

Phonetic Information and Misinformation in 'Dead' Languages

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It is well known that 'dead' languages can be made to yield indications of their pronunciation. Among the pieces of evidence are foreign transcriptions, orthographic variants, assimilatory and dissimilatory processes, expressive effects (animal cries spelt out etc.) and play on words. There is also commonly extant the direct testimony of contemporary native speakers (writers), of widely varying value. Their *prima facie* statement can be reliable; their obvious folly can be instructive. The description offered may be cryptic, inadequate, inconsistent, or plausible in itself and yet at variance with inscriptional evidence, with deductions from later developments or with the total phonological pattern of the language. Examples of all these possibilities are easily found in the standard handbooks. The purpose of this paper is to add some detail to the reasons which have been put forward for vagaries of contemporary phonetic analyses and to the signs thought to indicate trustworthiness.

Sturtevant spotlighted three main types of, and reasons for, ancient inaccuracy: a) lack of phonetic training causes inexact apprehension of sounds, b) theoretical considerations cause blindness to visible or audible data, c) adherence to traditional terms causes loss of contact with actual, developed, phenomena. He saw as the most reliable ancient witness an educated and interested speaker with no systemic motive; and as the most credible description one which runs counter to tradition. To this latter recommendation one may add this: it is advisable to prize, as symptoms of clarity and honesty, abrupt changes of mind, homeliness of expression and ingenuousness in description. Cicero rejects the academic question of hiatus and its aesthetic effect by a sudden realization that it applies only to Greek after all, and opines that 'nobody is such a boor' as not to run

contiguous Latin vowels together; Terentius Scaurus makes it clear that the middle vowel of *artubus* was not at any rate pronounced [u] by saying 'nobody would be such a fool' as to try it. Equally credibly, Sextus Empiricus underlines his assertion of the monophthongal nature of Greek *ai* in his day not only by his break with tradition but also by contrasting sequences like [ra], with a beginning and an end which do not sound the same, and by using terms like 'homogeneous' – so like the denial of 'sequence' and assertion of 'coalescence' for Skt. *e/o* (< *a-i/a-u*) in *Ṛk-Prāṭiśākhya*, and the commentator's striking comparison of the diphthong's 'solution' to milk and water (*kṣīrodakavat*).

On the other side, *Sturtevant's* first cause of ancient inaccuracy (failure to hear correctly) may be supplemented by what seem to be cases of simple failure to listen to the relevant phone. Notoriously, Terentianus (and his paraphraser, Victorinus) establishes for Latin a dental [d] and an alveolar [t] – unbelievably and inconsistently with the report of Martianus Capella. Now it is probable that it was the choice of environmental words for Terentianus' personal testing of the sounds which led him to compare and state contrastively what were in effect relatively different allophones from each of these phonemes. The same may apply to the statement that Latin [g] is more 'back' than [c]; Victorinus' use of 'lenius' scarcely supports a fortis/lenis distinction here, although it is not impossible (cf. 'oris molimine nisuque'). There is quite certainly no such indication in the equivalent discussion of [b] and [p], pace *Sturtevant* and those he has convinced: [b] is actually said to have complete lip-closure, [p] to have lip-central release. This analysis may derive its curious differentiation from the inequality of expelled breath as between exponents of these phonemes in comparable environments; but the odd description of [b] is almost certainly the result of misleading personal testing of the sounds in whispered soliloquy, where the voiceless sound remains intact but the 'voiced' to maintain differentiation replaces vocal cord movement by lip-tension. *Sturtevant's* second diagnosis (that theory precludes observational precision) applies to Priscian's treatment of Latin *f* as an aspirated stop or to Varro's denial of the graphic status of Latin *h*. But theory may also occasion wilful distortion of phonetic fact, as when Pāṇini equates Skt. [a] and [a:] in aperture quality, implicitly admitting the fiction in his final aphorism. The third point (that tradition blinds the analyst to development in the phenomena, as in statements on the

rough breathing in late Greek) may be enlarged by recognition of the effect of archaisms of orthography, which is often inaccurate even when first applied. Aside from the words of ancient scholars who are thinking about music and of modern scholars who are theorizing, there is no compelling evidence that the Greek acute accent involved a necessitous *rise* (except in the loose sense that a sequence of lower point–higher point is so called, like a 'rise' in price). Restriction on accent-recession suggests that there was a necessitated true *fall* from high pitch in post-acute morae, lasting beyond the immediate syllable-boundary; but a true preceding rising movement on pre-tonic syllables is ruled out by e.g. the succession of grave (i.e. low) markers on all pre-acute syllables in one Greek system (cf. *anudāttas* preceding the first *udātta* in Vedic verse notation), and rising motion at least on the commonly short acute syllable itself is far less likely than that the voice hits a simple high point. Fall within a syllable needs 'double length' (two morae) if the syllable contains effective accent (circumflex); rise may be credited to long syllables likewise (long acute), but therefore not to short. 'Fall' as the meaning of final grave sign is accepted by few nowadays, which means that scholars are not swayed by the diacritic ' despite the value of the second half of ^; but still the shape of ' is over-persuasive. Probably ' has misled analysts from ancient times, although the sign is indistinguishable from a common sign for place of stress, and the latter implies no 'contour' at all. And how many of us still write the stress sign from the top down and the acute from the bottom up?

Sporadic inscriptional testimony of lengthened [i] in Latin before the cluster *-gn-* seems to support Priscian's general statement about vowels in that environment. Now spelling (*ignosco*, not **ingnosco*; *sinnu* etc.), sound-shift conditions (*e > i* in *dignus* as in *lingua*), and perhaps grammarians' readiness to hear *agma* elsewhere, all show a dorsal nasal as the first consonant in this sequence; *ign-* represents [iŋn-]. Introspective ancients may have misheard this as [i:n-] – if ŋ in fact gave way to a nasalization, [ĩn] or [i:n], one prosody may have ousted the other – and this, the first of *Sturtevant's* 'faults', was aided by the third, for orthography held them fast, and *ign-* is spoken of as if it were [i:gn-] and even written *Ign-*. Romance reflexes show a return to a spelling pronunciation [iŋn-]. They also show no loss of the /n/ phoneme as such (any more than does Latin orthography itself) in the sequence [-Vnf-], whereas earlier [-Vns-]

has passed to [-Vs-]. Already in Latin spellings like *cosol*, *cesor* are frequent. Then why does Cicero say that in *both* environments the phonetic value is [V:ns/f-]? Epigraphic testimony often supports him, and other analysts generalize his ruling beyond the mere *ins-*, *inf-*, *cons-*, *conf-* of which he speaks. It is hard, too, to prove or disprove vowel lengthening before *-nf-* from the Romance results. But co-existence of secondary vowel length and full nasal phoneme is unparalleled in Latin, for barring analogy such length compensates for loss of weight in syllables affected by reduction of consonant clusters. Further, the assignment in quantitative verse of syllabic length to the sequence *-Vm C-* may reflect an addition of duration-prosody to nasalization-prosody to maintain weight in the absence of oral release of *m* ([-y:(#)C-]); but one is not justified in combining traditional spelling and (partial) phonetic analysis, and describing the result as [-V:m(#)C-]. In fact, there is no convincing proof of [-V:ns/f-] in Latin. It looks as if in *inf-*, *cons-*, *iunx-*, *iunct-* mishearing and traditional spelling (the *cesor*/*cesor* variation really shows only the instability of /n/ before [s]) may have induced the stating of false co-existences and the equating of environments whose effects were diverse.

Postscript

A relevant point made in subsequent discussion was the tendency of nasalized vowels to display measurably longer duration than non-nasalized equivalents. This affects assessment of Cicero's report (apart from his equation of *-ns-* and *-nf-*, not justified by the balance of orthographic evidence). He may be credited with some phonetic perspicacity; but with accuracy only if the following grouping of phenomena can be paralleled: (1) vowel length associated with an apparent feature of prenasalization before a nasal phoneme, plus (2) limitation of this feature to strings defined not phonologically but morphologically (some lexical derivatives), plus (3) subsequent loss of (vowel length and) nasality, but not of the nasalphoneme, in one sub-group alongside loss of the nasal phoneme and prenasalization, but not of vowel length, in another.

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