

Early East African and Peripheral East Cushitic

Foragers and pastoralists in early East Africa

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Well-known facts & sound hypotheses

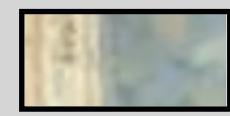
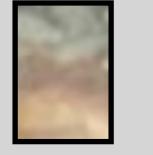
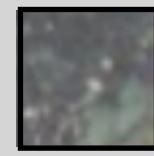


- Foraging preceded food production
- Foragers spoke languages not belonging to either Afroasiatic or Nilo-Saharan
- Pastoralism preceded agriculture in East Africa
- A numerically small but very diverse number of foragers groups still live in East Africa, from Ethiopia to Tanzania; they include:
 - hunter-gatherers
 - fisher and crocodile/hippo hunters
 - honey collectors and producers
 - they may live in symbiosis with dominating non-foraging groups or pretty much independent of them
- Interaction between foragers and pastoralists – and their languages – has been going on since millennia

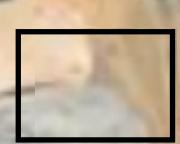
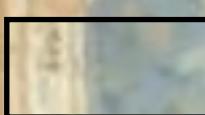
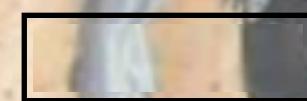
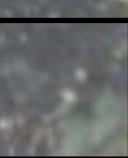
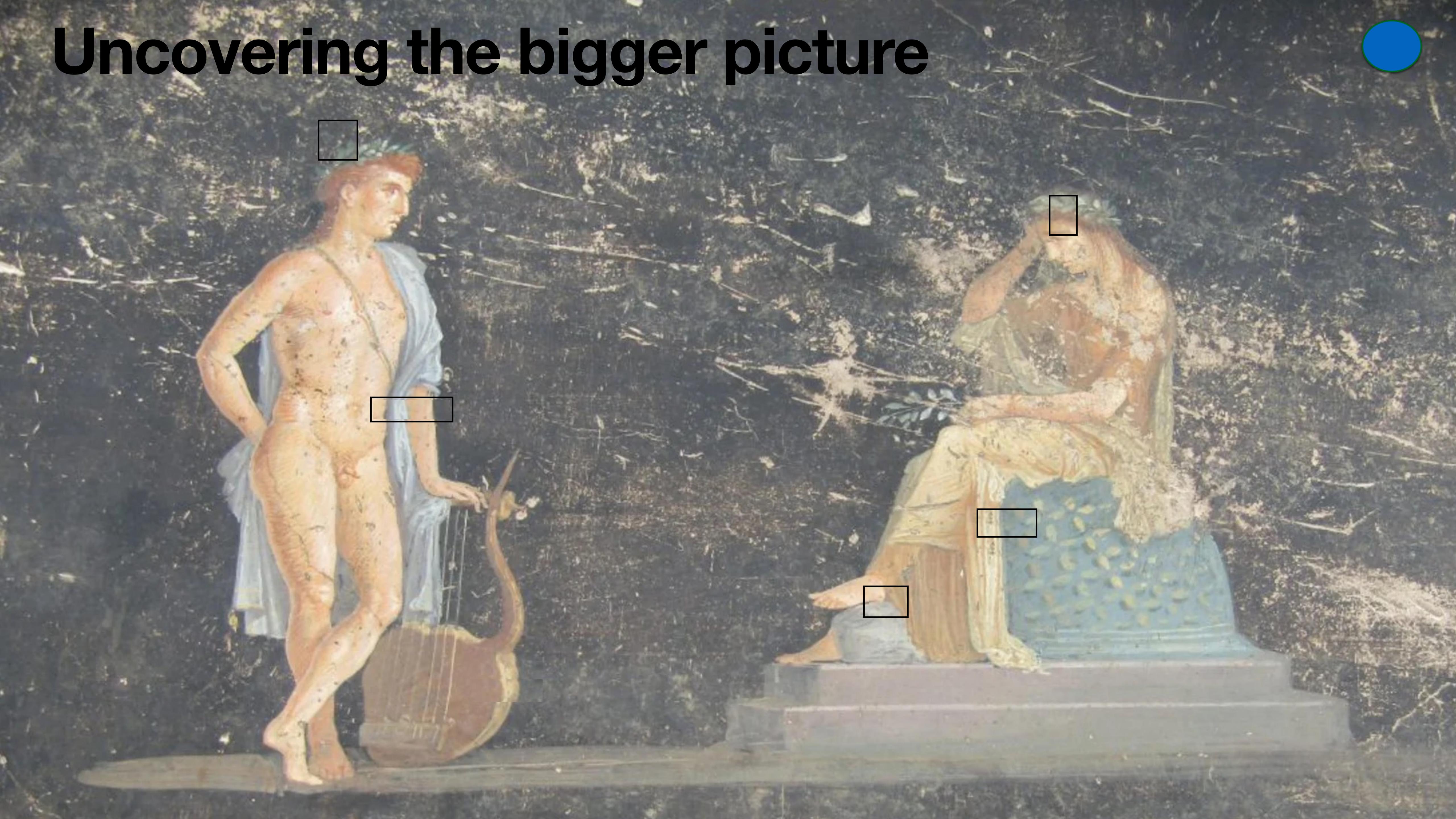
Language contact and shift

- Linguistic contact between foragers and pastoralists has generally been assumed, sometimes investigated
- Mainly focused on the impact of pastoralists' languages onto foragers
 - ☞ (the pastoralists as typical linguistic donors—the foragers as linguistic recipients of contact)
- Language shift of foragers toward a dominating language of non-foragers is documented in historical times
- Multiple language shift, too has been documented
- (Multiple) language shift is likely to have occurred in the past

Remants of an Earlier Mosaic

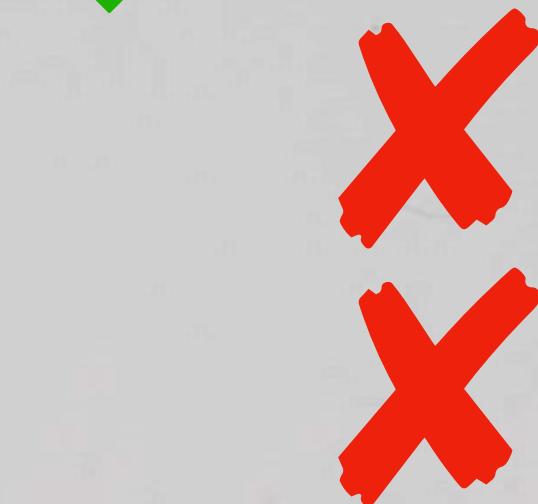


Uncovering the bigger picture



Introducing Early East African (EEA)

- Ongota (Southwest Ethiopia)
- Hadza (Tanzania)
- Ik (and Kuliak/Rub languages; Uganda)
- Chabu = Shabo (Southwest Ethiopia)

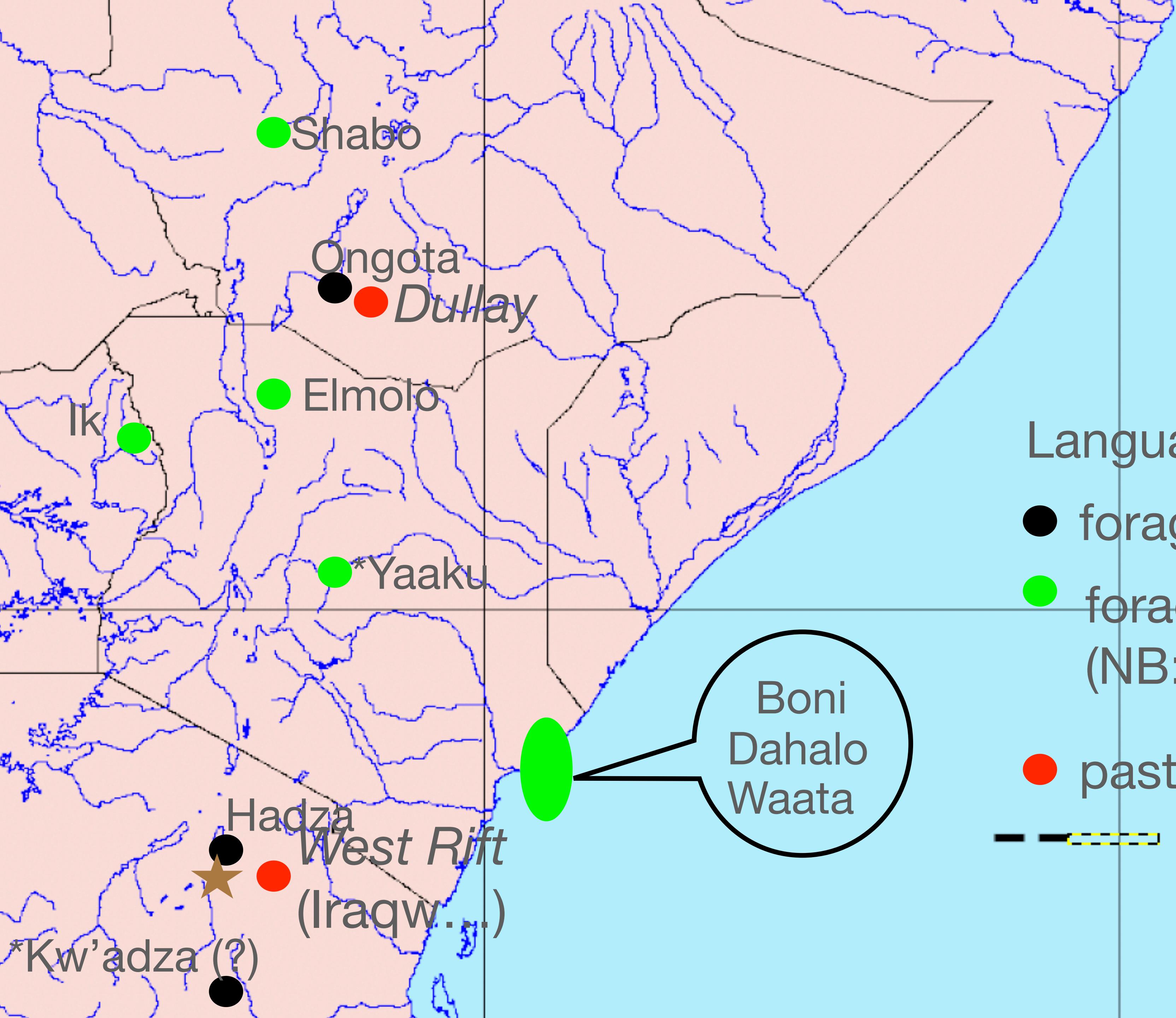


Shift from a former likely unclassified language

- Dahalo (East Cushitic)
- *Yaaku (East Cushitic)
- *Elmolo (East Cushitic)
- Qwadza, Asá (Cushitic?)
- ...
- (occupational groups and their languages/jargons)



Early East African

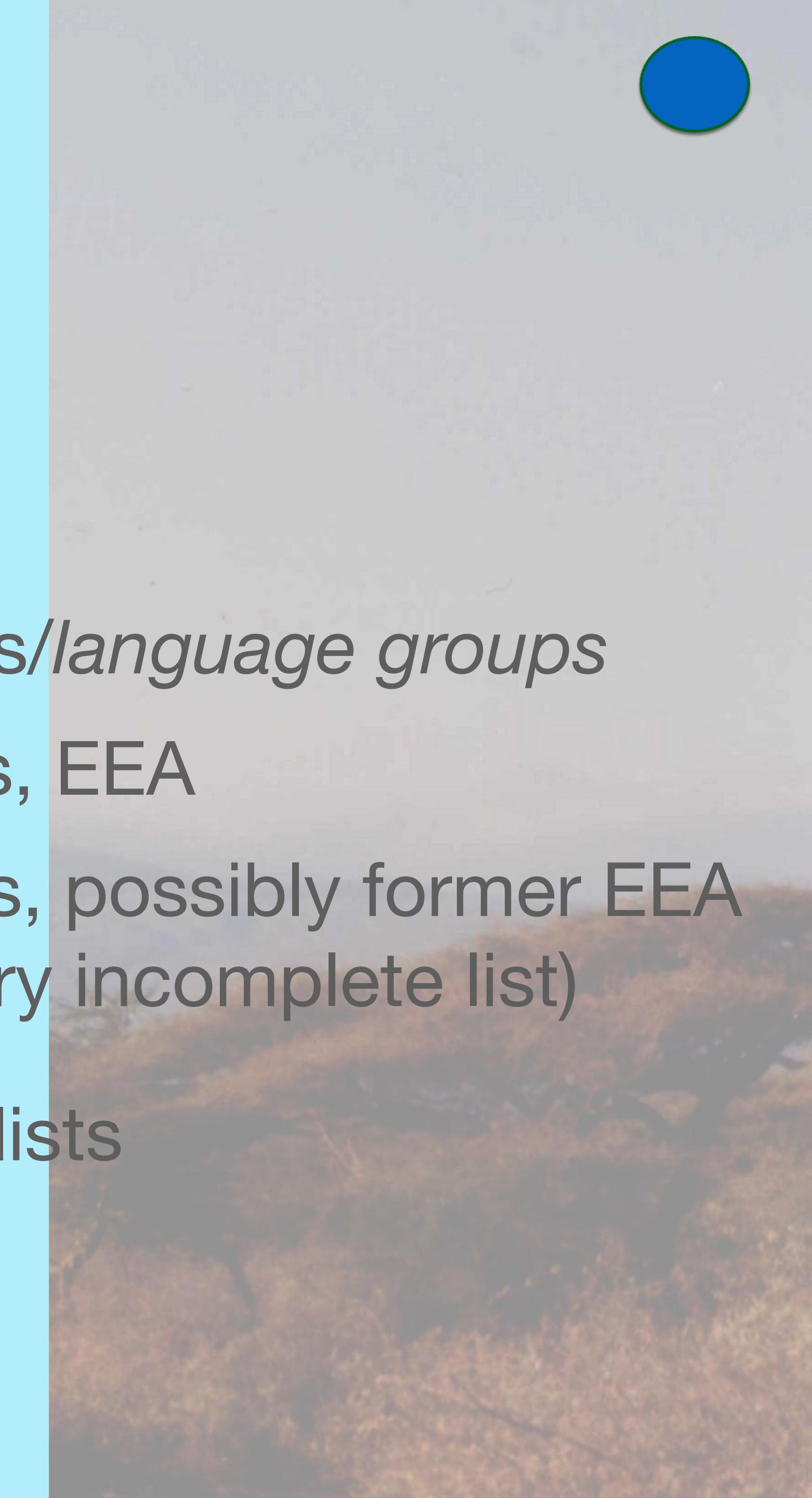


Languages/language groups

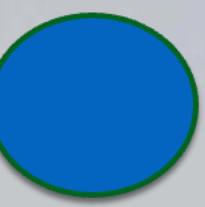
● foragers, EEA

● foragers, possibly former EEA
(NB: very incomplete list)

● pastoralists



EEA in more details



- Hadza is best considered an isolate (Sands 1995, 1998) (Miller 2013, Sands 1992-1997)
 - Inconclusive evidence for **affiliation** within Afroasiatic;
 - Definite evidence of **borrowing** from Afroasiatic (as well as Nilo-Saharan, Bantu...)
 - Contact with “South Cushitic” (: West-Rift) evident
- Ongota is best considered an isolate (+ dying language; poor data)
- Dahalo is best considered East Cushitic (Tosco 2000, Rowe 2000) but does not show evidence of any affiliation to a specific subgroup
- *Yaaku (Peripheral East Cushitic– to be discussed later on) [today the Yaaku speak Maa)

What EEA was and what it wasn't

- Early East African was not a language (obviously) nor a language family (sorry, guys...) but
- a mosaic of genetically unrelated languages in contact
- we think there is evidence of contact:
 - **between EEA and early Cushitic groups (predating contact with South Cushitic in Tanzania)**
 - **among EEA languages**
 - and that there is
 - **evidence of loans from EEA into Cushitic**

Dahalo and Ongota (the northern connection)/1

- Dahalo *ro?* ‘to come’ (‘to go’ for Tosco 1991 and Elderkin n.d. (cited in Ehret et al. 1989) and Ongota *roo-* ‘to go’:
 - the phonological status of the long syllable in Ongota is unclear (root *ro?*- ?). Tosco (2000) connects Dahalo with Yaaku *-rɛʔɛ-* ‘to run away’. In the Leipzig-Jakarta wordlist for basic vocabulary, where it is also the third most semantically stable word (Tadmor et al. 2010). But, the shortness of the root makes a chance-resemblance not improbable.
- Dahalo *dze?*- and Ongota *ji?*- ‘to kill’:
 - at first sight convincing; basic word in Swadesh 100-words list. But:
 - attested in Boni as a prefix verb *-igaas-/iyyaas-* (Heine 1982: 114) and in different Somali languages: Tunni *egees-* (Tosco 1997: 270); Dabarro *yigees-* (Lamberti 1980: 96), and, important for its historical connection to Boni and possibly other foraging groups, Karre *yigisay* (Tosco 1989: 154).
 - more distantly: Arbore- *?eKes-* (Hayward 1984: 267); cf. also *Ik cɛ-ɛs* (Heine 1999: 123), *cɛ-ɛsí* ‘to kill; to injure’ (Schrock 2014: 622).
 - the shortness of the root increases the likelihood of a chance resemblance
 - Conclusions: if this is an Cushitic root, Dahalo exclusively within Cushitic has lost both the initial syllable with vowel /i/ and the final /s/; a similar form is shared with Ongota & *Ik* (perhaps reflecting an EEA substrate)
- Dahalo *butú?*- and Ongota *bud-* ‘to spit’:
 - reasonably convincing, but ‘to spit’ is not bisyllabic in Ongota and the root often shows a bilabial cross-linguistically (Johansson et al. 2020 “The typology of sound symbolism...”).

Dahalo and Ongota (the northern connection)/2

- Dahalo **হান্জ**- and Ongota **ʕad-** ‘to lick’
 - is reinforced by Shabo *handa* ‘to lick’, ‘tongue’ (from Cushitic according to Aberra (2019) but no Cushitic root with this meaning is known to us; only Dahalo has *ʕé:na* ‘tongue’). Tosco (2000) links Dahalo with Yaaku *-ɛnt*’-.
 - Assessment: only moderately convincing on the basis of the number of plausible sound changes that would be required in both languages (cf. the presence of a nasalized dental click in one language and an alveolar stop in the other). ‘to lick’ is the only verb with a click in Dahalo and there is no prove that the root is Cushitic (why the click in Dahalo?); it could harken back to EEA.
- Dahalo **kwáʔ-** and Ongota **gay-/gaʕ-** ‘to run’
 - (weakly) reinforced by Shabo *kol*.
 - Phonetic difference partially accounted for by the lack of labiovelars in Ongota.
 - Existence of voicing opposition in Ongota (marked in Savà and Tosco 2000 and other sources) is doubtful (the Southwest Ethiopia area has no voice opposition; Sasse 1986). One could reconstruct a uvular in Proto East Cushitic (contra Sasse 1979).
 - Assessment: we are moderately happy with it. An alternative hypothesis for these forms is that the original word had a *q uvular initial which became labiovelarized in Dahalo and was replaced by /g/ in Ongota, both common sound changes attested cross-linguistically.

Dahalo and Ongota (the northern connection)/3

Weak lookalikes

- Dahalo *be:??a* and Ongota *báya ſa* ‘buffalo’ shares some of the same problems seen above (basically, and also the corresponding between epiglottal in Dahalo and pharyngeal in Ongota. Shabo *boŋ*, *booj*, *booy* ‘cape buffalo’ looks unrelated.
- Dahalo *ba?-anna* ‘to set out to dry’, Ongota *buʃ-* ‘to dry up, become dry’ – again a basic word (in the Swadesh list) – is moderately convincing due to phonological inconsistency between Dahalo and Ongota
- Dahalo *daħ-* and Ongota *zax-* ‘to pound, grind’

Our hypothesis is that Dahalo shifted from an EEA language to a very early form of East Cushitic, whose classificatory position within the family cannot be recovered. It could be pre-Peripheral East Cushitic. An independent position of Dahalo within East Cushitic (as advocated by Bender 2020: 91) seems reasonable.

Historical scenario/1

EEA networks



Introducing yet another label: Peripheral East Cushitic

(Ehret 1974; Hayward 1978; Tosco 2000)

- Peripheral East Cushitic is a primary branch of East Cushitic consisting of “Dullay” and *Yaaku
- (a substantial number of isoglosses connects Dullay and Yaaku)
- (some 400 miles/more than 600 kms between Dullay and Yaaku)
- hypothesis:
 - Proto-Dullay was a component of an early southbound East Cushitic migration
 - EEA-speaking Yaakus shifted to Proto-Dullay

Contacts between EEA and PEC

- No historical evidence of PEC south of Yaaku
- Still, a short but interesting list of lookalikes
- Sometimes the source of borrowing is unclear
- [N.B.: the following is a very partial list and a shortened discussion]

1. “honey”

- ‘(eat) honey’

Hadza *sok’omo* ‘to eat honey’ and Peripheral East Cushitic *Yaaku sákmái* ‘honey’, *Gawwada sakm-o* ‘honey’ is a striking piece of evidence, as it involves three very similar consonants. Phonological/semantic changes required:

- 1) the proposed correspondence between /k’/ in Hadza and the plain velar in PEC contained a different consonant, such as **kx*’, which merged with /k’/ in Hadza and the plain velar in Peripheral East Cushitic.
- 2) the differences in vowel quality would need to be explained by vowel harmonic processes in Hadza, with a Proto-Hadzoid form having been something like **sakx’omo*.
- 3) the difference in syllable structure can easily be accounted for a synchronic sound change of CVCVCV>CVCCV in Peripheral East Cushitic.
- 4) the difference in meaning would have to be explained through a change of part of speech in one or other language.

- We propose that **this is an EEA loan into PEC**. From PEC it went into Konso and other Oromoid languages neighboring Dullay. A Proto East Cushitic root **zagm* has been reconstructed by Sasse (1979: 20), but its reflexes are attested only in PEC and in Oromoid, with Oromo *damm-a*, Konso *takm-a*, and Diraasha *tank-(a)*. While nothing specific is known about Dullay-Oromo contacts, the heavy reciprocal influence between Dullay and its neighboring Oromoid languages (especially Konso) is well-known (Tosco 2009). As this is the area from where the Oromo started their momentous expansion in the 16th century, it may well be assumed that it entered Oromoid (Oromo included) through Dullay. Both the conservative status of Dullay within East Cushitic and the reconstruction of the historical movements of other East Cushitic groups well account for the restricted presence of such words in East Cushitic.

Somewhat similar in form but unlikely to be related is: Sandawe *sakaláni* ‘honey beer (Honigbier)’ (Newman 1970); *sakaláni* traditional hunter’s rations: a stiff lump of millet pudding fermented with honey which is wrapped up in leaves and tied to the belt with a string (Ten Raa 1970).

2. “tortoise”

- Hadza k’upe-ko ‘leopard tortoise’
- Dahalo k’úbe ‘tortoise’
- Ongota kufe ‘tortoise’ (< a relatively recent loan from Ts’amakko [Dullay, PEC])
- PEC Yaaku q'ópe' ['qópe?], Gawayada hup-e, Harso húpe, Ts’amakko kufe ‘tortoise’ (how to account for the initial velar ejective in Hadza vs. the different realizations of Cushitic? What about the bilabial?)
- Other attestations in East Cushitic: Omo-Tana: Somali qubo ‘turtle’; Afar gublaali (Parker & Hayward (1985) (Parker 2006 has goblaali)) and Oromoid: Konso kup-aata (Black & Shako Otto 2009/1973) 'tortoise, turtle' (cf. Oromo qoc'aa [k'otʃ'a] 'tortoise' Gragg (1982); South Cushitic: PWR *qubée (based on Iraqw quwee 'skunk-like animal sp.' (archaic) & Alagwa qubée 'big tortoise (sp.)' (general word: Iraqw kenkeeamoo 'tortoise' and Alagwa kenkee'imoo 'big tortoise') (Kießling & Mous 2003).
- In Omotic, cf. Sheko (Dizoid) kow (Worku 2008: 197).

We may also mention here that there is a Sandawe khúrú ‘turtle’ (Elderkin 1983) which is somewhat similar in form to a Hadza word k’oló-ko ‘pancake turtle’. Blench (1997, Table A) notes the wide presence all over Africa of roots starting with *ku and generally followed by /rV/. Interestingly, no bilabial is reported in words from other African language phyla.

3. “egg”

- Hadza *?úŋe-ko*, Dahalo *?égo:e*, Gawayada *?ukaah-e* ‘egg’ (absent in Yaaku and Ongota). Meaning in all basic-words lists. In Hadza -ko is a feminine marker; In Dahalo the pharyngeal is dropped, maybe out of conflict with the initial pharyngeal.
- Plenty of cognates in Cushitic, so this seems to be a Peripheral East Cushitic loan in Hadza.
- Apart from Dullay, cf. Somali *ugax* (= [ugaħ]), Konso *húkukkaa*, Diraasha *úkukka* (but maybe loans from Dullay? Oromo has *killee*).
- South Cushitic *qanaHi is perhaps the same root with loss of the first syllable: proto-West-Rift *qana’oo ‘eggs’ (Kießling & Mous 2003: 229)), as represented by Gorowa *qan’oo*, Burunge *qana’oo* and Alagwa *qana’oo*. In Iraqw the word has merged with a root meaning ‘germinated grain,’ yielding *qanhhaa* ‘eggs and *qanhhi* ‘egg’ (/qanħaa, qanħi/)
- Ehret (1995: 247, no. 449) reconstructs *kʷánħ, Orel and Stolbova (1995: 332, no. 1525) *ka’-/*kay-
- We reconstruct Proto-Dullay *?ugaħ with a singleton vowel (as in Somali *ugax*, etc.).

4. others...

- Hadza *teje:*, Dahalo *taħ-* (Tosco 1991: 148) and Gawwada *tay-* ‘to get, find’ (**questionable**)
- Hadza *mitħ'a*, Dahalo *mít'l'tl'o*, Ongota *mic'a*, PEC: Yaaku *mic'o* ‘bone’, Gawwada *meq~q-e* ‘bones’ (**more likely**)
 - a Proto-Afroasiatic root has been reconstructed by Orël and Stolbova (1995: 333, no. 1530) as *kac* with a mV-; Ehret (1995: 240, no. 428) as **k'os*. Bender (2020: 23) reconstructs Proto-Cushitic **mik+*, with loans in Omotic. South Cushitic, Beja and Central Cushitic (i.e., everything except a part of East) have different roots.
 - Within East Cushitic, Saho-'Afar, Omo-Tana and Oromoid have different roots. Also in South Cushitic we find *Iraqw* and *Alagwa fara* (cognates with the Somali, Oromo, etc. words for “finger”).
 - The root is therefore restricted to Peripheral and Highland. The Dullay connection may appear weak (due to the uvular /q/), but for **q'* to have a reflex with lateral frication follows a natural phonetic tendency (Sands 2007)

5. weaker lookalikes

- Hadza *ts'una-ko* ‘sp. stingless bee that produces only a handful of honey’ (*tsunako* (Peterson et al. 2013) *Trigona erythra junodi*), PEC Yaaku *túúní* ‘carpenter bee’ , Gawnwada *t'oonaq-o* ‘bee’
 - Dahalo *t'ónané* ‘mosquito’ is much less convincing for obvious semantic reasons.
 - Sandawe *ís'na* ‘kind of Sandawe bee that build hives in trees’ (Newman 1970), while one can add Shabo: *shina, sina* ‘honey’; *shoi, shoy, soi* ‘bee’, *dana, daana, dana* ‘beehive’ (cf. Blazek 1991)
- Hadza *k'ó?o* ‘bow’ vs. Gawnwada *koo?-e* ‘arrow’: semantics is problematic, unless ***‘weapon’?**
 - cf. ‘arrow’/‘bow’ in this Sandawe/Gawnwada & Ts'amakko & Konso Sandawe: *phādò* (Elderkin 1983); *pāndo* (Dempwolff 1916) ‘type of arrow’
 - also cf. Langi *mpando* ‘flechette/dart’ (Dunham 2005: 210)
- Hadza *?ati-* ‘rain, river’, and *?ati-bi?i* ‘water’ vs. Yaaku *ánt'ô* ‘water’, Gawnwada *ſand-e* ‘water’
- Hadza *'ákhwá-ko* vs. Gawnwada *'ih-t-e, ih~h-e*, Ts'amakko *axete* ‘eye’
- Hadza *ts'awabe?e* ‘sand, gravel’ vs. Yaaku *tehei*, Gawnwada *tah-akk-o* ‘sand’

Contact between EEA and Cushitic: overview

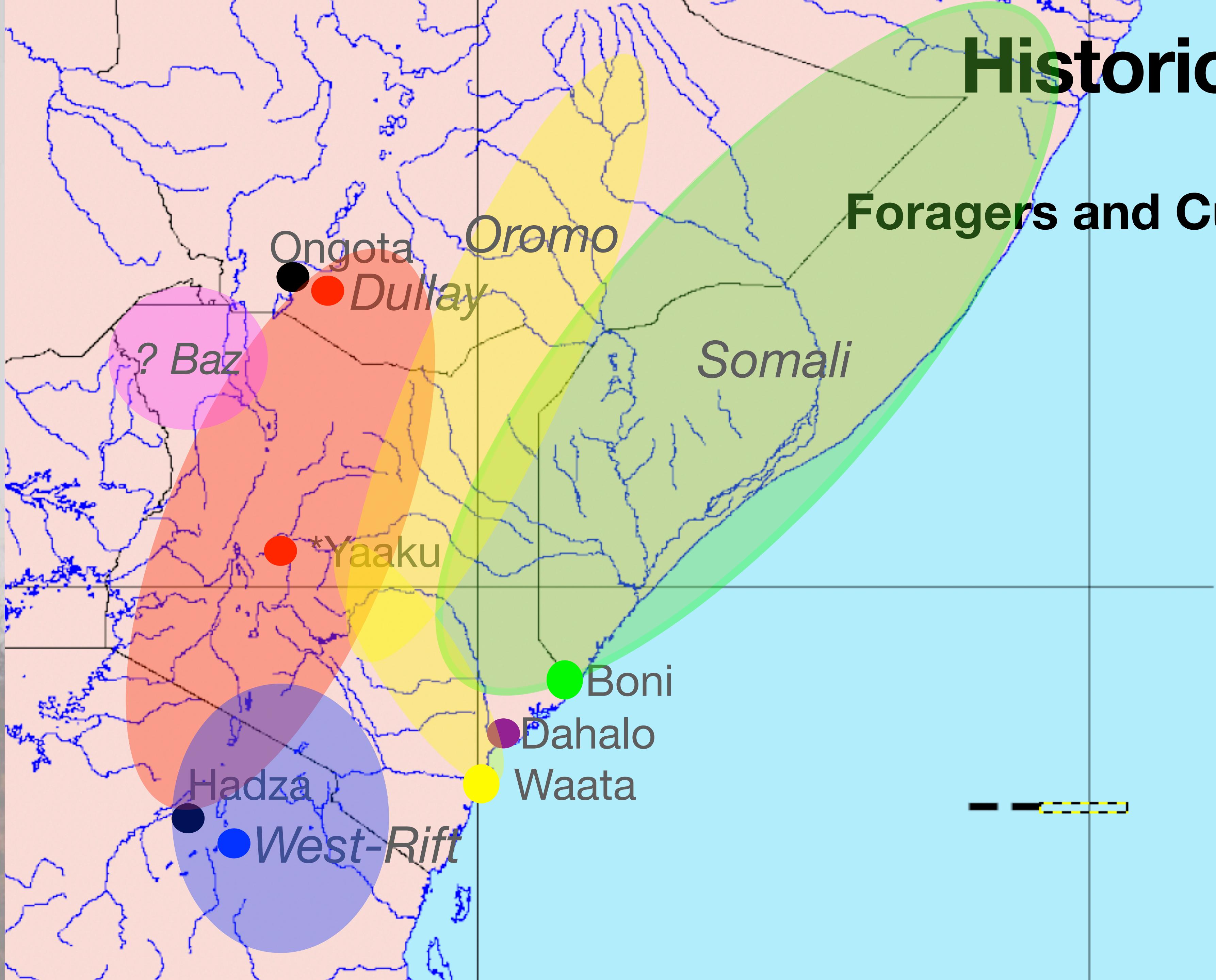
Peripheral East Cushitic & EEA

- East Cushitic retentions not found elsewhere

Later Cushitic southern inroads

- *Baz?
- Omo-Tana (Somali) (shift of Boni from EEA (?))
- West-Rift (mutual contact with Hadza)
- Oromo (shift of Waata from EEA (?))

Historical scenario/2



Foragers and Cushitic pastoralists

Successive dispersals of Cushitic groups:

- Ø. ? > Dahalo
1. PEC
3. West Rift
4. Somali
5. Oromo

Between South Cushitic and Hadza

- Hadza *gulinguli-ko*, Alagwa *gurunguda*, Iraqw *gurungura* ‘knee’: South Cushitic has a reduplicated root instead of East Cushitic *glb. Dahalo goes with East Cushitic but with loss of final -b (**Cush → Hadza**)
- Hadza *khwá^hi-ko* ‘area between shoulder and neck’, Alagwa *kwaahha* ‘shoulder’, Iraqw *kwaahha* ‘top part of back’: isolated in Cushitic (**Hadza ↔ Cush?**)
- Hadza *hompáhi-ko*, Alagwa *hhampu*, Iraqw *haampa* ‘wing’ (**Hadza ↔ Cush**)
- Hadza *lama-ko*, Alagwa, Iraqw *lama* ‘falsehood, lie’ (**Hadza → Cush?**)
- **South Cushitic retentions not found elsewhere**

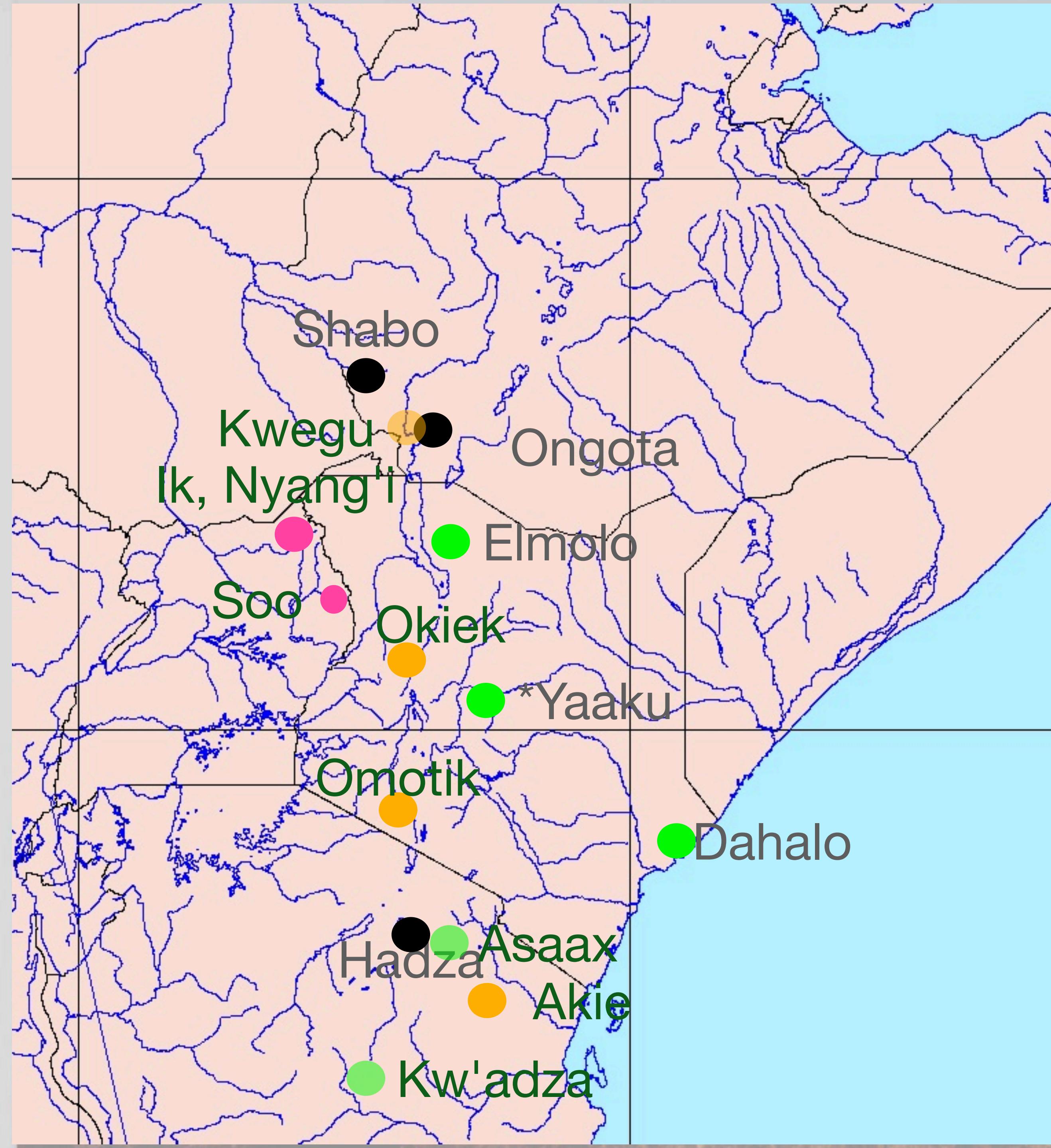
Ongota/Hadza/Dahalo/Yaaku Comparison

Pros

- Lexical connections between languages of East African foragers not otherwise explained
- Lexical connections between Hadza and East Cushitic not otherwise explained

Cons

- Limited number of languages and contact situations taken into account
- We didn't come out with any regular sound change between EEA and PEC
- Evidence is patchy (lookalikes almost never surface in all the languages)
- Is the number of lookalikes above chance rate?



What other EEA networks can be uncovered?

- Cushitic?
- Cushitic
- Surmic
- South Nilotc
- Kuliak
- Isolate

Preliminary investigation

- Multiple **sporadic** similar pairs, e.g.
 - *but^u* 'all' (Ik) (Schrock 2017): *fu?umayo* 'all' (Kw'adza) (Ehret n.d.)
 - *sakám* 'liver' (Ik) (Schrock 2017): *čukuma* 'liver' (Shabo) (Daniel Aberra 2019)
 - *f(^w)a-* 'drink' (Hadza) (Miller et al. 2023): *fa* 'drink' (v.) (Sese, Disoha) (Gumuz) (Bender 1971)
- Many resemblances/etymologies have already been noted in literature:
 - Ehret, Fleming, Lamberti, Militarev, Blažek, Elderkin, Schrock, etc.
- Look for repeated pairs (to minimize likelihood of chance resemblances)
- Identify likely loan strata

Loan strata

- 1. *pul^he* 'spleen' (Hadza) (presumed inherited)
- 2. *ʃok^wa* 'spleen' (Hadza)
 - compare to 'liver' terms ('liver'='spleen' in CLICS & Catalogue of Semantic Shifts in multiple language families)
 - *c'ok'om* 'liver' (Langa) (Koman) (Bender 1971)
 - *tʃ'ɔk'ɔm* 'intestines' (Opo) (Koman) (Otero, p.c.)
 - [but also cf. *ɛnk-ɔshɔke* 'belly' (Maa) (Payne & Ole-Kotikash 2008)]
- 3. *makasita, magasida* 'spleen' (Hadza) < South Nilotic
 - *nwaakta* 'spleen' (Kalenjin) (Toweett 1975)
 - *nàwagd* 'spleen' (Asimjeeg Datooga) (Griscom 2019)
 - [term not in Ogiek (Micheli 2018) or Akie (König et al. 2020) lexicons]
 - *nwa>mwa>ma

Additional possible EEA forms

- 'bird': *kùbèr* (**Kwegu**), *karbo* (**Ongota**) (but cf. Nara: *kərba*; Sheko, Nao, Maji, Proto-East- Cushitic **kimbir?*, etc. (Bender 1971))
- 'dry' *k'uwk'a* (**Kwegu**) (Yigezu 2001: 366); *kwa?as-* (**Kw'adza**) '(to) dry' (Ehret, n.d.) [no similar Surmic forms in Yigezu 2001]
- *wetés* 'drink' (**Ik**) (Schrock 2017), *wat-* 'to drink' (**Kw'adza**) (Ehret, n.d.) (but cf. Aroid, Murle (Surmic), etc.)
- 'tail' *ts'aho* (**Hadza**) (Miller et al. 2023), *ts?wă:* (**Sandawe**) (Elderkin 1983) (cf. *tsúb^a* (**Ik**) (Schrock 2017))
- 'skin': *?ahu-* (**Hadza**) (Miller et al. 2023) & *akus, auks* (**Shabo**) (Aberra 2019)
 - vs. *tseno* (**Kw'adza**) (Ehret, n.d.) & *ts'è* (**Ik**) (Schrock 2017)
 - vs. *darbo* (**Ongota**) (Savà & Tosco 2000)

“Northern EEA”? Ongota, Yaaku and beyond

- Ongota šoxo, Yaaku sógó ‘blood’
 - Problems: not found in Dullay (which excludes the obvious possibility of a Dullay loan in Ongota).
 - Hypotheses:
 1. an Ongota early loan from PEC (Dullay: Gawwada č’eeq-t-e; Ts’amakko č’egde, Gollango k’eekte, etc.)
 2. an EEA word preserved in Yaaku.
 - Further doubtful lookalikes: Militarev (2006) compares Omotic Chara *suu-ta* and Maale *sugu-c* as well as Ma'a *sako*, *saho*
- Ongota caʃaw, Kw’adza ca?am (Ehret) ‘to drink’
 - Problems: the Kw’adza data
 - Note: both -aw (Inchoative) and -am (Passive) Cushitic verbal derivation markers.

A Dahaloan stratum?

t'uggʷa (**Dahalo**); *ts'úk'à* (**Sandawe**), *ts'ik'o* (**Hadza**) ‘smoke’. Absent in PEC and Ongota but apparently related to Shabo *č'imbo* (Aberra 2019).

- Bender (1971) lists:
 - North Omotic *c'ū:gʷa* (Oyda), *c'ūfo* (Kafa), Basketo *c'uyiʒ*, Wolaytta and Kullo *c'uwa*, Dache and Dorze *c'ua*, Maji *c'ubu*, Nayi *cubu*, Maale *c'ubi*; *c'ūb* (Bench), *c'ubo* (Kara) (Bender 1971);
 - South Omotic Dime and Aari *c'ū:bu*; cf. also Hamar *c'úba* (Petrollino 2016: 329)
 - Iraqw (South Cushitic *qui* (cf. also Militarev 2023 for other comparisons).

Possible ‘Nilo-Saharan’ strata (excluding Nilotic)

- Koman stratum
- *ka?uko* 'dog' (**Kw'adza**) (Ehret, n.d.); *k'áw* Komo **k'áw* PCtrl Koman (Otero 2019) (but also cf. /ká:kà/ 'dog' (Sandawe) (Elderkin 1983))
- *sgilli* 'claw' (animal) (**Yaaku**) (Bender 1971); *θ'igil* 'claw' (animal) (Central Koma); *c'ik'ir* 'claw' (animal) (Langa) (Bender 1971); (but also cf. *xac'ił* 'claw' (animal) (Xamtanga) (Central Cushitic) (Bender 1971))
- *titʃ'i-* 'black' (**Hadza**) (Miller et al. 2023); *č'iini* 'black', *č'iin*, *č'in* 'black, blue' (**Shabo**) (Daniel Aberra 2019) ; **s'íd* v. ‘black (be)’ Reconstructs to: PCtrl Koman (Otero 2019) (also cf. *ts'ia* 'black' (Karo), *ts'id* 'black' (Bencho, She), *ts'i'a* 'black' (Banna=Hamar) (Bender 1971))
- *wiʃi-* 'root' (Hadza); *bìl* (Komo), etc.; (but cf. B *-yídí, Nyaturu *mwiri*, PWR *weeli* 'bark rope'; *fiili* 'root' Berta (Neudorf 2014))

Problems identifying ‘Nilo-Saharan’ strata (excluding Nilotic)

- Surmic strata
- 'ear' *nibe* 'ear' (**Yaaku**) (Eastern Cushitic) (Bender 1971); *neba* 'ears' (Me'en), *nābí* 'ear' (Chai) (**Surmic**) (Moges Yigezu 2001: 402); [but also cf.: *nεbe* 'ear' (**Baiso**), *naba-* 'ear' (**Konso**), *ne'bi^h* 'ear' (**Arbore**) (Bender 1971)]
- 'mountain' *kuttunko* (**Ongota**) (Savà & Tosco 2000); *kúttúl* (Mursi) (Chai, Baale have similar forms) (Yigezu 2001: 378); *kùrúg* (**Kwedu**) (Bender 1971) [**but** this is not a direct loan: *kuttonko* (Ts'amakko) (PEC) (Savà 2005)]
- 'name' *sááre* (**Dahalo**); *sárá* (Mursi), *sará* (Baale), etc. (cognate in 8/10 Surmic lgs., Yigezu 2001: 379) (cf. Swahili: *sáre* 'birth name' Sacleux 1939-1941)
- 'night' *baliko* (Kw'adza) (Ehret, n.d.); *báálin* (Murle) (Surmic), etc. (Yigezu 2001: 379); but cf. *bar* Saho, 'Afar
- **Shabo**: recent Majang (**Surmic**) loans (cf. Fleming 1990, Jordan et al. 2015), e.g. 'egg', 'louse', etc., e.g. 'bark of a tree'
 - *ork'an*, *orkan* (**Shabo**) (Daniel Aberra 2019); *ɔrkán* (Majang) cf. *úrkù* (**Kwedu**) (Surmic); cf. *orgn* (Maji), *orkn* (Nao), *ɔrkn* (Sheko) (Bender 1971)] In 10 lects in Yigezu (2001) only Majang has an obvious cognate *ɔrkán*, Kwedu's close relative Koegu has a different word (Inui 2011)
 - *dimu* 'rain' (n) (**Shabo**) (Jordan et al. 2015); *təm^u* (Murle); *tammu* (Narim, Tennet, Didinga, etc.) (Yigezu 2001)); [**but**: *t^hul* (Majang); *idamo* (Baiso), *dəmma* (**Gumuz**) (Bender 1971)]

Problems identifying older “Afroasiatic” strata

- HEC stratum?

- *wuri* 'cloud' (**Chabu**) (Daniel Aberra 2019); e.g. *wuriira* 'smoke' (Hadiyya), *hurre* 'fog' (Gedeo) (Hudson 1989) (but cf. Oromoid)
- *mana-* 'meat' (**Hadza**) (Miller et al. 2023); e.g. *maala* (Burji, Gedeo, Kambaata, Sidamo), *maara* (Hadiyya) (Hudson 1989) (but cf. *maal-e* (Gawwada) 'property, wealth', and I > n is questionable)
- *erútsón* 'new' (Ik) (Schrock 2017); *haareechcho* (Hadiyya) (Ritter 2018), etc.; but cf. Gimjan (e.g. *orets* 'new' (Dache) (Bender 2017)

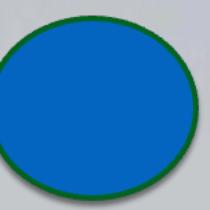
- PEC stratum

- e.g. 'long' *zikibòn* (Ik) (Schrock 2017); Ts'amakko: *zigaba* (Bender 1971) *zigam* (Savà 2005); *sikaap-a* (Gawwada) (Tosco 2022)
- possibly also 'to bite' *gañ-* 'bite' (**Ongota**) (Savà & Tosco 2000); *qaw* (Gawwada) (Tosco 2022), *q'aw* (Ts'amakko) (Savà 2005) (**Chabu** form *k'aw-ge* is a recent loan from Ts'amakko); but cf. Surmic; **Dahalo** (*k'añ-*, *kad'añ-*)
- 'moon' [lèhɛ́kʷ] (Winter, n.d.) *leheuk* (Maguire 1928) (**Aasax**), *l'éhe* (**Elmolo**) (Heine 1980); *leññ-o* (Gawwada) (Tosco 2022) vs. **slahhaangw* (PwR) (Kießling & Mous 2003)

- Omotic stratum?

- *áts'és* 'bite' (Ik) (Schrock 2017); e.g. *sets-* 'bite' (v.) (Dorze) (Bender 1971); (but cf. Surmic, **s'uns* 'bite' (Otero 2019: 415)

Conclusions



Pros

- Lexical connections between languages of East African foragers not otherwise explained
 - EEA as a cover term for a mosaic of languages of East African foragers (either in existence or as lexical strata)
- Lexical connections between languages of East African foragers and different East Cushitic groups not otherwise explained

Cons

- Patchy knowledge of languages and lexica
 - Limited number of languages and contact situations taken into account
 - No regular sound change
- Evidence is patchy (lookalikes almost never surface in all the languages)
- Is the number of lookalikes above chance rate?

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