ	κρινον
κτ	κτισις
μν	μνα
πλ	πληγη
πν	πνευμα
πρ	πρεσβευτης
πτ	πτωχεια
σβ	σβεννυμι
σγ*	σγαλη
σθ	σθενοω
σκ	σκανδαλον
σκλ	σκληρος
σκν*	σκνιπος
σμ	σμυρνα
σπ	σπουδη
σπλ	σπλαγχνον
στ	στομα
στλ*	στλιξ
στρ	στρεφω
σφ	σφοδρα
σφρ	σφραγις
σχ	σχισμα
τλ*	τλημων
τμ*	τμηγω
τρ	τρεφω
φθ	φθαρτος
φλ	φλεγω
φν	φνει
φρ	φρονεω
χθ	χθες
χλ	χλευη
χν	χνους
χρ	Χριστος
ψχ*	ψχεντ

6. A grouping of consonants that does not constitute a consonant cluster is divided, with the first consonant pronounced with the preceding vowel or diphthong. Thus, the first consonant closes the syllable before; the second consonant begins the following syllable.

ἐμπροσθεν	ἐμ-προ-σθεν
φοβηθεντες	φο-βη-θεν-τες
συγχαιρω	συγ-χαι-ρω
ὁρκωμοσια	ὁρ-κω-μο-σι-α
ἀρχης	ἀρ-χης
πορφυρα	πορ-φυ-ρα
ὁρκος	ὁρ-κος
κεντρον	κεν-τρον

7. Any consonant (except for Λ λ and P ρ) plus M μ or N ν accompanies the following vowel or diphthong. The nasal consonants do not divide when they are the second consonant in a consonant pair.

τεκνον	τε-κνον not τεκ-νον
μιμνησκομαι	μι-μνη-σκο-μαι
τολμαω	τολ-μα-ω (λ-exception)
κοσμος	κο-σμος not κοσ-μος
ἐθνος	ἐ-θνος not ἐθ-νος
πραγμα	πρα-γμα
ὀφθαλμος	ὀ-φθαλ-μος (λ-exception)
δυσνοητα	δυ-σνο-η-τα
θερμος	θερ-μος (ρ-exception)
ἀρνεομαι	ἀρ-νε-ο-μαι (ρ-exception)

8. Compound words are normally divided where joined. A ***compound word*** is two distinct words combined together. Normally the first word will be a Greek preposition such as ἀνα, ἀπο, δια, εἰς, ἐκ, ἐπι, κατα and προ. New students to NTGreek do not know what constitutes compound words. Therefore, it is only necessary to be acquainted with this principle.

εἰσηλθον	εἰσ-ηλ-θον
εἰσφερω	εἰσ-φε-ρω
ἀναγω	ἀνα-γω
κατελαβεν	κατ-ε-λα-βεν
ἀποστελλω	ἀπο-στελ-λω
συνεχω	συν-ε-χω
ἐκπιπτω	ἐκ-πι-πτω
προσερχεται	προσ-ερ-χε-ται

There are obvious instances necessitating compound words not to be divided according to guideline #8. An important case in point is where double consonants follow an initial vowel after the first word of a compound word (διαγγελλω < δια + ἀγγελλω). Since Greek syllables cannot begin with double consonants, other considerations must be taken into account to divide the word phonetically correct. Consider the following examples.

διαγγελλω	δι-αγ-γελ-λω	**NOT** δια-γγελ-λω
διαλλαγηθι	δι-αλ-λα-γη-θι	**NOT** δια-λλα-γη-θι
ἐπιρραπτει	ἐ-πιρ-ρα-πτει	**NOT** ἐπι-ρρα-πτει
ἀπολλυμεθα	ἀ-πολ-λυ-με-θα	**NOT** ἀπο-λλυ-με-θα
καταγγελλειν	κα-ταγ-γελ-λειν	**NOT** κατα-γγελ-λειν

In most cases, intuition and a little bit of common sense will serve as a good guide where to divide Greek syllables. The easier way of pronouncing a Greek word with the above eight guidelines in mind is 99.9% the phonetic correct and proper way. Therefore, be wise and learn these guidelines.

In order to move to the next important diacritical phonological marking, which is Greek accents (5.3), further knowledge concerning Greek syllables is necessary. Accentuation is inextricably bound to a syllable's ***designation*** and ***position*** (*ultima*, *penult* and *antepenult*), and to its ***quantity*** (long or short).

5.2.2 Designation and position of syllables. A Greek word with three or more syllables is ***polysyllabic***. A ***disyllabic*** word has two syllables; a word with only one syllable is ***monosyllabic***. Only the last three syllables of a Greek word are labeled and the only three that may be accented. The last syllable of a word is called the ***ultima***, the next to the last syllable the ***penult*** and the syllable before the penult is the ***antepenult*** ("before the *penult*").

Polysyllabic λελυκετω	**Disyllabic** λογοι	**Monosyllabic** συ
antepenult penult ultima ↓ ↓ ↓ λε λυ κε τω	penult ultima ↓ ↓ λο γοι	ultima ↓ συ

Only words with three syllables or more require all three of the above definitions. Whether a word is polysyllabic, disyllabic, or monosyllabic, the last syllable is the ultima. Thus, a monosyllabic word such as συ has an ultima, but it has neither penult nor antepenult. The disyllabic word λογοι has an ultima and a penult, but no antepenult. A polysyllabic word such as λελυκετω has all three, as do longer words (ἀκηκοαμεν, ἑωρακαμεν, ἐθεασαμεθα).

A syllable is considered *closed* if it terminates with a consonant, and *open* if its syllable ends with a vowel or diphthong. Thus in the word, λογος (λο-γος), the ultima is closed and the penult is open. In the polysyllabic word, ἀνθρωπος (ἀν-θρω-πος), both the ultima and antepenult are closed and the penult is open.

5.2.3 Syllable quantity. Syllable quantity depends on the vowel or diphthong in a syllable. If a syllable contains a long vowel (Η η, Ω ω) or diphthong, its quantity is long; if it contains a short vowel (Ε ε, Ο ο), its quantity is short. The only exception is when αι and οι end a word (*i.e.*, και, μαγοι). These two diphthongs are considered short for accenting purposes. Syllables with Α α, Ι ι or Υ υ may be long or short, determined by further considerations (see 5.3.6).

5.3 Introduction to Greek Accents

Similar to breathing marks, Greek accents are associated with vowels and diphthongs, but never with P ρ (*rho*). Also like breathing marks, accents were employed later than NTGreek times by copyists of Greek manuscripts to assist in the pronunciation of Greek words by those to whom the language was foreign.

Although accents were not part of the original NTGreek text, their importance lies in their phonological benefit for the beginning Greek student. This will become evidently clear before the close of this lesson. For example, the variable vowel, *iota*, may be pronounced either long or short. After learning a few principles of Greek accentuation, you will learn that *iota* in ὑμῖν is long, whereas in ἀσεβέσι the *iota* is short. Moreover, learning Greek accents will increase appreciation for the intonated beauty and history of the Greek language.

In the end, the best students will be those who learn proper accentuation in the early stages, for they will go the farthest distance the fastest. Do not be dissuaded by former students who use their Greek text as a doorstop and espouse that accents are not important. To learn NTGreek effectively, the ear and voice need to carry as much of the burden as possible, and not only the eye.

> Aristophanes of Byzantium (*ca.* 200 B.C.) is credited with inventing accents to aid foreigners in their Greek pronunciation. The Greek accents originally denoted musical pitch. By NTGreek times, however, they had diminished to ordinary stress accents.

5.3.1 Names of the accents. Except for specific exceptions (introduced in later lessons), Greek words are written with one of three possible accents. The three Greek accents are, the ***acute*** (´), ***grave*** (`) and the ***circumflex***: (͂).

5.3.2 Position of accents. Just like breathing marks, all accents are written over the vowel which forms the nucleus of the stressed syllable. In instances of a diphthong, however, the accent is written over the second vowel, unless the second vowel is an iota subscript.

listen (**acute**): ἐπί, κατά, ἀνεῴχθη, λόγος, αὐτούς

listen (**grave**): παρὰ, ψυχὴ, ἀδελφὸς, θεὸς, τοὺς, αὐτὸς

listen (**circumflex**): νῦν, πῦρ, Ἰησοῦς, βῆτα, δεῖ, αὐτῷ

Study the chart below of the possible accentual positions.

		Possible Accent Positions		
		Antepenult	**Penult**	**Ultima**
ACCENT	**Acute**	´	´	´
	Circumflex		͡	͡
	Grave			`

A very important rule of accentuation can be summarized: ***the antepenult rule***. As stated before (cf. 5.2.2) a Greek accent cannot fall further from the end of the word than the antepenult. An accent may fall on the last syllable (the ultimate), or the one before the last (penult) or the third syllable from the end (antepenult). However, which accent can stand over what vowel or diphthong? Two significant determiners are the syllable's quantity (5.3.3) and an accent's sustention (5.3.4).

5.3.3 Syllable quantity. Syllable quantity (as long or short) affects accents. Both the acute and grave accents can stand over either a long or a short syllable. These two accents are not restricted by syllable quantity. The circumflex accent, on the other hand, can stand over long syllables only.

Acute over a short syllable: δέλτα, σίγμα, πατρίς, ἄνθρωπος

Acute over a long syllable: Κώς, ἐγκλείω, οἵ, πείσας, φήμη

Grave over a short syllable: αὐτοὶ, Χριστὸν, χωρὶς, ἡλὶ

Grave over a long syllable: καὶ, χρὼς, καταβολὴν, λεγιὼν

Circumflex over only a long syllable: βῆτα, ζῆτα, ἦτα, ἰῶτα, μῦ, ξῖ

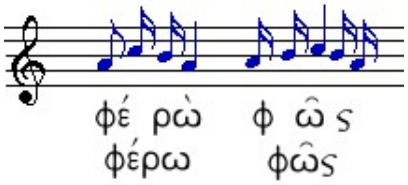
5.3.4 Maximum Accent Sustention. Sustention is the accent's ability to carry the syllable or syllables that follow. The acute can sustain three syllables; therefore, it may stand over an ultima, a penult or an antepenult. The circumflex can sustain two syllables; therefore, its accent may stand over only an ultima or a penult. In either instance, the syllable is always long. The grave accent can sustain only one syllable; therefore, its accent is always over the ultima.

5.3.5 The de-evolution of accents. Greek was not always written with accents. First introduced by ancient grammarians, they attempted to preserve a phonetic record of their language when it was in danger of obscuration. Ancient Greek words and word-groups were intonated; meaning voice pitch within them rose and fell during speaking. Intonation was in danger of extinction (*i.e.,* changing from a phonetic pitch to a simple stress) therefore, they created a set of diacritical accent marks to preserve representatively the language's sound.

Greek grammarians accented syllables that were pitched higher than unaccented syllables, and not because of stress (as in English). It was this rising and falling of pitch that made the language sound musical. The Greek word for "accent" is προσῳδία, a term used for "a song (words) sung to music". These "musical" accents represented a higher pitch in voice. Thus, one syllable was not emphasized by stress over another as it was by pitch or a lack of it.

English also has this musical accent, but dependant on the shade of meaning intended by the speaker. The rising inflection in the second syllable of the English word, *Really?* (surprise), captures the ***acute*** accent (´) intonation rise. The falling tone in the same syllable of *Really!* (displeasure), embodies the falling intonation of the ***grave*** accent (`). Finally, the ***circumflex*** accent (ˆ) blended the acute and grave accents. It was confined only to long syllables in which the voice rose in pitch during the first half and fell in the second. Since the circumflex was roughly equivalent to a combined acute and grave accent (therefore, in effect two syllables) it never could stand over the antepenult.

These three Greek accents may be represented in musical notation to the right. Pitch would vary with individuals, and the intervals would not be the same. Interestingly, these accents were rigidly observed by those who produced the Greek classics.



Sometime before NTGreek times, however, the grammarians had lost their battle partly because of the assimilation of conquered nations' influence. All three accents eventually became to represent stress and not pitch. Thus, when we pronounce NTGreek words today—no matter what accent is represented—stress is manifested by extra loudness on the accented syllable, clearer quality of the vowel and some slight lengthening (just as in English). An abridged monotonic accentual system was officially adopted in 1982 by Modern Greek classrooms.

Since ancient Greek accentual intonation has been irretrievably lost, the three Greek accents, the acute, grave and circumflex, will be stressed identically in this grammar.

listen λύω, τίνα, καὶ, ἐγὼ, Χριστοῦ, θεοῦ

What is to be understood and emphasized now is that, even though the ancient accentual pitch has been lost, NTGreek may be read successfully without knowing any more about accents and the rules by which they are governed other than what is presented in this lesson. So why learn the Greek accents?

As stated in the introduction to this lesson, accents in Greek are distinctive. Greek words may be differentiated simply by the position and type of the accent as in the following word pairs: ἥν (“which”), ἦν (“was”), ὁ (“the”), ὅ (“which”), ἀλλά (“but”), ἄλλα (“others”), and φοβοῦ (“Fear!”), φόβου (“of fear”). In English, compare the word pair “min´ute” (a unit of time) with “minute´” (something very small). The shift of accent not only changes the manner in which these words are divided (“min-ute” and “mi-nute”, respectively), but also lengthens the vowel quality in “i” and “u” in the latter case! Greek vowel quantity shift also occurs when an accent shifts within the same word.

5.3.6 Capital letters and accents. When a vowel begins a word that is also a capital letter, the accent mark cannot go above it because of the letter’s size (just like breathing marks). Therefore, the accent is placed before the letter (see examples under 5.3.7). Accents (as well as breathing marks) are not normally used with words written entirely in capital letters. Very rarely, however, they may be written over a capital in order to emphasize the position of the accent in the word.

5.3.7 Combination of breathing marks and accents. When a breathing mark and either the acute or the grave accent occur over the same vowel or diphthong, the accent is written beside and just after it. In the case of a circumflex, the accent is written over the breathing mark.

listen ἄνθρωπος, ἕν, ὕδωρ, ἔτι, εἷς, ἦν, οἶδα, αἷμα

When a word begins with a vowel and it is capitalized, both the breathing mark and accent are placed before the word because of the letter’s size. In cases of a diphthong, the breathing and accent marks are placed over the second vowel.

listen Ἕλλην, Ἔραστος, Ἧμεν, Εὔβουλος, Αἴγυπτος

For those interested, rules for accenting Greek words and further advanced information about accents will be presented in later lessons where applicable.

5.3.8 Accents and the long variable vowels. Learning the different Greek accents will introduce uniformity in the phonetic pronunciation of the Greek variable vowels (Α α, Ι ι, Υ υ) when read aloud.

It has been stated before that three of the seven Greek vowels cannot be distinguished by their form whether to be pronounced short or long. These three variable vowels are ἄλφα (Α α), ἰῶτα (Ι ι) and ὖ ψιλόν (Υ υ). The following guidelines in combination with Greek accents will guide in the pronunciation of these variable vowels.

5.3.8.1 Α, α Ἄλφα

1. Regardless what syllable is accented, when ἄλφα has the iota subscript written under it (ᾳ) in a word, the vowel is always long. In this instance, the ἄλφα is an improper diphthong (see 3.3.2).

   listen ᾅδης, σατανᾷ, γεννᾷ, συνηθείᾳ, Ἰουδᾳ

2. Since the circumflex accent can only stand over a long vowel, it follows that whenever ἄλφα carries the circumflex, it is long.

   listen ὑμᾶς, ἡμᾶς, πᾶς, πᾶσα, πᾶν, τιμᾶτε

3. Because of ***crasis,*** the ἄλφα is always long. Crasis is the merging of a word into the one following by the omission and contraction of a final vowel or diphthong with the next word's initial vowel or diphthong. Crasis is marked by the retention of the breathing of the second word, which is called the ***coronis***.

   listen κἄν (for καί + ἄν), κἀγώ (for καί + ἐγώ)

> Be sure to differentiate between the smooth breathing mark (᾽) and the coronis when crasis occurs (crasis is not common in NTGreek). The coronis (᾽) is not the same as the smooth breathing mark that stands over initial vowels and diphthongs. The coronis marks the omission and contraction of final vowels and diphthongs with the next word's initial vowel or diphthong.

4. In both instances, the ἄλφα in its own alphabetical name is long, as well as the final ἄλφα in the other alphabetical names.

   listen ἄλφα, Ἄλφα, γάμμα, δέλτα, ζῆτα, ἦτα, θῆτα

5. The ἄλφα is long in a word when its transliterated corresponding long vowel in proper names and places has been carried over into Greek from another language. These will be learned on a case-by-case examination.

   listen Ἀδάμ, Ἀβραάμ, Ἀβιαθάρ, Ἄγαρ

Other determining (and advanced) factors for distinguishing the long ἄλφα from the short will be introduced in later lessons when applicable. For now, if you are not sure when the vowel should be pronounced long or short in the exercises accompanying this lesson, choose short and you will probably be correct.

5.3.8.2 Ι, ι Ἰῶτα

1. Ἰῶτα in the following Greek letter names are always long.

   listen ἒ ψιλόν, ὂ μικρόν, ὗ ψιλόν

2. Since the circumflex accent can only stand over a long vowel, it follows that whenever ἰῶτα carries the circumflex, it is long.

   listen ξῖ, πῖ, φῖ, χῖ, ψῖ, ὑμῖν, θλῖψις, χρῖσμα

   This guideline governs why the ἰῶτα in the five Greek alphabetical names (Ξ ξ, Π π, Φ φ, Χ χ, and Ψ ψ) are pronounced long, and not short.

3. The ἰῶτα is long when the transliterated corresponding long vowel in proper names and places has been borrowed from another language. These will be learned on a case-by-case examination.

   listen Μιχαὴλ (from "Michael" in Hebrew) Ἠλί (for "Eli" in Hebrew)

Other determining (and advanced) factors for distinguishing the long ἰῶτα from the short will be introduced in later lessons when applicable. For now, if you are not sure when the vowel should be pronounced long or short in the exercises accompanying this lesson, choose short and you will probably be correct.

5.3.8.3 Υ υ ῾Υ ψιλόν

Many Greek grammarians do not attempt to make a distinction between the short and long pronunciation of ῾ψιλόν. When accents are discussed in depth, however, it will made a decisive difference whether or not this vowel is long or short within a syllable in order to determine the word's proper accentuation.

1. Since the circumflex accent can only stand over a long vowel, it follows that whenever ῾ψιλόν carries the circumflex, it is long.

   listen μῦ, νῦ, νῦν, τανῦν, πῦρ, τῦφος, ὗς

   This principle governs why the ῾ψιλόν in the two Greek alphabetical names, μῦ and νῦ, are pronounced long and not short.

2. The ῾ψιλόν ιn its own alphabetical name is long. Of course, this follows because of the circumflex over the "υ".

   listen ῾ψιλόν, ῾Υ ψιλόν

Other determining factors for distinguishing the long ῾ψιλόν from the short will be introduced in later lessons where applicable. For now, if not sure when the vowel should be pronounced long or short in the exercises accompanying this lesson, choose short and you will probably be correct.

5.3.9 Long by position. The two natural short vowels (Ε ε, Ο ο) and the three variable vowels (Α α, Ι ι, Υ υ) may become long when followed by two or more consonants, a double consonant, or a compound consonant. If however, the first of two consonants following these vowels is a stop consonant and the second a liquid or a nasal consonant, the vowel may be either long or short.

listen εὐαγγελίον, ὀργή, πιστός, ἵππός, ὄψιν

listen ὀρθάς, ὀρφανός, ἔσκηκεν, ὑστερεῖ, ὑψόω

5.3.10 Elision. Usually when Greek words end with a short vowel (Α α, Ε ε, Ι ι, Ο ο, or Υ υ) which immediately precedes another word beginning with a vowel or diphthong, the final accented vowel of the preceding word is dropped, or elided. This omission is indicated by an apostrophe (᾽).

Greek was highly conscious of ***hiatus***, which is the open clash of vowels between words. Because Greeks disliked the immediate succession of two vowel sounds between words, elision normally occurred. Elision greatly affects the manner of pronunciation in which words are sounded together. Words are pronounced in quick succession together without a pause. The examples of elision that follow on this page show the manner the last consonant of the first word pair glides easily into the syllable of the adjoining word.

> Classical Greek used elision to a greater degree than NTGreek. Elision is comparatively infrequently employed in Modern Greek.

1. ἀπὸ αὐτοῦ is written ἀπ᾽ αὐτοῦ and pronounced ἀ-παυ-τοῦ
2. ἀπὸ ἀρχῆς is written ἀπ᾽ ἀρχῆς and pronounced ἀ-παρ-χῆς
3. μεθα ἡμῶν is written μεθ᾽ ἡμῶν and pronounced με-θη-μῶν
4. μετά αὐτοῦ is written μετ᾽ αὐτοῦ and pronounced με-ταυ-τοῦ
5. μετά ἀλλήλων is written μετ᾽ ἀλλήλων and pronounced με-ταλ-λή-λων
6. δὲ ἂν is written δ᾽ ἂν and pronounced δάν
7. ἀλλὰ ἐντολὴν is written ἀλλ᾽ ἐντολὴν and pronounced ἀλ-λεν-το-λὴν
8. ἀλλὰ ἐκ is written ἀλλ᾽ ἐκ and pronounced ἀλ-λεκ

Whenever elision occurs with the contraction resulting with an initial variable vowel in the second word (as in #s 2, 5, 6 above), the variable vowel is long.

Below are excerpts from the NTGreek illustrating elision. There are other examples of elision than illustrated above.

listen 1 Jn 1:1: Ὃ ἦν ἀπ᾽ ἀρχῆς
listen 1 Jn 1:3: ὑμεῖς κοινωνίαν ἔχητε μεθ᾽ ἡμῶν
listen 1 Jn 1:5: ἣν ἀκηκόαμεν ἀπ᾽ αὐτοῦ καὶ ἀναγγέλλομεν ὑμῖν
listen 1 Jn 1:6: ὅτι κοινωνίαν ἔχομεν μετ᾽ αὐτοῦ καὶ τῷ σκότει
listen 1 Jn 1:7: κοινωνίαν ἔχομεν μετ᾽ ἀλλήλων καὶ τὸ αἷμα Ἰησοῦ
listen 1 Jn 2:5: ὃς δ᾽ ἂν τηρῇ αὐτοῦ τὸν λόγον
listen 1 Jn 2:16: οὐκ ἔστιν ἐκ τοῦ πατρὸς ἀλλ᾽ ἐκ τοῦ κόσμου ἐστίν
listen 1 Jn 2:27: ἀλλ᾽ ὡς τὸ αὐτοῦ χρῖσμα διδάσκει ὑμᾶς
listen 3 Jn 13: Πολλὰ εἶχον γράψαι σοι, ἀλλ᾽ οὐ θέλω διὰ μέλανος
listen 3 Jn 15: ἀσπάζου τοὺς φίλους κατ᾽ ὄνομα
listen Jn 12:30: Οὐ δι᾽ ἐμὲ ἡ φωνὴ αὕτη γέγονεν ἀλλὰ δι᾽ ὑμᾶς
listen Jn 13:10: ἀλλ᾽ ἔστιν καθαρὸς ὅλος· . . . ἀλλ᾽ οὐχὶ πάντες

5.4 Punctuation

The last and least important of the diacritical marks is punctuation. The oldest NTGreek manuscripts had few indications of punctuation. The earliest authorities are patristic comments and early versions. Writing during NTGreek times was done with all capital letters, without the modern convention of spaces between words, and without any indication between sentences, paragraphs and chapters (an example may be found on page 12). Most modern editions of NTGreek texts have included four punctuation marks (for better or worse). Φέρει is used below as an example before these punctuation marks.

- (φέρει.) period, used like the English period (full stop)
- (φέρει**,**) comma, used like the English comma (minor pause)
- (φέρει·) colon or semicolon, indicates a major pause
- (φέρει;) question mark – identical in form to the English semicolon (;).

In addition, contemporary editors of the NTGreek text capitalize proper names, the first letter of direct quotations, the first letter of an Old Testament quote and the first letter of words that begin a new paragraph. Most editors do not capitalize words that begin a new sentence as in English usage.

5.5 Transliteration

Transliteration is the transcription of alphabetical characters of one language into the equivalent characters of another language. Transliteration may sometimes aid in learning the pronunciation of a difficult Greek word, as well as assisting in learning to recognize English words that are derived from Greek words. The common equivalencies used in Greek – English transliteration are below.

Α, α = A, a	Η, η = Ē, ē	Ν, ν = N, n	Τ, τ = T, t
Β, β = B, b	Θ, θ = Th, th	Ξ, ξ = X, x	Υ, υ = U, u or Y, y
Γ, γ = G, g	Ι, ι = I, i	Ο, ο = O, o	Φ, φ = Ph, ph
Δ, δ = D, d	Κ, κ = K, k	Π, π = P, p	Χ, χ = Ch, ch
Ε, ε = E, e	Λ, λ = L, l	Ρ, ρ = R, r	Ψ, ψ = Ps, ps
Ζ, ζ = Z, z	Μ, μ = M, m	Σ, σ, ς = S, s, s	Ω, ω = Ō, ō

To reflect proper Greek phonetic pronunciation when it is transliterated into English, the following special matters need to be addressed.

5.5.1 Accents. It is always good practice to place the proper accent over the transliterated vowel or diphthong. However, in many texts where authors have transcribed Greek, they are not included, as well as not the macron to differentiate between the improper and proper diphthongs (cf. 5.5.7).

5.5.2 Breathing marks. The rough breathing mark (῾) is transliterated as an "h", and except for *rho* ("rh"), always occurs before the letter or diphthong that it is over. The smooth breathing mark never affects the pronunciation of a vowel or diphthong, and therefore, need not to be represented in the transliteration.

5.5.3 *Nasal gamma*. In combination with Κ κ, Γ γ, Ξ ξ and Χ χ, the *nasal gamma* is transliterated as "n": γγ = ng, γκ = nk, γχ = nch, and γξ = nx.

ἄγγελος = ángelos ὄγκος = ónkos ἐλέγχει = elénchei σάλπιγξ = sálpinx

5.5.4 Double letters. Four individual Greek letters, Θ θ, Φ ϕ, Χ χ, and Ψ ψ, are represented by two English letters: θ = th, ϕ = ph, χ = ch and ψ = ps.

θρίξ = thrix φάσις = phásis χθές = chthés ψιχίον = psichíon

5.5.5 Long vowels. When Η η and Ω ω are transliterated into English (both small and capital letters), they must be marked long with the macron to differentiate between their corresponding short vowels, Ε ε and Ο ο.

θέλητε = thélēte βέλη = bélē λόγων = lógōn ὀπίσω = opísō

5.5.6 The vowel *upsilon*. The Greek Υ υ is transliterated by "u" when part of a diphthong (αυ, ευ, ου, υι, and ηυ); otherwise by "y".

υἱός = huiós ὑπέρ = hypér ὕδατι = hýdati εὕρομεν = heúromen

πνεῦμα = pneûma ψυχή = psyché οὐρανος = ouranós κύριος = kýrios

5.5.7 Improper diphthongs. The improper diphthongs, ᾳ, ῃ, and ῳ are transliterated as āi, ēi, and ōi respectively. The macron over the initial vowel distinguishes them from the proper diphthongs ai (αι), ei (ει) and oi (οι). Special care must be exercised when pronouncing the transliterated improper diphthongs. The adscript does not affect its pronunciation (cf. 3.3.2).

τιμᾷ = timāî τῃ = tēi τῷ λόγῳ = tōî lógōi ᾔδει = ēidei

Click here for other Greek lessons in this series.

5 Study Guide
Greek Phonology (Part 3)
Consonants, Vowels and Diphthongs

Having now been exposed to all of the necessary introductory phonological information for NTGreek, you are ready to be launched into a formal study of the language. This means that from this point on, all Greek illustrations will have their appropriate breathing and accentual marks. Therefore, you will be expected to properly pronounce and divide correctly nearly all Greek words.

The following exercises integrate the material covered in this lesson. In addition, there are further lesson aids available which are associated with this lesson for those who wish to pursue additional study.

I. The Greek alphabetical letter names.

Let us begin with the twenty-four Greek alphabetical letters. Concentrate on good penmanship and the proper pronunciation of each letter. As you write each alphabetical letter's name, memorize the placement of its accent and place the appropriate stress on its syllable as you say the letter's name.

Α α, ἄλφα _____

Β β, βῆτα _____

Γ γ, γάμμα _____

Δ δ, δέλτα _____

Ε ε, ἒ ψιλόν _____

Ζ ζ, ζῆτα _____

Η η, ἦτα _____

Θ θ, θῆτα _____

Ι ι, ἰῶτα _____

Κ κ, κάππα _____

Λ λ, λάμβδα _____

Μ μ, μῦ _____

Ν ν, νῦ _____

Ξ ξ, ξῖ _____

Ο ο, ὂ μίκρον _____

Π π, πῖ _____

Ρ ρ, ῥῶ _____

Σ σ, σίγμα _____

Τ τ, ταῦ _____

Υ υ, ὖ ψιλόν _____

Φ φ, φῖ _____

Χ χ, χῖ _____

Ψ ψ, ψῖ _____

Ω ω, ὦ μέγα _____

II. Divide the following Greek words into their appropriate syllables. In addition, indicate what guideline(s) apply which you learned in 5.2.1.

α. πνεῦμα

β. ἄγγελος

γ. διά

δ. καρδία

ε. ἄνθρωπος

ζ. ἀμήν

η. λυομένων

θ. ἔκπαλαι

ι. βότρυς

κ. γυναικάρια

λ. καθελόντες

μ. ὀψώνιον

ν. παγίδα

ξ. ἔτι

ο. εὖ

π. λοιδορέω

ρ. ὑποτάσσω

σ. ὠφεληθήσεται

III. Circle the variable letters known to be long because of their accent.

α. ὑμῖν

β. γεννᾷ

γ. ἡμᾶς

δ. ὗ ψιλόν

ε. τῦφος

ζ. θλῖψις

IV. Transliterate the following words into Greek capital letters.

α. KAINĒ _____ ε. TAXIN _____

β. PSEUDOS _____ ζ. KOINON _____

γ. KURIOS _____ η. ŌMEGA _____

δ. TAPHEI _____ Θ. IĒSOUS _____

V. Transliterate the following Greek words into English small letters.

α. κόσμου _____ η. ἅγιος _____

β. ἕξω _____ θ. δόξα _____

γ. ἀρχῶν _____ ι. ἑπτα _____

δ. ἀληθής _____ κ. λάρυγξ _____

ε. δή _____ λ. χάρις _____

ζ. λύτρα _____ μ. ζωή _____

VI. Dictation. First listen to the instructor pronounce the word, then complete the spelling of the word. There are no iota subscripts in the exercise and each blank represents a missing letter.

listen α. λέγ _ listen ε. ἔλεγ _ _

listen β. θε _ _ listen ζ. κύρι _ _

listen γ. Χριστ _ _ listen η. κω _ _ _

listen δ. ζ _ _ listen θ. πρέ _ _

VII. Multiple choice. Circle the answer that best completes the question.

1. The two Greek breathing marks are:

   α. monosyllabic and disyllabic γ. acute and circumflex

   β. crasis and coronis δ. smooth and rough

2. The breathing mark which indicates the lack of aspiration is the

   α. smooth γ. circumflex

   β. rough δ. acute

3. When ὑ ψιλόν (Υ υ) begins a word, it always has

   α. a smooth breathing mark γ. a rough accent

   β. a rough breathing mark δ. a rough breathing and an accent

4. Every Greek word that begins with a vowel or diphthong must have

   α. an accent γ. a breathing mark and accent

   β. a breathing mark δ. a breathing mark if accented

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5. What are the three Greek accents?

α. ´ ` ῾ γ. ´ ` ῾

β. . ᾽ ῾ δ. ´ ` ͡

6. Which word has the smooth breathing mark and the grave accent?

α. ἓ ψιλόν γ. ἔτι

β. εὐθέως δ. εὑρίσκω

7. How many syllables does ἑωράκαμεν have?

α. 3 γ. 5

β. 4 δ. 6

VIII. Fill in the blank.

1. Give any ten of the fifty-one Greek consonant clusters.

α. ____ β. ____ γ. ____ δ. ____ ε. ____

ζ. ____ η. ____ θ. ____ ι. ____ κ. ____

2. Every word has as many _____ as it has separate vowels and/or _____.

3. A single consonant surrounded by vowels normally begins a new _____.

4. Two or more consonants together within a word begin a syllable if they can begin a _____.

5. A word that has three or more syllables is called _____.

6. If a syllable contains a long vowel (Η η, Ω ω) or diphthong, its quantity is _____.

If you wish to see the answers for this exercise, go here.
For more lesson aids associated with Lesson Five, go here.