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MOROCCAN AFFRICATES

One of the many analytical difficulties faced by those of us working on Moroccan Arabic is the interpretation of (phonetic) affricates [,Z] and [Ç]. This note, borrowed from a larger study of the phonology of the Fès/Meknés Muslim (F/M) dialect, will attempt to clarify the matter, though the bottom line is that native speakers themselves are not entirely sure what is going on.

In the F/M dialect, [Z] does not occur as a phoneme in native words, i.e., those inherited from C(lassical) A(rabic) — or proto-vernacular Arabic — and other old vocabulary. Classical phoneme ŋ is reflected as Moroccan phoneme /Z/, hence CA jamb, Moroccan /žbal/ ‘mountain’. Moroccans speaking CA often pronounce  as [Ž], and recent borrowings from CA show /Z/, hence /tižar-a/ ‘commerce’ (CA tižar-a).

In the northern Moroccan dialect spoken around Tetuan, one hears affricates in forms like /[Z]-žal/ ‘the mountain’ (cf. southern and central [S]-žal]). However, this is due to a phonological rule by which geminated /ŽZ/ is pronounced as a surface affricate [Z] in the northern dialect, and there is no need to recognize a special affricate phoneme.

Returning to the F/M dialect, the problem now arises how to interpret [Z] found in certain recent European loanwords, notably [Jin] ‘pair of, jeans’ (there are two others attested with stem initial [Z], neither as common as ‘jeans’). We would suspect that the [Z] here is interpreted as a /dZ/ sequence, as in /džaž-a/ ‘chicken’, pronounced [Jaž-a].

This interpretation is supported by a number of converging phonological arguments. First, the [Z]-initial nouns have diminutives beginning with [ji…...], hence [jiyn], [jiyž-a]. Since the diminutive template is of the shape /Ci….../, the [Z] must function as a consonant cluster and thus be analysed by natives as /dZ/. If [Z] were a unit phoneme, we would expect diminutives in *[wi…...] with the filler semivowel /w/, seen in such alternations as *[raž] ‘man’, dimin. /rwiž/.

Second, for some speakers we can elicit a productive set of speech-play inversions, typically with the linear order of stem consonants completely reversed (other less drastic reorderings are also sporadically attested). Input [Z] is often, though not always, broken up into its components (/d/ and /ž/) for this purpose, hence [jaž-a] ‘chicken’ becomes [Zaž-a] (where ‘ indicates consonantal hiatus), pointing to a representation /džaž-a/ for the simplex. From [Jin] ‘jeans’ we likewise have play-speech variants [nižad] and (intermediate) [ždin]. Overall, then, the data point clearly to an optimal analysis of [Z] as a cluster /dZ/.

In the case of voiceless [Ç] the decision is more difficult. In the Tetuan dialect, /Ç/ is clearly a distinct phoneme (unlike [Z], which is merely an allophone of /Z/), hence /Çtä/ ‘(water) to drip’. In the F/M dialect, then, we may wish to scrutinize the facts carefully.
Phonet [ɛ] occurs within native Moroccan stems in a few cases, but is analysable as /tɛ/ (or /tʃ/ if adjoining vowel allophones show the effects of pharyngealization): /jɔsand/ ‘spark’, /nɔsan/ ‘thirsty’ (cf. /nɔs/ ‘thirst’ or verb ‘be thirsty’). All of the available phonological tests show that the [ɛ] is not a unitphone here.

In European borrowings, however, the evidence is more balanced. In cases like [maç] ‘(sporting) match’, the play-speech inversion may be either [ṣam] (pointing to a representation /maʃ/) or [cação], which could be analysed as from /maʃ/ or possibly /maʃ/ (at least one of the consonants being pharyngealized). Likewise, [kuçi] ‘two-horse carriage’ (Spanish coche) has play-speech outputs [tukh] or [sukk], each suggesting a distinct representation of the simplex. (The diminutive is no help with [maç] or [kuçi] since the diminutive test is applicable to input stem-initial, not final or medial, affricates.)

The most interesting case is [leìn] ‘oranges’ (collective), individual singular [leìn-a] with “feminine” suffix. Originally this is from Spanish la China ‘China’ (country), but it is now a well-assimilated borrowing, and in the F/M area it is the usual term for oranges, which are grown locally now and a fixture in markets.

Speech-play inversions often treated the [ɛ] as a /tɛ/ cluster, with the two components going their separate ways in the outputs, e.g., [lțin-a]. However, if the stem is represented as /lțin(-a)/ we should expect diminutives of the type */lțin(-a)/, on the pattern of, e.g., /skikari/ ‘sugar’, dimin. /skikar/ (variant /skikar/). However, after checking this diminutive with numerous F/M-area speakers I concluded to my surprise that this output is strongly disapproved of, even when proposed by the eliciting linguist. While no diminutive is actually used for this stem (rather surprising in view of the productivity of diminutivization, above all for small commodities which are often bought, sold, and otherwise transferred from one person to another), under the spotlight informants produced forms of the following general type:

/lțin(-a)/
/lɛeìn(-a)/
/lskikin(-a)/

What seems to be going on is that speakers have a representation of the stem of the type /C_xC_yin(-a)/ with some geminated cluster, here indexed abstractly as C_x C_y. Some speakers seem to conceptualize this as /tt/, others as /ʃʃ/, but neither of these is phonetically compatible with the affricate [ɛ] actually heard in the simplex [leìn-a]. It is true that Moroccan /t/ has a kind of assimilated release [ɾ], but even geminated /tt/ ([tt:]) is distinct from the [ɛ] of [leìn(-a)]. The other alternative shown above is to take the input stem as /leɛin(-a)/, so that /ɛ/ does have to be recognized as a distinct phoneme. Individual speakers often tried out two or three of the diminutive forms listed above, and sometimes others, while expressing discomfort and uncertainty, so it is not so much a question of variation
among speakers as of a more basic ambivalence in the mental grammar of most or all speakers in this region. (The variants with /k/ are also supported by the occurrence of a rural variant /lāsin(-a)/, hence automatically diminutive /lāsin(-a)/ in the mountains to the north.) Unfortunately, several Moroccan dialects have a distinct lexical item /limun(-a)/ 'orange(s)', also a loanword, so we cannot test the status of /l/ in the same way as in the F/M dialect.

The ambiguous result we have discovered for /l/, in contrast to the more clearcut result for /j/, is rather typical of the phonology of Moroccan Arabic. Many similar examples, involving either the status of segments or of ablaut routines, are discussed in a forthcoming larger work (Ablaut and Ambiguity: Case Study of Moroccan Arabic).

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