Greek in Space and Time

Ancient Greek is one of the major branches of the Indo-European language family and subdivided into several dialects whose exact subclassification is disputed (cf. the overview in appendix 3). Due to systematic grammatical and lexical correspondences, the Indo-European languages enable us to reconstruct a proto-language out of which the individual Indo-European languages developed. This common ancestor of all Indo-European languages is known as Proto-Indo-European whose reconstruction is based on the systematic comparison of correspondences between the individual attested Indo-European languages. Proto-Indo-European is, however, not an attested but a reconstructed language. This workbook traces the phonological development from Proto-Indo-European to Attic Greek, the dialect which was spoken in the Attica region, whose variant of the 5th century BC is known as Classical Ancient Greek. The famous works of the philosophers Plato and Aristotle, the historians Xenophon, Thucydides as well as of the playwrights Aeschylus, Sophocles, Euripides and Aristophanes were written in Attic. Due to the political and cultural importance of Athens at that time, a modified Attic variant became the basis of the transregional lingua franca known as Koine Greek which developed as a consequence of the conquests of Alexander the Great in the 4th century BC and was spoken until the 3rd century AD.

- **Sociolects as Language Variants**

Classical Attic Greek was a language of prestige and subjected to the norms of conservative orthography which did not display sound changes which were ongoing or had already taken place. It is very common that the spelling of a language lags far behind the actual development, as it can also be seen in the word *night* [naɪt] whose spelling represents the pronunciation [niçt] which was in use about 600 years ago. Important indications of the actual pronunciation of ancient languages are therefore phonetic misspellings, inscriptions and non-official letters of semi-educated writers who often wrote the way they spoke. In contrast to Attic, the phonologically progressive dialect Boeotian was never subjected to standardized orthography so that many writers spelled its actual pronunciation. Many Boeotian developments of the 5th century BC anticipate later Attic developments so that it is possible that in the 5th century BC already the Attic variant of the uneducated population differed strongly from the language of the educated elite on which the reconstruction of the phonological system of the Attic dialect is based. This situation is similar to the coexistence of Classical Latin and Vulgar Latin which became the ancestor of the Romance languages and must have exhibited in classical times already many sound changed which were not spelled due to standardized Latin orthography.

This contrast of everyday language and an artificially heightened language norm based on Classical Attic is to some extent typical for Greek still today. The modern Greek vernacular, which is known as Demotic Greek or Demotiki, stands in opposition to the artificially archaic Katharevousa, which is based on Classical Attic and was the official standard language until 1976. Katharevousa is, however, still important in medical and judicary terminology as well as for the official communication of the Greek Orthodox Church but most speakers do not use it for writing anymore. Such a coexistence of two complementary languages in one language system is known as diglossia. The linguistic difference between the speakers of the two languages is referred to as diastratic difference. **Cf.** Teodorsson 1978:94–6; Horrocks 2010:163–165; Wilms 2013:73.

- **Diachronic Language Change**

The phonology and morphology of languages are always subjected to changes. The change from one state of language to the next state is known as **diachronic language change** and constitutes the main subject of this book in which the phonological development of Attic is traced from reconstructed PIE. As languages change gradually and mostly unnoticed, the classification of Greek language epochs given in the following table must therefore not be regarded as separate entities of the development of Greek. Classifications like this one are often composed not from the linguistic but rather historical aspect.

- **Stages of Greek Diachronic Development**

Language	Timeframe
Proto-Indo-European = PIE	ca. 3500 BC
Proto-Greek	ca. 2000 BC
Mycenaean Greek	ca. 1400–1100 BC
Classical Ancient Greek	ca. 800–300 BC
Koine Greek	ca. 300 BC–300 AD
Late Antique Greek	ca. 300–600 AD
Medieval Greek	ca. 600–1500 AD
Modern Greek	since ca. 1500 AD

PIE as the common ancerstor of all the IE languages was spoken probably around 3500 BC in the vicinity of the Black Sea. Proto-Greek, which is the reconstructable predecessor of all Greek dialects, was probably not a homogenous language anymore but rather subdivided into dialects already. The first attestation of Mycenaean, which is the most ancient attested form of the Greek language, dates back to the 14th century BC. The syllabic spelling of the Mycenaean Linear B clay tablets, which are a corpus of texts of the royal court administration, was deciphered in 1952. Mycenaean was, however, not the predecessor of the other Greek dialects but rather an individual dialect besides the unattested prestages of the other dialects. Between the collaps of the Mycenaean culture and the start of the Ancient Greek alphabetic tradition come the so-called dark ages about which only little to nothing is known.

The Homeric epics Iliad and Odyssey, which deal with the destruction of Troy and Ulysses's odyssey back home, are dated to the starting time of alphabetic Ancient Greek. They are of high linguistic and cultural importance and composed in an artificial literary language which contains elements from several Ancient Greek dialects. The Attic variant of the 5th century BC, which is known is Ancient Classical Greek, was superseded by Koine Greek in the Hellenistic period which eventually led to Medieval and Modern Greek. Koine Greek is also the language of the New Testament which is the central collection of texts which proclaim Jesus Christ as the Son of God. **Cf.** SI §12–15; Wilms 2013:85–146.

2   Spelling and Transcription

In the early Greek times, there existed many different alphabets which also included letters such as digamma Ϝ, koppa ϙ or sampi ϡ. These letters are absent in the following Ionic alphabet which was introduced as the official alphabet in Athens in 403 BC with slight modifications in order to adapt it to the Attic dialect. Originally, only capital letters known as majuscules were used for writing before a cursive writing was developed, out of which the minuscules developed. In the early times, the direction of writing was from right to left similar to the Phoenecian alphabet out of which the Old Greek alphabet was derived.

● **Vowels**

The accent signs ά, ὰ, ᾶ are transcribed [á à ã]. The short vowels α, ε, ι, ο, υ are transcribed [a e i o y]: ἀντί [antí] 'against'; δέκα [déka] 'ten'; ἵνα [hína] 'in order to'; πόλις [pólis] 'city'; λύκος [lýkos] 'wolf'. The long vowels ᾱ, η, ῑ, ω, ῡ, ει, ου are transcribed with a macron [ā ē ī ǭ ȳ ē̦ ū] and accent signs are placed above the macron: τρᾱχύς [trākʰýs] 'rough'; ζητέω [zdē̦téǭ] 'I search'; πῑ́νω [pī́nǭ] 'I drink'; ὠμός [ǭmós] 'raw'; λῡγρός [lȳgrós] 'sad'; λείπω [lḗ̦pǭ] 'I leave'; ἐξουσίᾱ [eksūsíā] 'permit'.

As the second element of diphthongs, ι and υ are transcribed [i̯] and [u̯]: τραυματίζω [trau̯matízdǭ] 'I wound'; σπευστικός [speu̯stikós] 'in a hurry'; αἱ βίβλοι [hai̯ bíbloi̯] 'the books'. Accent signs are placed on the first element of a diphthong: τραῦμα [trâu̯ma] 'wound'; αἷμα [hâi̯ma] 'blood'; σπεύδω [spéu̯dǭ] 'I hurry up'.

The iota subscript of long diphthongs is transcribed [i̯] after the long vowel: dat. sg. δώρῳ [dǭ́rǭi̯] 'present'; κλῆσις [klḗ̦i̯sis] 'closure'. A trema represents the discrete pronunciation of two vowels: Hom. πάϊς [páis] 'child'; Hom. dat. sg. κέραϊ [kérai] 'horn'.

Majuskel	Minuskel	Transkription
A	α / (ᾱ)	[a] / [ā]
B	β	[b]
Γ	γ	[g] / [ŋ]
Δ	δ	[d]
E	ε	[e]
Z	ζ	[zd]
H	η	[ē]
Θ	θ	[tʰ]
I	ι / (ῑ)	[i] / [ī] / [i̯]
K	κ	[k]
Λ	λ	[l]
M	μ	[m]
N	ν	[n]
Ξ	ξ	[ks]
O	ο	[o]
Π	π	[p]
P	ϱ	[r] / [rʰ]
Σ	σ, ς	[s] / [z]
T	τ	[t]
Υ	υ / (ῡ)	[y] / [ȳ] / [u̯]
Φ	φ	[pʰ]
X	χ	[kʰ]
Ψ	ψ	[ps]
Ω	ω	[ǭ]
ʽ		[h]

● **Consonants**

The stops voiced β, δ, γ are transcribed [b d g]: βιάζω [biázdǭ] 'zwinge'; δῶμα [dǭma] 'house', γλίσχρος [gliskʰros] 'sticky'. The voiceless stops π, τ, κ are transcribed [p t k]: πνεῦμα [pnêu̯ma] 'wind'; τείρω [téi̯rǭ] 'I weaken'; κύκλος [kýklos] 'circle'. The voiceless aspirated stops φ, θ, χ are transcribed [pʰ tʰ kʰ]: φαίνω [pʰái̯nǭ] 'I show'; θᾶκος [tʰākós] 'seat'; χείρ [kʰḗ̦r] 'hand'.

The resonants μ, ν, ϱ, λ are transcribed [m n r l] and initial ϱ̔ is transcribed [rʰ]: μοχλός [mokʰlós] 'lever'; νῦν [nȳn] 'now'; ἱδρώς [hidrǭ́s] 'sweat'; λάλος [lálos] 'talkative'; ϱ̔εῦμα [rʰêu̯ma] 'current'.

The letters ξ [ks], ψ [ps] and ζ [zd] stand for two sounds: ξυρόν [ksyrón] 'cutting blade'; ψύχω [psýkʰǭ] 'I breathe', ζώνη [zdǭ́nē] 'belt'. The sound [s] is noted σ in the initial and medial position and ς in the final position: νόστος [nóstos] 'return'. Before β, δ, γ, the letter σ is transcribed [z]: πρέσβυς [prézbys] 'old', ζώνη [zdǭ́nē] 'belt', μίσγω [mízgǭ] 'I mix'. Before γ, κ, χ, ν, μ, the letter γ denotes the velar nasal [ŋ]: ἐγγύς [eŋgýs] 'near'; ἐγκύκλιος [eŋkýklios] 'round'; λαγχάνω [laŋkʰánǭ] 'I forget'. The spiritus asper ʽ is transcribed [h]: ἁρμονίᾱ [harmoníā] 'harmony'. The spiritus lenis ʼ is not transcribed.

Exercises

E1 Easy Transcriptions

A λόγος [_____] 'word' **B** πόνος [_____] 'effort' **C** τόνος [_____] 'tension'

D κλίνω [_____] 'I lean' **E** κλέπτω [_____] 'I steal' **F** μῑκρός [_____] 'small'

E2 Transcription of φ, θ, χ as [pʰ], [tʰ], [kʰ]

A τίθημι [_____] 'I put' **B** φημί [_____] 'I say' **C** χώρᾱ [_____] 'space'

D συμφορά̄ [_____] 'occurence' **E** συχνός [_____] 'frequently' **F** λόχος

[_____] 'ambush'

E3 Transcription of ι and υ as [i̯] and [u̯] in Diphthongs

A καυλός [_____] 'stalk' **B** αἱρέω [_____] 'I take' **C** σπεύδω [_____] 'I

hurry up'

E4 Transcription of ψ, ξ, ζ as [ps], [ks], [zd]

A ξένος [_____] 'foreigner' **B** ξύλον [_____] 'wood' **C** ψεύδειν [_____]

'to lie' **D** ψυχή [_____] 'soul' **E** ψέγειν [_____] 'to criticize' **F** νίζω [_____]

'I wash'

E5 Transcription of Inital ῥ as [rʰ] and Transcription of Iota-Subscript as [i̯]

A ῥῆμα [_____] 'word' **B** ῥίπτειν [_____] 'to throw' **C** ῥήτωρ [_____]

'speaker' **D** dat. λόγῳ [_____] 'word' **E** dat. τῑμῇ [_____] 'honor' **F** dat. θεᾷ

[_____] 'goddess'

**E6 Transcription of γ [ŋ] Before γ, κ, χ, μ, ν**

A ἄγγελος [_____] 'messenger' **B** ἀγμός [_____] 'abyss' **C** ὄγμος [_____]

'furrow'

E7 The Symbols *ϝ and *ι̯ Can Be Used for [u̯] and [i̯]

A *κλέϝος [_____] 'honor' **B** *ὄϝις [_____] 'sheep' **C** *καλϝός [_____]

'beautiful' **D** *τένι̯ω [_____] 'I stretch' **E** *μάνι̯ω [_____] 'I am furious' **F** *δαι̯ϝήρ

[_____] 'brother-in-law'

3 Basics of Phonetics

Phonetics is the study of the production and properties of human speech sounds. One of the most important classification of sounds is that according to the place of articulation, which describes where a sound is produced, and the manner of articulation, which describes how a sound is produced.

● **Fundamental Places of Articulation**
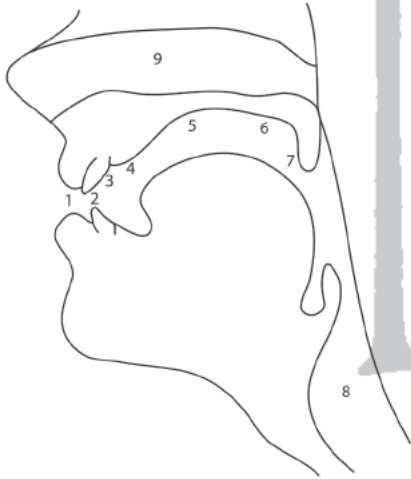
Place of Articulation		Description
1	labial	With the lips
2	interdental	Between the teeth
3	dental	At the teeth
4	alveolar	At the teeth-ridge
5	palatal	At the hard palate
6	velar	At the soft palate
7	uvular	At the uvula
8	glottal	At the vocal folds
9	nasal	In the nasal cavity

● **Fundamental Manners of Articulation**

Vowel	Vowels are articulated with an open vocal tract. The airflow passes out of the mouth un-constrictedly.
Consonant	Consonants are articulated with a complete or partial occlusion of the vocal tract.
Stop	The airflow stops completely due to an occlusion of the oral vocal tract. All languages have stop consonants, the most common are [p], [t], [k] and their voiced counterparts [b], [d], [g].
Nasal	The airflow passes through the nose while there is an occlusion of the oral vocal tract, which determines the resonant cavity of the consonant and therefore produces the sound of e.g. dental [n], labial [m] or velar [ŋ].
Fricative	A partial closure of the vowel tract causes the airflow to become turbulent which produces fricative consonants like [s], [f], [h]. Fricatives are also called spirants or stridents.
Lateral	During the articulation of the alveolar lateral /l/, the airflow escapes along the sides of the tongue while the tongue blocks the airflow in the middle. /l/ and /r/ are traditionally known as liquids.
Voiced Sounds	The vocal cords vibrate while articulating a voiced sound. All the vowels and the consonants [b d g u̯ i̯ r l m n ŋ] are voiced sounds.
Approximant	The approximant consonants [w] and [j], which are also called semivowels, have an intermediate articulation between vowels and fricative consonants.
Trill	The alveolar trill consonant /r/ is articulated while the tongue vibrates against the teeth-ridge. In the Initial position, it had a voiceless aspirated allophone [rʰ]. /l/ and /r/ are traditionally known as liquids.
Resonants	Due to their similar phonological behavior, the trill [r], the lateral [l] and the nasals are grouped together as resonants.