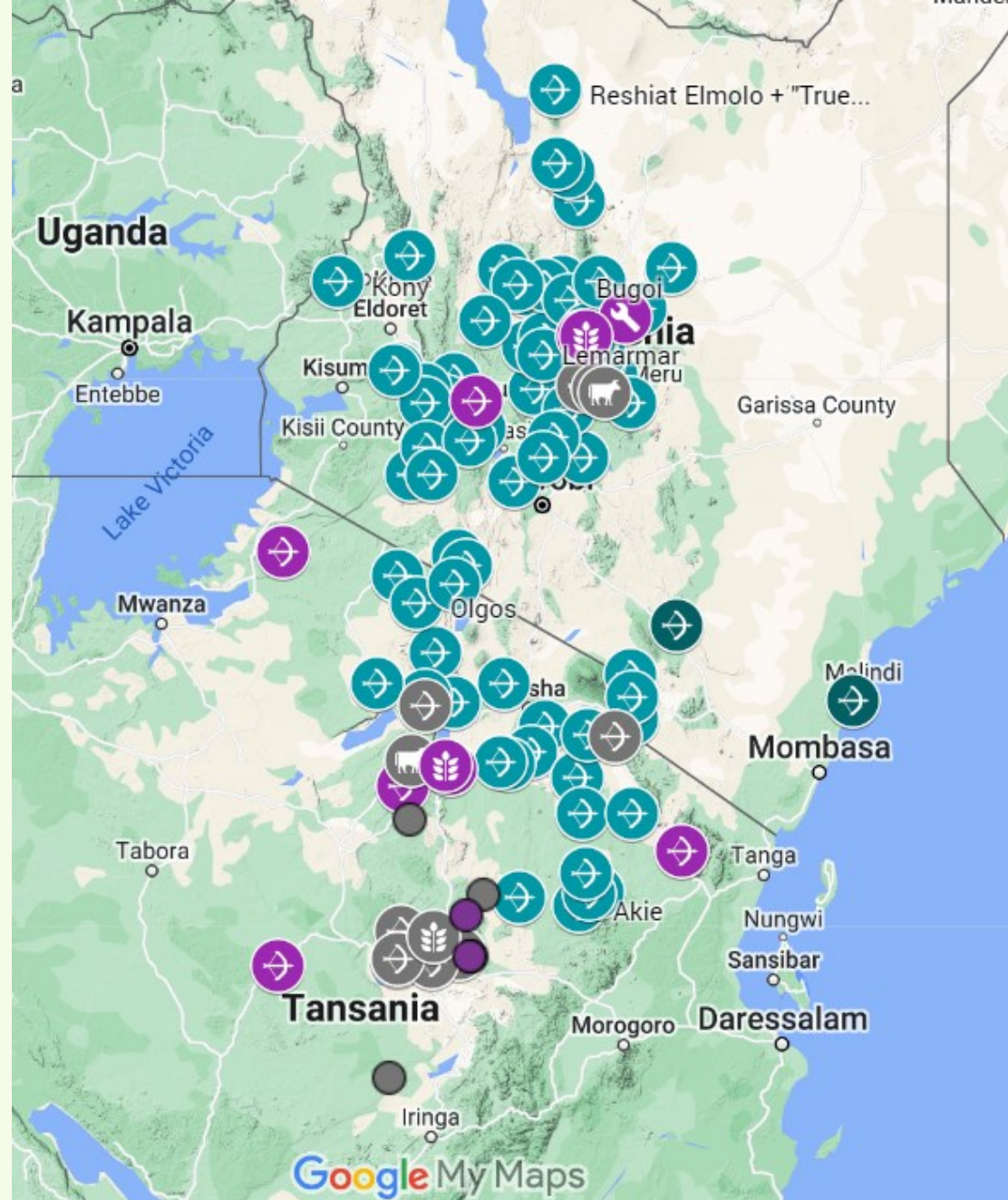


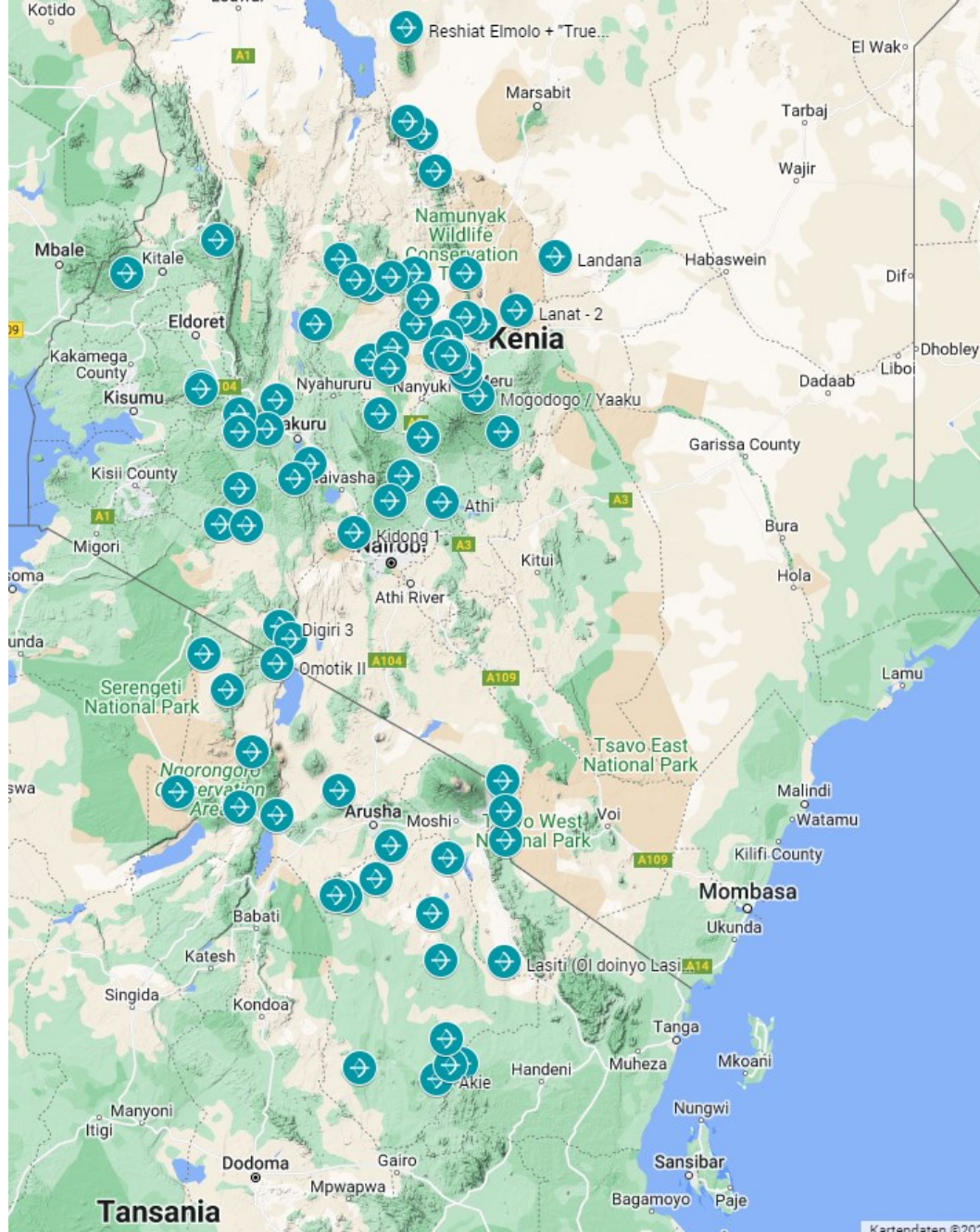
Hunters without horde or herders without history?

Investigating the past of East-African forager groups

DOMINIQUE LOVISCACH







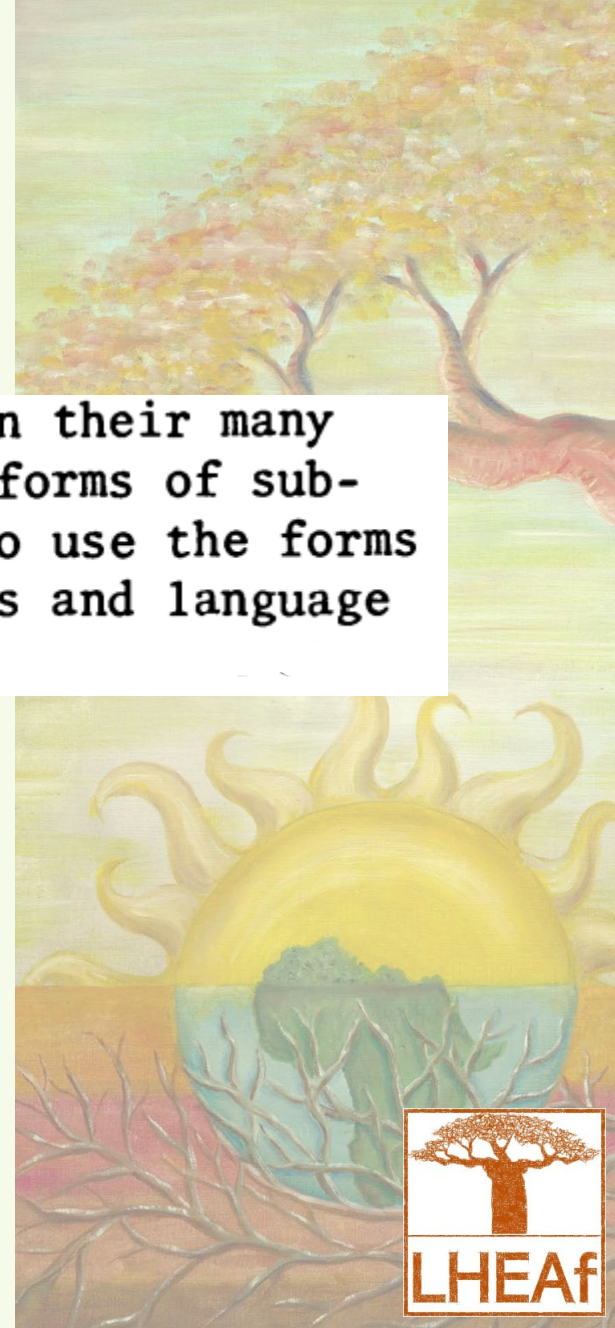
Introduction: Hunter Gatherers in East Africa

It would seem that the Dorobo in their many and various forms were people who had been able to readapt their forms of subsistence, especially their skills of hunting, but who continued to use the forms of social organisation and intercourse they knew, the clan systems and language of the people from where they had come.

Van Zwanenberg 1976: 18

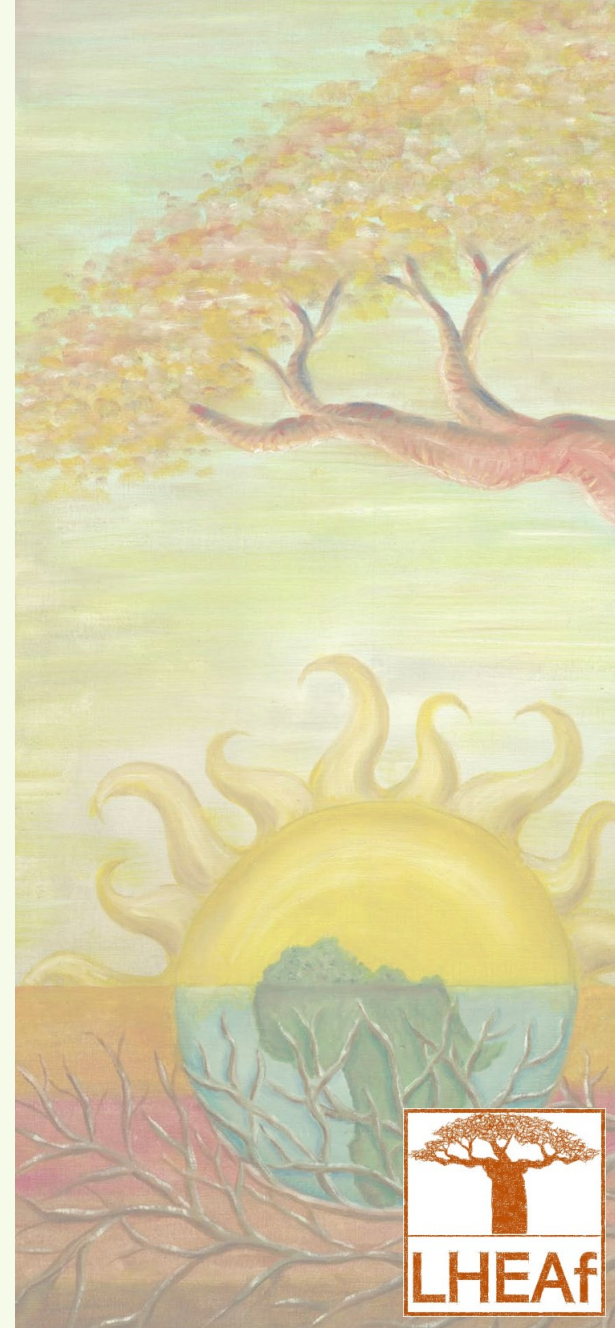
isolated groups of Okiek and Dorobo that have no knowledge of each other share "a number of distinctive and recognizable characteristics of culture, social organization and technology". This suggests a common origin for all local groups, and a great antiquity and continuity of their lifestyle.

Ambrose 1986: 12

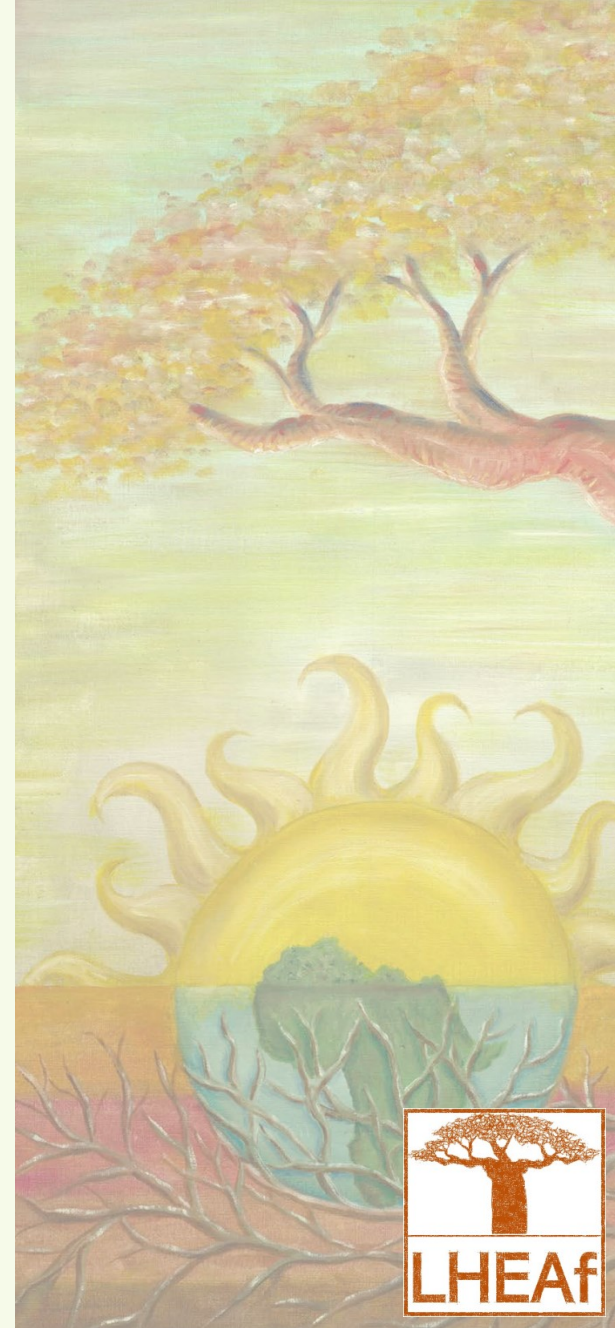


Introduction: Hunter Gatherers in East Africa

- Two groups of HGs in East Africa
 - **“Doroboid” HGs**
 - » Agriculturalist / pastoralist language
 - » *Dorobo* ‘poor people, without cattle’ (Maasai)
 - » In close contact with neighbouring agriculturalists/pastoralists → “symbiosis”
 - **“Independent” HGs**
 - » May speak “Khoisan” language (Hadza, Sandawe) (but not only – cf. Dahalo!)
 - » In contact, but not depending on neighbouring groups



Case study: Overview

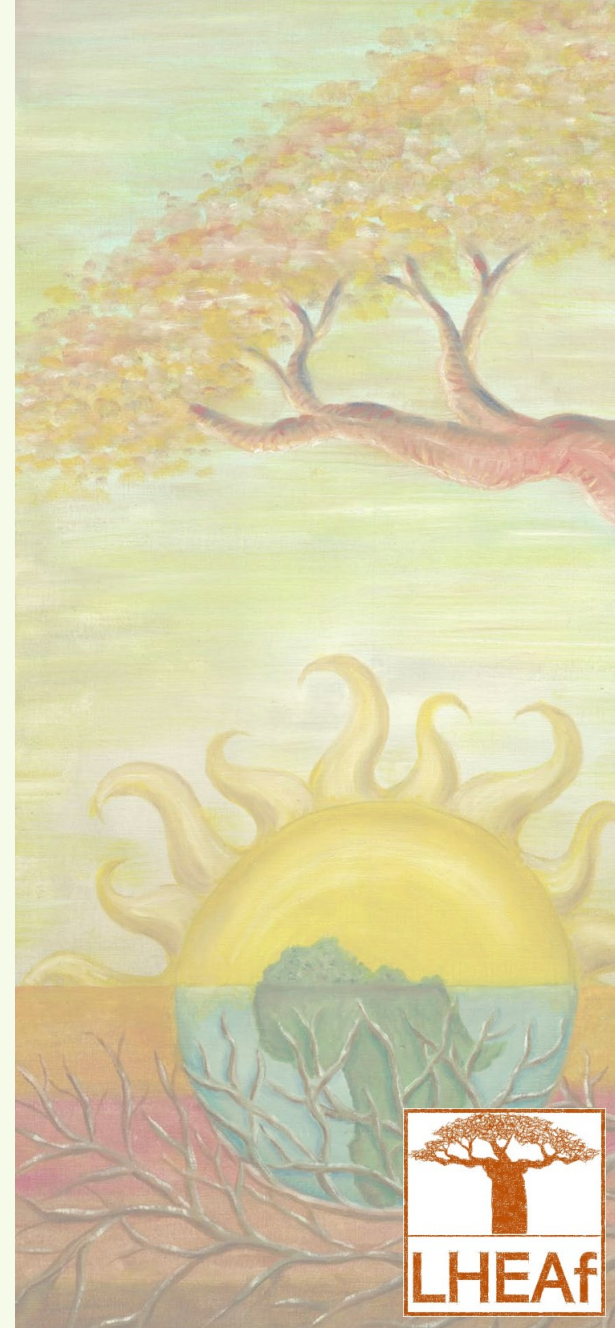
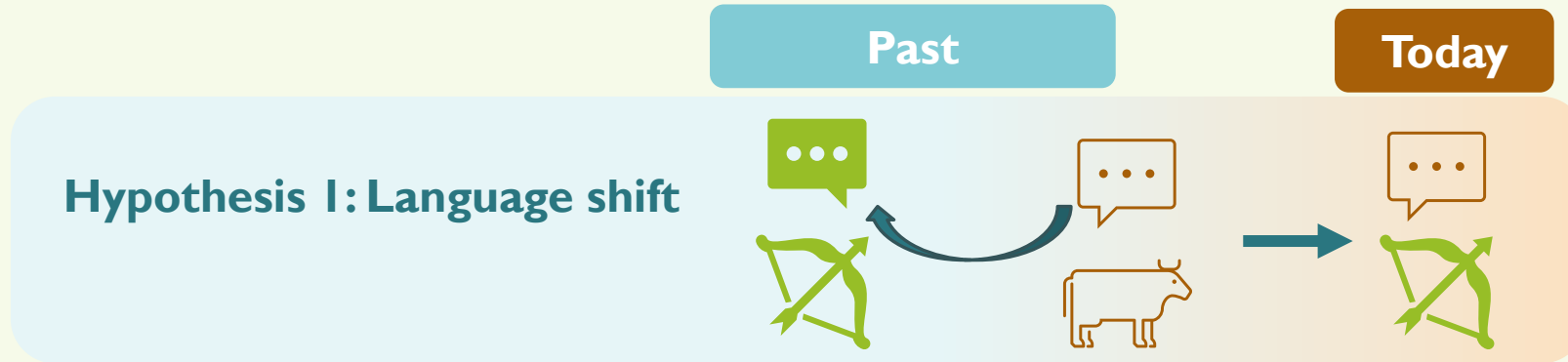


Case study: Overview

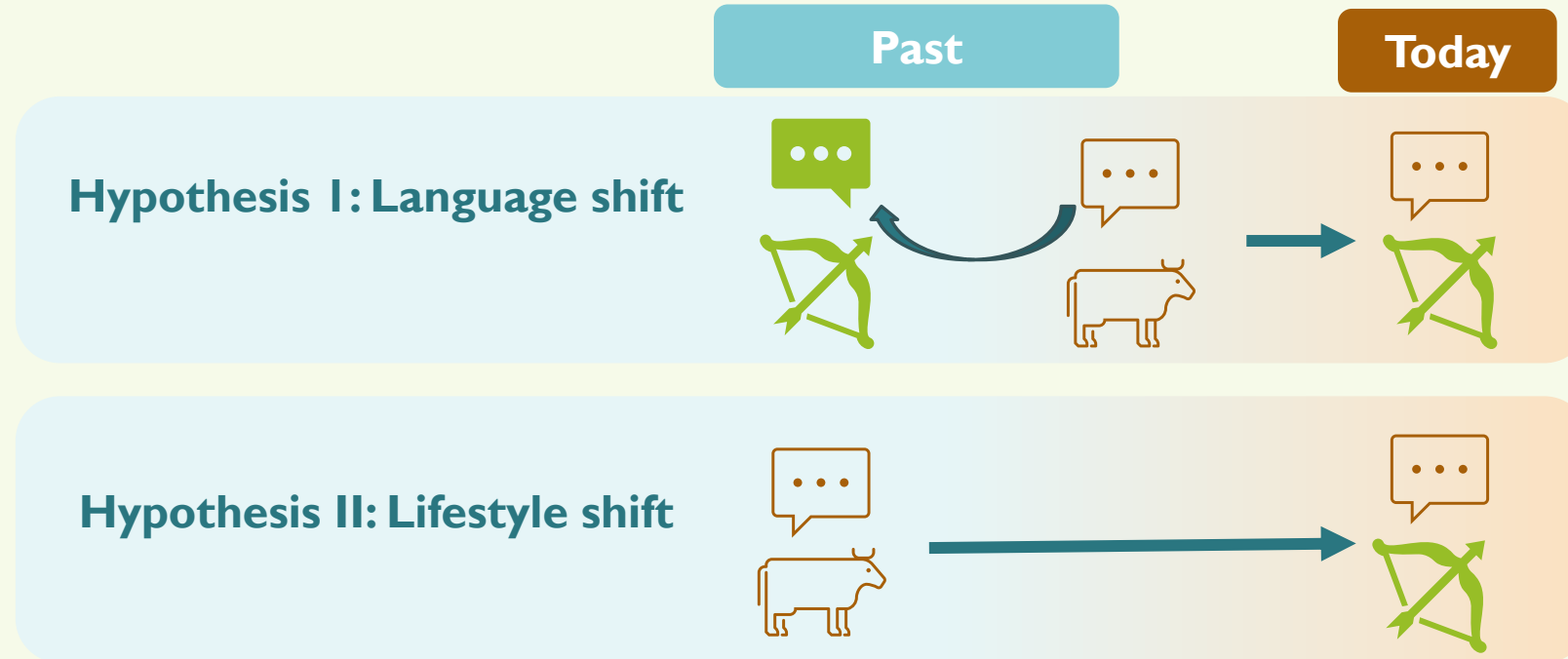
Name	Language family	Contact languages + occupation	Type
Hadzabe	Hadza (Isolate)	Iraqw (agro-pastoralist, South Cushitic); Datooga (pastoralist, Southern Nilotic); Ihanzu, Sukuma (agro-pastoralist, Bantu)	Independent
Akiek	Kalenjin (Southern Nilotic)	Maasai (agro-pastoralist, Eastern Nilotic); Nguu (agriculture, Bantu)	Doroboid
Okiek	Kalenjin (Southern Nilotic)	Maasai (cattle, Eastern Nilotic); Nandi, Kipsigis (agro-pastoralist, Kalenjin)	Doroboid
Waata	Oromo (East Cushitic)	Giriama (agro-pastoralist, Bantu); other Oromo groups (pastoralist)	Doroboid



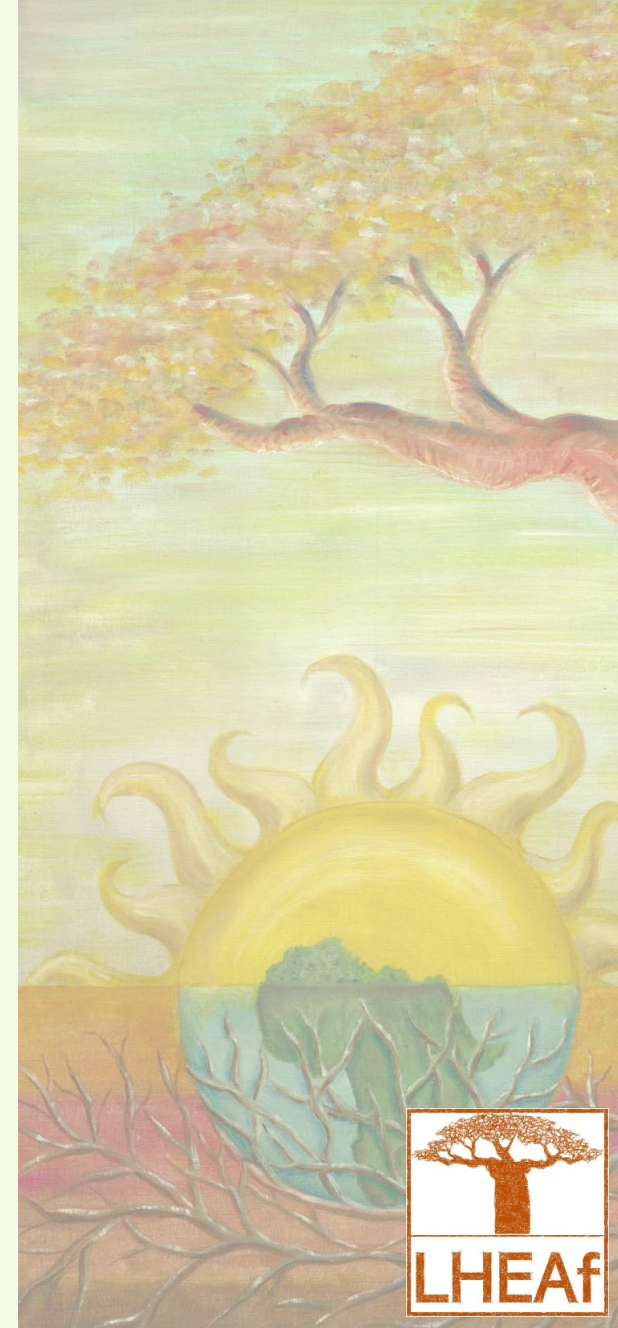
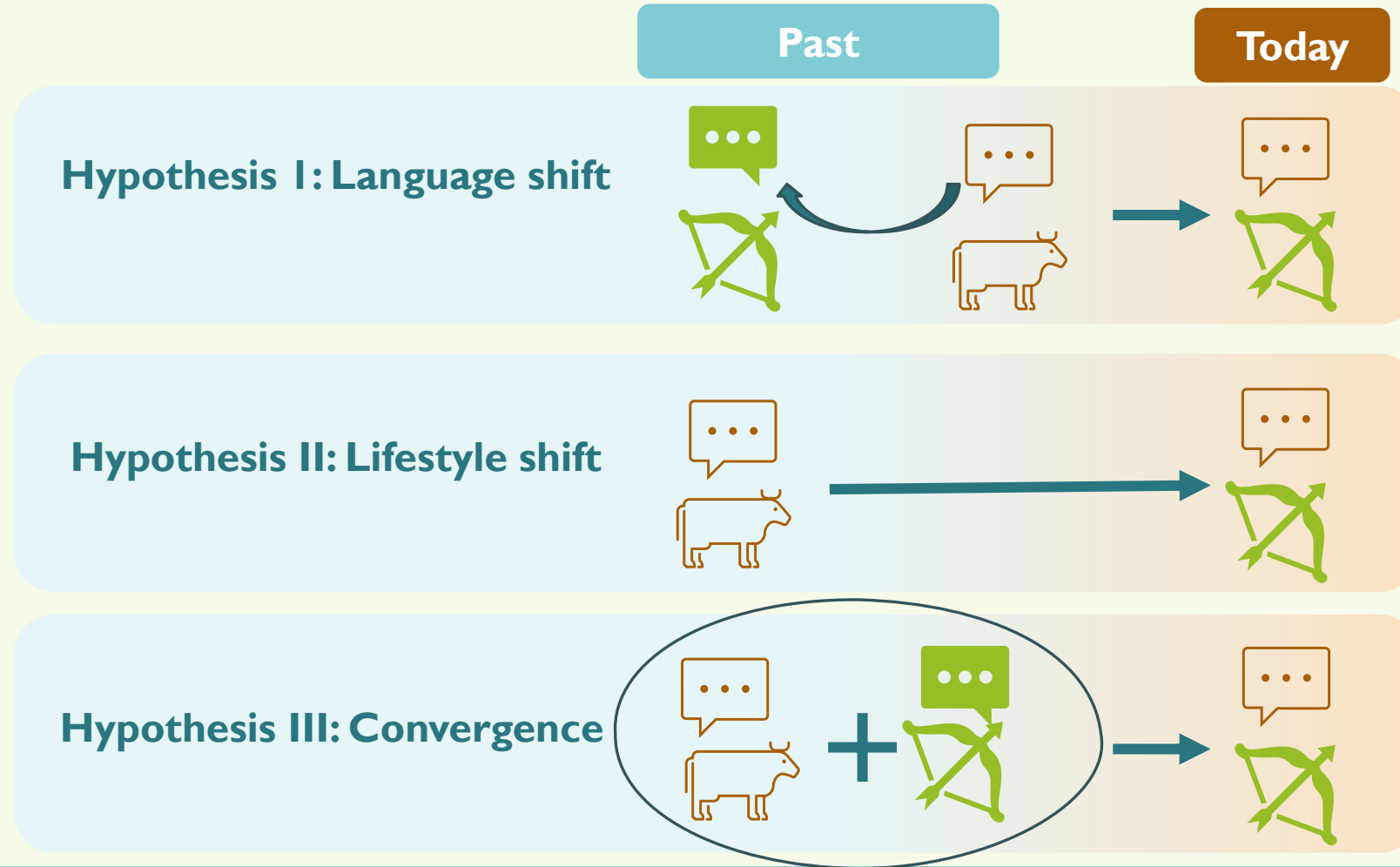
Possible scenarios



Possible scenarios



Possible scenarios



Possible scenarios

Hypothesis I: Language shift

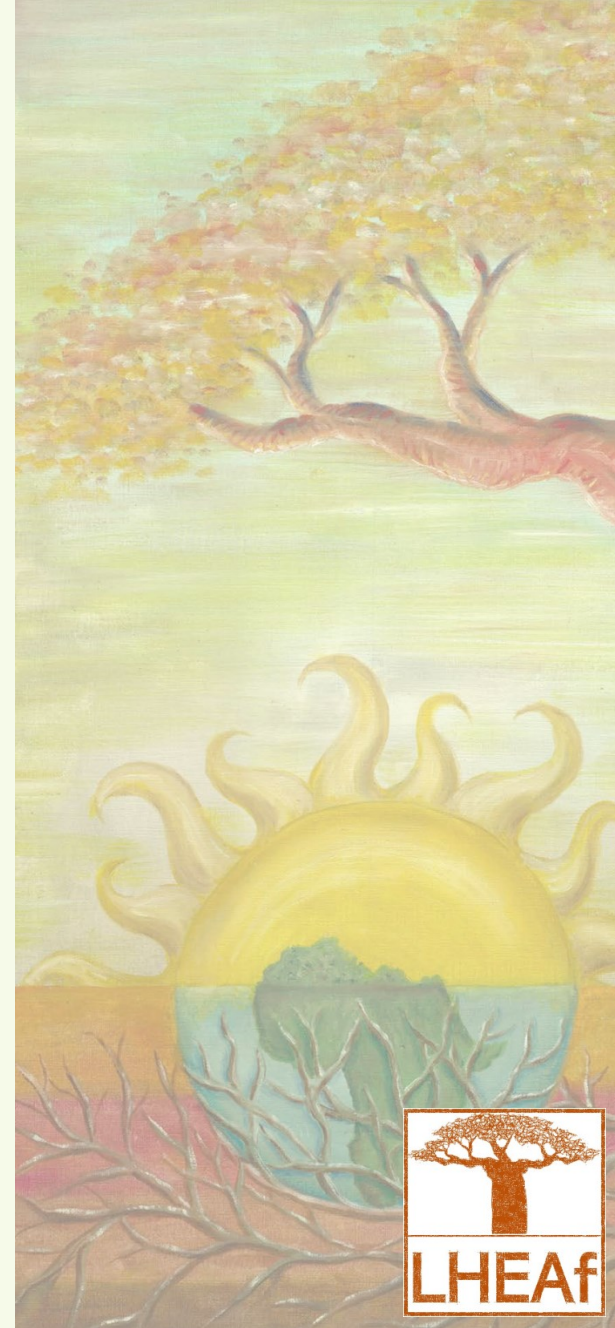
- Linguistics: Substrate influence; HG lexicon non-inherited
- Genetics: Very different from neighboring non-HGs with same language
- Distribution: Relatively small, local group

Hypothesis II: Lifestyle shift

- Linguistics: HG lexicon semantic change, neologisms, compounds
- Genetics: Very similar to neighboring non-HGs with same language
- Distribution: Possibly very similar groups spread over vast geographical area

Hypothesis III: Convergence

- Linguistics: Substrate influence; HG lexicon non-inherited
- Genetics: Similar to neighbors; gene flow from additional group
- Distribution: Relatively small, local group



Case study: Waata

Lexical evidence (pastoralist / HG lexicon; based on Stroomer 1987)

- Words only in Waata:
 - *gurumesa* 'wildebeest'
 - *kulungucaa / p'ip'ici* 'kind of antelope'
 - *taarii/targii/tarrii* 'dik-dik'
 - *dabeelaa* 'kind of food, made from nuts'
 - *haleelad'd'a* 'to aim at (with bow and arrow)'
- » Not many words, all related to HG activity



Case study: Waata

Lexical evidence (pastoralist / HG lexicon; based on Stroomer 1987)

- Semantic change

Word	Boraana	Orma	Waata
<i>c'ufanaa</i>	shrub enclosing cattle enclosure	piece of wood to close calves' shed	door
<i>k'odaa</i>	all milk containers within one household	all milk containers within one household; household utensils	household utensils
<i>kurroo</i>	-	milk container	honey container
<i>ribuu</i>	tendon, muscles	-	fibre bowstring
<i>sorobad'd'a</i>	to collect food before a journey	-	to go and collect honey

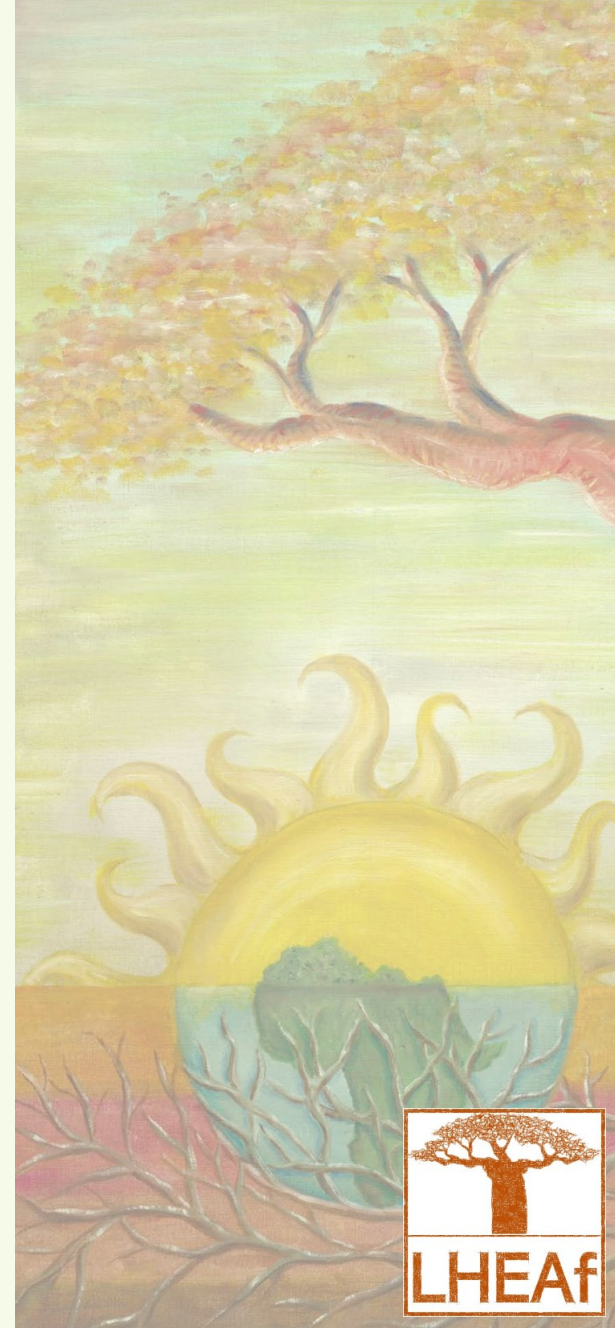


Case study: Waata

Evidence from oral traditions

- Origin story (Waata of Tsavo)
 - » Explains current “doroboid” relationship with other Oromo groups
 - » Claims loss of cattle as reason for being HGs
 - » What does the honeyguide symbolize?

→ **Oral Tradition features a loss of cattle (< lifestyle shift?)**



Case study: Waata

Genetic evidence (Scheinfeldt et al. 2019)

- “Elmolo, Yaaku, Boni, Wata, Ogiek, and Sengwer from East Africa share ancestry with neighboring agriculturalist or pastoralist populations” (2019: 4167-4168)
- “... East African populations who practice an HG lifestyle and speak AA or NS languages, appear to be genetically similar to neighboring non-HG populations. **This could either be due to [1] the loss of domestication or may reflect [2] older ancestral subsistence patterns**” (2019: 4172)

→ [1] more likely than [2]



Case study: Waata

Conclusion

Field	Evidence
Lexical evidence	No evidence for original HG language → H2
Oral traditions	Loss of cattle → H2, H3
Genetics	Loss of cattle → H2

Hypotheses

- (1) Language shift
- (2) Lifestyle shift
- (3) Convergence

- **Question:** When did cattle loss happen during Oromo expansion?
- **Caveats:** It is possible to shift language without leaving any traces; how reliable is genetic study?



Case study: Akiek / Okiek

Introduction

- Maasai culture + language plays important role in everyday life
 - » “I would argue, however, that the yielding is [...] part of Okiek self-identity” (Kratz 1980: 358-359)
- Akiek/Okiek languages belong to Kalenjin cluster:
 - Were they already “Dorobo” of Kalenjin before Maasai? Are they “original” HGs that shifted first to Kalenjin?
 - Are they impoverished Kalenjin agro-pastoralists that joined Maasai after losing cattle?

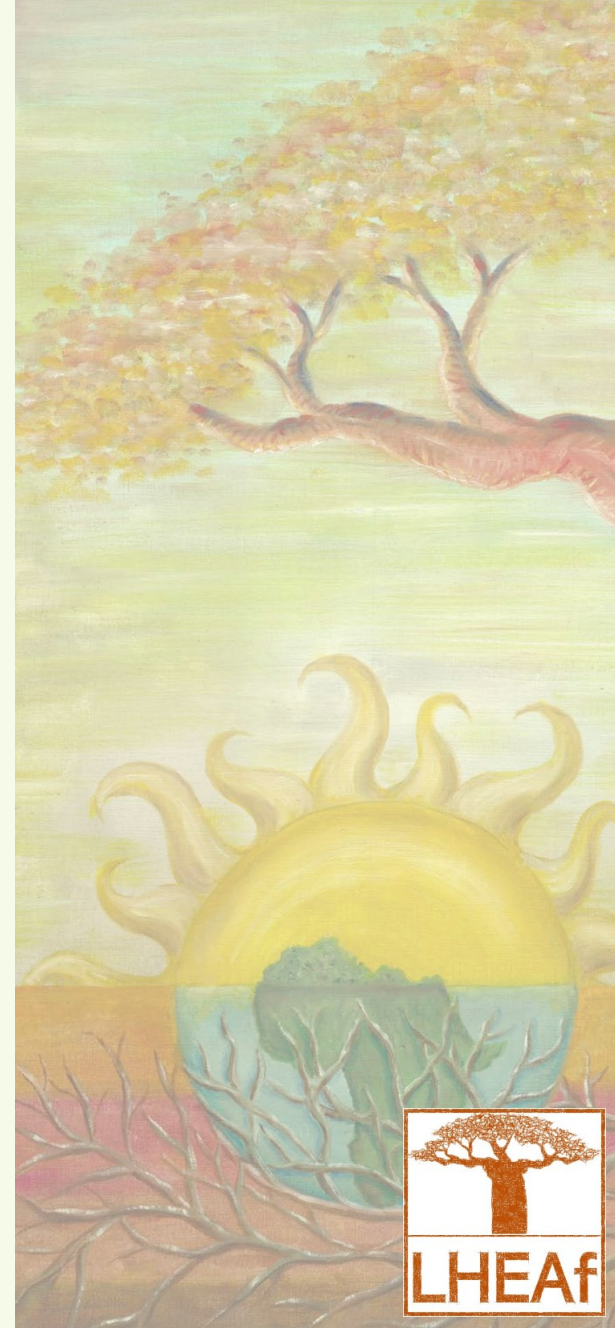


Case study: Akiek / Okiek

Lexical evidence (Micheli 2018, Huntingford 1929, König et al. 2019, Creider & Creider 2001)

- Insights from cattle vocabulary
 - » For both groups, most cattle words are likely inherited Kalenjin words:

Akiek	Okiek	Nandi
<i>chééka</i> 'milk'	<i>chèègó</i> 'milk'	<i>chegö</i> 'milk'
<i>téé́ta</i> 'cow'	<i>tèè́tá</i> 'cow'	<i>teta</i> 'cow'
<i>iyaaki</i> 'to herd'		<i>ki-yaga</i> 'to herd'
	<i>àrtét</i> 'sheep'	<i>artet</i> 'sheep or goat'



Case study: Akiek / Okiek

Lexical evidence

- Insights from cattle vocabulary
 - » For both groups, most cattle words are likely inherited Kalenjin words
 - » Some words, mainly for small livestock, are Maasai loans



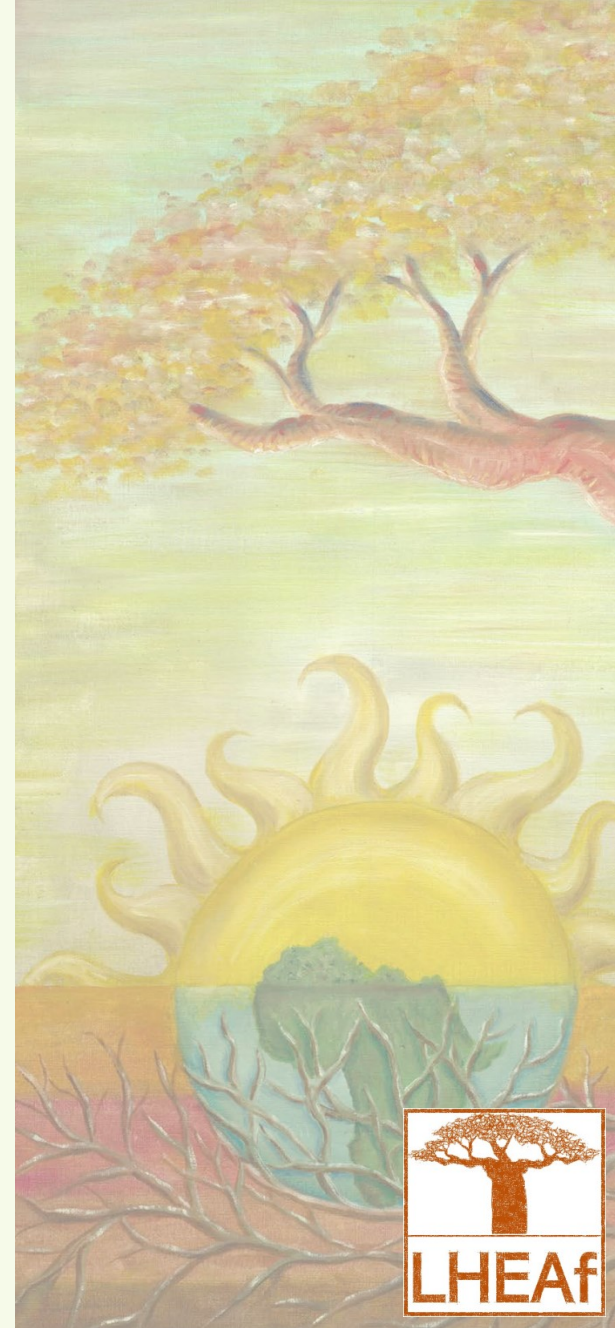
Case study: Akiek / Okiek

Lexical evidence

- Insights from cattle vocabulary

Akiek (König et al. 2019)	Okiek (Micheli 2018)	Maasai (Payne & Ole-Kotikash 2005)
<i>mbaléllooi</i> 'lamb, kid of smaller livestock and game '		<i>ol-bálèlò</i> 'kid, lamb'
<i>mpaléloi</i> 'calf of small animals '		<i>ol-bálèlò</i> 'kid, lamb'
<i>merége</i> 'male sheep'		<i>ol-mérégèsh</i> 'ram'
<i>ilmishirei</i> 'brandmark, branding iron'		<i>ol-míshíré</i> 'brand mark, branding iron'
	<i>(i)ngìnet</i> 'goat'	<i>en-kíné</i> 'goat, female goat'
	<i>olgine</i> 'sheep'	<i>ol-kíné</i> 'castrated male goat'

- » Maasai loans mainly within field of small livestock → often in addition to inherited (Kalenjin) words!
- » Akiek: Words also used beyond livestock - Why?



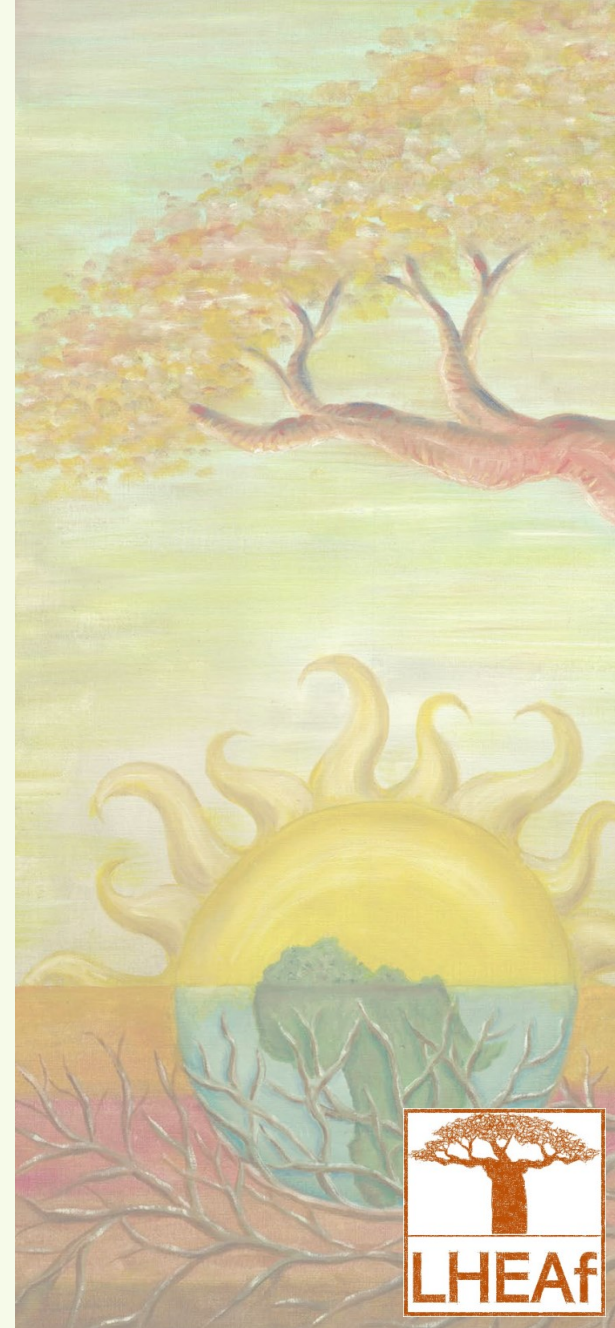
Case study: Akiek / Okiek

Lexical evidence

- Insights from HG vocabulary

Meaning	Akiek (König et al. 2019)	Proto-Kalenjin (Rottland 1982)
arrow	<i>kaátee</i>	*ka:t
bee	<i>sεkεεmIantεε</i>	*sεkεm
elephant	<i>pééliantee</i>	*pe:L
forest	<i>tímta</i>	*tim
hunter	<i>lakáátyantee</i>	*laka:t
porcupine	<i>sapIIIIE</i>	*sa:pIt

» Important parts are inherited



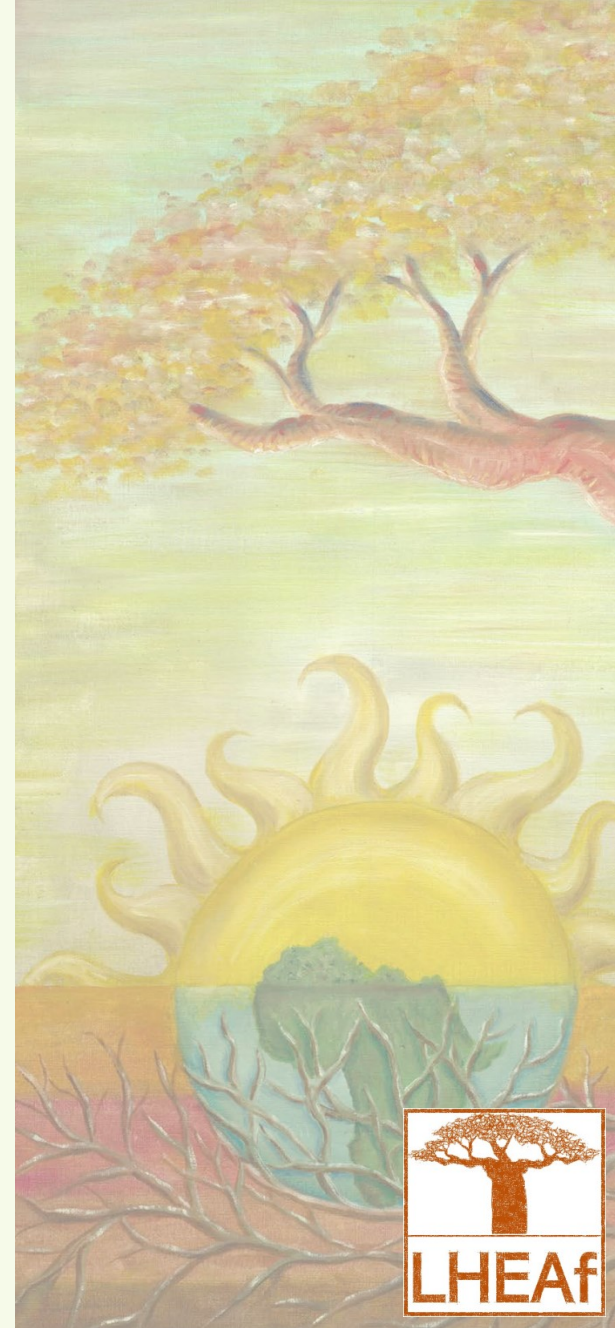
Case study: Akiek / Okiek

Lexical evidence

- Insights from HG vocabulary

Meaning	Okiek (Micheli 2018)	Proto-Kalenjin (Rottland 1982)
bee	<i>sègemyát</i>	*sɛkɛm
honey	<i>kóómèg</i>	*kʊ:m
elephant	<i>pèèlyót</i>	*pe:l
natural beehive	<i>póónèt</i>	*po:n(et)
wax	<i>tèmenyét</i>	*temen
wild boar	<i>tòraét</i>	*tɔ:ra

- » Important parts are inherited
- » If there was a shift, then it did not leave many traces



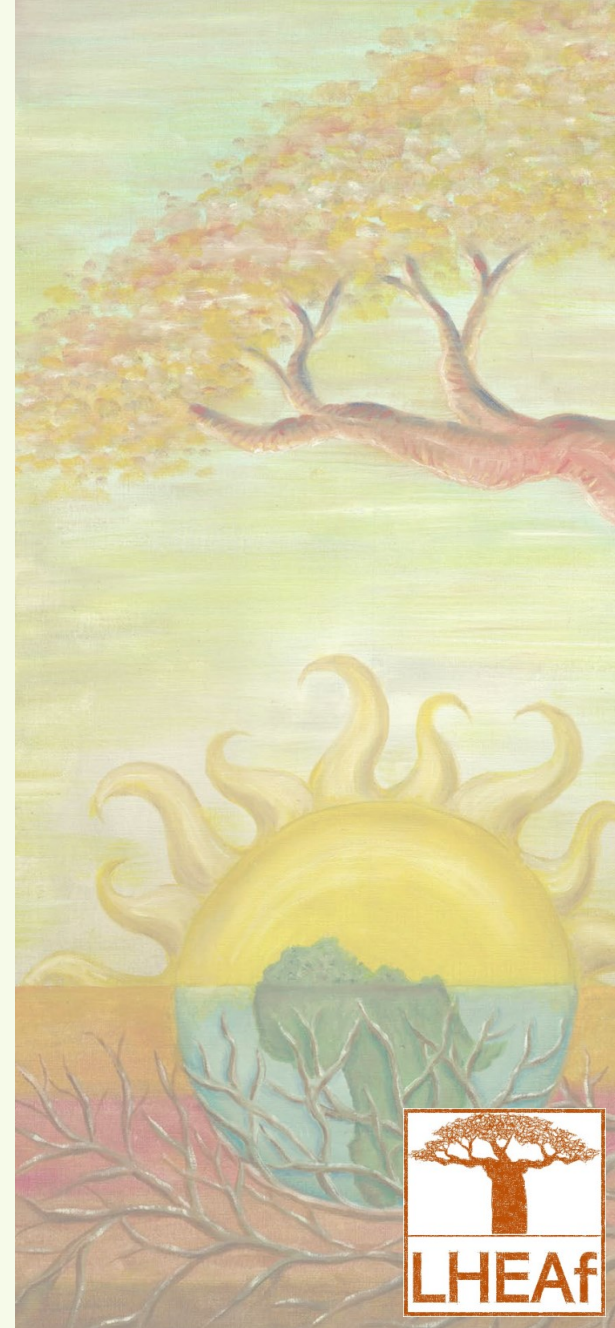
Case study: Akiek / Okiek

Oral tradition

- Okiek: No origin myths available
 - » “Okiek oral traditions do not reach back to a time when they lived united [with other Kalenjin groups]” (Kratz 1980:361)
 - » All Okiek “share an identification of themselves as the original inhabitants of Kenya” (ibid)
 - » Ceremonial song at girls’ initiation: first line (Micheli 2024, personal communication)

kì:βúnun mɔkìɔrur gwe, asa! Igo!

‘we come from where, it cannot be explained, gwe, asa! Igo!’



Case study: Akiek / Okiek

Oral tradition

- Akiek origin myth (König, Heine, Legère & Heine 2019)
 - Very similar to Waata origin story!
 - » Akiek: loss of cattle due to irresponsibility and following honeyguide
 - » Maasai: gain of cattle due to obeying and patience
 - » Dominance of Maasai
 - No mention of other groups; although Maasai contact with Maasai only started in 18th century
 - Akiek identity only possible in connection with Maasai
- **Again, suggests loss of cattle (due to honeyguide)**



Case study: Akiek / Okiek

Genetic evidence (Scheinfeldt et al. 2019) (= evidence for Waata)

- “Elmolo, Yaaku, Boni, Wata, Ogiek, and Sengwer from East Africa share ancestry with neighboring agriculturalist or pastoralist populations” (2019: 4167-4168)
- “... East African populations who practice an HG lifestyle and speak AA or NS languages, appear to be genetically similar to neighboring non-HG populations. **This could either be due to [1] the loss of domestication or may reflect [2] older ancestral subsistence patterns**” (2019: 4172)

→ **Again, [1] seems to be more likely than [2]!**



Case study: Akiek / Okiek

Conclusion

Field	Evidence
Lexical evidence	No evidence for original HG language → H2
Oral traditions	Loss of cattle → H2, H3
Genetics	Loss of cattle → H2

Hypotheses

- (1) Language shift
- (2) Lifestyle shift
- (3) Convergence

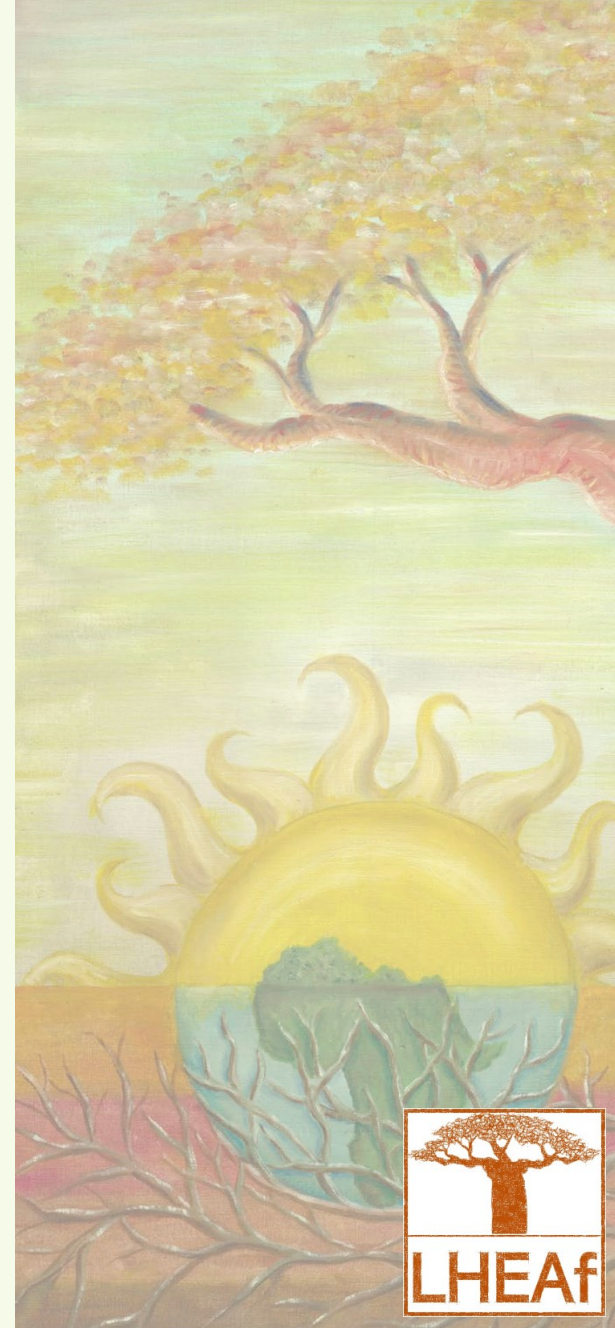
→ **Caveat:** Not yet comprehensive analysis of HG lexicon!



Case study: Hadza

Introduction

- Occupation: Traditionally HG, nowadays also farming and tourism (Lusekelo & Mgeja 2020, Yatsuka 2015)
- Often treated as “human fossils”, “timeless” (Marlowe 2010, criticized in Harvey 2022) → lexical evidence, as well as genetic data show that this is not the case



Case study: Hadza

Lexical evidence: Cattle vocabulary (Miller et al. to appear)

- Not many words found in this domain (Miller's dictionary: ~ 500 pages)
- For most words, external origin is hypothesized



Case study: Hadza

Lexical evidence: Cattle vocabulary (Miller et al. to appear)

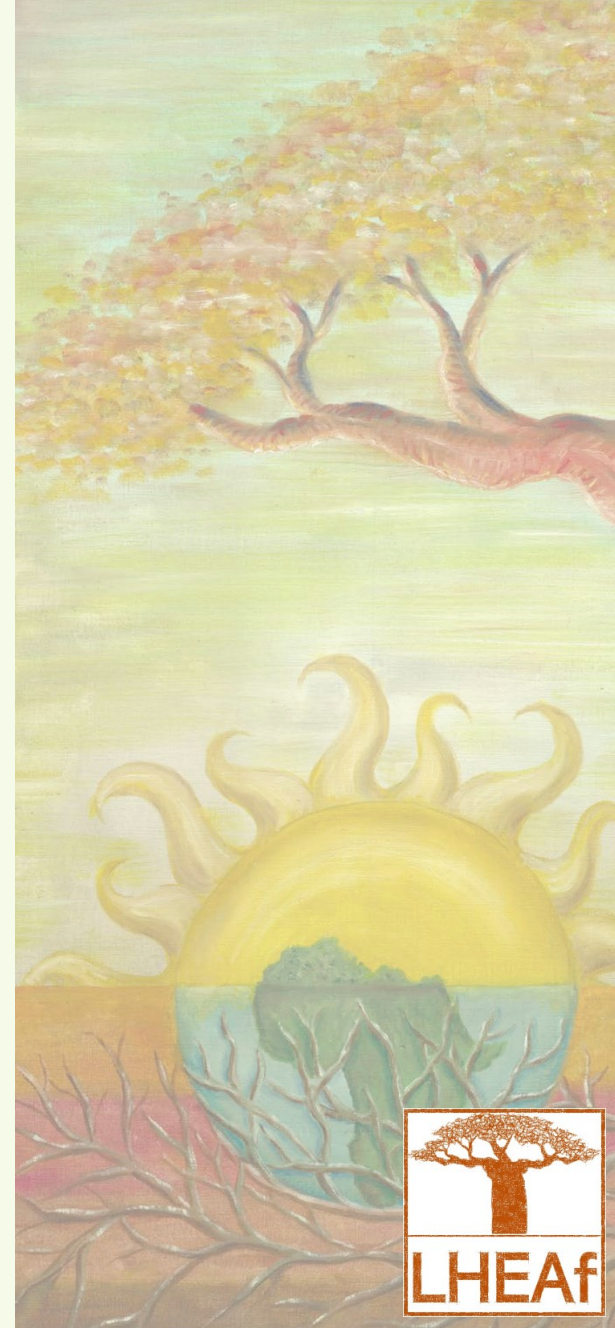
Hadza	Gloss	Comment
ara-ko	goat	cf. Iraqw <i>aara</i> 'goats'
atcheka-ko, atceka-ko	cattle	cf. Datooga <i>ɛ/pedʒekta</i> 'young bull'; Omotic <i>*atfo</i> 'meat'
beerere-ko	sheep	cf. Iraqw <i>beelli</i> 'sheep'
pukupuku-ko, -bee	sheep	cf. P-Bantu <i>*pongo</i> ('goat') (name perhaps < <i>puku</i> cause of wool coat?)
godema	to herd	loan either from Bantu, Isanzu or pWR?
hagwanda	adolescent animal	cf. Datooga <i>hawanika</i> 'young female calf after puberty'
harumo-ko, harumanga-ko	admirative names for cattle	cf. Iraqw <i>xarma</i> 'horns', pswr <i>*xaruma'iing</i>
hayimanga	alternative word for cattle; aardwolf	semantic shift?
hayimangati-ko	beef	



Case study: Hadza

Oral traditions: Origin story (Mahiya 1998)

- Hadza portrayed as first people
- HG occupation as free choice
- Includes contact groups, even those who came very recent



Case study: Hadza

Genetic evidence

- Recent contact with other Tanzanian populations (Tishkoff et al. 2007) → corresponds to lexical evidence
- “Hadza and Sandawe are genetically more similar to their Nilotic-, Cushitic-, and Bantu-speaking neighbors than they are to the SAK-speaking population” (ibid)
- Connections with other “Khoisan” groups “quite ancient”, at least 15.000 years for Sandawe, 35-55.000 years for South African “Khoisan” (ibid)
- “Our results indicate that these HG populations [Hadza, Sandawe, Dahalo, and Sabue], [...] **are not impoverished agriculturalists or pastoralists who have lost their land or livestock**; instead, they likely have remained relatively isolated for an extended period of time and have only come into contact with other populations in the more recent past.” (Scheinfeldt et al., 2019)

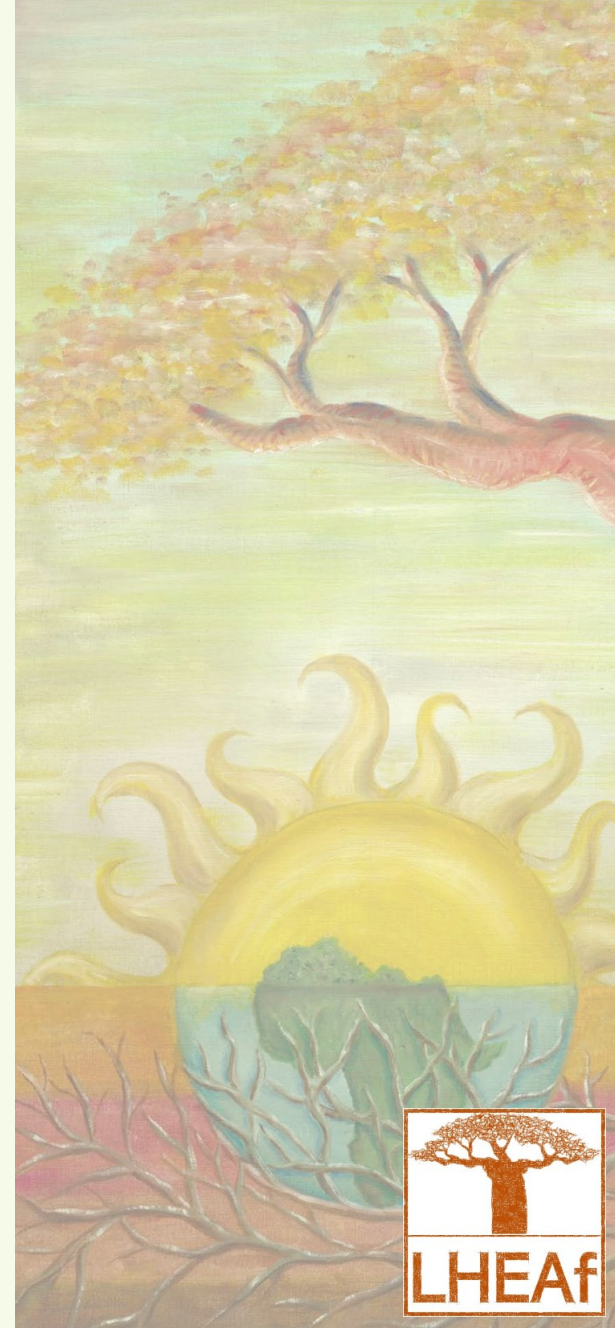


Case study: Hadza

Conclusion

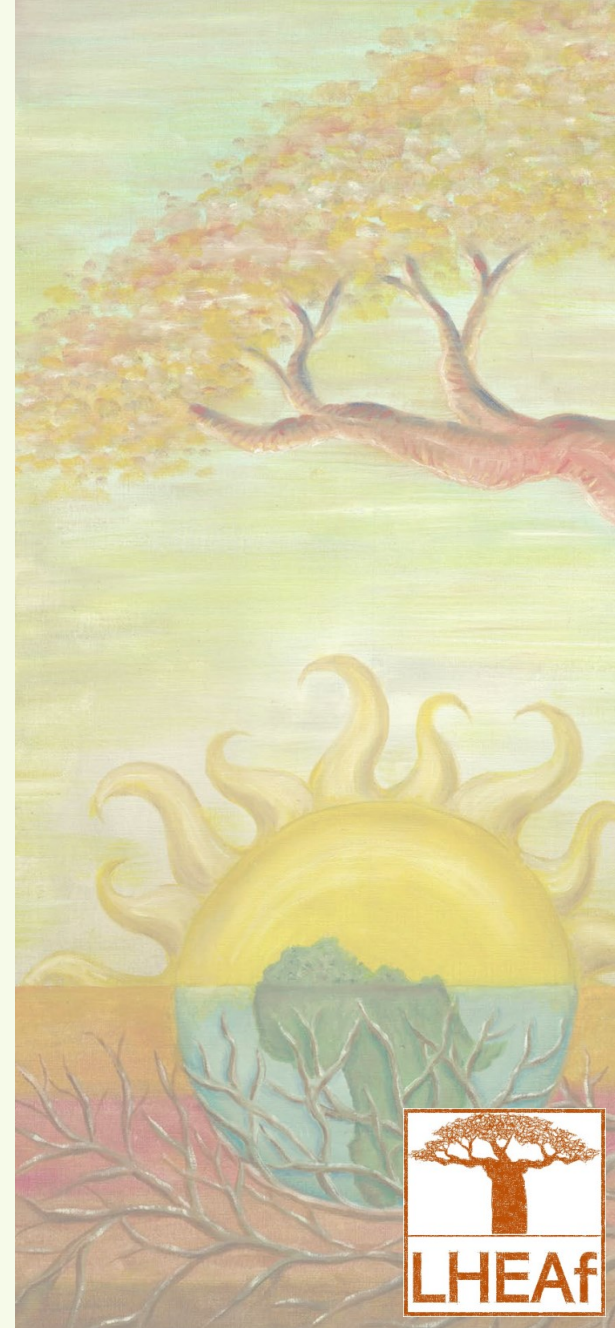
- Hadza as “independent” HGs show differences to “doroboid” HGs on various levels
 - » Language affiliation
 - » Genetic data
 - » Oral tradition
- Hadza has a history of contact with neighboring groups → borrowings in the pastoralist domain

Unlike Waata, Akiek and Okiek, there is no incentive to assume language or lifestyle shift.



Conclusions

- It is not easy to disentangle the history – necessity for “educated guesses”
- More detailed, small-scale genetic studies would be insightful
- It is too short-sighted to assume that all HG groups are “original” / “have always been there the way they are today” → All HG groups have a history of contact with other groups
- Still, it might be possible to draw a line between “doroboid” HGs and “autonomous” HGs → synchronically, but possibly also diachronically (more investigations necessary)



References

Ambrose, Stanley H. 1986. "Hunter-Gatherer Adaptions to Non-Marginal environments: An Ecological and Archaeological Assessment of the Dorobo Model". *Sprache und Geschichte in Afrika* 7(2), 11.42.

Creider, Jane Tapsubei & Chet A. Creider. 2001. *A Dictionary of the Nandi Language*. Köln: Rüdiger Köppe.

Harvey, Andrew. 2022. Deconstructing the "Hadza curse": language work as work in transformation." Talk given at the evening lectures of the Leiden Summer School in Languages and Linguistics. 28/07/2022. DOI: <https://doi.org/10.5281/zenodo.6856975>.

Huntingford, G. W. B. 1929. Modern Hunters: Some Account of the Kamelilo-Kapchepkendi Dorobo (Okiek) of Kenya Colony. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 59, 333-378.

König, Christa, Bernd Heine, Karsten Legère & Ingo Heine. 2019. *The Akie language of Tanzania – Texts and dictionary*. Cologne & Vienna.

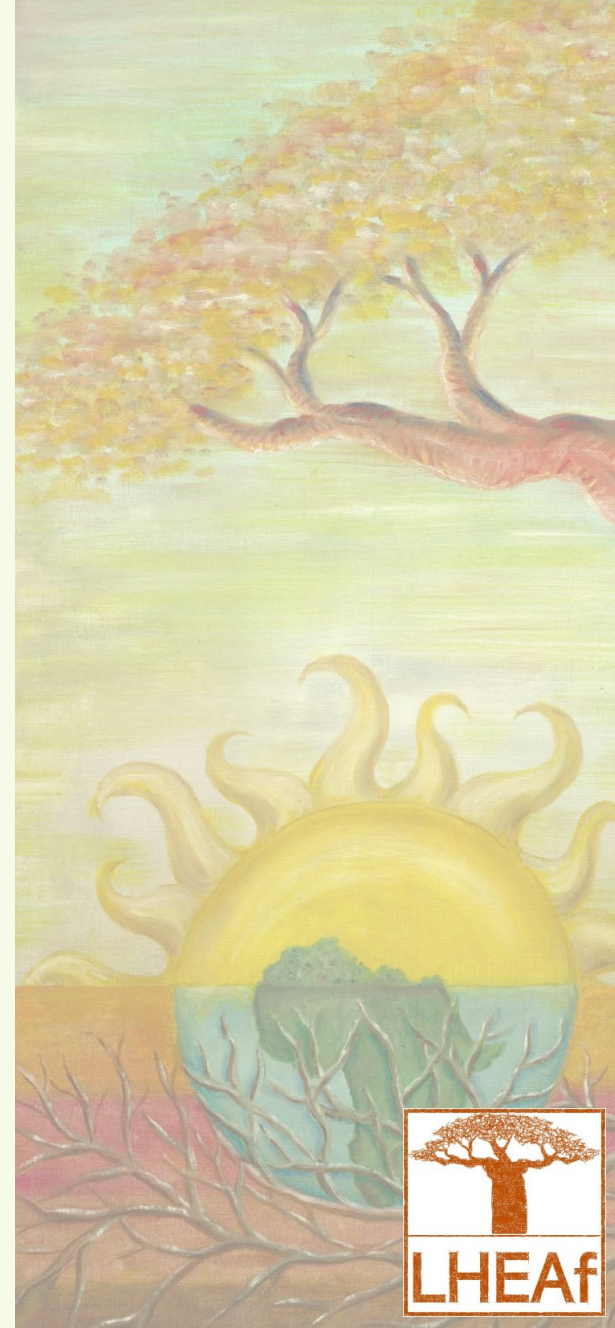
Kratz, Corinne A. 1980. "Are the Okiek Really Masai? Or Kipsigis? Or Kikuyu?" *Cahiers d'Études Africaines* 20(79), 355-368.

Lusekelo, Amani & Micky Mgeja. 2020. "Linguistic and Social Outcomes of Interactions of Hadzabe and Sukuma in North-Western Tanzania". *Utafiti* 15, 348-373.

Mahiya, Gudo. 1998. *Hadza Stories & Songs*. Los Angeles: Friends of the Hadzabe.

Marlowe, Frank W. 2010. *The Hadza: Hunter-Gatherers of Tanzania*. Berkeley etc.: University of California Press.

Micheli, Ilaria. 2018. *Grammatical Sketch and Short Vocabulary of the Ogiek Language of Mariashoni*. Trieste: UPI - University Press Italianae.



References

Miller Kirk, Mariam Anyawire, G. G. Bala & Bonny Sands. In press. *A Hadza Lexicon and etymological dictionary*. Mang'ola, Tanzania.

Payne, Doris L & Leonard Ole-Kotikash. *Maa (Maasai) Dictionary*. <https://pages.uoregon.edu/dlpayne/Maa%20Lexicon/lexicon/main.htm>.

Rottland, Franz. 1982. *Die Südnilotischen Sprachen: Beschreibung, Vergleichung und Rekonstruktion*. Berlin: Dietrich Reimer.

Tishkoff, Sarah A., Mary Katherine Gonder, Brenna M. Henn, Holly Mortensen, Alec Knight, Christopher Gignoux, Neil Fernandopulle, Godfrey Lema, Thomas B. Nyambo, Uma Ramakrishnan, Floyd A. Reed & Joanna L. Mountain. 2007. "History of Click-Speaking Populations of Africa Inferred from mtDNA and Y Chromosome Genetic Variation". *Mol. Biol. Evol.* 24(10), 2180-2195. DOI: 10.1093/molbev/msm155.

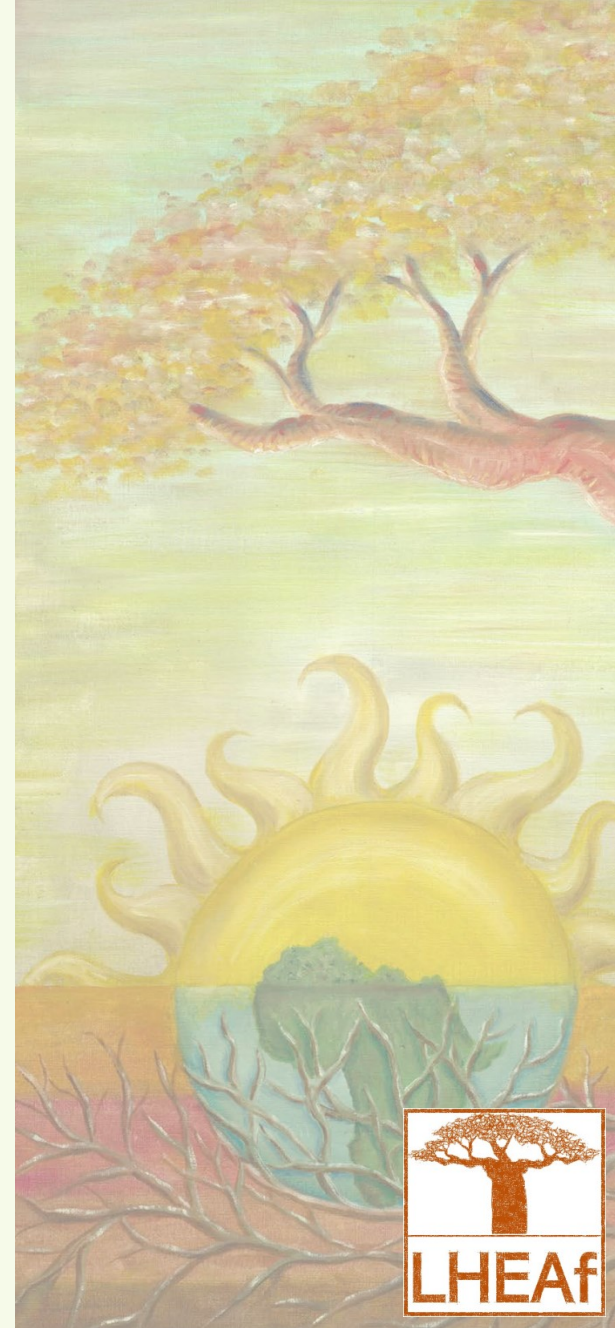
Scheinfeldt, Laura B., Sameer Soi, Charla Lambert, Wen-Ya Ko, Aoua Coulibaly, Alessia Ranciaro, Simon Thompson, Jibril Hirbo, William Beggs, Muntaser Ibrahim, Thomas Nyambo, Sabah Omar, Dawit Woldemeskel, Gurja Belay, Alain Froment, Junhyong Kim & Sarah A. Tishkoff. 2019. "Genomic evidence for shared common ancestry of East African hunting-gathering populations and insights into local adaptation". *PNAS* 116(10), 4166-4175.

Stroemer, Harry. 1987. *A Comparative Study of Three Southern Oromo Dialects in Kenya*. Hamburg: Helmut Buske.

Van Zwanenberg, Roger M. 1976. "Dorobo Hunting and Gathering: A Way of Life or a Mode of Production?". *African Economic History*, 12-21.

Ville, Jean-Luc. 2006. "«L'éléphant est notre ancêtre». Histoire et construction identitaire chez les Waata du Kenya". In Alain Rouaud (ed.), *L'Homme et l'Animal dans l'Est de l'Afrique*, 29–55. Paris: Éthiopisants associés.

Yatsuka, Haruna. 2015. "Reconsidering the "indigenous peoples" in the African context from the perspective of current livelihood and its historical changes: The case of the Sandawe and the Hadza in Tanzania". *African Study Monographs* 36(1), 27-47.



Thank you!



Discussion questions

- Should general conclusions be made (e.g., for “doroboid” vs. “independent” HGs)?
- How much can we trust oral history? Is it usable at all for investigating history or does it just explain current dynamics between groups and group identity? Why do some groups have no origin stories at all? Why do “doroboid” Akiek and Waata share very similar stories?
- Is there another explanation for not finding substrate influence (apart from assuming there was none)?
- If a dorobo group is an “original” HG group, what would bring it into dependence from pastoralists? Why did this not happen to independent HGs like Hadza?

