

2.10.1 Sidney Allen's treatment of φ, θ, χ and π, τ, κ

This section critiques Sidney Allen's argument regarding φ, θ, χ and π, τ, κ as laid out in his *Vox Graeca* (1987).

In his description of Attic Greek consonants, Allen, a leading Erasmian authority, classifies φ, θ, χ as voiceless aspirated plosives [ph, th, kh], with their unaspirated variety being π, τ, κ [p, t, k]. "Their distinctiveness," Allen says, "is demonstrated by minimally different pairs such as πόρος/φόρος, πάτος/πάθος, λέκος/λέχος" (Allen, 14). Knowing that Modern Greek φ, θ, χ are voiceless fricatives (i.e. not plosives), Allen says that his main task is to prove that their development into fricatives did not happen until a later date, at any rate outside the classical period 5-4 c. BC (Allen, 18).

In critiquing Allen, an attempt to summarize the meandrous and multi-layered thought pattern in this section of his work may prove futile, hence the need for extra detail here. Thus, Allen prefaces the discussion of his "proof" by pointing out the distinction between aspirated and unaspirated plosives in Sanskrit and in a modern language that developed from Sanskrit, Hindi, saying that that distinction, being allophonic, can also be found in English. He then alludes to Hellenistic-period grammarians who categorized the two varieties of plosives as smooth letters (γράμμα) ψιλόν and aspirated letters δασύ, in Latin rendered as *lenis* and *aspera*, though the Latin terms in Priscian are *tenuis* and *aspirata* (Allen, 15).

Allen then introduces the unaspirated plosives π, τ, κ by saying, "*The fact* [italics mine] that aspirated and unaspirated plosives were distinguished in Greek means that aspiration must be suppressed in the latter if confusion is to be avoided; such a pronunciation comes more readily to native speakers of e.g. French than to those of English or German..." (Allen, 15). Notably, with his introductory remark Allen shows that he already treats as a fact the very distinction he is trying to prove; and in describing that distinction, he has so far brought into the discussion Sanskrit, Hindi, Latin, Priscian, French, English, and German.

Next, Allen ties the pronunciation of "a very early period" to Grassmann's Law, "whereby the first of two originally aspirated syllable-initials in a word loses its aspiration" (Allen, 15). The examples Allen gives are ἔχω and ἔξω, which he renders [ekho] and [hekso] respectively; and τριχός and θριξί, the initials of which he renders [t] and [th] respectively (Allen, 15-16). Later in his discussion Allen uses Grassmann's Law as well in connection with reduplication: πέ-φευγ-α, τί-θη-μι, κέ-χυν-μαι (Allen, 20). What Grassmann's law theoretically asserts regarding Greek, however, pertains to "a very early period," as Allen puts it, thus it cannot necessarily serve as evidence that in Classical Greek (a comparatively much later period) φ, θ, χ were aspirated plosives, rather than aspirated continuants (fricatives). Nor does [h] in ἔξω (Allen's [hekso]) prove that "aspirate" H [h] was pronounced at all in the 5th c. BC, particularly when H started being used as the vowel ἦτα (η) (p. 41).

For the discussion of Attic consonants, Allen leans on Hellenistic grammarians (Allen, 19). “The grammatical tradition,” he goes on, “divides the consonants into two primary categories, ἡμίφωνα [‘half-voiced’] and ἄφωνα [‘voiceless’].” This distinction is given by Dionysios Thrax (170–90 BC), who says ζ ξ ψ λ μ ν ρ σ are ἡμίφωνα and β γ δ κ π τ θ φ χ ἄφωνα. Thrax’s distinction, however, is given from a poetically euphonic and aesthetic, rather than a phonological, standpoint (see below). Today no phonetician would classify these two groups of consonants as half-voiced and voiceless, respectively, since the “half-voiced” group includes voiced ζ λ μ ν ρ and voiceless ξ ψ σ, and the “voiceless” group includes voiced β γ δ. Allen, however, says that the two groups correspond to continuants and plosives respectively, hence he justifies the classification of θ φ χ as plosives.

But further on Allen admits that scholars from the same era as Thrax, e.g. Stoic Diogenes Babylonios (2nd c. BC), classify φ, θ, χ with the ἡμίφωνα ζ ξ ψ λ μ ν ρ σ—which would make φ, θ, χ not plosives but fricatives(!). Allen, however, brushes that classification aside “simply [as] a Stoic aberration” (Allen, 23). With aberration as his reasoning for dismissing Babylonios, in the same breath Allen also dismisses Plato’s classification of φ with ψ, σ, ζ as a fricative (*Kratylos* 427a), asserting, “the classification provides no grounds for assuming a fricative pronunciation of φ” (Allen, 23). It is not surprising that Allen so casually dismisses Babylonios and Plato, for he has already reached his conclusion (a page earlier), where he declaims:

“The evidence thus seems conclusive that the 5 c. B.C. Attic φ, θ, χ represented *plosives* (as π, τ, κ) and NOT *fricatives* (as σ or as φ, θ, χ in modern Greek)” —with a strikingly large “NOT” apparently needed to strengthen his evidence.

But if Allen’s description of φ, θ, χ were to be applied, then ἐχ Χαλκίδος would be ἐκκχκαλκίδος, ἐχ Θετταλίας ἐκκχθητταλίας, and ἐχφέρω ἐκκχφέρω, all too cumbersome to pronounce and against the natural flow of the language. Allen therefore advises that [ph, th, kh] should be pronounced each as part of the same syllable, not like “*saphead, fathead, blockhead*, where the plosive and the [h] are divided between separate syllables” (Allen, 28-29). Contrary to Allen’s advice, nevertheless, Smyth gives *upheaval, hothouse, backhand* as examples for the pronunciation of [ph, th, kh].¹

Allen goes a step further to say that the doubling of these consonants results in an unaspirated stop followed by an aspirated stop, hence πφ, τθ, κχ = [pph, tth, kkh], and offers the vague explanation that “the proof only refers to the time at which the doubling took place, and in many cases this must have been long before the 5 c. B.C.” (Allen, 21). However, Greek phonology does not support [pph, tth, kkh], such pronunciation in fact being unnatural. Clearly, Allen’s “proof” so far has no basis.

Having thus far struggled to justify the difference between π, τ, κ and φ, θ, χ, Allen alerts speakers of English to the difficulty they would experience in not only pronouncing but also in hearing the difference between π τ κ and φ θ χ, hence his caveat:

¹ Herbert Weir Smyth, *A Greek Grammar for Colleges* (New York: American Book Company, 1920), 13.

[T]here is a difficulty which most English speakers are likely to experience—namely, of clearly distinguishing the voiceless *unaspirated* plosives from the aspirated, both in speaking and hearing; and the result of an attempt of the correct pronunciation may thus only bring confusion (Allen, 29).

Allen is mindful, though, to offer a pedagogical solution: he advises against trying to produce that distinction and recommends pronouncing φ θ χ as fricatives “in the Byzantine manner” (Allen, 29)—subtly steering away from saying “Modern Greek”!

Greek phonology supports [pf] as in σάπφειρος [sápfiros] *sapphire*, [tθ] as in Ματθαῖος [matθéos] *Matthew*, and [kx] ([kç]) as in ἐκχέω [ekchéo] *I pour out*. Jannaris says that if φ θ χ were like p+h t+h k+h, then names such as Σαπφώ, Ἀθθίς, Βάκχος [sapfo, atθis, vakxos], which were simplified to Σαπφώ, Ἀθθίς, Βάκχος [safō, aθis, vakos] (but never converted to the naturally easier forms Σαππώ, Ἀττίς, Βάκκος [sappō, atis, vakos]), would have been unnaturally pronounced [saphphō, aththīs, vakhkhos].²

Allen challenges Jannaris by quoting him as saying, “Combinations like φθόνος ... χθών ... constitute a physiological impossibility in any actual language” (Allen, 27). Rightly understood, Jannaris is arguably saying that φθ and χθ are normal in Greek as fricatives, but not as (Allen’s) aspirated plosives *p-h+t-h* and *k-h+t-h*, which are not supported by Greek phonology or by that of any language.³ Allen’s argument that this feature is actually normal among modern languages sounds hardly convincing judging by his tendentiously exaggerated (aspirated) transcription of Armenian for *prayer* as [aγoθkh] (Allen, 27), rather than as [aγotk].⁴

Allen further alludes to an account by Quintilian (1st c. AD) in which Cicero (1st c. BC) laughs at a Greek person who, while standing as a witness in court, is unable to pronounce the *F* in *Fundanio*.⁵ Allen’s point of course is that in Cicero’s time Greek Φ is the aspirated bilabial plosive [ph], i.e. not the “modern” Greek fricative [f], a sound also shared by English. But first let us look at what Cicero’s *F* in *Fundanio* was like.

Scholars have variously attempted to describe Latin *F* in Quintilian’s and Cicero’s time as the following translation samples of the same excerpt from Quintilian XII. 10.29 show:

For the (F) which is the sixth letter of our alphabet, ... is no more than a whistle through the teeth; if it goes before a vowel it is no more than a quiver of the lips, and it makes a fracture of all harmony when it precedes, first a consonant, and then a vowel, in the same syllable, or falls in with other consonants.⁶

² Jannaris, 58.

³ Jannaris, 58.

⁴ In interviews with native-born Armenian college students, I was assured that my pronunciation of unaspirated [aγotk] sounded clearly native, whereas Allen’s aspirated ending [-thkh] sounded decidedly foreign!

⁵ Allen, 23 (regarding Allen’s reference to Quintilian, I. 4.14).

⁶ W. Guthrie, Esqu., *Quintilian’s Institute of Eloquence* (London: Printed for R. Dutton et al., 1805), 437.

F, the sixth letter of our alphabet, makes a sound, scarce human, or rather one not proceeding from the voice, because [it is] formed intirely [*sic*] by the air puffed out between the teeth. Followed by a vowel it loses its force, and by a consonant, it breaks the sound, and becomes more harsh and disagreeable.⁷

For the sixth letter of our alphabet is represented by a sound which can scarcely be called human or even articulate, being produced by forcing the air through the interstices of the teeth. Such a sound, even when followed by a vowel, is harsh enough and, often as it clashes (*frangit*) with a consonant, as it does in this very word *frangit*, becomes harsher still.⁸

Based on the above translations, Cicero's *F* must have been a sound other than [f], for a modern phonetician could hardly associate such bizarre descriptions of a speech sound with the distinctive phonological features of a not-an-unpleasant sound such as [f]. The closest candidate to Cicero's *F*, then, would have been *bilabial* fricative [ɸ], a sound which, on the one hand, approximates that of [f] and, on the other, does not restrict the free flow of air (aspiration) as [f] does. If so, the closest the Greek witness could have come to simulating the effects of [ɸ] would have been voiceless velar fricative [x], e.g. [xuntanio], in which case his lips would have been rounded because of [u], with simultaneous aspiration being produced by [x]. This would have enabled the man to produce aspiration not at the aperture formed by the rounded lips, but between the back of the tongue and the velum—a distinction which, however effective in simulating [ɸ], could escape neither the eye nor the ear of observant Cicero. This comports with Quintilian's account of Cicero's reaction to the witness who, unable to release a rush of airstream through bilabial [ɸu], relied on the aspiration produced by velar [xu]:

nam contra Graeci aspirare F ut φ solent, ut pro Fundanio Cicero testem, qui primam eius litteram dicere non possit, irridet.⁹

*for the Greeks ... are accustomed to aspirate, whence Cicero, in his oration for Fundanius, laughs at a witness who could not sound the first letter of that name.*¹⁰

That Cicero's *F* could have been [ɸ] should not be surprising, since the same sound, though apparently milder in phonation than described above, is enjoyed by many millions of Romance-language speakers today. As Lindsay observes, "[I]t is highly probable that Latin *f* was at some time bilabial, as it is to this day in Spanish."¹¹

⁷ J. Patsall, *Quintilian's Institutes of the Orator* (London: Printed for B. Law and J. Willis, 1774), 415.

⁸ H. E. Butler, Tr. *The Institutio Oratoria of Quintilian* (London: William Heinemann, 1922), 465, 467.

⁹ Butler, 68.

¹⁰ John Selby Watson, *Quintilian's Institutes of Oratory*, Vol. I (London: George Bell & Sons, 1892), 33.

¹¹ W. M. Lindsay, *The Latin Language: An Historical Account of Latin Sounds, Stems, and Flexions* (Oxford: The Clarendon Press, 1894), 99.

The point. My analysis of Quintilian’s allusion to Cicero, though plausible, is somewhat conjectural and proves nothing about the pronunciation of the sixth letter of the Latin alphabet. It simply shows a possible interpretation other than Allen’s. It also shows that drawing attention to an isolated and ambiguous account by some ancient authority cannot be equated with evidence. Allen’s masterful litanies of cherry-picked multilingual elements, nevertheless, at times culminate with a mere reference to a prominent historical figure, a technique that seems to seal his argument. But has Allen, by simply referencing an isolated incident regarding the pronunciation of Latin F, shown that Greek speakers of the day pronounced Φ as [ph] and not as the “modern” Greek [f]? I think not.

Allen has virtually relied on Hellenistic grammarians for a phonological description of the Attic Greek sounds φ θ χ and π τ κ, notwithstanding the peculiar way in which those grammarians classify sounds. But as Roberts cogently remarks, “the terminology of Dionysius’ [of Halikarnassos] phonetics is full of difficulties,”¹² and goes on to explain that “[Dionysios’ *Composition*] is not a treatise on Greek Pronunciation, or even on Greek Phonetics. ... There was, in fact, no independent study of phonetics in Greek antiquity; the subject was simply the handmaid in the service of music and rhetoric. ... [so] in describing the way in which the different letters are produced is not scientific but aesthetic and euphonic.”¹³

Allen has apparently found such descriptions, however inaccurate and inappropriate for a true phonological description, suitable for his purpose.

Dionysios Thrax discusses the relation between φ~π, χ~κ, θ~τ in Classical Attic.¹⁴ If in classical times φ θ χ had been Allen’s aspirated stops [ph, kh, th] but by pre-NT and NT Hellenistic times they were beginning to turn (or had already turned) into fricatives, then Dionysios Thrax, as well as Diogenes Babylonios, Dionysios of Halikarnassos, or even Quintilian, whose lives collectively ranged within Hellenistic times between 230 BC and 100 AD, would have most likely lamented the Κοινή pronunciation of φ θ χ as fricatives. It is no wonder that none of them even hints at a pronunciation change of this type, for apparently they all see φ θ χ as fricatives.

Allen has failed to show that Attic Φ Θ Χ /f/, /θ/, /x/ are an aspirated variety of voiceless plosives, and not the monophthongal voiceless fricatives [fi], [θíta], [xi] ([çi]), as they are known to Greek speakers today—notwithstanding the Anglicized names [p^ha¹], [θe^thə], [k^ha¹] used by modern fraternities and sororities.

¹² W. Rhys Roberts, *Dionysius of Halicarnassus on Literary Composition, Being the Greek Text of the De Compositione Verborum* (London: MacMillan and Co., Limited, 1910), 294.

¹³ Roberts, 43.

¹⁴ Thomas Davidson, trans., *The Grammar of Dionysios Thrax* (repr. from “The Journal of Speculative Philosophy,” St. Louis, MO: Studley, 1874), 7.