Short Article

On the Phonetics of α -opening

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For ancient or reconstructed languages, we cannot do observational or “real” phonetics, but only systematic (phonologically computed) or “human” (physiologically generalized) phonetics.

It is well known and agreed that in ancient Attic (but not Ionic) Greek after ρ and front vowels, long $\tilde{\alpha}$ did not become η , but remained α . It is only following the general inflectional rule of grammar (“paradigmatic pressure”), that in Modern Greek the feminine adjective for ‘second’ is δεύτερη, and not δευτέρα. Otherwise $\tilde{\alpha}$ in such a context prevailed; κόρη ‘girl’ in such an apparent environment changed because originally [w] (“digamma”) intervened, as we see from reconstruction and confirmed by the writing system of Mycenaean Greek, which leaves out the $-r-$ by a rule of writing(!); thus Mycenaean < ko – wa > stands for [korwa].

There can be no doubt therefore about what finally happened. How, then, did it happen? This is what we often mean when we ask ‘Why did it happen?’. We usually learn about this lack of change globally as a sort of footnote to the rule of Attic-Ionic change. That solves the day’s lesson, but the truth is sometimes more interesting. And understanding the world (even a fly’s world) is more important than parroting.

When we make noises that phonetics talks about, we do not, it turns out, assume positions, hold them there where they have phonetic names, and then move to the next label on the road map (or hotel list). Instead, what we do is called targeting; we can list features and diagrams for these hotels, we take aim (allowing for what we are standing on, which is often different or rather unexpected), and we often don’t quite get there. We don’t miss or fire wild, we sort

of *flake off*, give it a personal signature, maybe an abrupt surprise.¹ It's all a bit like Chinese and Japanese styles of writing where the dribbles show where the brush went *between* the lines that compose the characters (which aren't all there). It's the journeys and the plans that matter, not whether you always check in at the hotel. There are laws about flaking off and how to do it, and languages differ a lot on that. Greek and Albanian allow (but differently) such flaking only *between* stressed syllables; Danish glories in an extravagant flaking that tapers to a Monet-like subtle dribble, a style that staccato Swedes and Finns abhor. All this reminds us that it is of interest to ponder how in Greek they have reacted to getting from ρ to $\bar{\alpha}$ and from ϵ to $\bar{\alpha}$.

This matter of targeting does not mean that phoneticians for 200 years, and in India for 2500, have been barking up the wrong tree. In fact, their notes are still made and written in lists of target hotel facilities. Technology has only for half a century allowed them to understand the mechanics that happen. But we humans bunch them readily into those lists. Why, then, do we keep and refer to such lists? Because we're human.

In the light of what has been briefly rehearsed, it must be that even if the Attic change which we call $\bar{\alpha} > \eta$ can be termed a single event, there must have been at least two separate and independent conditions which we can distinguish and which were dominant in the conservation of $\bar{\alpha}$. One was the context of ρ , and the other was the context of a front vowel.

Unless modified by neutralizing or conflicting features, any ρ , when it occurs in the phonology of a language (Ojibwa has no ρ or λ , and only μ and ν as sonants²), is found frequently to have a *lowering* effect on adjacent sounds. Thus in English, the *a* in *car* or *far* is lowered and contextually³ retracted when compared with *cat* or *fat*, and an earlier *e* in this position was lowered to *a* (*park*, *Clark*, *heart*, *Derby*, etc.), as some of our traditional spellings illustrate. In Classical Attic, η was pronounced [ɛ:] (often called “open *e*”); although it had not yet been raised (or closed) to [i], it was definitely more front and high (close) than α . We see then that the targeting from ρ was biased by some inherent factor and failed to qualify as η ; instead, it was heard as $\bar{\alpha}$ (though perhaps not the same as the old $\bar{\alpha}$ in delivery), and finally the speakers didn't try any more. In later Greek, the same process has reasserted itself: The folk

¹ Some complicated, busy, endlessly involved, all going on in your mouth and ear in the space of a wee word like *the* or *τούς*? Well, it is, just like the instant accuracy of a fly before a swatter.

² There are languages that have a number of ρ 's. Irish and Scottish Gàidhlic dialects can have up to three or four, with about three subvarieties depending on the position within the word (initial, medial, or final).

³ I leave it to my Anglist betters to work out the details of this context.

form κυρά ‘Mrs.’ has lost its high (close) ι, which was absorbed on the lowered journey from ρ to α. Here we have an inversion of result.

When it comes to the ease of a preceding higher front vowel, we find an inversion of motivation (or intent): Instead of a failure in targeting, we have an enhancement in the goal of the target. The purpose of language is to communicate; this implies conservation or facilitation of distinctions and their signals. If two vowels occur in succession, their distinctiveness will be improved by increasing their distance along salient parameters. If $\bar{\alpha}$ moves to η ([ε:]), there will be loss in combined height and fronting with respect to ε ([e]) (and ει ([eː]), irrelevant mostly here) and ι or $\bar{\iota}$. So $\bar{\alpha}$ gained in ἀκρίβεια.

Notice that a further step on this path to efficiency has been taken by later and Modern Greek: Νεο-χωρι(ν) > Ντοχωρι > [ɲoxori], where the informative contrast-preserving ι has packaged itself inside the formerly preceding nasal, in reverse of what happened in Νεάπολις > Napoli, surrounded by Oscan speech habits in Campania.