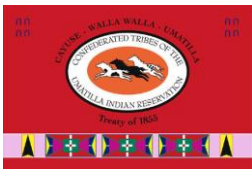


# Lexical borrowing of bird names among Yuman languages of the lower Colorado River

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# Introduction

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- I discuss lexical borrowing among 2 groups of Yuman communities:
  - Piipaash (a.k.a. Maricopa) ↔ Cocopa
  - Mojave and Quechan (a.k.a. Yuma) ↔ Imperial Valley Kamia
- Focusing on bird names, I show that different patterns of lexical borrowing hold across these groups:
  - Piipaash and Cocopa exchange names for otherwise unnamed species.
  - Imperial Valley Kamia borrows species names for which native names likely already existed, replacing or supplementing it with the borrowing.
- These differences stem from asymmetrical sociocultural relations.

# The Yuman language family

- The 5 languages studied here belong to 2 branches of the Yuman family:
  - River – Mojave, Piipaash, Quechan
  - Delta-California – Cocopa, Imperial Valley Kamia (a.k.a. Northeastern Kumeyaay)

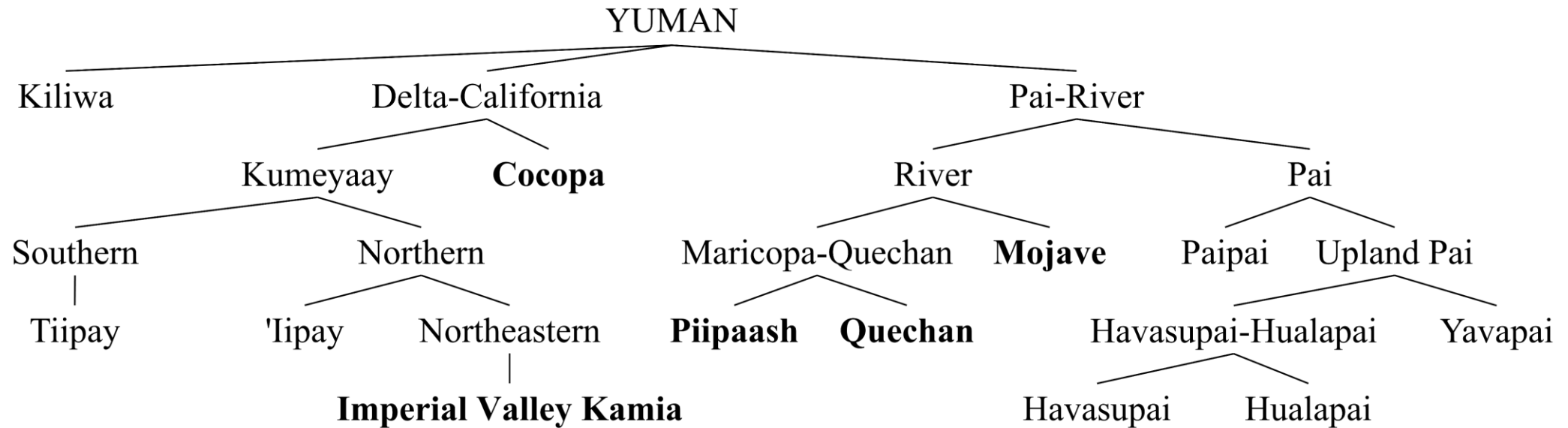


Figure 1. The Yuman language family tree (simplified from Miller 2018)

# Languages of the lower Colorado River

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- All 5 languages are/were historically spoken on the lower Colorado River.
  - The LCR forms the modern California–Arizona and Baja–Sonora borders.
  - Piipaash is now spoken near Phoenix, Arizona, while Imperial Valley Kamia is now dormant.
- The **Piipaash and Cocopa** were allied against the **Mojave and Quechan** (e.g. Kroeber 1925, Spier 1933).
  - The less-numerous Kamia periodically resided in Quechan lands, allied with the Mojave/Quechan, and were heavily influenced by them culturally and linguistically (Gifford 1931, Langdon 1975).

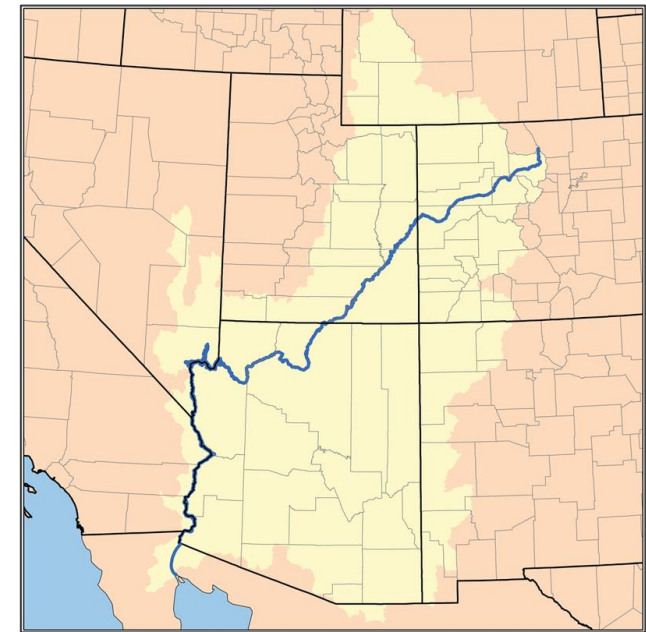


Figure 2. The Colorado River Basin watershed (<https://tinyurl.com/yc4kk6vx>)

# The lower Colorado River ecosystem

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- The lower Colorado River ecosystem is **rich in avifaunal diversity**.
  - Nearly 400 bird species occur along the LCR (Rosenberg et al. 1991).
- Yet little research has explored Yuman **ethno-ornithological** knowledge.
  - This research stems from my own efforts to identify the bird species named in Piipaash and other Yuman languages using the biological knowledge that is encoded in bird names and in oral literature.
  - I also consult **comparative data** to identify possible species referents.
- I often find that bird names are shared among the Yuman languages of the lower Colorado River, to the exclusion of other languages.....

# The present study

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- 1) What bird names are shared among the LCR Yuman languages?
  - 2) What patterns of lexical borrowing exist among these languages?
- I analyze bird names taken from dictionary (e.g. Crawford 1989, Langdon et al. 1991, Munro et al. 1992, Quechan Language Program 2017), ethnographic (e.g. Gifford 1931, Spier 1933), and unpublished fieldnote resources (e.g. Alpher 1970).
  - Shared names may be the result of borrowing. I assume, given historic intertribal relations, that the most likely directions for borrowing are:
    - Piipaash ↔ Cocopa
    - Mojave/Quechan ↔ Imperial Valley Kamia

Piipaash ↔ Cocopa

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# Piipaash ↔ Cocopa

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- Piipaash/Cocopa share names that are of likely onomatopoetic origin:
- ‘Western Screech-Owl’ – Piipaash *tkúk* ~ Cocopa *ckúk*
  - cf. Mojave *takó:k*; Piipaash/Mojave *t* regularly corresponds to Cocopa *c* (Wares 1968).
- ‘Cactus Wren’ – Piipaash *xatxát* ~ Cocopa *xálxál*
  - *ʔ* is a phoneme of Cocopa but not Piipaash, raising the possibility of Cocopa → Piipaash. However, onomatopoeia may use unusual sounds/phonotactics (Marttila 2011: 59–63).
- ‘goose; \*Snow Goose’ – Piipaash *yalák* ~ Cocopa *ya:lák*
  - cf. Mojave *ya:lák*, Quechan *ya:lák*; Havasupai *yahlák*; Akimel O’odham *hialak*
- It is possible that these names arose as independent onomatopoetic renderings, i.e. without involving borrowing (cf. Havasupai *shó:q* ‘W S-Owl’).



# Piipaash ↔ Cocopa

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- Piipaash/Cocopa share further, non-onomatopoetic names:
- ‘swallow’ – Piipaash *xamké* ~ Cocopa *xmká*
  - cf. Mojave *hamkʷé:*, Quechan *xamkʷé*.
- ‘blackbird; Red-winged’ – Piipaash *xsik<sup>wá</sup>* ~ Cocopa *ʃq<sup>wáy</sup>*
  - cf. Mojave *θiʔi:k<sup>wá</sup>* (Mojave *θ* regularly correspond to Piipaash *s*; Wares 1968).
- ‘\*Ferruginous Hawk’ – Piipaash *xomasé* ~ Cocopa *xu:mʃwí*
  - cf. Mojave *humaθé:* (Mojave *h, θ* regularly correspond to Piipaash *x, s*; Wares 1968).

# Piipaash ↔ Cocopa

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- Piipaash/Cocopa share further, non-onomatopoetic names:
- ‘Burrowing Owl’ – Piipaash *mát k<sup>w</sup>n<sup>y</sup>ví:* ~ Cocopa *màṭkn<sup>y</sup>wáy*
  - cf. Mojave *?amat k<sup>w</sup>in<sup>y</sup>aví:*; LCR names have to do with making its home in the ground.
- ‘\*American Coot’ – Mojave *?ahan<sup>y</sup>i:wí<sup>y</sup>/han<sup>y</sup>iwí<sup>y</sup>* ~ Cocopa *xn<sup>y</sup>íṭ<sup>y</sup>*
  - Cognate lacking from Piipaash sources, may represent a gap in available data.
  - Compounds of ‘water’ + ‘be black’, referring to American Coot’s color and habits.
- These names are most likely shared through **borrowing**.
  - Cognates are found in Mojave/Quechan; most likely **Piipaash → Cocopa**.

# Piipaash ↔ Cocopa

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- Piipaash and Cocopa do not share names for any dove species.....:
- ‘Mourning Dove’ – Piipaash *xoškʷévk* ~ Cocopa *lkú:* / *li:kú:*
  - cf. Mojave *huskív*, Quechan *xuskív* (Harrington 1908) / *xaškʷé:vək* (Halpern and Miller 2014).
  - cf. 'Iipay *kuwí* / *kaikarwí*, Tiipay *kirwí*; Havasupai *kuwí* Hualapai *kuwí*, Paipai *kuwí*.
  - Delta-California and Pai names may be related and/or derived via onomatopoeia.
- ‘White-winged Dove’ – Piipaash *kuʔá* ~ Cocopa *lku:ku:ʔá*
  - cf. Mojave *ku:ʔá*; River names are likely derived via onomatopoeia.
  - Cocopa name is a compound of *lkú:* ‘Mourning Dove’ + *ku:ʔá*. The second element is either borrowed from Piipaash/River or similarly derived via onomatopoeia.
- Could be further evidence of Piipaash influence on Cocopa bird names.

# Piipaash ↔ Cocopa

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- Piipaash and Cocopa may share another name for “cardinal-type” birds:
- Compare Piipaash *k<sup>w</sup>ltéš* ‘Phainopepla; Cedar Waxwing; type of bird resembling a cardinal’, with Cocopa *x<sup>l</sup>y<sup>t</sup>iš* ‘Abert’s Towhee’.
  - The attested species referents are very different, and a correspondence between Piipaash *k<sup>w</sup>* and Cocopa *x* is not attested elsewhere (cf. Wares 1968), but the two forms are similar...



Phainopepla ([ML52264101](#))



Abert's Towhee ([ML210295631](#))

# Piipaash ↔ Cocopa

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- Piipaash and Cocopa use this name as the base for ‘Northern Cardinal’:
- ‘Northern Cardinal’ – Piipaash *k<sup>w</sup>ltés x<sup>w</sup>ét* ~ Cocopa *x<sup>l</sup>ʔíš ʔax<sup>w</sup>át*
  - Both names describe Northern Cardinal as a “red” variant of the prototype species.
  - It is tempting to relate these names, but N. Cardinals are a relatively new species: They appeared in central AZ in 1870s and have been expanding westward (Halkin et al. 2021).



Phainopepla ([ML52264101](#))



Abert's Towhee ([ML210295631](#))



Northern Cardinal ([ML257386271](#))

# Piipaash ↔ Cocopa – Interim summary

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- Piipaash and Cocopa share a number of bird names to the exclusion of Yuman languages spoken outside of the lower Colorado River.
  - Given the presence of cognates in Mojave/Quechan for most names, it is likely that Cocopa borrowed these names from Piipaash.
- For most species, I do not find any name in other Delta-California languages.
  - cf. 'lipay *u:k<sup>w</sup>ís* / *kurkúr* 'ground owl (i.e. Burrowing Owl)'
  - This could reflect a limitation of the extant Delta-California materials, or it could be that these species simply have not been named by other Delta-California speakers.
- Thus, the available evidence suggests that Cocopa primarily borrowed River names for unnamed bird species to fill gaps in their ornithological lexicons.

Mojave/Quechan  $\leftrightarrow$  IV Kamia

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# Mojave/Quechan ↔ Imperial Valley Kamia

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- Imperial Valley Kamia is sparsely documented (cf. Gifford 1931), yet I have found several bird names of River origin among the Kamia data:
  - Kamia phonology is poorly understood (Miller 2018), so I retain Gifford’s transcriptions.
- ‘Mourning Dove’ – Kamia “kiyaskwi” ~ Mojave *huskív*, Quechan *xuskív*
- ‘Common Ground Dove’ – Kamia “kuL” ~ Mojave *kú:t*
  - cf. Piipaash *kú:t* ‘type of small dove; Inca Dove’
  - cf. Cocopa *lkú:* ‘Mourning Dove’. Although CC-metathesis is common in Yuman (Langdon 1976), consonants do not cross a stressed vowel, so the Kamia form must be unrelated.
- Additionally, one Kamia tale (Gifford 1931) involves two bird characters who are called the Delta-California name for Verdin (“kwasaman”; cf. Cocopa *k<sup>w</sup>šmán<sup>y</sup>*) and the River name for Verdin (“hanuchip”; cf. Mojave *hanavčí:p*).



# Mojave/Quechan ↔ Imperial Valley Kamia

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- Kamia has borrowed River names for species that are named in other Delta-California languages, apparently replacing or supplementing a native name.
  - ‘Mourning Dove’ – Kamia “kiyaskwi” ~ Cocopa *lkú:*, ‘lipay *kuwí* / *kaikarwí*, Tiipay *kirwí*
  - ‘Verdin’ – Kamia “kwasaman”, “hanuchip” ~ Cocopa *k<sup>w</sup>šman<sup>y</sup>*
- I hypothesize that this stems from the nature of the relationship between the Imperial Valley Kamia and the Mojave/Quechan:
  - The Kamia were less-numerous than the Mojave/Quechan and were heavily influenced by them culturally and linguistically (Gifford 1931, Langdon 1975), and their borrowing names for which native terms likely existed reflects their culturally subordinate relationship.
  - In contrast, the Piipaash and Cocopa were on more equal footing, and so bird names have been borrowed only to fill apparent gaps in the ornithological lexicons.

# Broader implications – LCR language area

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- Bird names are 1 domain in which LCR languages have exchanged lexical items.
  - Langdon (1975) identifies Kamia animal, plant, and place names as borrowed from River.
  - Crawford's (1989) Cocopa consultants identified a handful of words, often for introduced concepts, as having been borrowed from Piipaash. For example:
    - 'money' – Cocopa *ʃyá:l* < Piipaash *šiyá:l* (< Spanish *real*)
    - 'shovel' – Cocopa *ʔilʷkucíʃ* < Piipaash *kʷčéš*
- I suggest that we may identify the lower Colorado River as a **language area** where linguistic innovations are shared among distantly related languages.
  - Northern Arizona and southern/Baja California have been identified as language areas where lexical, phonological, and even morpho-syntactic innovations are shared among Yuman languages (Hinton 1984, Langdon and Munro 1980, Powell and Geary 2021).
  - cf. Langdon (1975) identifies River phonological features in some Kamia borrowings.

# Summary

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- Yuman languages of the lower Colorado River (Piipaash, Mojave, Quechan; Cocopa, IV Kamia) share bird names to the exclusion of other languages.
- Common bird names likely arose through borrowing; attested patterns of borrowing reflect the nature of historic sociocultural relations.
  - The Piipaash and Cocopa were equals: Borrowing fills lexical gaps.
  - The Kamia were subordinate to the Mojave and Quechan: Borrowing replaces or supplements native names for known species.
- The lower Colorado River may represent a third Yuman language area where linguistic features (lexical, phonological) are shared among Yuman languages belonging to different branches of the family.

# Thank you!

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Photo credits: Suzie McCann (Northern Cardinal: [ML257386271](#)), Heather Pickard (Phainopepla: [ML52264101](#)), and Jason Vassallo (Abert's Towhee: [ML210295631](#)).

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