## Lexical borrowing of bird names among Yuman languages of the lower Colorado River

Introduction: Nearly 400 bird species occur along the lower Colorado River (Rosenberg et al. 1991). We compare bird names among five Yuman languages spoken in this avifauna-rich region, including Cocopa (ISO: coc) and now-dormant Imperial Valley Kamia (dih), which belong to Yuman's Delta-California branch; and Mojave (moh), Quechan (yum), and Piipaash (mrc; now spoken near Phoenix, Arizona), which comprise the River branch (Miller 2018). We analyze bird names taken from both dictionary (e.g. Crawford 1989; Langdon et al. 1991; Munro et al. 1992; Quechan Language Program 2017) and ethnographic resources (e.g. Gifford 1931; Spier 1933).

We find that many bird names are shared among these languages through borrowing, being borrowed (1) from Piipaash into Cocopa and (2) from Mojave/Quechan into Kamia. Moreover, we find that Kamia alone has borrowed names for species that were already named among other Delta-California languages, replacing native names with River loanwords. We argue that these patterns of borrowing stem from regional sociocultural relations: The Cocopa and Piipaash were allied historically against the Mojave and Quechan (Kroeber 1925; Spier 1933), while the less-numerous Kamia, who periodically resided in Quechan territory along the river, allied with the Mojave and Quechan and were influenced by them culturally and linguistically (Gifford 1931; Langdon 1975).

**Evidence:** Cocopa and Piipaash share a range of bird names, such as the names for Western Screech-Owl (Cocopa  $ck\acute{u}k$ , Piipaash  $tk\acute{u}k$ ) and for a species of hawk (perhaps Ferruginous Hawk; Cocopa  $xu:msw\acute{u}$ , Piipaash  $xomas\acute{e}$ ). These names are shared with Mojave and/or Quechan (e.g. Mojave  $tak\acute{o}:k$ ,  $huma\theta\acute{e}:$ ), but not with Yuman languages spoken beyond the lower Colorado River, suggesting that they were originally River Yuman terms that Cocopa borrowed from Piipaash. Names for some bird species are not found in extant Piipaash sources, but the presence of cognates in Cocopa and Mojave, such as the name for American Coot (Cocopa  $xn^yil^y$ , Mojave  $han^yiwil^y$ ), suggests that these words too were borrowed from an intermediate River language into Cocopa. For the name for White-winged Dove, Cocopa  $lku:ku:?\acute{a}$  compounds the native name for Mourning Dove (Cocopa  $lk\acute{u}:$ ) with a form similar to the River name for Mourning Dove (cf. Piipaash  $ku?\acute{a}$ ).

While Kamia phonology is poorly understood at present (Miller 2018), the Kamia names for Mourning Dove ("kiyaskwi") and Common Ground Dove ("kuL") are distinct from their names in other Delta-California languages (e.g. Cocopa  $lk\acute{u}$ :,  $n^y lk\acute{u}$ :) yet broadly similar to River names (e.g. Mojave  $husk\acute{v}$ ,  $k\acute{u}$ :t), suggesting that they were acquired from a River source. In both cases, Kamia replaced a native form (cognates for which occur throughout Delta-California) with a River borrowing. Further, we find that in one Kamia tale (Gifford 1931), a bird character who is known by the Delta-California name for Verdin ("kwasaman"; cf. Cocopa  $k^w$ smán") interacts with another bird character who is known by the River name for Verdin ("hanuchip"; cf. Mojave hanavtfi:p).

**Implications:** Prior research has demonstrated a range of contact phenomena, including lexical, phonological, and morpho-syntactic borrowing, among Yuman languages in two language areas: northern Arizona, and southern and Baja California (Hinton 1984; Langdon and Munro 1980; Powell and Geary 2021). We argue on the basis of bird name data that the lower Colorado River, where Delta-California and River Yuman languages meet, represents a third language area in terms of lexical borrowing in which sociocultural relations may have determined the nature of borrowing: That Kamia alone replaced native Delta-California names with borrowed River forms may stem from their culturally-subordinate relationship with the Mojave and Quechan.

## References

- Crawford, James M. 1989. Cocopa dictionary. Berkeley, CA: University of California Press.
- Gifford, Edward W. 1931. *The Kamia of Imperial Valley*. Bureau of American Ethnology 97. Washington, D.C.: Government Printing Office.
- Hinton, Leanne. 1984. Language convergence between closely related languages: A case study in Yuman. In Claudia Brugman and Monica Macaulay (eds.), *Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society*, p. 285–295.
- Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology 78. Washington, D.C.: Government Printing Office.
- Langdon, Margaret. 1975. Kamia and Kumeyaay: A linguistic perspective. *The Journal of California Anthropology* 2: 64–70.
- Langdon, Margaret, and Pamela Munro. 1980. Yuman Numerals. In Kathryn Klar, Margaret Langdon, and Shirley Silver (eds.), *American Indian and Indoeuropean Studies: Papers in Honor of Madison S. Beeler*, p. 121–135. New York, NY: De Gruyter Mouton.
- Langdon, Margaret, et al. 1991. *Maricopa English dictionary*. Prepared by Margaret Langdon and others. SRPMIC Department of Education.
- Miller, Amy. 2018. Phonological developments in Delta-California Yuman. *International Journal of American Linguistics* 84: 383–433.
- Munro, Pamela, Nellie Brown, and Judith G. Crawford. 1992. *A Mojave dictionary*. UCLA Occasional Papers in Linguistics 10. Los Angeles, CA: Department of Linguistics, UCLA.
- Quechan Language Program. 2017. Kwatsáan Iiyáa Mattkuu'éeyk!: Learn the Quechan Language.
- Powell, John, and Jonathan A. Geary. 2021. *Passive -č innovations and borrowings in Yuman languages*. Paper presented at SSILA Winter Meeting 2021 (SSILA 2021), January 9.
- Rosenberg, Kenneth V., Robert D. Ohmart, William C. Hunter, Bertin W. Anderson. 1991. *Birds of the Lower Colorado River Valley*. Tucson, AZ: The University of Arizona Press.
- Spier, Leslie. 1933. Yuman tribes of the Gila River. New York, NY: Dover.