

Appendix 5

Further information on a few topics

This is a useful place to offer some useful supplementary information for your reference.

Accents

Syllables

Accents occur only on the final three syllables: the *antepenult* (third-from last syllable); the *penult* (next-to-the-last syllable); and the *ultima* (final syllable).

Quantity of Syllables

All syllables are said to be either *short* or *long*.

A syllable is *short* if its vowel is a short vowel (ă, ε, ĭ, o, or ŭ) that is not followed by two consonants.

A syllable is *long* if its vowel is a long vowel (ā, η, ī, ū, or ω), a diphthong (αι, αυ, ει, etc.) or a short vowel followed by two consonants or a double consonant (ζ, ξ, ψ). For purposes of accent, final -αι and -οι are short.

Kinds of Accent

The *kind* of accent—acute(´), circumflex(˘), or grave (`)—is determined by the quantity of the accented syllable and the quantity of the ultima.

Acutes are the most common and versatile. They occur on both short or long syllables and on all three syllables.

Circumflexes are more limited, occurring only on the long penults and long ultimas.

Graves occur only on the ultima (either long or short) and only when that ultima is not immediately followed either by a punctuation mark (a spoken pause) or an enclitic.

Or, to organize the principles by syllables:

An accented antepenult takes an *acute* regardless of the quantity of its syllable.

An accented penult takes a *circumflex* if it is long and the ultima is short; else, an *acute*.

An accented ultima takes a *circumflex* if it is long and the result of contraction. If it is long, but does not involve contraction, it may take either a *circumflex* or an *acute*. If it is short, it takes an *acute*. In actual texts an acute on the ultima is replaced by a *grave* except when it is immediately followed by a punctuation mark—that is, unless the speaker pauses and interrupts the flow of words—or when it is immediately followed by an enclitic.

Position of Accents: Principles

In most words the *position* of the accent is *fixed* on a specific syllable and will always occur on that syllable unless some other principle requires it to move. In this book, I show the fixed point of the accent in verb and adjective bases (e.g., κεφαλά/). In most verb forms, however, the position is *recessive* rather than fixed. That is, it comes as early in the word as possible: on the antepenult if the ultima is short; on the penult if the ultima is long. Since verbs do not have fixed accents, I do not include accents on verb bases (λαβ/) or stems (λαμβάν/).

The fixed accent on nouns and adjectives shifts from its fixed position on the antepenult if the case ending makes the ultima long (and so forbids accenting the antepenult). So, for example, ἄνθρωποι, but ἄνθρώπων [ἄνθρωπο/].

Position of Accents: Exceptions.

Some noun and (rarely) verb forms defy the principles.

The genitive singulars of nouns like πόλις in Attic retain the fixed accent on the antepenult despite the long ultima: πόλεως.

The accent shifts from the noun base to the case ending in the genitives and datives (singular and plural) of virtually all single-syllable bases: πυρός; μητρί.

Proclitics.

Several single-syllable words are pronounced as though they are attached to the word that follows them, and so they take no accent at all. Examples include ό, ή, ού, εις, έν, and ώς.

Enclitics

Some one- and two-syllable words are pronounced as though they are suffixed to the word preceding them, which often leaves them without an accent and imposes an additional accent on the preceding word. The most common enclitics include:

The single-syllable forms of the personal pronouns (e.g., μου, σοι);

The two-syllable forms of the present tense of είμί (ἄνθρωπός είμι) and φημί (πολλά φαμεν).

Adjectives and adverbs that indicate indefinite notions: ἄνθρωπός τις (*some guy*); ἔρχονται που (*They are going someplace.*)

When two or more enclitics come together, only the last word is left without an accent: οὗ φημι; εἷ τινες λέγουσι.

To avoid too many unaccented syllables in a row, a two-syllable enclitic must retain its accent if its preceding word is accented with an acute on the penult: νεανίας τις, but νεανίαι τινές.

Sound changes

Certain sound combinations trigger changes in spelling and pronunciation. You are already well-acquainted with sigma-liquid combinations and with loss of intervocalic sigma and digamma. This section will document some of the common changes that you may not understand.

Changes involving Consonantal Stops

Chief among the combinations that produce pronunciation and spelling changes are those involving *consonantal stops*, charted below.

The Consonantal Stops by Categories

Voicing Formed near	Thin (unvoiced)	Medial (voiced)	Aspirate
Teeth: Dentals	τ	δ	θ
Palate: Palatals	κ	γ	χ
Lips: Labials	π	β	φ

When a **consonantal stop formed at the palate or lips** precedes a **consonantal stop formed at the teeth**, the former stop retains its position in the mouth (*row*), but assimilates to (becomes similar to) the voicing (*column*) of the **dental**. So, for example, ἐπέμ**φ**θην (ἐ/π**ε**μ**τ**^φ/θ**η**/v̲).

Other combinations of consonantal stops produce different results:

A dental before another dental becomes σ. So, for example, ἐνομί**σ**θην (ἐ/νο**μ**ι**δ**^σ/θ**η**/v̲).

Virtually any consonantal stop before a palatal or labial simply disappears. So, for example, νενόμικα (νε/νο**μ**ι**δ**/κ/α̲). The combinations γγ, γκ, and γχ do not conform to this rule because in these combinations γ has a nasal sound (angma) and is not a stop.

Changes involving μ and ν

Assimilation involving μ and ν

<u>Consonantal Stops + μ</u>		<u>Assimilation involving ν</u>	
	+ μ	The combinations	become
Dentals: τ, δ, θ	σμ (usually)	βν, φν	μν (usually)
Palatals: κ, γ, χ	γμ (usually)	λν	λλ
Labials: π, β, φ	μμ	νπ, νβ, νφ, νψ	μπ, μβ, μφ, μψ
		νκ, νγ, νχ, νξ	γκ, γγ, γχ, γξ
		νμ	μμ, and often <i>apparently</i> σμ
		νλ	λλ
		νρ	ρρ

Dissimilation of aspirates: Grassmann's Law

When two successive syllables attempt to begin with aspirated consonantal stops, the first syllable retains its position in the mouth, but changes from an aspirate to unvoiced. This pervasive feature of Greek phonology is known as Grassmann's Law, named after the 19th-century German scholar Hermann Grassmann. Examples include τριχός (θ^τριχός), τίθημι (θ^τι/θε/μι), πέφυκα (φ^πε/φν/κα). Grassmann's law can also change rough breaths to smooth breaths: ἔχω (σ^ε 'εχ/ω).

Grimm's Law

Grimm's Law, named after Jacob Grimm (one of the Brothers Grimm) explains nothing about the internal workings of Greek, but it does help explain continuities in the vocabularies of Classical Greek (and Latin) and certain modern languages: for Grimm's purposes, German; for ours, English.

Grimm's Law was one of the most popularly-honored intellectual discoveries of the 19th century because it provided indisputable evidence that virtually all modern European (and some Indian and Middle Eastern) languages are descended from a common linguistic ancestor that we now call Proto-Indo-European, or more simply Indo-European (IE). As it applies to Greek and English, it explains why English has so many words that are similar to Greek counterparts—in cases where English has certainly *not* borrowed its words from Greek, but has instead inherited them from German.

Grimm demonstrated that Greek is not the parent of German (and *its* child English); Greek is Ancient German's brother. IE was the parent of both. IE was apparently spoken by tribes living around the Caspian Sea as early as 5000 B.C. Over a period of many centuries, bands of IE speakers left their original homeland and spread throughout Europe as far as India and Iran. As they migrated, they took their language with them, and in the millennia that followed, linguistic changes made the languages of their new homelands (Greece, Italy, Scandinavia, India, etc.) seem very different. Nonetheless, to the trained eye, many traces of their original linguistic kinship survives. Just to take a few obvious ones from English and Greek:

πάτερ/, *father*; μάτερ/, *mother*; γνῶ/, *know*; γόνυ/, *knee*; δφός/, *two*; τρί/, *three*.

Grimm and other linguists have documented thousands of common words such as these distributed throughout the languages of Europe, India, and parts of the Middle East.

Grimm's Law is of interest to students of Greek because it can help them learn Greek vocabulary by connecting Greek words they do not know to English words they do know. Grimm's Law is neither helpful nor necessary in making connections between English words that have been borrowed directly from Greek (φιλοσοφία, for instance; or ψυχή, which we know because it has been borrowed to create the word *psychology*). It is helpful and often necessary in recognizing that certain apparently strange Greek words are (historically, through IE) identical to certain English words that entered our language through German.

Appendix 4: Verb Syntax

Grimm's list of Greek and German parallel words—such as μάτερ/Mütter—differed from one another in two kinds of sounds: vowels (which he did not explain) and consonantal stops (which he did). The original IE consonantal stops, as it turns out, were pronounced slightly differently by the tribes who became Greeks and those who became Germans. A 19th-century teacher (whose name I cannot remember) in a little book I once purchased in a used book store and can no longer find, developed the following mnemonic to teach Grimm's Law as it applies to English.

Me T A (Greek)
 ↓ ↓ ↓
T A Me (English)

This mnemonic uses the initial sounds of classical terms for voice categories (**Thin**, **Medial**, **Aspirate**) to produce two words: one Greek (μετά); the other English (tame). The relative order of their sounds happens to be just right to illustrate the pattern of change that Grimm's Law reveals between Greek and English words that share IE elements.

Consonantal Stops in Greek and English

Voicing Formed near	T Thin (unvoiced)	Me Medial (voiced)	A Aspirate
Teeth: Dentals	τ; t	δ; d	θ; th
Palate: Palatals	κ; k, c	γ; g	χ; h
Lips: Labials	π; p	β; b	φ; ph

When an IE word survives in both Greek and English (through German, not borrowed from Greek), any consonantal stops the IE word contains will be made in the same part of the mouth (*row*) in both Greek and English, but the two languages will voice (*column*) the sound differently. The MeTA/TAMe formula shows that the IE stop that was pronounced as a *thin* (**T**, *unvoiced*) in Greek will be pronounced as an *aspirate* (**A**) in English: A τ in Greek, for example, will be a *th* in the equivalent English word. That explains pairs like **μάτερ**/-mother and **πάτερ**/-father. This handy mnemonic can also help you identify and remember some less obvious Greek words as cousins of familiar English words: **θύρα**/ (door); **καρδία**/ (heart); **ποδ**/ (foot); **δεκ**/ = **δεχ**/ (take); **θυγάτερ**/ (daughter). (In the last example there is a minor complication, but Grimm's Law gets us close enough to see that the two words are in a historical sense the very same IE word).

Reference Grammars

Greek Before Christmas provides you a quick, but reliable and linguistically sophisticated *introduction* to Greek morphology and syntax. As you progress in the study of Greek, though, you will need to acquaint yourself with more grammatical details than are contained in *Greek Before Christmas*. Consequently, you will need a *reference grammar*. The most commonly used reference grammars in English include:

Oxford Grammar of Classical Greek, James Morwood (Oxford University Press, 2001)

This is a very clear and accessible modern grammar. It is not as detailed as Goodwin or Smyth (cited below), but it is clear, succinct and useful. I recommend it as an excellent intermediate reference grammar.

Greek Grammar, Herbert Weir Smyth (Harvard University Press, 1920).

A Greek Grammar, William W. Goodwin (St. Martins, 1894).

These two are the standard English language reference grammars used by intermediate and advanced Greek students. Of the two, Smyth is the more thorough and generally the more respected.