

## **LANGUAGES WITHOUT BILABIAL CONSONANTS**

### **THE ABSENCE OF BILABIAL CONSONANTS IN THE OTOMANGUEAN FAMILY**

Bilabial consonants are very common phonemes, which might be found, according to many authors, in as much as 98% of the world's languages. As such, the lack of those sounds is an atypical characteristic worth of a deeper analysis. This case study is centred on the Otomanguean language family, one of the widest and most interesting linguistic families of Mesoamerica, even if it is possible to find this phenomenon also in the Caddoan, Iroquoian, and Eyak-Athabaskan-Tlingit families, as well as in Taushiro (an isolated language) and in Tillamook (a language belonging to the Salish family).

The phonology of many Otomanguean languages has been described by a large number of authors such as Pike (1937), Black (1948), Bauernschmidt (1965), Marrifield (1977), Bradley & Hollenbach (1988, 1990, 1991, 1992), Campbell (2014), and McIntosh (2015). In addition to those, several reconstruction works of their proto-languages have been produced by the following authors: Mak & Longacre (1960) and Josserand (1983) regarding the Mixtecan branch; Swadesh (1947), Suarez (1973), and Kaufmann (2016), the Zapotecan one; Gudschinsky (1959) and Kirk (1966) the Popolocan one; Fernández de Miranda & Weitlaner (1961) the Chorotegan one; Bartolomew (1959) the Otopamean one; Rensch (1963, 1976) regarding both the Chinantecan branch and the Proto-Otomanguean language.

This case study aims to provide a complete description of the presence of bilabial consonants in the different branches of the Otomanguean family in order to establish whether or not this is due to borrowings (recent or old hispanisms or other Mesoamerican languages) and to compare the presence of bilabial phonemes with other consonants, as to obtain a complete description of the phenomenon in a synchronic perspective.

From a phonological point of view, it is first of all necessary to compare the Otomanguean languages with the eight main Proto-languages branches: Zapotecan, Popolocan, Amuzgo and Mixtecan, which constitute the eastern branches, and Chinantec, Oto-Pamean, Chorotegan and Mè'ehpàà-Subtiaba, which constitute the western branches. The eight main Proto-languages branches need than to be compared with their common ancestor in order to reach the second goal of this study.

The study of the current Otomanguean languages has pointed out that the presence of bilabial sounds is extremely rare in the eastern families, and mostly limited to nasals or borrowings from Spanish. Only in the Zapotecan languages it is possible to find a normal amount of them. On the contrary, in the western families only the Chinantecan branch seems to be characterized by the scarce presence of those consonants, while all the others show a normal amount of them.

In particular, in all branches characterized by the scarcity of this sounds, three different situations arise for each of the three bilabial consonants taken into account. The voiceless bilabial stop is very rare: the few cases where it occurs are generally due to borrowings from Spanish or onomatopoeias. The presence of the voiced bilabial stop is also very rare and normally derived from hispanisms, although in most languages it is possible to find its fricative version. Conversely, the nasal bilabial is much more widespread and present also in native words even though not in the same proportion as other consonants.

The analysis of some of the reconstruction works has shown that the lack of bilabial phonemes is a phenomenon which was already present in the common antecedents. In most cases, the presence of the two bilabial stops in many branches of the family derives from the conversion of the voiceless labio-velar stop, whose geminate and short version gave origin respectively to the voiceless and the voiced bilabial stop. This phenomenon was already present in the period of differentiation of the various branches. The topic of the bilabial nasal is definitely more controversial. Most of the phonemic inventories of the Proto-Languages show its presence, though in the case of Mixtec, for instance, while Mak & Longacre (1960)

include it, Josserand (1983) considers it to be only an allophone. Eventually, regarding the Proto-Otomanguean language, the inventory proposed by Rensch (1976) does not include any bilabial sound, while the review made by Kaufmann (2016a) includes the nasal bilabial. A further research concerning this language family might address the behavior of the universals of language amongst the Otomanguean group in order to highlight whether these languages feature any other atypical characteristics. However, the presence of nasal bilabial phonemes in the common ancestor is by far the most interesting subject and, therefore, worth of deeper analysis.

#### REFERENCES

- Bartolomew, Doris A, *The Structure of Proto-Otomi-Pame*, Philadelphia, University of Pennsylvania, 1959, M.A. Thesis
- Bauernschmidt, Amy, *Amuzgo Syllable Dynamics*, New York, Linguistic Society of America, 1965, "Language", 41(3), pp. 471-483
- Black, Helen E., *Breve Descripción Fonémica de la Lengua Ixcateca*. Tlalpan, SIL International 1948 [Manuscript]
- Bradley, C. Henry, & Hollenbach, Barbara E. *Studies in the Syntax of Mixtecan Languages, Vol. 1-4*, Dallas, Summer Institute of Linguistics and University of Texas at Arlington, 1988, 1990, 1991, 1992 "SIL International Publication in Linguistics" 83, 90, 105, 111
- Campbell, Eric William, *Aspects of the Phonology and Morphology of Zenzontepec Chatino, a Zapotecan Language of Oaxaca, Mexico*, Austin, University of Texas, 2014
- Fernández de Miranda, María Teresa & Weitlaner, Roberto J., *Sobre algunas relaciones de la familia mangue*, 1961, *Antropological Linguistics* 3.7, p. 1-99
- Gudschinsky, Sarah C[aroline], *Proto-Popotecan, a Comparative Study of Popolocan and Mixtecan*, Baltimore, Waverly Press, 1959, *Indiana University Publications in Anthropology and Linguistics* 15
- Josserand, Judy Kathryn, *Mixtec Dialect History*, New Orleans, Tulane University, 1983, PhD dissertation
- Kaufman, Terrence. *Tlapaneko-Sutiaba, OtoMangean, and Hokan: where Greenberg went wrong*, Institute for Mesaoamerican Studies, University at Albany, State University of New York, 2016a
- Kaufman, Terrence, *Proto-Sapotek(an) Reconstructions*, Institute for Mesaoamerican Studies, University at Albany, State University of New York, 2016b
- Kirk, Paul Livingstone, *Proto-Mazatec Phonology*, University of Washington PhD, 1966
- Mak, Cornelia & Longacre, Robert E., *Proto-Mixtec phonology*, 1960, *IJAL* 26, pp.23-40
- Marrifield, William R., *Studies in Otomanguean Phonology*, Dallas, Summer Institute of Linguistics, 1977, "Publications in Linguistics" 54
- McIntosh, Justin Daniel, *Aspects of Phonology and Morphology of Teotepec Eastern Chatino*, Austin, The University of Texas at Austin, 2015
- Mock, Carol, *Choco de Santa Catarina Ocotlán*, Tlalpan, El Colegio de México, 1977, *Archivo de lenguas indígenas de México*
- Pike, Eunice Victoria, *Mazateco Phonetics*, Instituto Mexicano de Investigaciones Lingüísticas, 1937, *Investigaciones Lingüísticas* 4, pp. 148-150
- Rensch, Calvin R[oss], *Proto-Chinantec Phonology*, Philadelphia, University of Pennsylvania, 1963, M.A. Thesis
- Rensch, Calvin R[oss], *Comparative Otomanguean Phonology*, Bloomington, Indiana University, 1976
- Suarez, George A., *On Proto-Zapotec Phonology*, 1973, *IJAL* 921 39(4): 236-249,
- Swadesh, Morris, *The Phonemic Structure of Proto-Zapotec*, 1947, *IJAL*, 13, pp. 220-30