

# CULTURAL RECONSTRUCTION

A photograph of a thatched-roof hut in a tropical forest at dusk. The hut is made of woven materials and has a thick thatched roof. It is surrounded by dense tropical vegetation, including palm trees. The sky is a deep blue, and a bright light source, likely the sun or moon, is visible in the upper left. The overall scene is serene and evokes a sense of a traditional, rural setting.

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# 0.1. INTRODUCTION: CULTURE

*Culture*: a set of **learned practices and beliefs, transmitted socially** – i.e. across individuals and groups, distributed in time and space.

- Several components, as explored by various theorists of culture:
  - “a body of artifacts and a system of customs” (Malinowski 1931:623) or “rules” (D'Andrade (1995:143)
  - “a pattern of meanings embodied in symbols” (Geertz 1973:89)
- Particular practices and beliefs may be **abandoned, replaced, and/or elaborated** over time.

Here we leverage these understandings to approach the study of cultural histories through a **linguistic lens**.

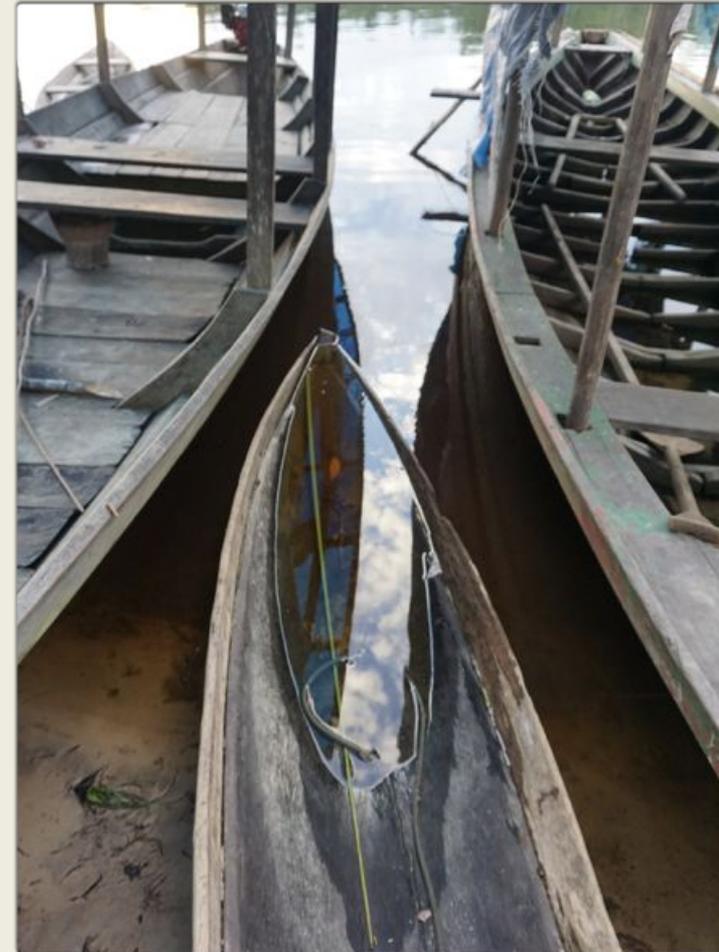
We consider **three general perspectives** on culture, with attention to what can be reconstructed/inferred...

- Interconnected dimensions, but relating to particular categories of questions about human past, which are variably informed by disciplinary and methodological approaches.



# 1. Material culture and subsistence

- previous stage(s) of material culture & subsistence
- relative timing of these different stages
- association with interactions and movements of peoples (homelands, migrations)



K. Obert

## 2. Social structure and language ecology

- social structure: internal (hierarchies, kinship, marriage...) or external (degree and dynamics of contacts with neighbours)
- patterns of bi/multilingualism
- language ideologies
- changes in social structure, e.g. through contact/conquest



A. Shluinsky

### 3. Other abstract cultural domains: beliefs, values, etc.

- cultural values and priorities; aspects of worldview
- cosmology and mythology (e.g. deities, spirits, mythic motifs)
- practices relating to ritual, medicine/healing, art



## 0.2. INTRODUCTION: LANGUAGE

Language is both **part of culture**, and an important source of **clues to cultural histories** more generally, informed by **historical linguistic** methodologies.

Processes associated with language history and change:

- inheritance (=vertical transmission)
- contact (=horizontal transmission, but can promote divergence as well as convergence)
- independent innovation (due to chance and/or typologically relevant motivations - communicative and cognitive)

Substance and levels of language change:

- (phonological) form
- meaning
- organization of forms and meanings: structures and categories

Types of change:

- addition/elaboration
- replacement

Language may be approached from several domains:  
lexicon, grammar, discourse

- each is associated with particular kinds of continuity and/or change,
- our methodologies differ in detecting and making inferences from change in each.

These approaches themselves relate in variable ways to our three general perspectives on culture.

--> In what follows, we address each of these in light of our three general perspectives on culture.

# 1. LEXICON

'Wörter und Sachen' - Linguistic paleontology - Cultural reconstruction

## Basic methodological assumptions:

1. Words (and meanings) inherited from protolanguage represent concepts relevant to its speakers
2. Etymologically complex words are more likely to represent newer concepts than are morphologically simple words
3. Loanwords tend to represent more recently acquired concepts; source of the loan represents source of concept, and/or its social importance in the interaction

Various caveats:

- possibility of spurious reconstructions (e.g. old/undetected loans)
- mis/unidentified semantic shift
- change in function or relevance of referent
- challenges in interpreting negative evidence
- relative robustness of inferences as a factor of number of data points within a given lexical domain

See Hock 1991, Campbell 2004, Epps 2015, inter alia

# 1.1. LEXICON: MATERIAL CULTURE AND SUBSISTENCE

## Types of data:

- terms for flora/fauna, manufactured objects, metals, etc.
- terms for subsistence-related activities
- toponyms ...

## Possible outcomes:

- insights into past patterns of subsistence, housing/settlement, technology, and other ecologically relevant practices
- clues to homelands, migrations and related changes in subsistence ...



Naduhup: Innovative agricultural terminology as a clue to a shift in subsistence pattern (Epps 2020; see also e.g. papers in Robbeets & Savalyev (eds.) 2017, Balée 1999):

	<u>Hup</u>	<u>Yuhup</u>	<u>Dâw</u>	<u>Nadëb</u>
'maize'	<i>pîhît júm</i>	<i>hóka</i>	<i>w'at</i>	<i>janati</i>
	'planting banana' (loan Tukano <i>ohôka</i> ) (loan Nheengatu <i>awači</i> ?)			

Uralic and Samoyedic: flora-fauna names and metal names reconstructible for the protolanguage give clues to geographic range, subsistence and technology (Helimski 1989/2000, Grünthal et al. forthc.)

- Toponyms

Northern Australia: Toponyms with more analyzable internal structure correspond to more recent spread (E. Ngumpin vs. Yirram languages; McConvell 2009, Harvey 2020)

Highland Ecuador: Toponyms of Barbacoan origin indicating that what is now a lowland people used to also occupy a highland ecosystem (Floyd forthcoming)

But various caveats...

- Meaning can shift from e.g. wild plant > cultivated variant as agriculture develops
  - e.g. Dravidian terminology for threshing and wild millet > cultivated millet (Southworth 2005)
- Markedness shifts can obscure semantic shift and/or confound reconstruction
- Past speakers may be familiar with a concept via trade, without producing it themselves
  - e.g. millet terms in some Sino-Tibetan languages (d'Alpoim Guedes 2017, d'Alpoim Guedes & Aldenderfer 2019)
- Ranges of flora/fauna can also shift over time
  - e.g. Proto-Indo-European \*bhago: Germanic 'beech', Greek 'oak', and Slavic 'elder' – not only has meaning shifted, but these trees' ranges have shifted since PIE times (Mallory 1989: 115-116; Fortson 2004: 40)

## A note on *substrate lexicon*

In some cases, a ‘misfit’ component in the lexicon is actually evidence for a lexical substrate in the context of language shift, which may provide insight into past subsistence patterns and social histories

Aka and Baka Pygmy peoples of central Africa:

- language shift > Bantu and Oubangian agriculturalists’ languages
- a set of cognate vocabulary relating to hunting/gathering was retained in both groups (Bahuchet 1993)

## Strategies for assessing the timing of change:

- Using material record (< archaeology) to help calibrate linguistic record
- Aligning lexical reconstruction with subgrouping to provide relative chronologies
- Loan stratigraphy...

Austronesian: Lapita pottery style and associated cultural complex - allows e.g. calibration of Proto-Central-Pacific branch (Fiji, Tonga, Samoa) to about 3000 BC (Kirch 1996).

Northern Australia: loan stratigraphy for dating the human-driven spread of the useful boab tree (presence/number of sound changes + calibration with post-colonial loans and archaeological record) (McConvell, Saunders, & Spronck 2013; see also McConvell & Smith 2003)

# 1.2. LEXICON: SOCIAL STRUCTURE AND LANGUAGE ECOLOGY

## Types of data:

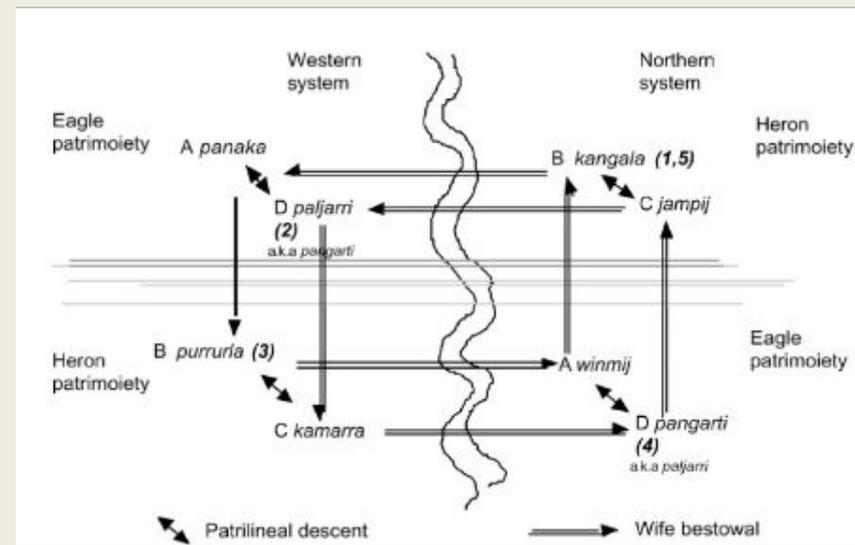
- kin terms
- terms associated with social roles and relations
- patterns of spread of a lexical/phonetic change...

## Possible insights:

- structure and change involving kinship systems
- social stratification and roles
- social relations, including patterns of multilingualism and intermarriage (esp where language contact is implicated)
- language ideologies (=role of languages in the social world) ...

Australian kin systems: McConvell (1985) on a complex system of 8 marriage/descent categories as grounded in intermarriage + norms of bilingual code choice, such that two less complex original systems were merged

Evans 2003:19, citing McConvell 1985



Spread of phonetic innovations in lexicon disregarding language/branch borders -> bilingualism by speakers of related languages; e.g. Warroran in Australia (Rumsey 2018), Northern Samoyedic in Siberia (Khanina & Gusev 2020)

Language ideologies in Australia and Oceania: active use of languages for building separate social identities via lexical innovations/ replacements/ borrowings (Miceli 2015, Ellison & Miceli 2017, François 2011)

HW	sisə	tati	jəjmə <sup>9</sup> Len	wu <sup>9</sup> Lɔɣ	k <sup>w</sup> e	i	nə	məŋa	ta
LTG	nihə	tat	lolməren	ɛrβe	k <sup>w</sup> ε	e	nə	βəɣəβaɣə	mətə
LHI	kej	tɛtnɛ	ɣlal	ɣalse	k <sup>w</sup> ɔ		n-	βap	munɣen
LYP	kīej	tɛ	ɣilal	tʃəjmat	tʃɛk <sup>w</sup> ɛ		n-	βaβap	ŋm <sup>w</sup> ɔnīɛn
VLW	<sup>0</sup> gɟ	ɛt	ɣilal	ɣalsi	tɛ <sup>0</sup> g <sup>w</sup> ɛ		n-	ɣatɣat	njɔnɣɪn
MTP	kij	ɛt	ɣlal	ɣalsi	k <sup>w</sup> ɛtɛ		nɔ-	hɔhɔle	nɔnɔnɣɪn
LMG	tær	ɪ	ɣɔlɔl	ʔərmaʔ	ʔæ.kiʔis		n-	tektek	mɔɣɔt
VRA	<sup>0</sup> dir	ɪʔ	lamai	ɛntɛɣ	ʔɪn		ɪn	tɪktɪk	mu <sup>0</sup> dɪ
VRS	nɪr	ɣɪtɪ-	ɣilal	wareɣ	tɛn		ɔ	k <sup>w</sup> ak <sup>w</sup>	namøɣɣɪnɪn
MSN	nɪr	ɛtɛ	lɪlɪ	manɟɛ	βɪs		ɔ	ɣatle	mɔɣɔnɪn
MTA	nra	ɣate	ɣlala	mantay	t <sup>w</sup> k <sup>w</sup> ɛ		o	βaβae	naŋm <sup>w</sup> unina
NUM	nir	βitis	ɣil	liŋliŋi	mi		u	luwluw	namɣɪn
DRG	nɪr	sɔwse	βɪɣɪl	taβul	tɛ		na	lŋa	-ɣɪn
KRO	nɪr	tɪ	rɔŋ	taβul	wɔs.mele		ɔ	βalβalaw	namɪɣɪn
OLR	nɟ	tɪ	rɔŋ	βɪlɪ:	wɔs.mele			ususra:	mɔtʃ
LKN	ɣɪ:	atɪ	rɔŋ	kere	aβɔh.male			ɛlŋa	-nɣɪtʃ
MRL	ker	ti	βalɣɛar	mɪnɪnɪn	tɪk <sup>w</sup> ɪtɛa		nɔ-	liŋɪ	-ɣɛan
	3pl	NOT.YET <sub>1</sub>	know	properly	NOT.YET <sub>2</sub>	[OBL]	ART	speech	poss:1incl.pl
									'They don't know our language very well yet.'

# 1.3. LEXICON: WORLDVIEW AND COSMOLOGY

## Types of data:

- names of deities and mythically relevant figures
- terms for rituals and associated objects/actions
- terms relating to artistic and other practices...

## Possible insights:

- spiritual/religious belief and practice
- cultural taboos
- art, medicine, other culturally grounded perspectives...

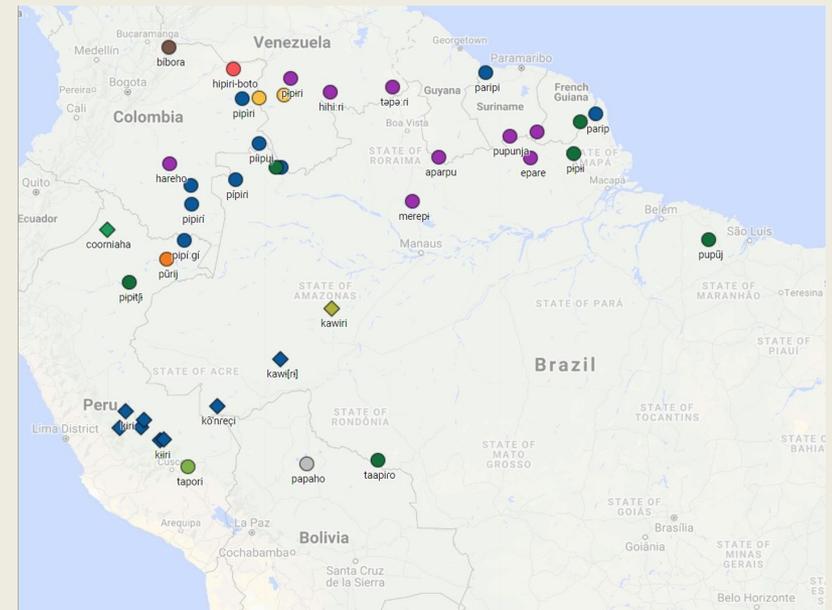
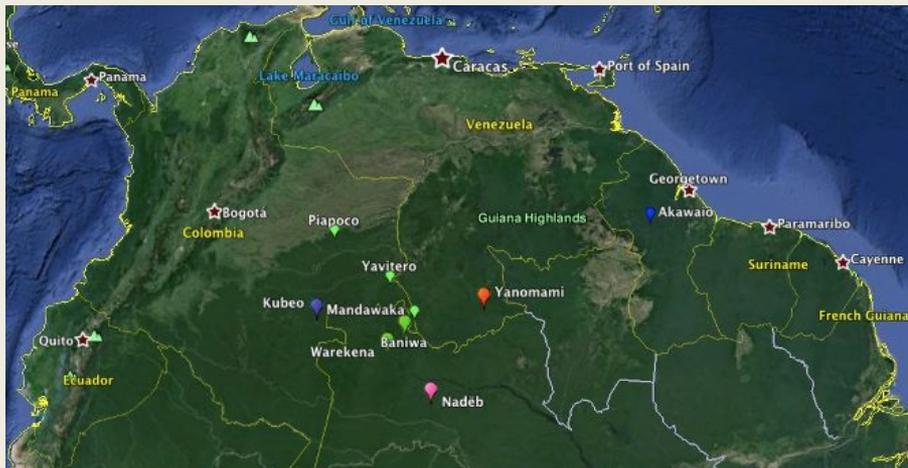


## Arawakan languages in Amazonia:

- major source of loans relating to cosmology and ritual culture
- consistent with archaeological and ethnographic evidence of Arawakan role

Upper Rio Negro culture hero: Baniwa (Arawakan) *inápírikuli* 'One on the Bone' > Tukano (Tukanoan) *o'ã-kó* 'Bone-Son' > Hup *g'æ̃g tæ̃h* 'Bone-Son'

## Wanderwört %jalaki 'fermented drink'



Wanderwörter %pipiri/%kiri 'peach-palm' (domesticated palm used for beer; ritually significant)

# 2. GRAMMAR AND DISCOURSE

## Basic methodological assumptions:

1. Shared grammatical/discursive structures and categories are likely to result from intensive contact and/or language shift; not necessarily indicative of deep genetic relationship (e.g. Donohue et al. 2011).
2. Shared morphological forms may provide strong evidence for genealogical classification.
3. If there is evidence of grammatical restructuring mirroring a contact language, this can indicate a particular social relationship between the respective speech communities.
4. Ritual/ceremonial discourse forms can be a source of archaisms (but also loans).

## Various caveats:

- Shared structures can represent parallel development, e.g. motivated by universal principles of communication and cognition.
- Morphological forms can also be borrowed; should be assessed in light of other linguistic evidence pointing to contact (e.g. lexical borrowings).

## 2.1. GRAMMAR AND DISCOURSE: MATERIAL CULTURE AND SUBSISTENCE

### Types of data:

- grammatical/discourse structures, esp. regarding how similarities do or do not match up with language relationship
- grammatical/discourse isoglosses which are broken on a modern language map
- ritual/ceremonial discourse forms as a source of lexical archaisms

### Possible insights:

- migrations/homelands and associated changes in subsistence
- further opportunities for leveraging Wörter & Sachen

Northern Samoyedic: interrupted isoglosses suggest migrations, the migrations suggest change in subsistence (from transport reindeer herding and hunting to large-scale reindeer herding with little hunting) (Khanina, forthc.)

Piro (Arawakan) cognate term for 'hammock' as archaism preserved in ritual discourse – the Piro abandoned hammocks when they moved into the western Amazon where hammocks are not generally used (Gow 2002; Facundes 2002).

## 2.2. GRAMMAR AND DISCOURSE: SOCIAL STRUCTURE AND LANGUAGE ECOLOGY

### Types of data:

- degree of sharing of grammatical/discourse structures between languages; grammatical/constructional calquing
- complication or simplification of a language compared to its relatives
- contrast between degree of lexical vs. grammatical sharing
- typologically rare grammatical feature attested only in some language(s) of a family

### Possible insights:

- dynamics and degree of multilingualism, social relations between groups in contact (<- directions and intensity of contact-induced changes, typical age of language acquisition),
- language ideologies (<- the relationship between lexical and grammatical sharing),
- bilingual interaction vs. language shift



## **Ross (2013:37) on contact diagnostics:**

### Bilingually-induced change:

- Lexical calquing, especially on a large scale
- Lexically based grammatical calquing
- Syntactic restructuring
- Complication

### Shift:

- Transfer of specialist vocabulary

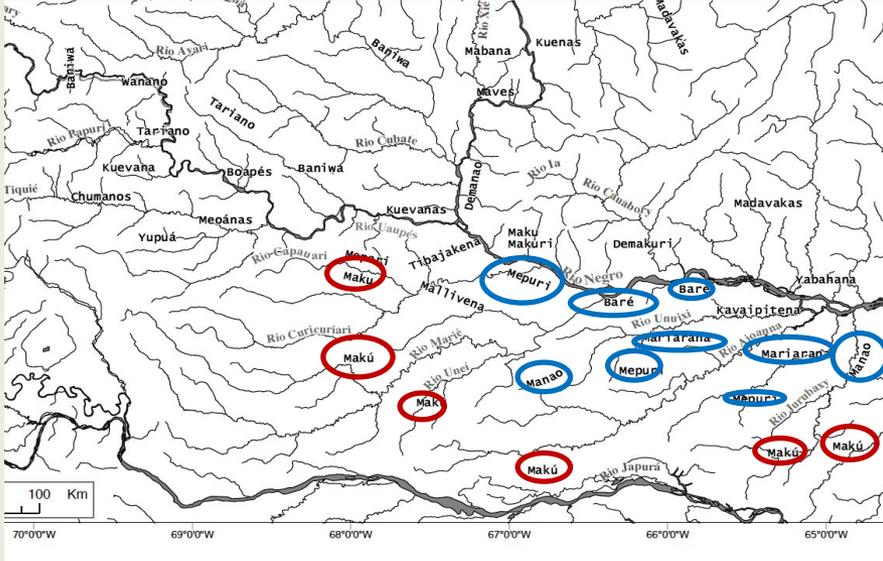
### Adult shift:

- Phonological copying in the absence of other significant contact effects
- Constructional calquing in the absence of lexical calquing
- Perhaps simplification

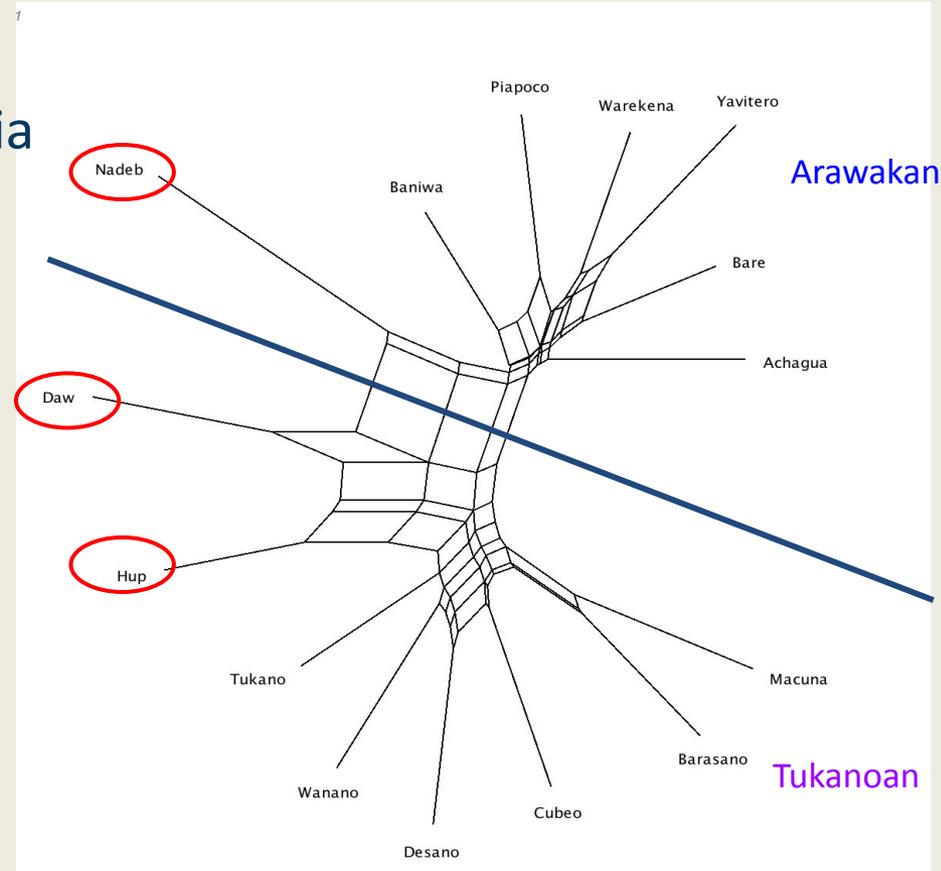
Kokama and Omagua (Tupí-Guaraní): grammatical restructuring may have arisen through large-scale captive incorporation, involving significant numbers of second-language learners (Michael 2014, 2017).

Northern Samoyedic: dialect continuum, innovations cross-cutting original branches -> bilingualism with relational identities based on geographic proximity (Khanina 2021, Khanina & Gusev 2020).

# Nadëb (Naduhup) engagement in Arawak-dominated interactive networks, pre/early-colonial Amazonia



Ethnic distributions on the Rio Negro, 1749-52 (Wright 2005:72)



	Nadëb	Source?
cotton	<i>kawad puuw</i>	Arawak, cf. Warekena <i>kawáli</i>
tortoise	<i>matug</i>	Arawak? <i>matu</i> appears in some tortoise terms
club	<i>kawidaro</i>	Arawak, cf. Mandawaka <i>kuidaru</i>
pot	<i>fere:j</i>	Arawak, cf. Warekena <i>fi:ri</i> (metal pot)
bead	<i>mãjo:r</i>	Arawak, cf. Warekena <i>majúlu</i>
snail (shell?)	<i>waro:r</i>	Arawak, cf. Yukuna <i>waroro</i> (rel. <i>quiripa</i> beads?)
knife	<i>mari:j</i>	Arawak loan / WW

Epps & Obert, forthcoming.

## 2.3. GRAMMAR AND DISCOURSE: WORLDVIEW AND COSMOLOGY

### Types of data:

- grammaticalization pathways
- mythic motifs and stylistic features in discourse

### Possible insights:

- culturally grounded frequency of use and/or likelihood of pragmatic inferences
- verbal art

Pennsylvania German: 'count' > future tense (associated with religious views that personal plans are subject to the will of God) (Burridge 2002)

Indo-European mythic motifs (e.g. killing a dragon) and stylistic features (e.g. alliteration) (Watkins 1995)

# 3. CONCLUSION

- Language is a significant source of insights into cultural pasts – as long as caveats are respected and the robustness of inferences is gauged according to the robustness of evidence
- Potential is underscored by ongoing exciting developments in linguistics...
  - many new language descriptions to draw on
  - new insights into parts of the world that have been blank spots on the map

## On aligning linguistic clues with those from other disciplines...

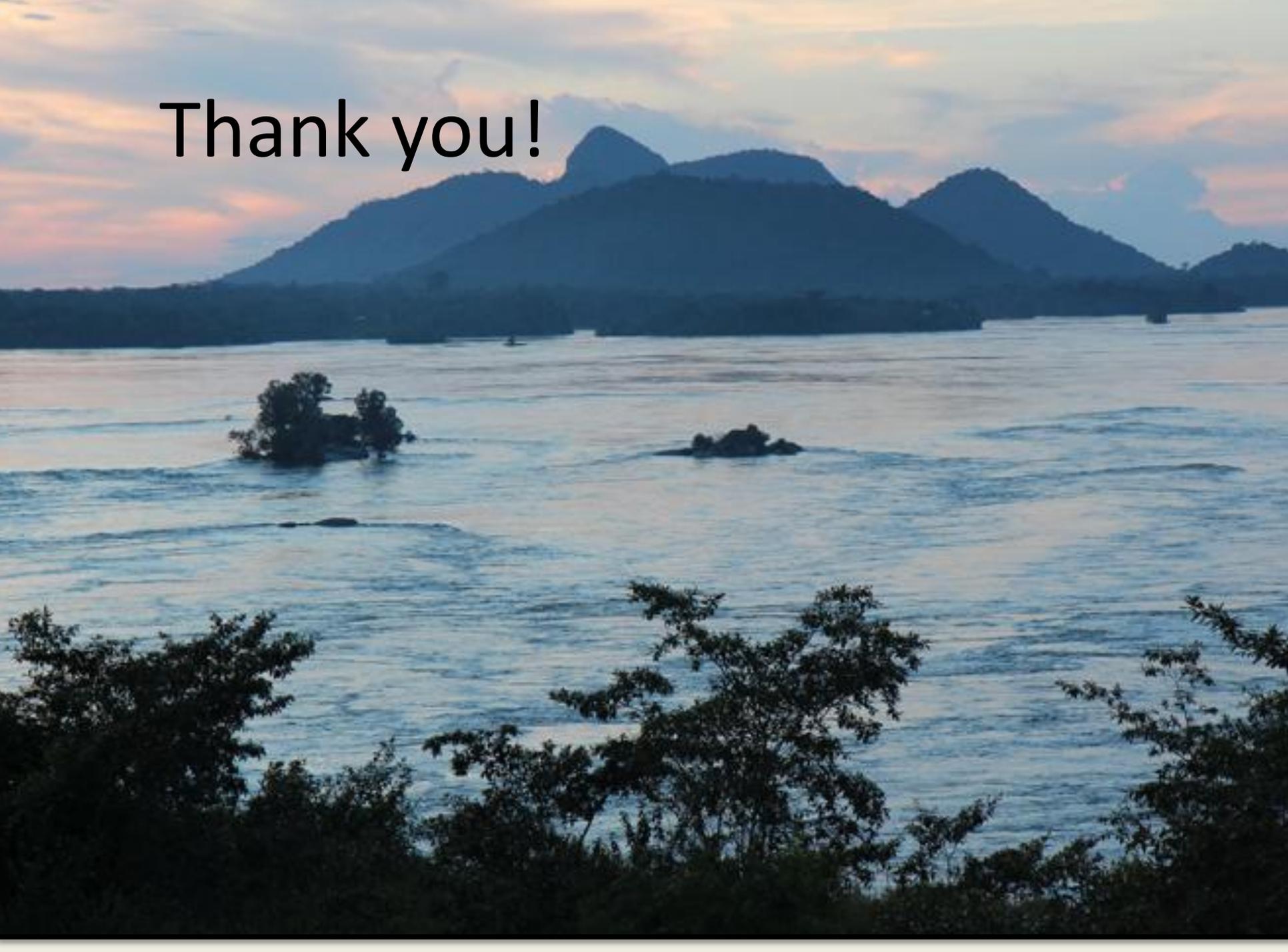
- **Material culture and subsistence**
  - Linguistics and archaeology: correspondence and even calibration...
  - But language and culture often change/diffuse at different rates
- **More abstract beliefs/practices**
  - Linguistics may complement archaeology
- **Movements of people** (esp. re subsistence/cultural change)
  - Linguistics and genetics: alignment (or not) of signals can inform re demographic movement vs. language shift
- **Interactions among different social/linguistic groups**
  - Linguistics and genetics: may align where intermarriage occurred;
  - Or language may provide information not available to genetics
  - Linguistics and archaeology: correspondence re transfer of linguistic elements and material record (e.g. ceramic styles)
  - Language shift may be completely unnoticeable for archaeology

Particular linguistic domains  
and/or disciplinary areas provide  
hypotheses about what to  
explore in others.

**Ongoing, synergetic triangulation  
to arrive at a more robust view  
of cultural histories.**



Thank you!



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