

Overview of Consonants

GREEK 101: Introduction to Ancient Greek



A **consonant** is a sound in spoken language that is characterized by a constriction or closure at one or more points along the vocal tract, in contrast to a **vowel**, which are characterized by an open configuration of the vocal tract.

Recognizing **stop consonants**, and what happens when stops are followed by σ , is very useful for understanding Greek.

	Voiceless	Voiced	Voiceless Aspirated
Labial	π	β	ϕ
Dental	τ	δ	θ
Velar	κ	γ	χ

Note what happens when a stop is followed by σ :

Labial: π or β or ϕ , when followed by σ , becomes ψ .

Example: $\gamma\rho\alpha\phi + \sigma\omega = \gamma\rho\acute{\alpha}\psi\omega$

Dental: τ or δ or θ (or ζ), when followed by σ , stop is lost.

Example: $\sigma\pi\epsilon\upsilon\delta + \sigma\omega = \sigma\pi\epsilon\acute{\upsilon}\sigma\omega$

Velar: κ or γ or χ , when followed by σ , becomes ξ .

Example: $\delta\iota\omega\kappa + \sigma\omega = \delta\iota\acute{\omega}\xi\omega$

Double Consonants

Three Consonants represent combinations of other sounds and are called *double consonants*:

$\zeta = \sigma + d$

$\xi = \kappa + \sigma$ or $\gamma + \sigma$ or $\zeta + \sigma$

$\psi = \pi + \sigma$ or $\beta + \sigma$ or $\phi + \sigma$

(Definitions on reverse)

Different types of consonants:

- **Continuants**: articulated by constricting (but not closing) the vocal tract [the opposite of a stop consonant]

Continuants can be further classified based on how they are articulated:

- **Nasals**: produced when the air is allowed to escape through the nose, while its oral passage may be blocked by the lips or tongue. μ ν (sometimes γ)
- **Liquids**: regarded as intermediate between vowels and typical consonants. In the articulation of approximants, articulatory organs produce a narrowing of the vocal tract, but leave enough space for air to flow without audible turbulence. λ ρ
- **Spirants or fricatives**: produced by air flowing through a narrow channel made by placing two articulating organs close together σ
- **Double**: produced when two distinct consonant sounds are combined into a single articulation. ζ ξ ψ
- **Stops or plosive** is a consonant sound produced by closing or obstructing airflow in the vocal tract by the lips or tongue. π β φ
τ δ θ
χ γ ξ

Stops can be further classified based on how they are articulated:

- **Labial**: articulated with both lips or with the lower lip and the upper teeth.
- **Dental**: articulated with either the lower or the upper teeth, or both.
- **Velar**: articulated with the back part of the tongue (the dorsum) against the soft palate (the back part of the roof of the mouth, known also as the **velum**).
- **Voiced**: produced with vibration of the vocal cords.
- **Voiceless**: produced without vibration of the vocal cords.
- **Aspiration**: the strong burst of air that accompanies the release of some stop consonants.