Passive -č Innovations and Borrowings in Yuman Languages

ISO 639-3: Mohave (mov): 34.89, -114.60; Tolkapaya, Hualapai (yuf): 35.63, -113.39

A survey of 14 Yuman grammars indicate that the vast majority of Yuman languages feature a medio-passive -v morpheme, a verbal affix which is reconstructable to Proto-Yuman but is also losing its productivity in many languages today. However, Munro (1976) also describes an innovative and productive $-\check{c}$ /t// passive morpheme in Mohave, a language in the River branch, while also remarking that "I have not discovered a cognate passive marker in any other Yuman language" (p. 241). Nevertheless, there exist similar morphemes in Tolkapaya and Hualapai, both in the Pai branch but spoken in close proximity to Mohave, yet there is no such passive $-\check{c}$ in either Verde Valley Yavapai (a sister dialect of Tolkapaya) or Havasupai (a sister dialect of Hualapai). Why is it the case that only Mohave, Hualapai, and Tolkapaya feature the passive $-\check{c}$? When considering geographic proximity, borrowing through language contact provides a plausible explanation.

The passive $-\check{c}$ features similar characteristics in all three languages. In Mohave, Munro (1976) argues that $-\check{c}$ is etymologically related to the nominalizer. In (1), note the passive $-\check{c}$ and semantic patient in accusative case. Example (2) illustrates the typical medio-passive -v in Piipaash (Maricopa), another River language, with a semantic patient in nominative case.

- (1) masahay-ny-Ø əta:v-**č**-m (**Mohave**) (2) nyik-sh tsmvey**v**-k (**Piipaash**) girl-DEM-ACC hit-**PASS**-TNS rope-**NOM** wind+**MP**-REAL
- 'The girl got hit' (Munro, 1976: 241) 'The rope is wound up' (Gordon, 1986: 83) Hardy (1979) discusses a similar passive morpheme -ch /tf/ in Tolkapaya, see (3), as does Watahomigie et al. (2001) with passive -j in Hualapai, pronounced /tf/, see (4).
 - (3) 'wi-h-a ch'han-**ch**-k wu-m (**Tolk.**) (4) nya nyi-đ'gyo:-**j**-k-wi-ny (**Hual.**) rock-DEM-ACC paint-PASS-SS do-IMPF 1.ACC 3/1-pinch-PASS-SS-AUX-PAST 'The rock is painted' (Hardy, 1979: 34) 'I was pinched' (W. et al., 2001: 346)

We have found no evidence of passive $-\check{c}$ in either Havasupai or Verde Valley Yavapai, which utilize the typical medio-passive -v (Kozlowski, 1972; Kendall, 1976), suggesting that genetic inheritance among the Northern Pai languages is unlikely. Instead, we propose that morphological

borrowing best explains the spread of passive $-\check{c}$ because of the geographical proximity of the languages. Figure 1 shows locations of Yuman languages by branch, with enlarged symbols indicating passive -č languages. The Mohave, Hualapai, and Tolkapaya Yavapai communities have exhibited close ties historically (Kroeber, 1925; Davis, 1961; Hinton, 1979) which are known to have supported the borrowing of lexical items such as numerals (Langdon & Munro, 1980) and the diffusion of sound changes such as $x \rightarrow h$ and $s \rightarrow \theta$ (Wares, 1968; Hinton 1979, 1984). Further, the borrowing of passive structures is attested in other languages (e.g. Gardani, 2008). This paper illuminates the shared linguistic history of these communities, showing that language convergence extends to innovative morphology.

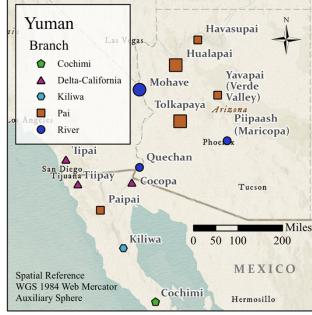


Figure 1. Yuman geography. Enlarged symbols indicate passive –č languages. Geocoordinate points from Glottolog (2020).

References

- Crawford, J. (1966). The Cocopa Language. Berkeley: University of California dissertation.
- Davis, J. T. (1961). *Trade routes and economic exchange among the Indians of California*. University of California Archaeological Survey 54. Berkeley, CA.
- Gardani, F. (2008). Borrowing of inflectional morphemes in language contact. Frankfurt: Peter Lang.
- Gordon, L. (1986). Maricopa Morphology and Syntax. Berkeley: University of California Press.
- Halpern, A. (1947). The Grammar of the Yuma Language. In *Linguistic Structures of Native America* (Vol. 6, pp. 249-288). New York: Viking Fund Publications in Anthropology.
- Hammarström, H.; Forkel, R.; Haspelmath, M.; Bank, S. (2020). *Glottolog* 4.2.1. Jena: Max Planck Institute for the Science of Human History. Retrieved from http://glottolog.org. Accessed on 2020-07-09.
- Hardy, H. (1979). *Tolkapaya Syntax: Aspect, Modality, and Adverbial Modification in a Yavapai Dialect.* Los Angeles: University of California dissertation.
- Hinton, L. (1979). Irataba's gift: A closer look at the $s > s > \theta$ sound shift in Mojave and Northern Pai. *Journal of California and Great Basin Anthropology Papers in Linguistics*, 1, 3-37.
- Hinton, L. (1984). Language convergence between closely related languages: A case study in Yuman. *Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society*, 285-95.
- Joel, D. J. (1966). *Paipai Phonology and Morphology*. Los Angeles: University of California dissertation.
- Kendall, M. B. (1976). Selected Problems in Yavapai Syntax: The Verde Valley Dialect. New York: Garland Publishing.
- Kozlowski, E. L. (1972). *Havasupai Simple Sentences*. Bloomfield: Indiana University dissertation.
- Kroeber, A. L. (1925). *Handbook of the Indians of California*. Smithsonian Institution Bureau of American Ethnology Bulletin 78.
- Langacker, R. W. & Munro, P. (1975). Passive and their meaning. Language, 51(4), 789-830.
- Langdon, M. (1966). A Grammar of Diegueño; The Mesa Grande Dialect. Berkeley: University of California dissertation.
- Langdon, M. & Munro, P. (1980). Yuman Numerals. In K. Klar, M. Langdon, & S. Silver (Eds.) *Papers in Honor of Madison S. Beeler* (pp. 121-135).
- Miller, A. (2001). A Grammar of Janul Tiipay. Berlin/New York: Mouton de Gruyter.
- Miller, A. (2018). Phonological Developments in Delta-California Yuman. *International Journal of American Linguistics*, 84(3), 383-533.
- Mixco, M. (1971). Kiliwa Grammar. Berkeley: University of California dissertation.
- Mixco, M. (1978). Cochimi and Proto-Yuman lexical and syntactic evidence for a new language family in Lower California. Salt Lake City: University of Utah Press.
- Mixco, M. J. (2000). Kiliwa. Muenchen: Lincom Europa.
- Munro, P. (1976). Mojave Syntax. New York: Garland Publishing.
- Seiden, W. (1963). Havasupai Phonology and Morphology. Indiana University dissertation.
- Wares, A. C. (1968). A comparative study of Yuman consonantism. The Hague: Mouton.
- Watahomigie, L. J., Bender, J., Watahomigie, P. S., & Yamamoto, A. Y. (2001). *Hualapai Reference Grammar* (Revised and Expanded ed.). Osaka: Endangered Languages of the Pacific Rim.