simple consonants in most areas, though in the SE dialects, as evidenced in Mod. Gk., they never changed. Digamma (F = /w/), lost graphically, at least, in some dialects by the Class. period, disappeared almost everywhere, although it did manage to persist in certain wayward Lac. enclaves, cf. the Mod. Gk. dialect of Tsakonian. The diphthongs αυ and ευ had their second element changed to consonantal /v/ before a voiced consonant (/av, ev/); if a voiceless consonant followed, however, the outcome of v was /f/ in both cases (/af, ef/, Allen 1987). In the early Roman period final /n/ became unstable and is occasionally omitted in inscriptions, e.g. pólē (= acc. pólin 'city'). The phonetic value of gamma, /g/, began to split depending on the nature of the following vowel, /j/ before /e, i/, and / $\gamma$ / before /a, o, u/, as regular in Mod. Gk. Furthermore, the similarity in tongue position (apico-alveolar) in the pronunciation of liquids meant that confusion between the two became increasingly common, e.g. aðelfós = aðerfós 'brother', with the latter being the regular Mod. Gk. pronunciation.

The latter history of Greek may be divided into Early Med. Gk. (ca 500-1100 CE), Late Med. Gk. (ca 1100–1500), and Early Mod. Gk. (ca 1500– 1700), although there are some minor border disagreements, largely due to the persistent conservatism of the standardized Classical/Koine orthography (it was not until 1509 that the first book in vernacular Greek was printed). Foreign languages continued to affect Greek in the form of loan-words and bilingualism as Greece was exposed to heavy Slavic, Arabic and Ottoman influence. At the beginning of the EMed. Gk. period, the affricates /ts/ and /dz/ appear, although exactly where from is a matter of some concern (Browning 1983:71). Of unknown date, but at some point in the Med. period, fricatives are dissimilated to stops, e.g. ehthés > htés 'yesterday', just as stops are dissimilated to fricatives ptôhós > ftohós, 'beggar'. EMod. Gk. and Mod. Gk. present a complicated landscape of change that was driven by political and social pressures rather than linguistic innovation (Browning 1983:103-18). The influence of the purist language (katharevousa) movement from the early 19th c. coupled with some of its [misguided] notions of ancient pronunciation paints a fascinating phonetic picture as it competed with vernacular Greek for ascendancy, with the latter ( $D\bar{e}motik\dot{e}$ ), winning official status in 1976 (→ Developments in Medieval and Modern Greek).

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## Consonants

# 1. Introduction

The Classical  $\rightarrow$  Attic consonant inventory is comprised of the following 15 phonemes (Lejeune 1955 and Brixhe 1996 are more detailed studies; Lejeune 1972, Meier-Brügger 1992, Rix 1992, and Sihler 1995 present the diachronic developments; Sturtevant 1940 and Allen 1973 present a wealth of evidence for pronunciation): 9 stops  $|p\ t\ k\ b\ d\ g\ p^h\ t^h\ k^h/$ ; 2 nasals  $|m\ n/$ ; 2 liquids  $|l\ r/$ ; a fricative |s| and a glottal aspirate |h|, whose phonetic details are discussed elsewhere ( $\rightarrow$  Laryngeal Changes).

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### 2. STOPS

The stops are symmetrically distributed across three laryngeal settings (→ voiceless unaspirated, voiceless aspirated, voiced), and three places of articulation (labial, coronal, dorsal). The nasal stops contrast at two points of articulation (labial and coronal); the velar nasal [ŋ] is allophonic: before /k g kh/, it is an allophone of /n/ and /m/, before [m] and perhaps [n], it is an allophone of /g/ (see Lupas 1972:112). In early Attic inscriptions one finds the grapheme koppa of adjacent to a back → vowel, which presumably reflects a uvular allophone of /k/. Other preclassical consonants include the labial approximant /w/ known as digamma F (on which see Threatte 1980:23-24; Allen 1987:47-51), and the mysterious sampi  $\mathbb{T}$  (or later  $\mathfrak{F}$ ; see Threatte 1980:24; Allen 1987:60-61).

The following table summarizes the inventory of oral and nasal stops in IPA and  $\rightarrow$  Ionic Greek orthography:

	labial	coronal	dorsal
voiceless unaspirated voiceless aspirated voiced nasal	$p \pi$ $p^h \phi$ $b \beta$ $m \mu$	$t \tau$ $t^h \theta$ $d \delta$ $n \nu$	k κ k <sup>h</sup> χ g γ η γ

## 3. ASPIRATES, TRILLS AND FRICATIVES

The glottal aspirate /h/ only occurs word-initially before vowels (Lupaş 1972:30, Threatte 1980:497–9), or in compounds, where word-initial aspiration is sometimes preserved after prefixes (known as "interaspiration", see Allen 1987:54–55).

The rhotic /r/ was probably an alveolar trill (Allen 1987:41). According to ancient grammarians ([Arc.] 226.24–227.2 Schmidt 1860), it had  $\rightarrow$  aspirated and unaspirated allophones, which were subject to the following distribution: wordinitially it is aspirated, e.g. *rhanis* 'drop'; when geminated word-internally, the first segment is unaspirated, the second aspirated; otherwise, /r/ is unaspirated. Evidence for this distributional pattern comes from inscriptions and  $\rightarrow$  Latin orthography. For the first, Phrearrios is written *phrearhios* and *phrearrihios* on the Themistocles ostraka of the 480s BCE. For the second, Latin *rhetor*, *Tyrrheni*, and *Socrates* illustrate all three patterns.

There appear to have been voiced and voiceless allophones of the dental fricative /s/: before voiced consonants it was realized as [z], and elsewhere as [s]. Inscriptional practice offers one source of evidence for the variation. Beginning in the mid-4th century BCE,  $<\zeta>$  starts to be used for earlier  $\langle \sigma \rangle$  before a voiced consonant (Threatte 1980:547-8), with substitution especially frequent before /m/. The voicing assimilation probably occurred from a much earlier date, but the zeta-diagnostic only becomes possible in the 4th century, for at this time the consonant cluster that it at one time represented, [zd], assimilates to [zz] intervocalically and elsewhere further undergoes degemination to [z]. The grapheme  $\langle \zeta \rangle$  thus comes to represent [z(z)], and accordingly can represent the voiced allophone of /s/. With the change of |zd| > |z|, /z/ acquires phonemic status, and is no longer simply an allophone of /s/.

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# Construction Grammar and Greek

#### 1. Introduction

Construction Grammar, as a theoretical framework, originates in the work of Charles Fillmore and his Berkeley colleagues beginning in the 1980s. It has, since then, spread widely across linguistic communities and today has several