

## Using Locus Equations for Berber Consonants Labiovelarization

**Authors :** Ali Benali Djouher Leila

**Abstract :** Labiovelarization of velar consonants and labials is a very widespread phenomenon. It is attested in all the major northern Berber dialects. Only the Tuareg is totally unaware of it. But, even within the large Berber-speaking regions of the north, it is very unstable: it may be completely absent in certain dialects (such as the Bougie region in Kabylie), and its extension and frequency can vary appreciably between the dialects which know it. Some dialects of Great Kabylia or the Chleuh domain, for example, "labiovélarize" more than others from the same region. Thus, in Great Kabylia, the adjective "large" will be pronounced: amqqwran with the At Yiraten and amqqran with the At Yanni, a few kilometers away. One of the problems with them is deciding whether it is one or two phonemes. All the criteria used by linguists in this kind of case lead to the conclusion that they are unique phonemes (a phoneme and not a succession of two phonemes, / k + w /, for example). The phonetic and phonological criteria are moreover clearly confirmed by the morphological data since, in the system of verbal alternations, these complex segments are treated as single phonemes: agree, "to draw, to fetch water," akwer, "to fly," have exactly the same morphology as "jealous," arem "taste," Ames, "dirty" or afeg, "steal" ... verbs with two radical consonants (type aCC). At the level of notation, both scientific and usual, it is, therefore, necessary to represent the labiovélarized by a single letter, possibly accompanied by a diacritic. In fact, actual practices are diverse. - The scientific representation of type does not seem adequate for current use because its realization is easy only on a microcomputer. The Berber Documentation File used a small ° (of n °) above the writing line: k °, g ° ... which has the advantage of being easy to achieve since it is part of general typographical conventions in Latin script and that it is present on a typewriter keyboard. Mouloud Mammeri, then the Berber Study Group of Vincennes (Tisuraf review), and a majority of Kabyle practitioners over the last twenty years have used the succession "consonant + " semi-vowel / w / "(CW) on the same line of writing; for all the reasons explained previously, this practice is not a good solution and should be abandoned, especially as it particularizes Kabyle in the Berber ensemble. In this study, we were interested in two velar consonants, / g / and / k /, labiovelarized: / gw / and the / kw / (we adopted the addition of the "w") for the representation for ease of writing in graphical mode. It is a question of trying to characterize these four consonants in order to see if they have different places of articulation and if they are distinct (if these velars are distinct from their labiovelarized counterpart). This characterization is done using locus equations.

**Keywords :** berber consonants, labiovelarization, locus equations, acoustical characterization, kabylian dialect, algerian language

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