

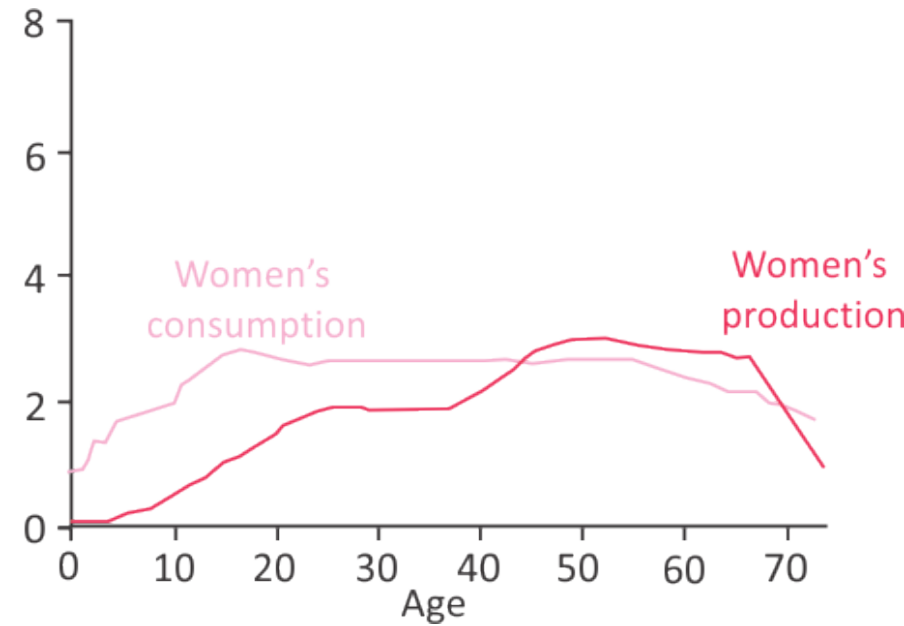
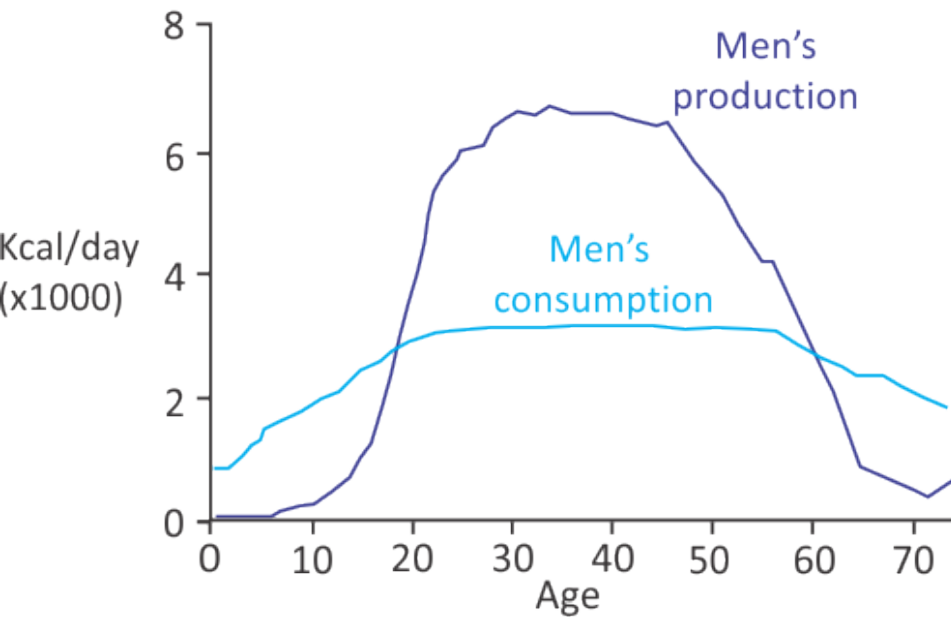
Beyond kith and kin

How culture transformed human cooperation

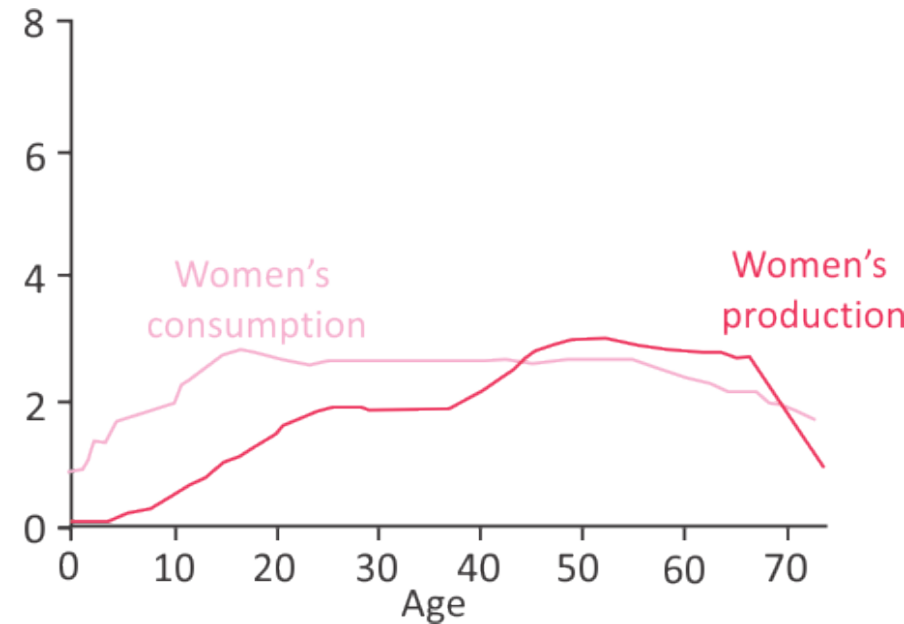
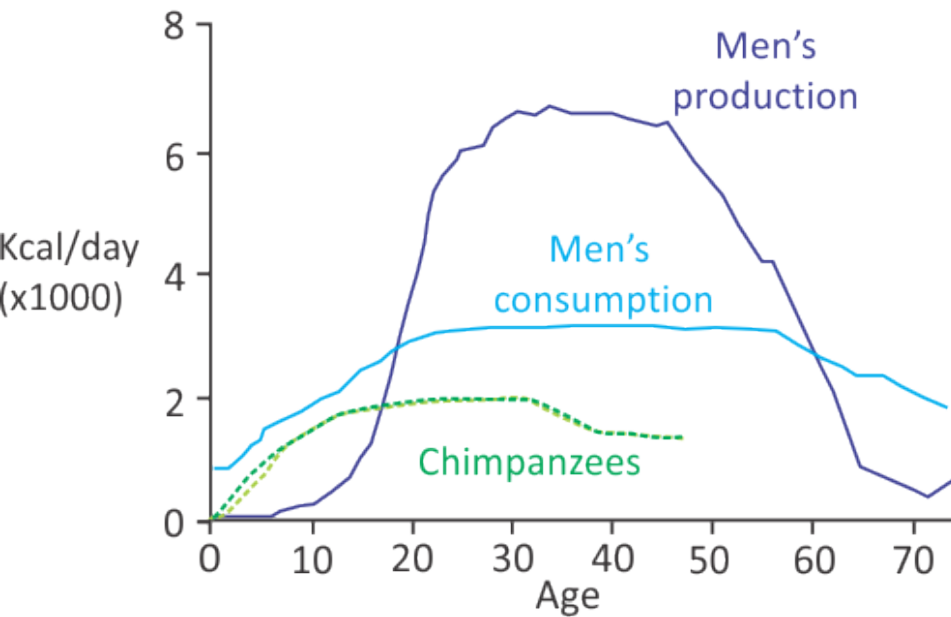


Look at this lead pencil. There's not a single person in the world who could make this pencil...

Ache & Hiwi foragers



Ache & Hiwi foragers



There is nobody in this
country who got rich on
their own.

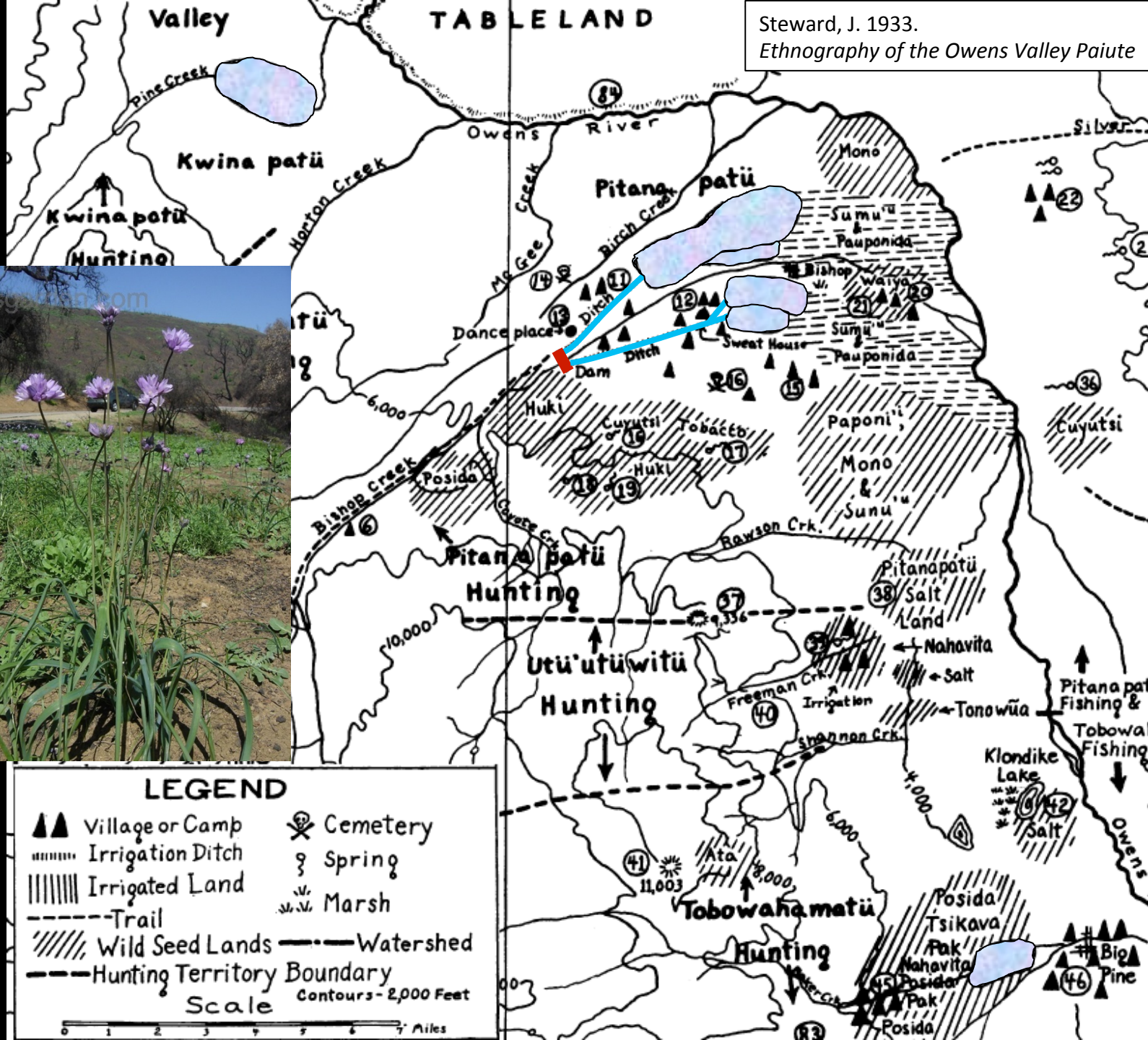
Nobody.

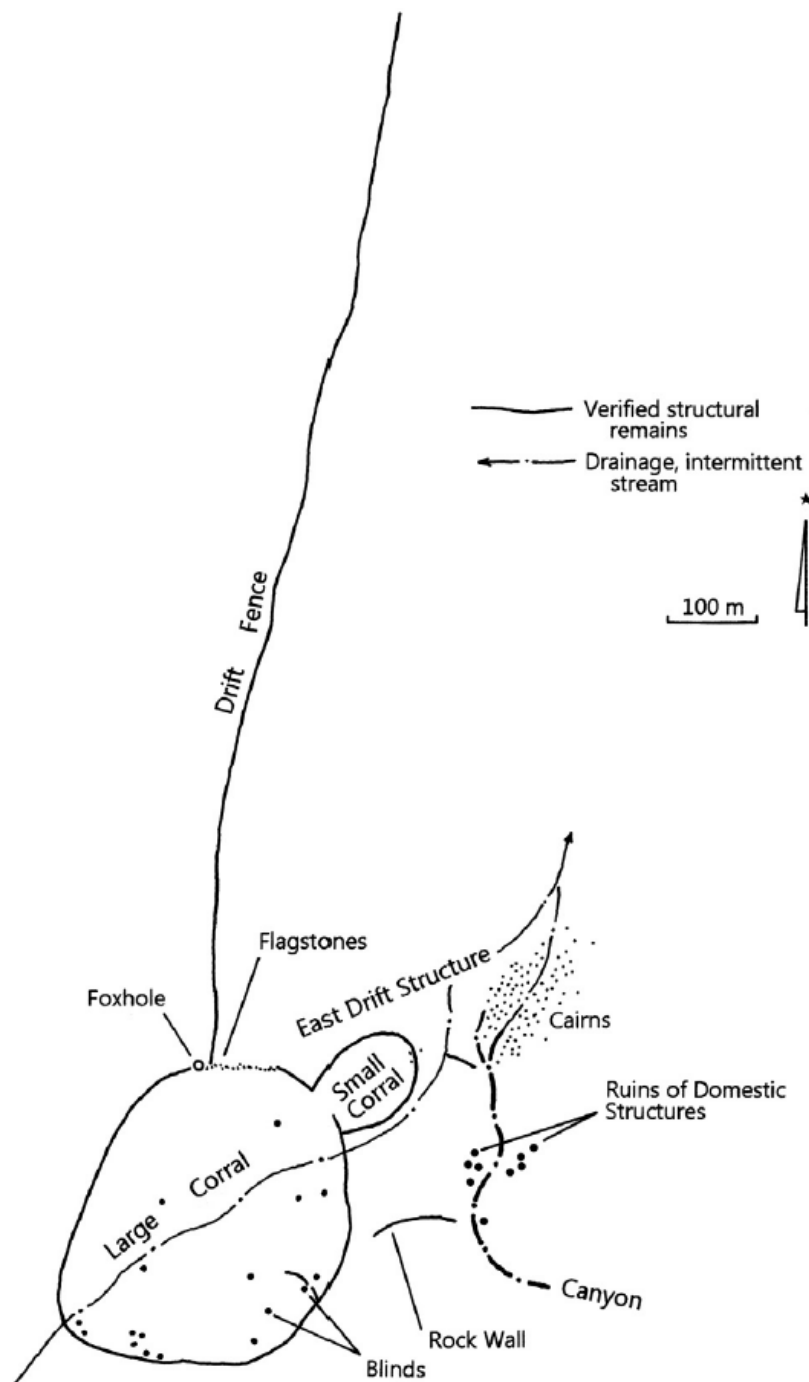


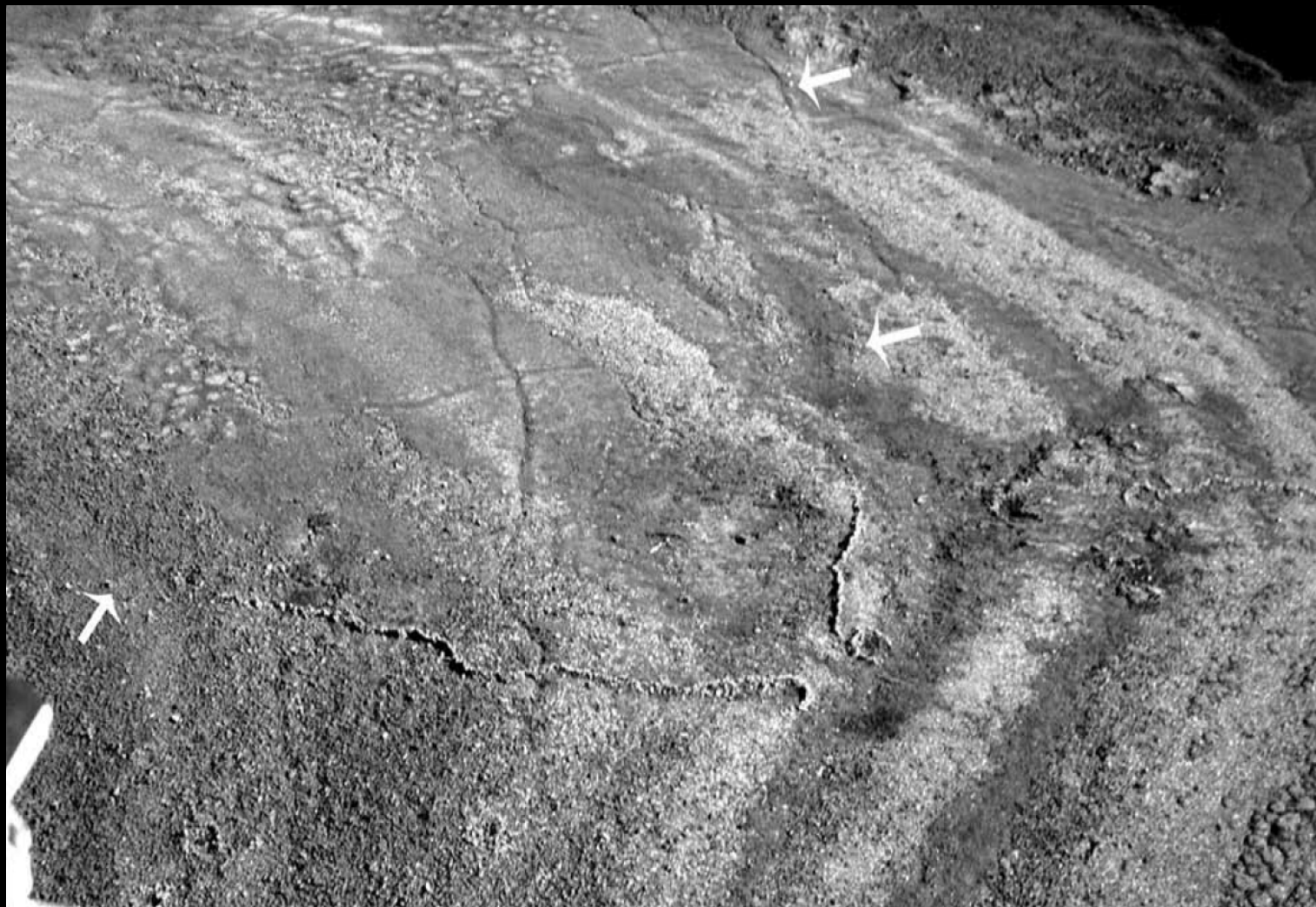


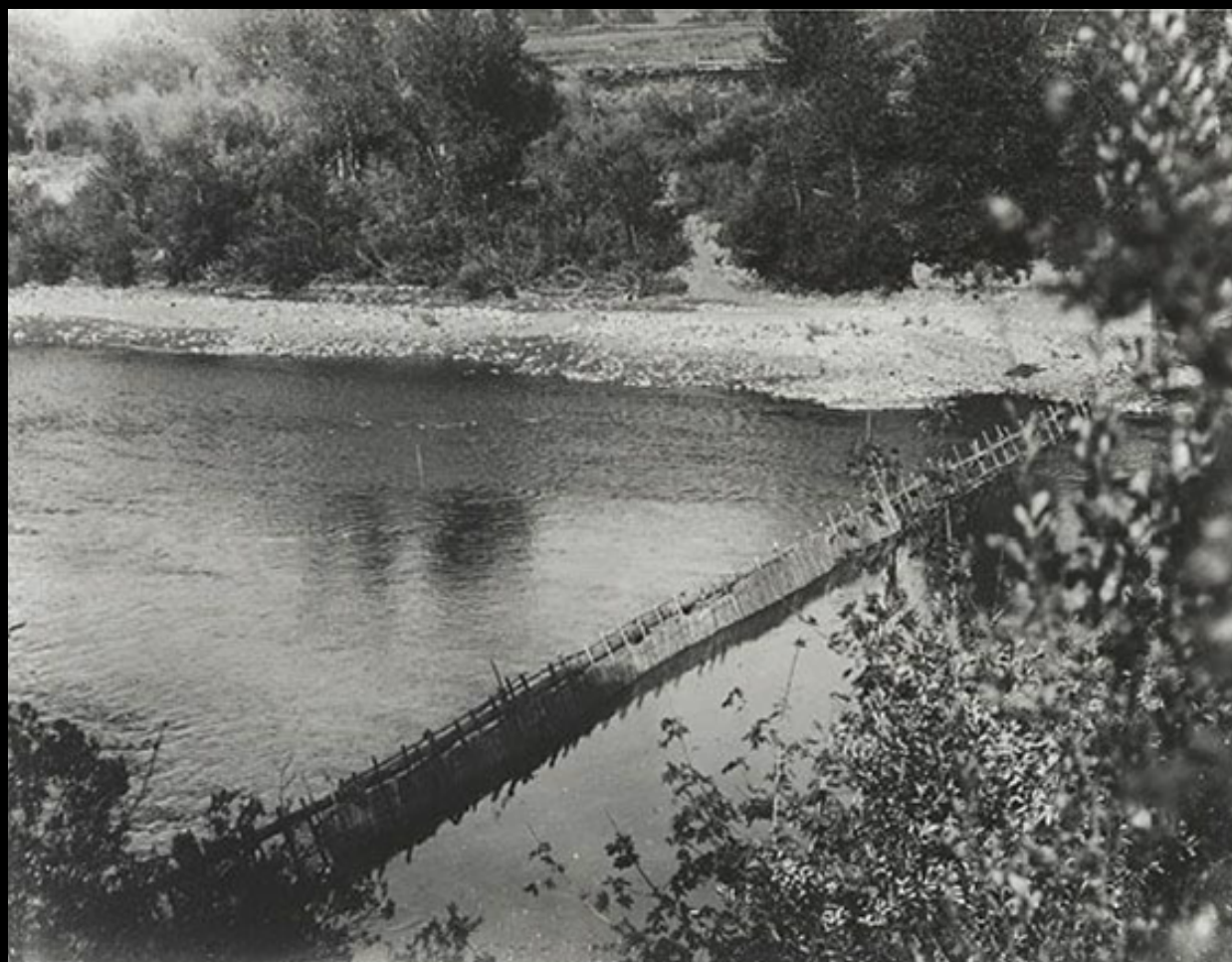
Steward, J. 1933.

Ethnography of the Owens Valley Paiute

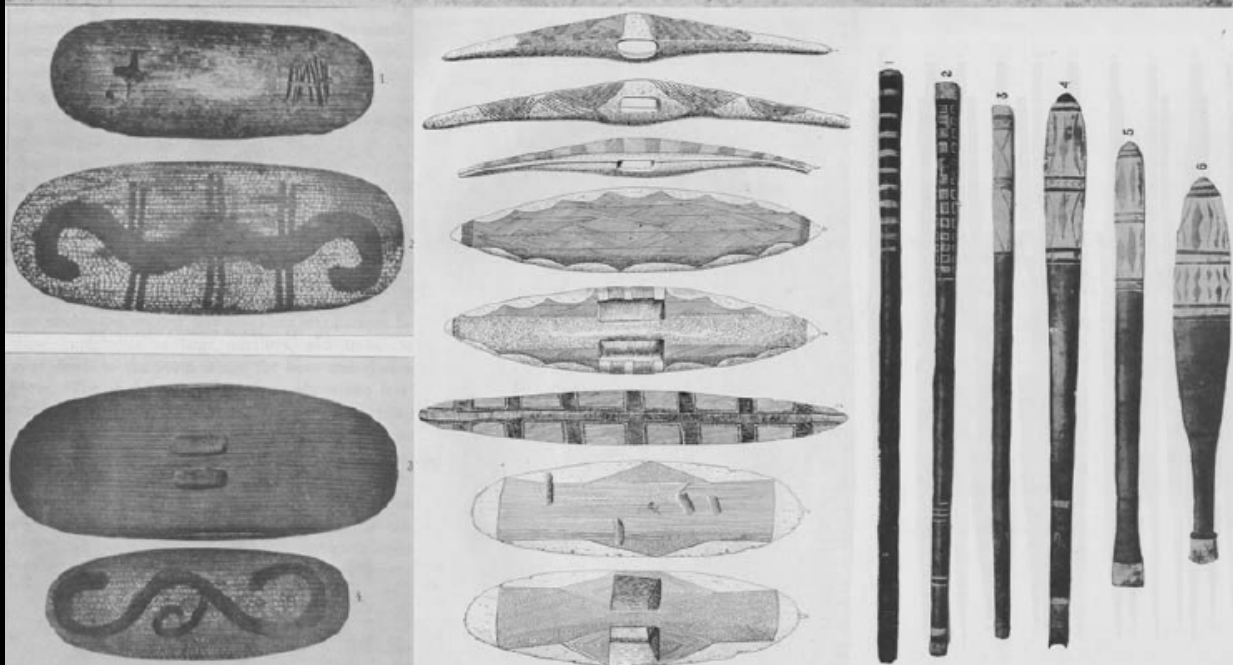
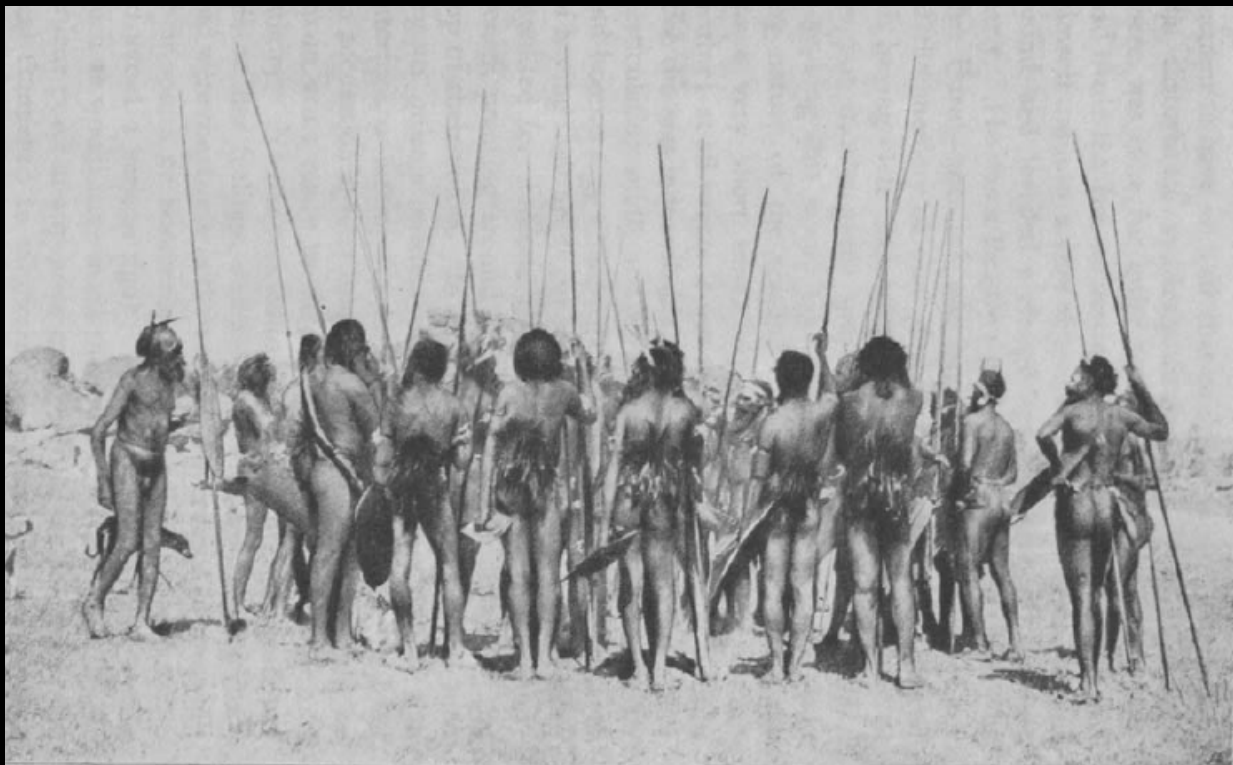


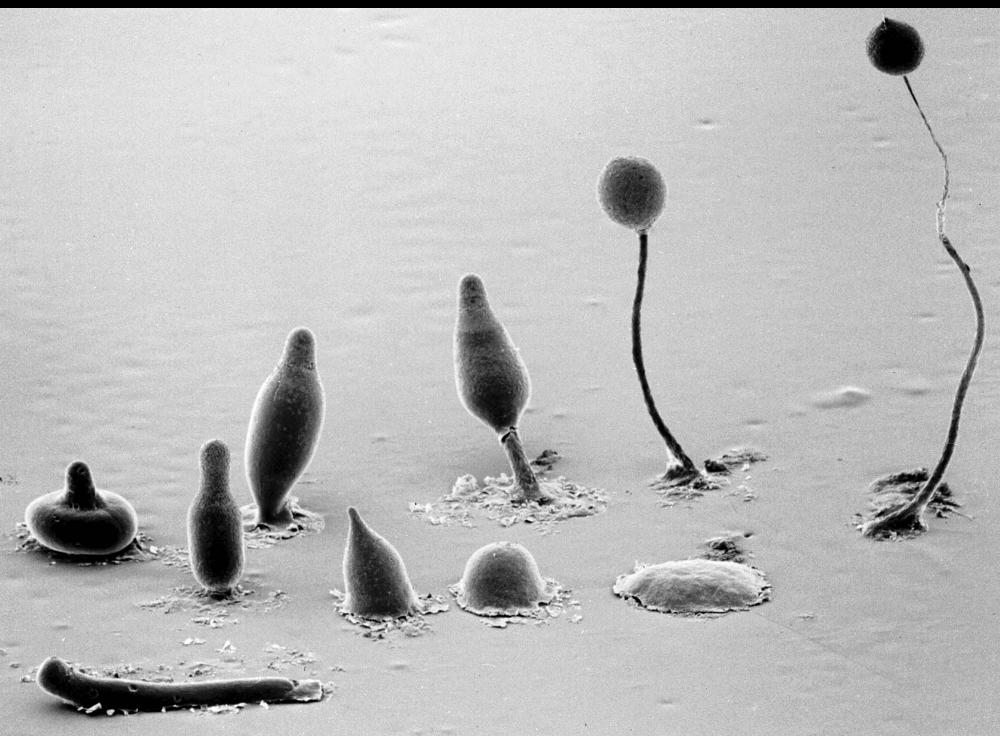


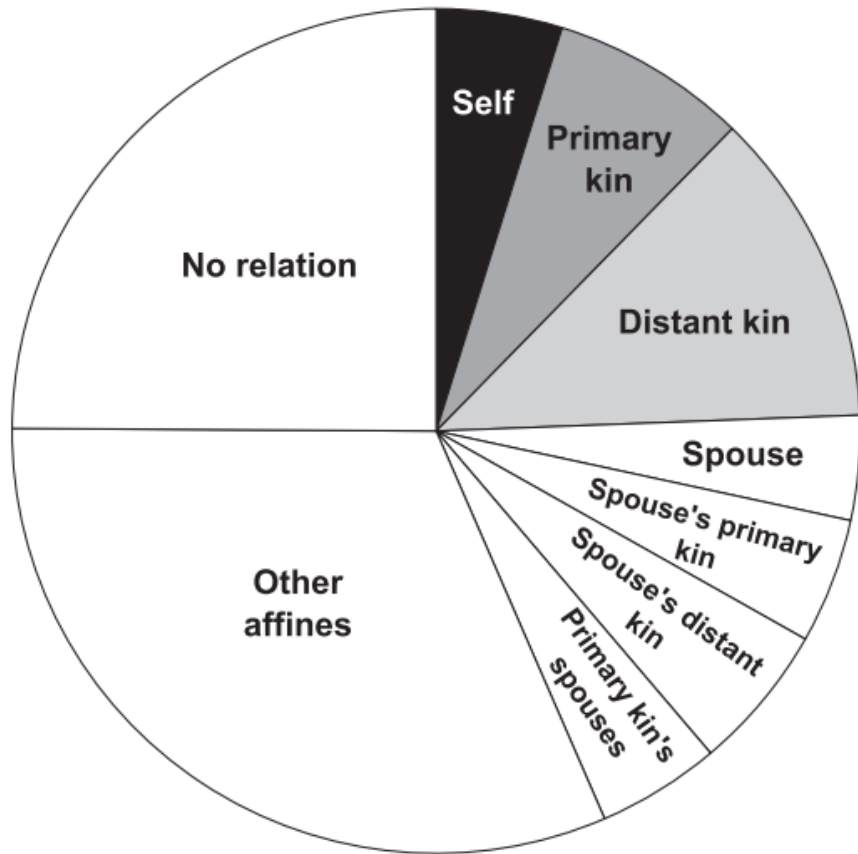




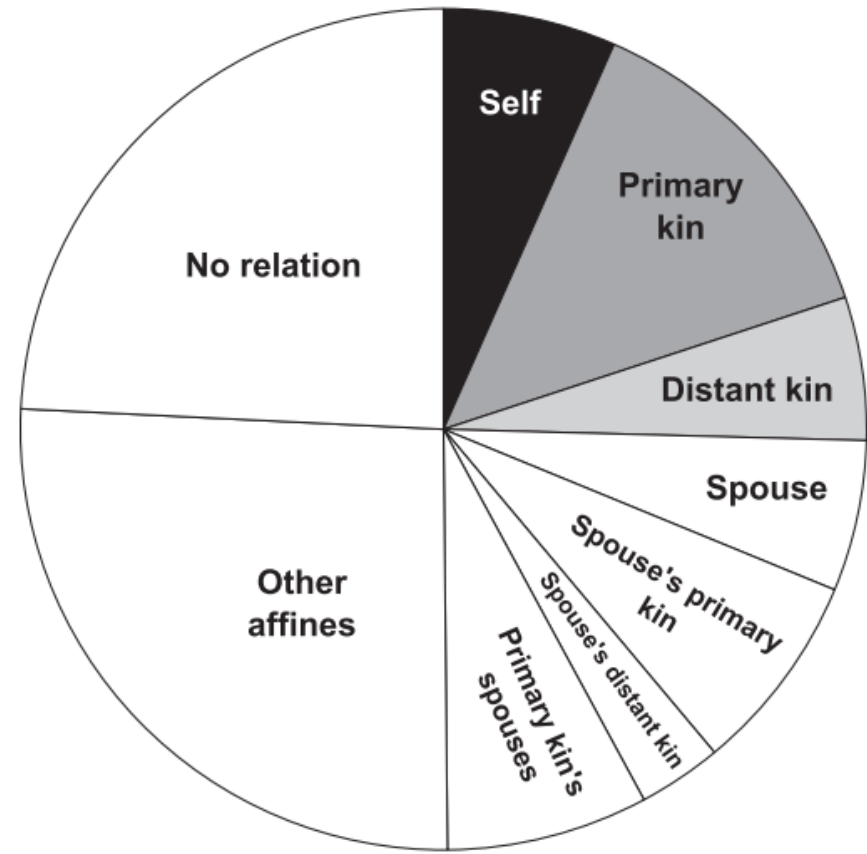




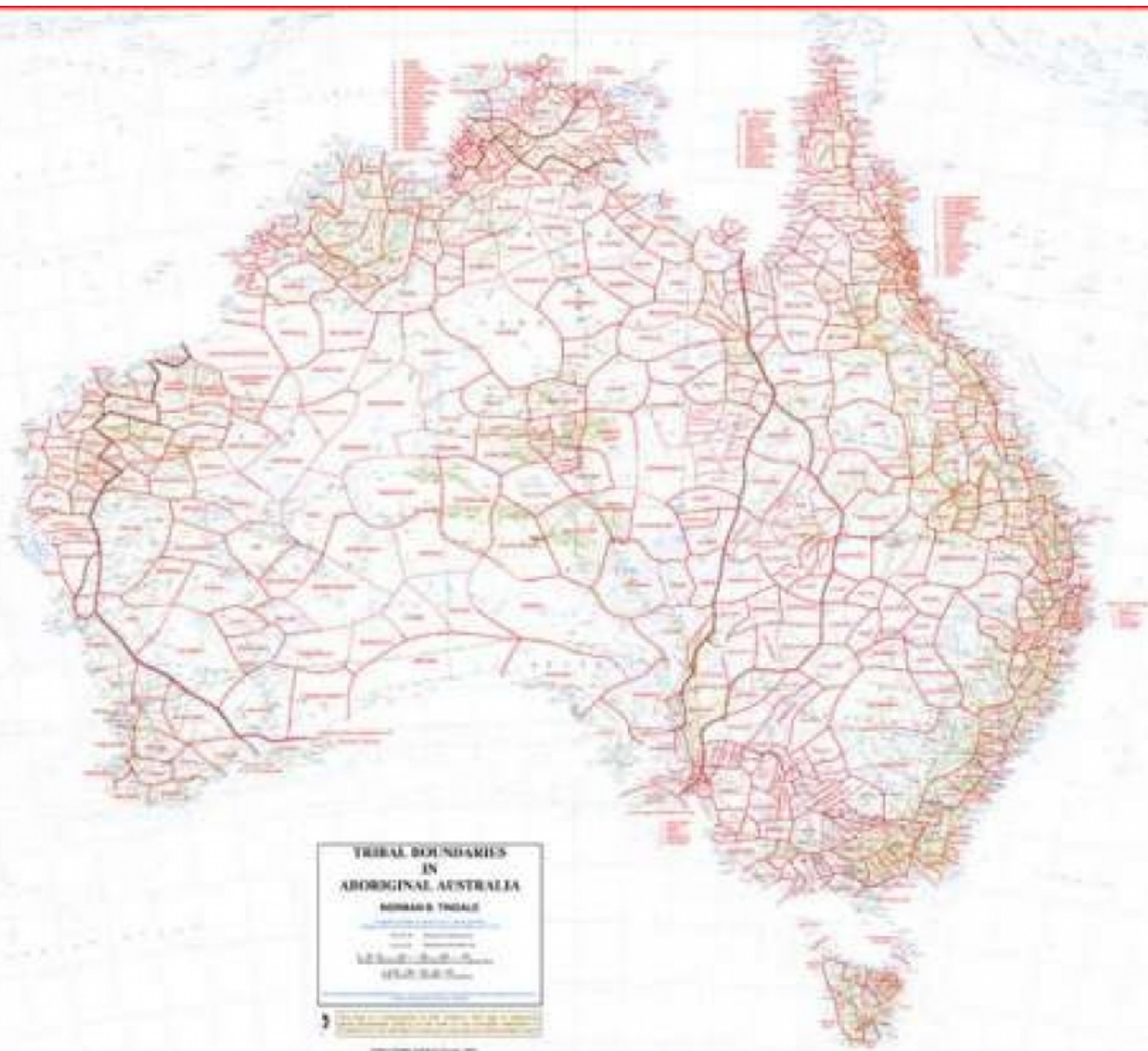




Ache



Ju/'hoansi



**TRIBAL BOUNDARIES
IN
ABORIGINAL AUSTRALIA**
MURRAY & TINDALE
1915
1:1,000,000
1915
1915

So, it must be reciprocity

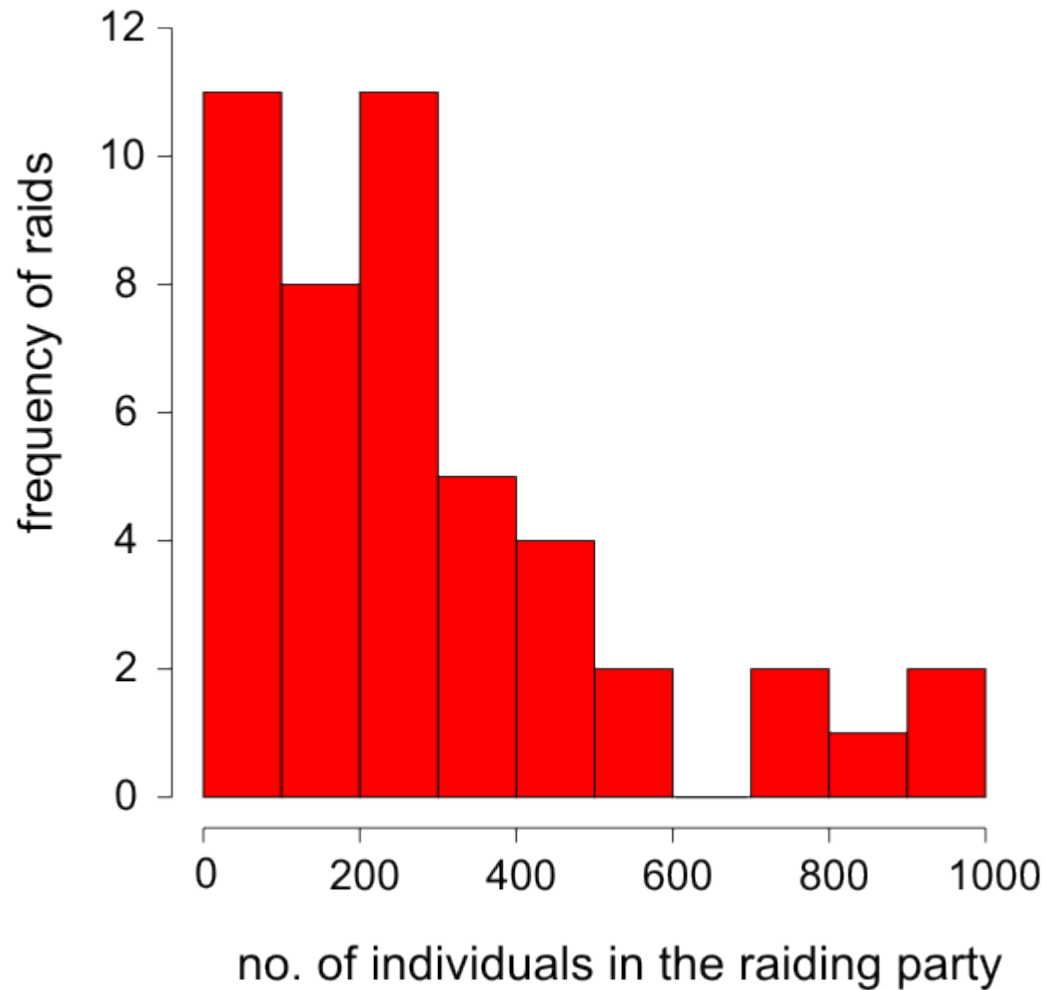
Size matters







Turkana war parties are large



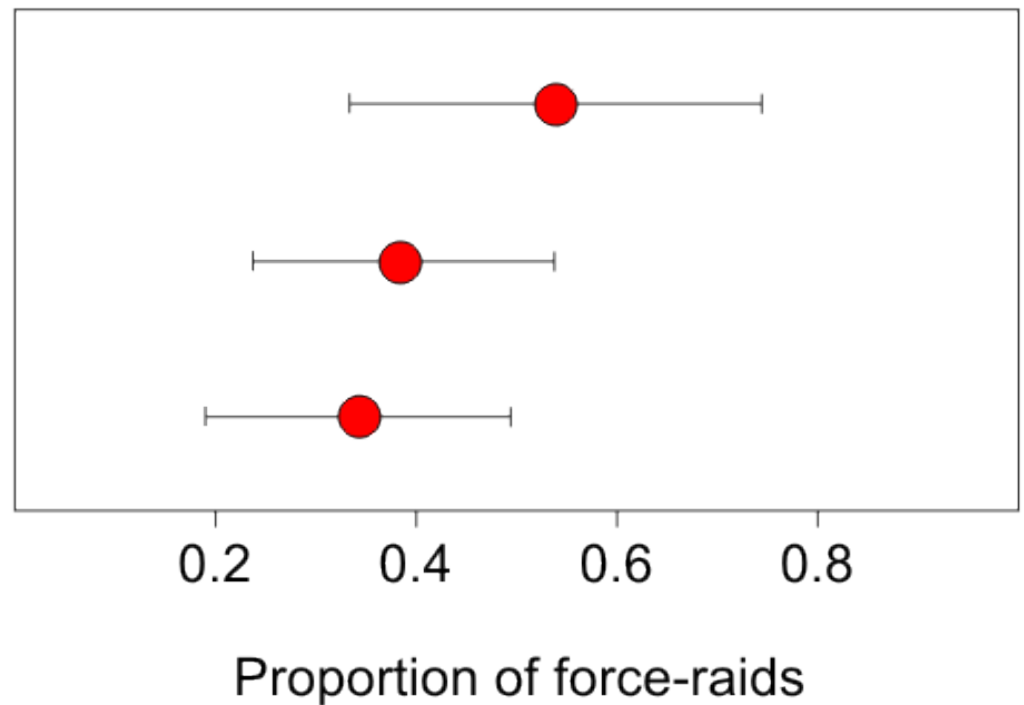


Free riding is common

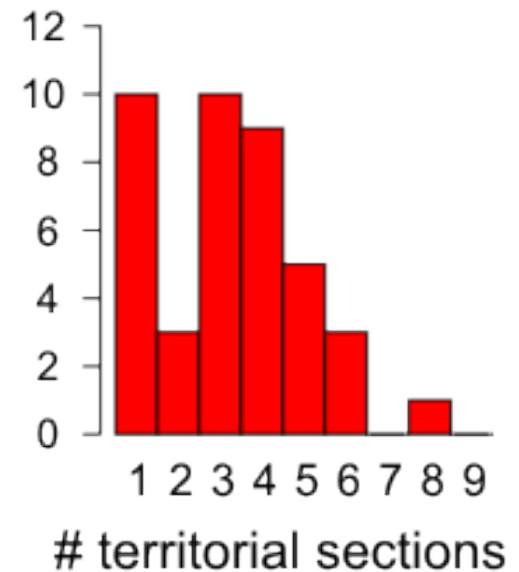
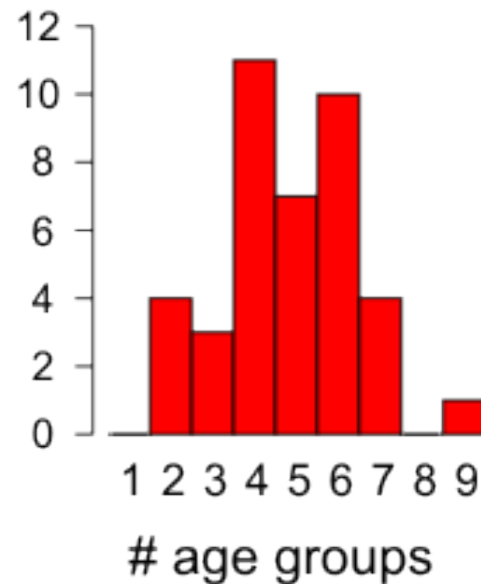
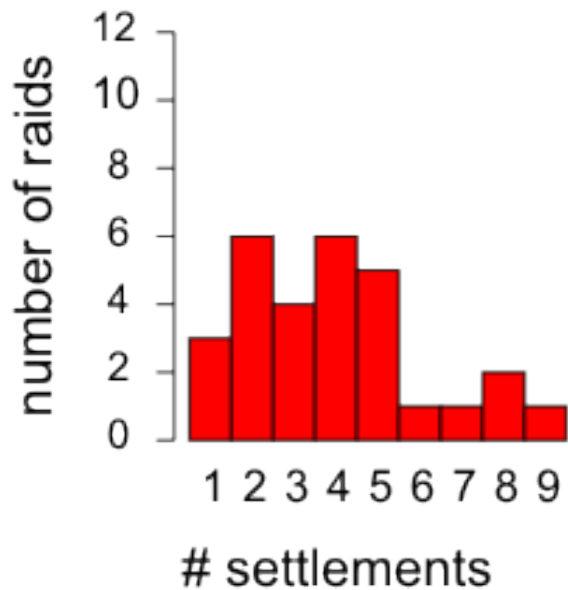
loot sharing system failed

desertion

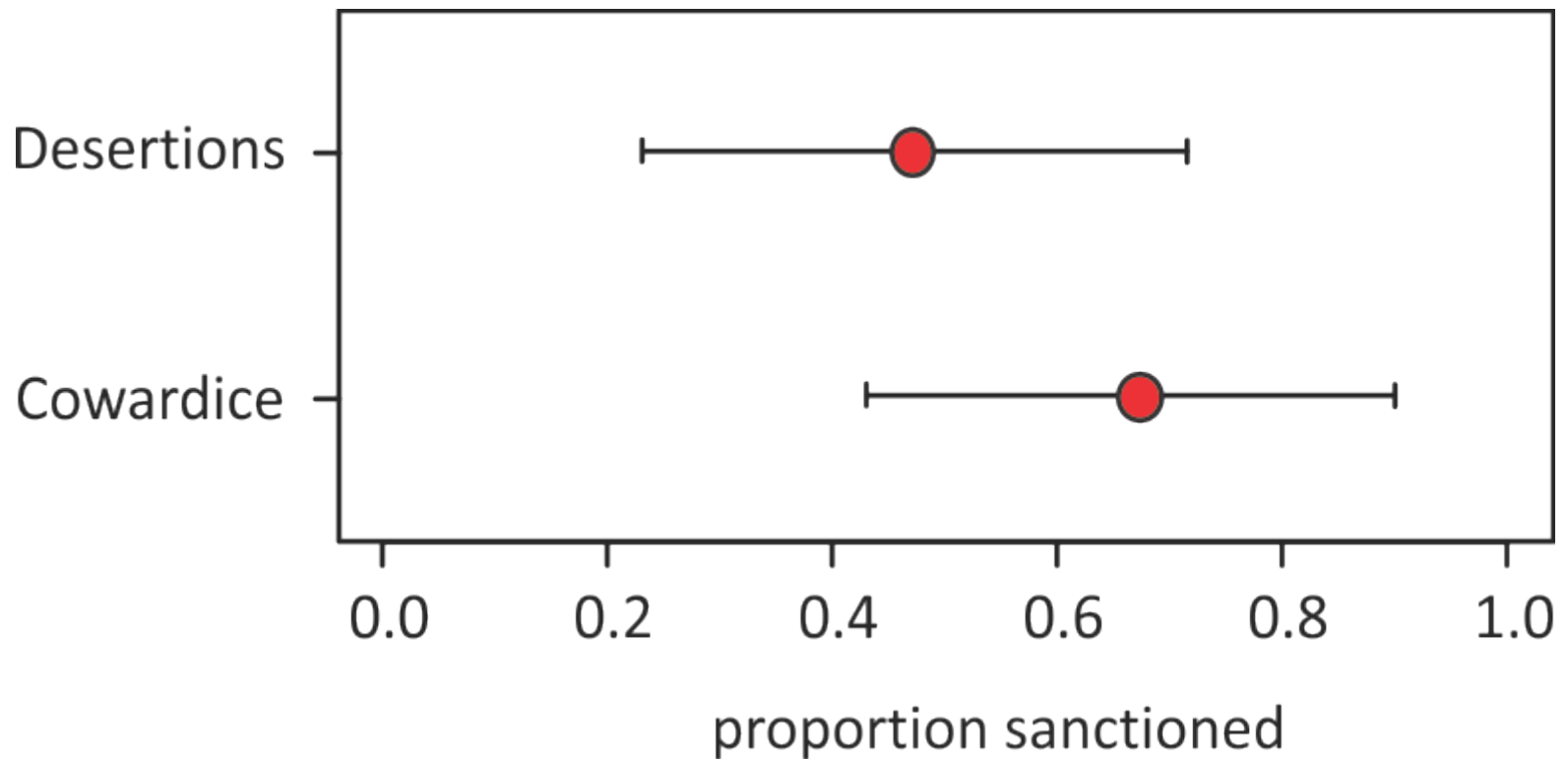
battlefield cowardice



War parties include many strangers



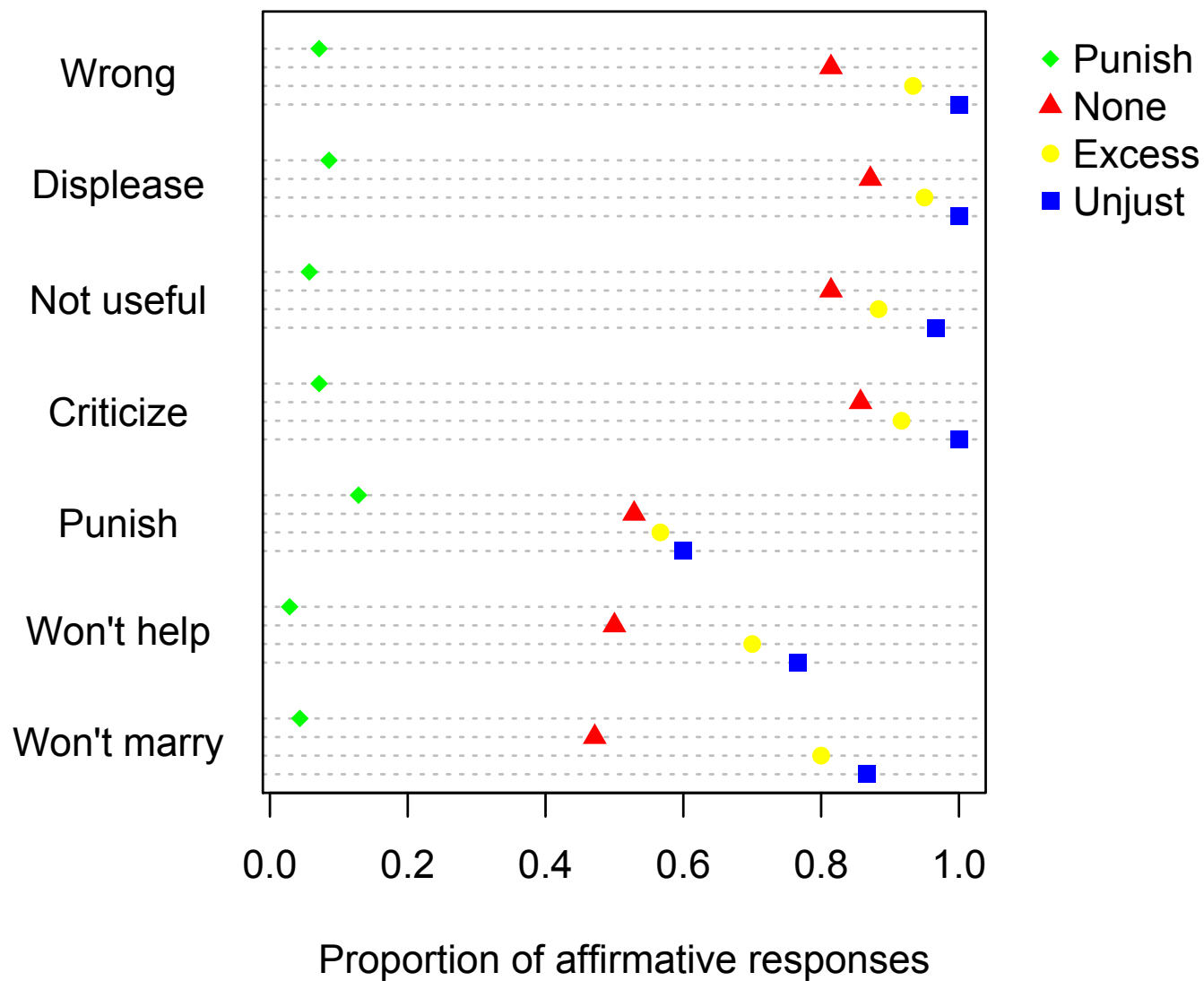
Free riders are punished by community





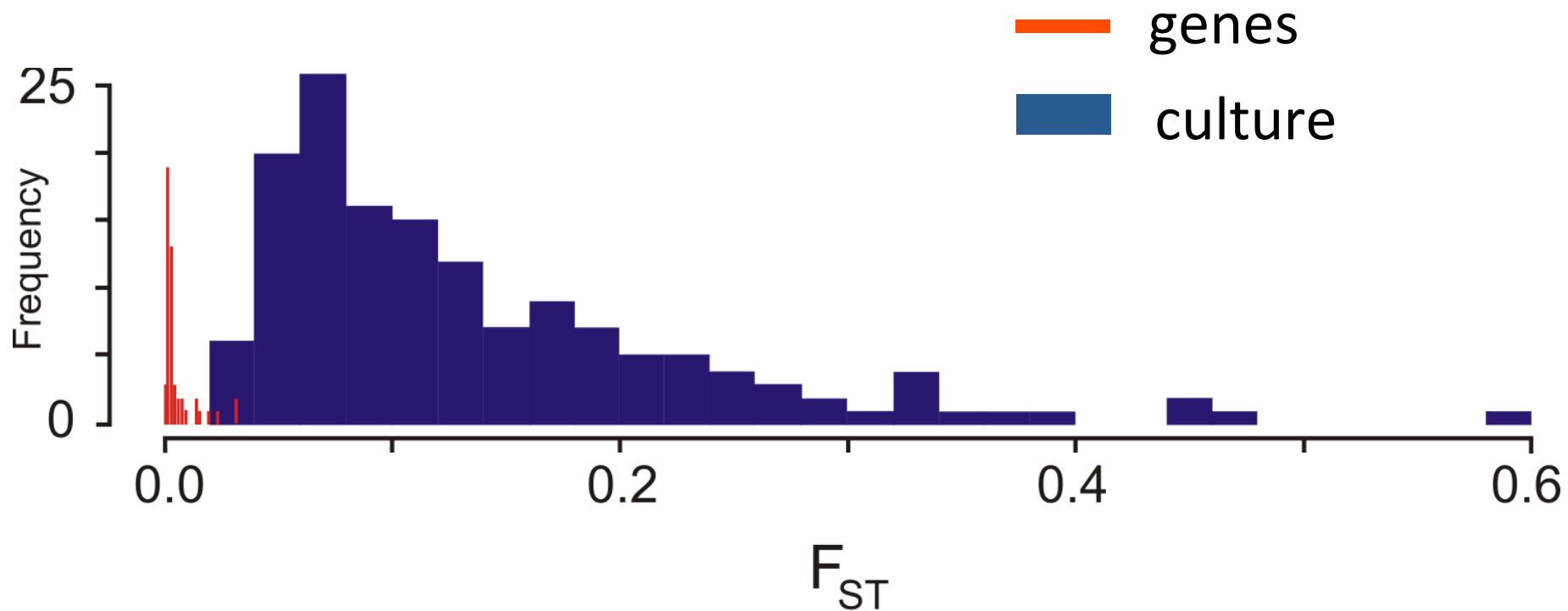
Why punish?



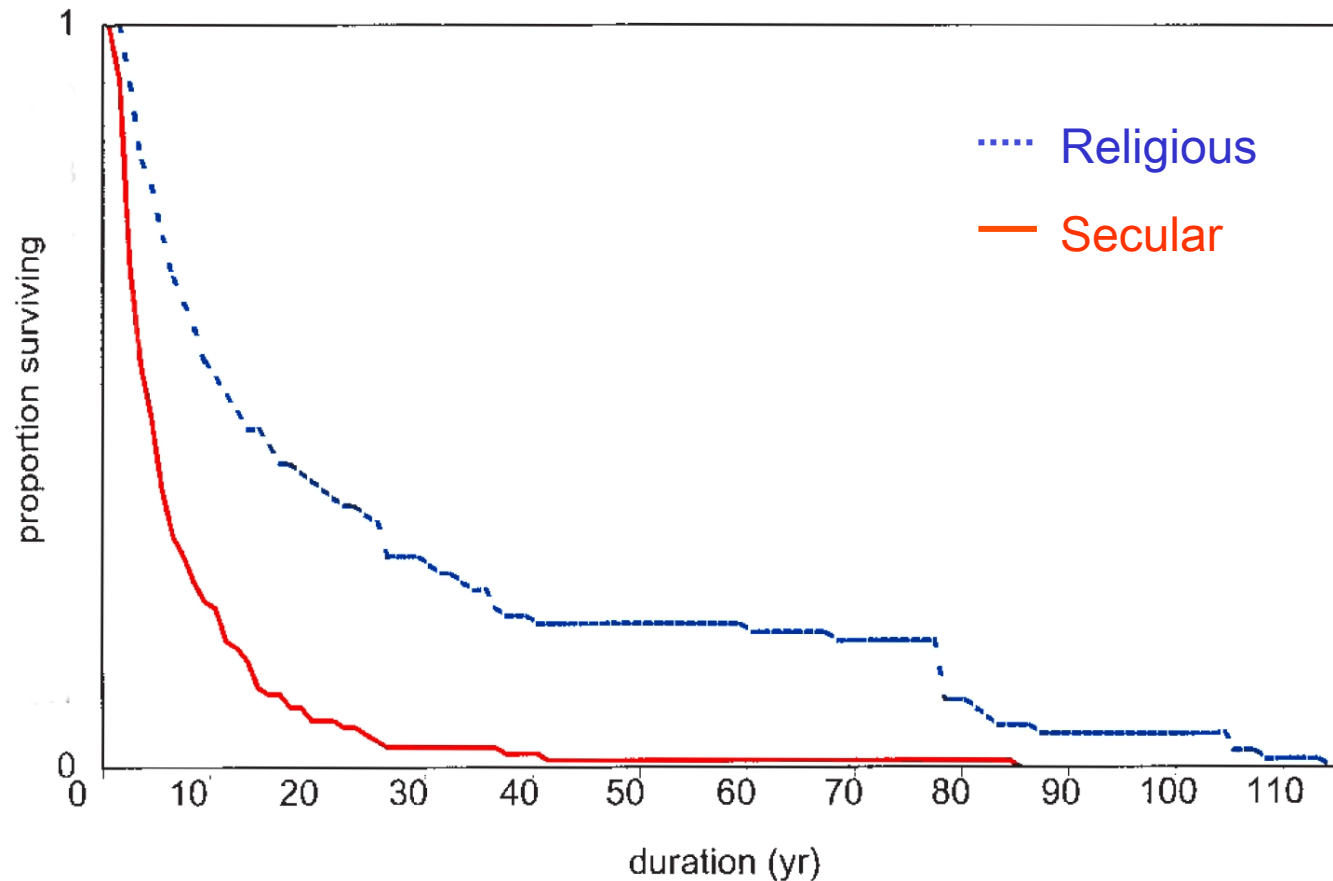


Norm content depends on equilibrium
selection mechanisms

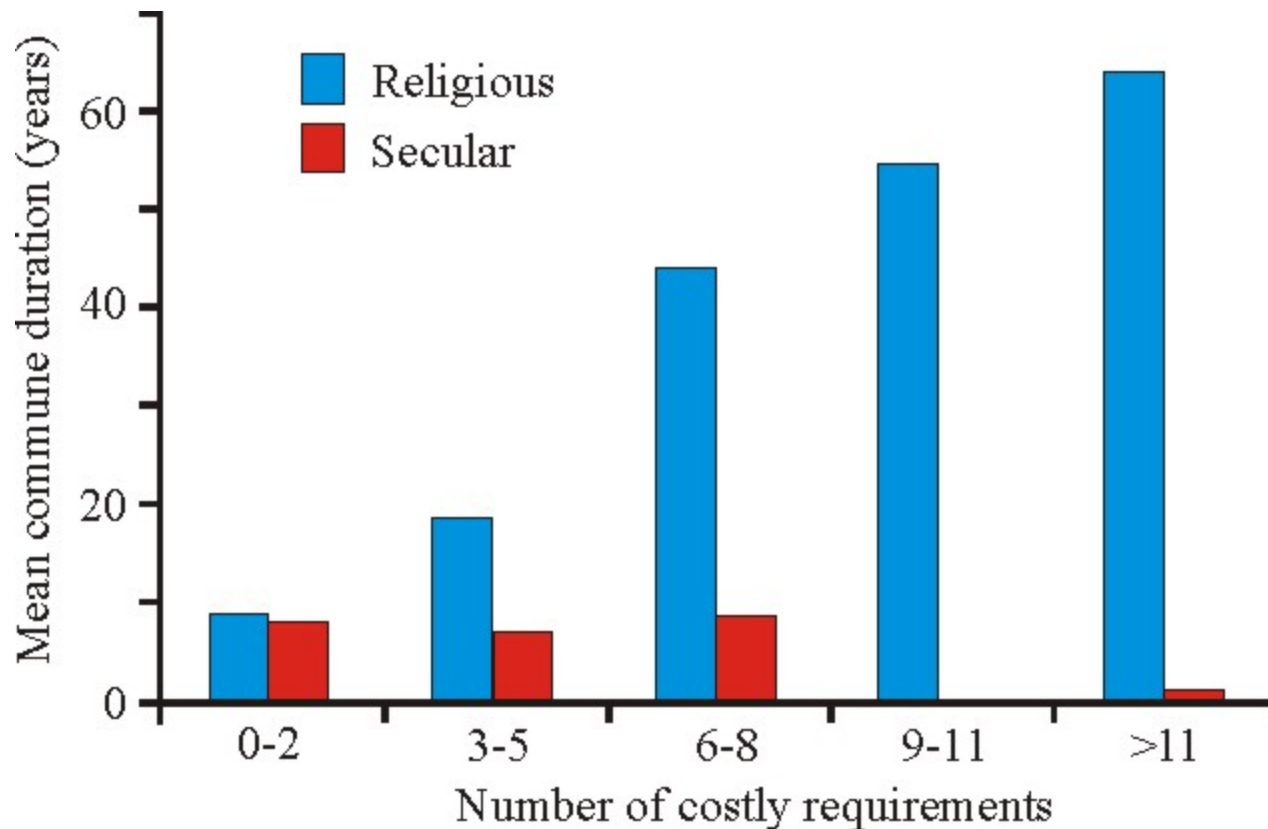
Much more cultural variation than genetic variation among contemporary nations



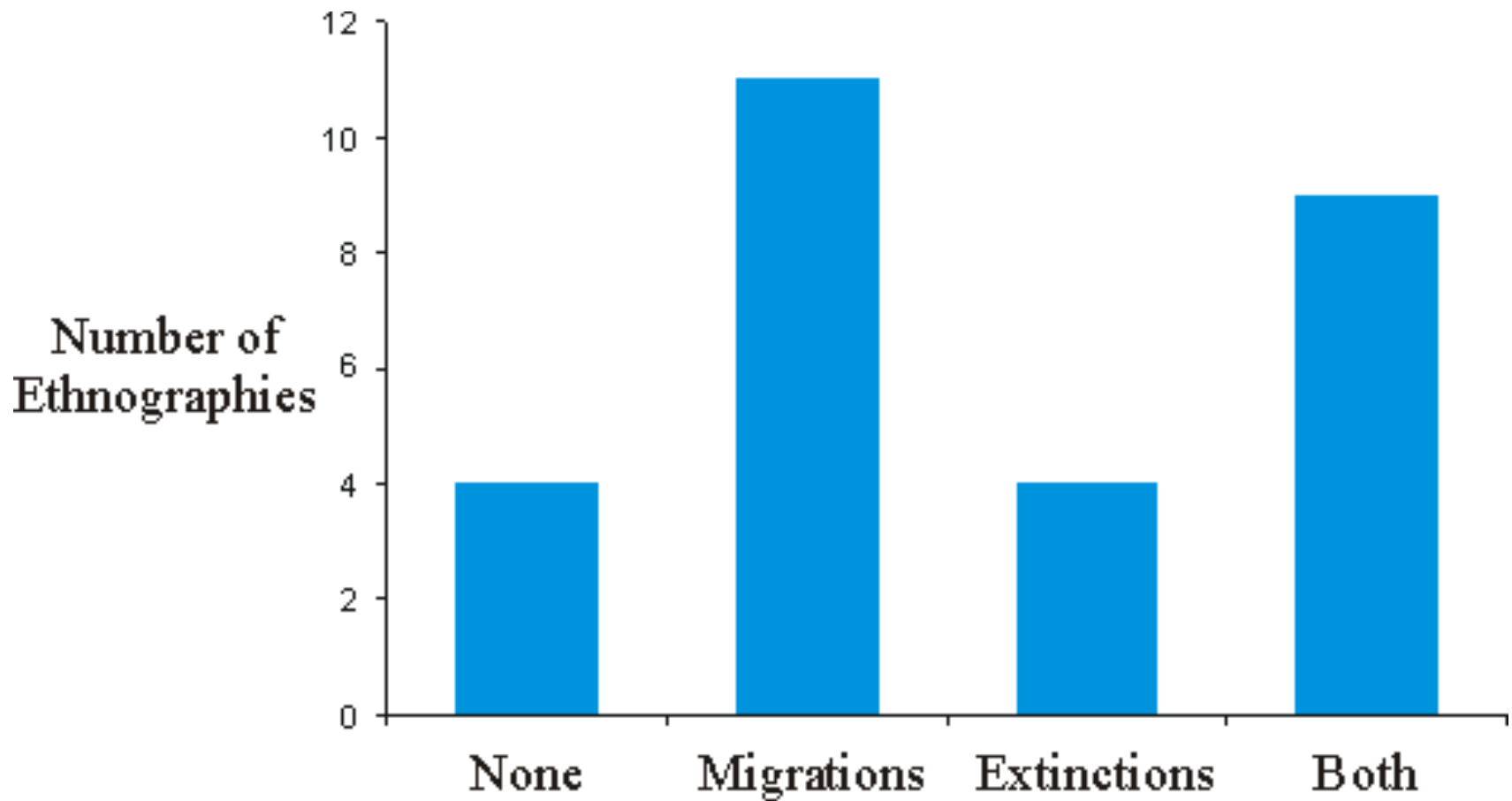
Religious belief enhances survival of utopian communities



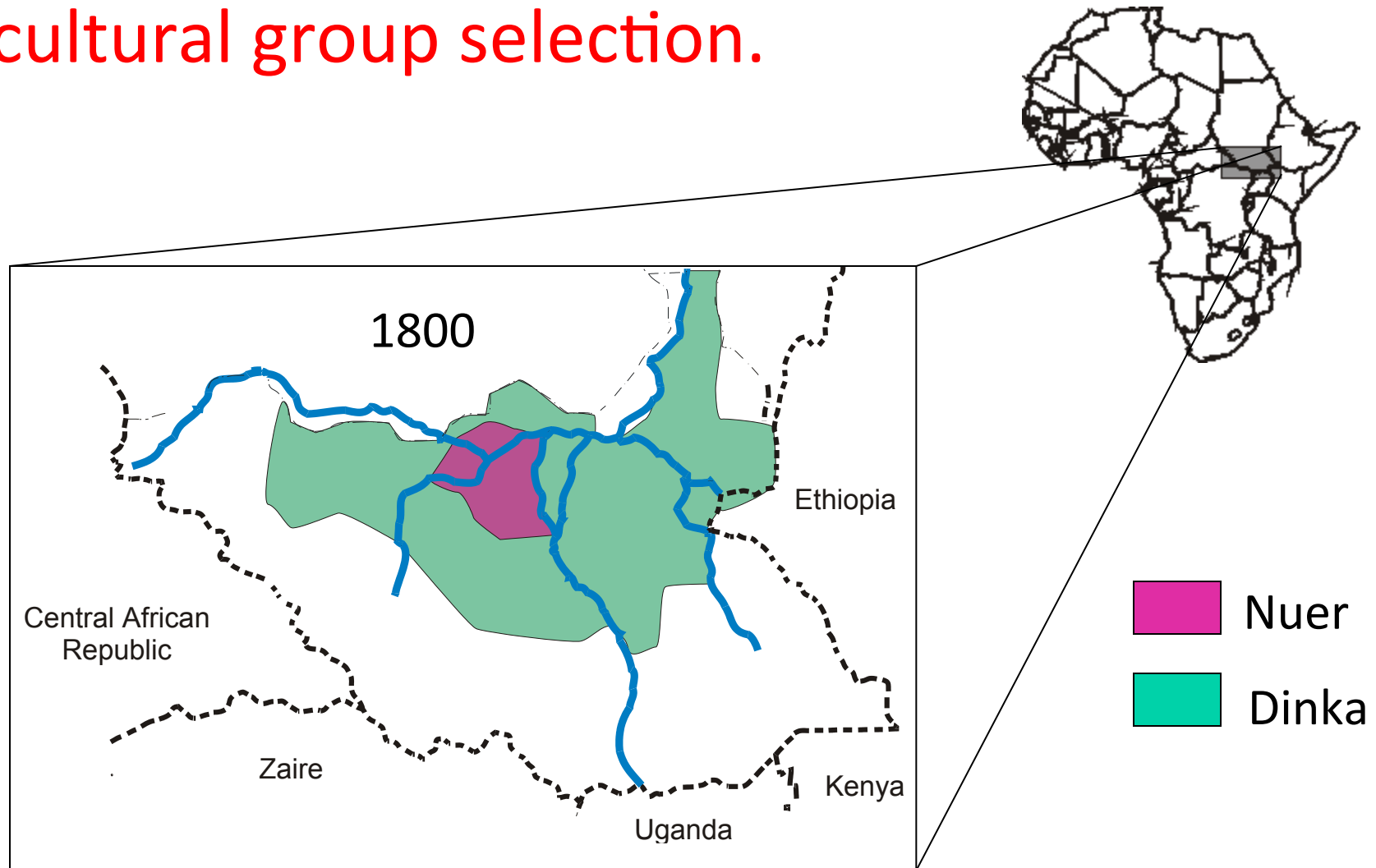
More committed religious communes survive longer



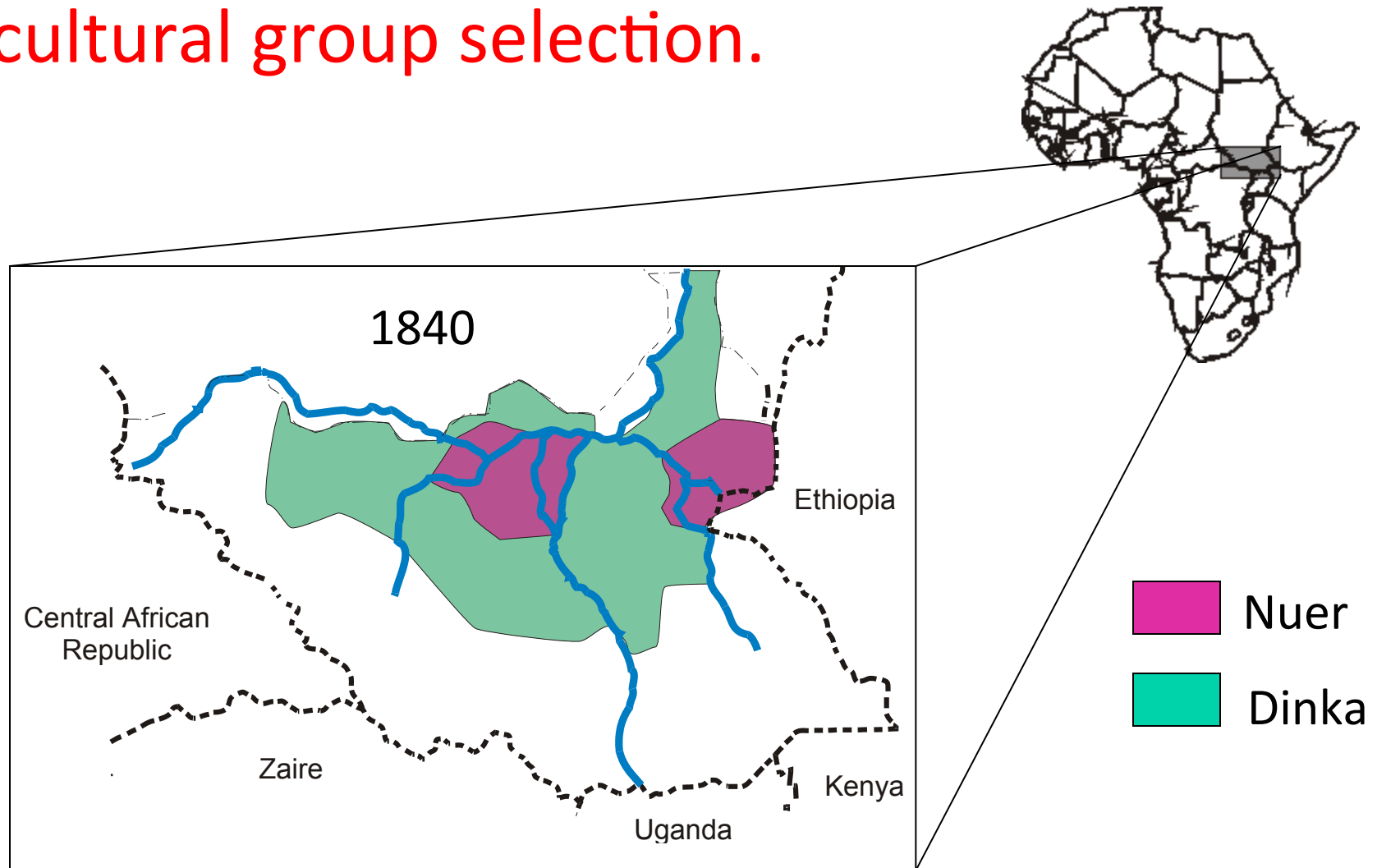
Extinctions common in New Guinea



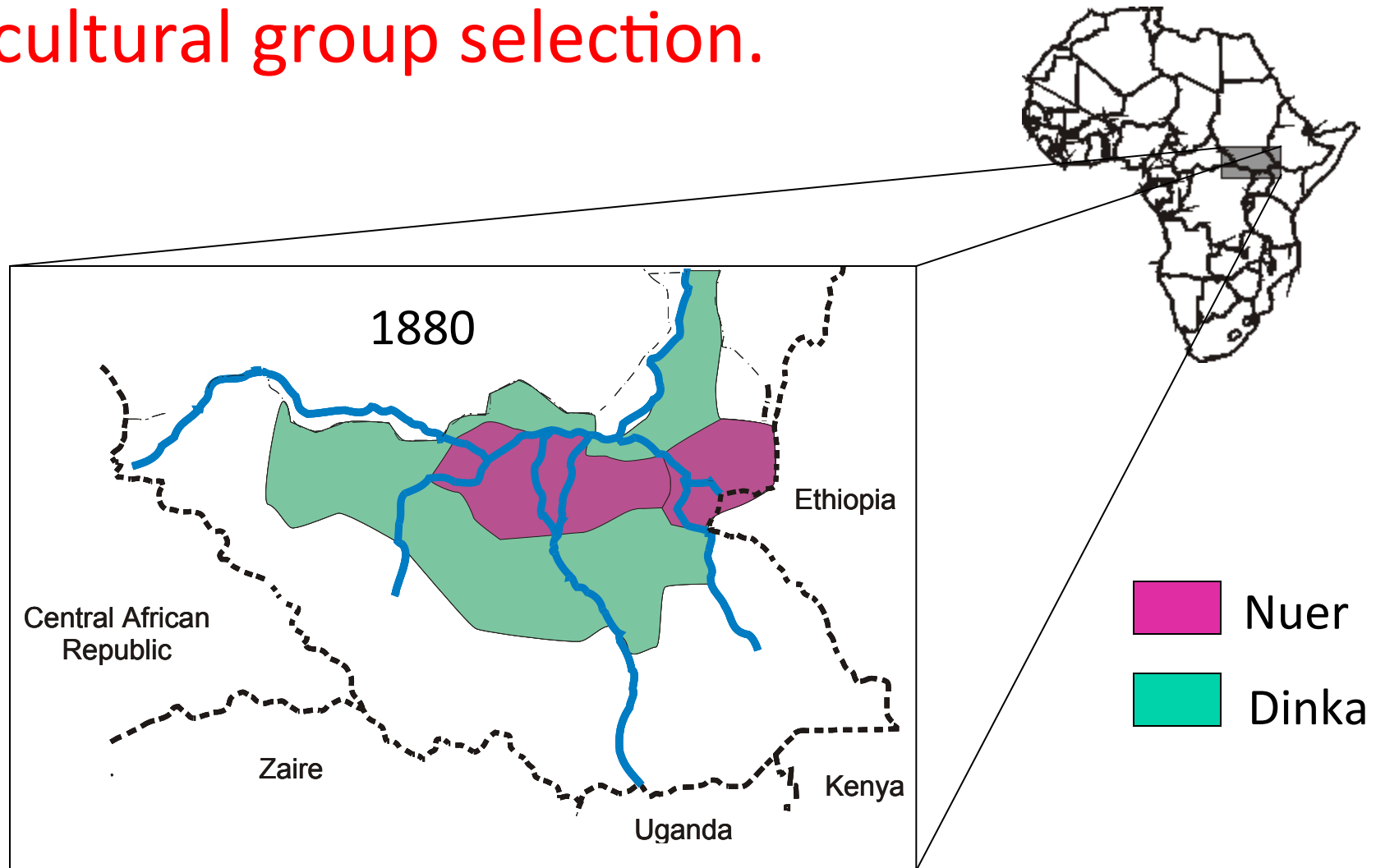
Nuer expansion an example of cultural group selection.



Nuer expansion an example of cultural group selection.



Nuer expansion an example of cultural group selection.





KING'S COLLEGE to Wit—a practical Essay.

London, B. 1829 by S. W. Jones 41 Piccadilly
 The D—ke when marshalled in the tented field,
 To no aspiring enemy would deign to yield;
 Shall he when dignified by Royal favor
 Submit to insult by each.....? No never!

$$rb - c > 0$$

Kinship

Reciprocity

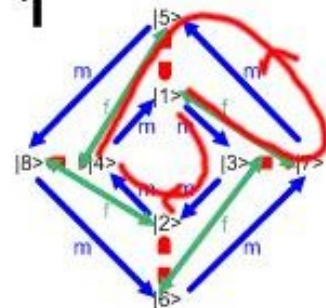




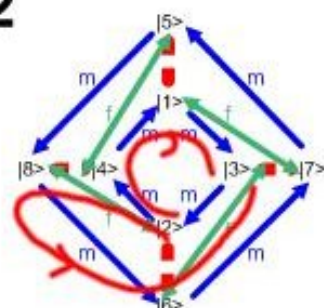
Norms shape small-scale cooperation



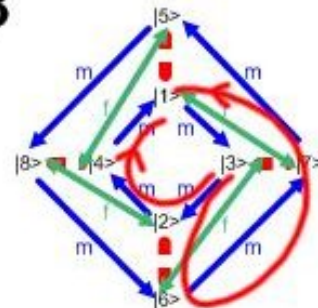
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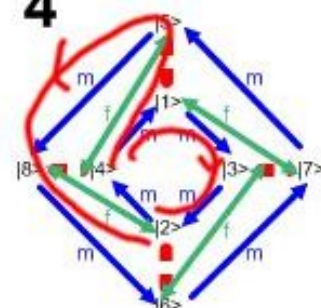
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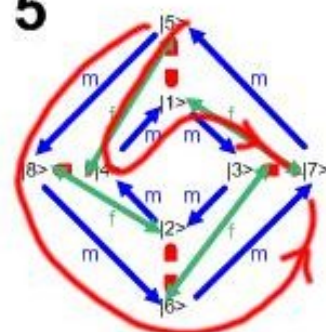
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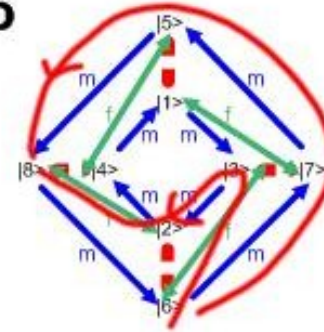
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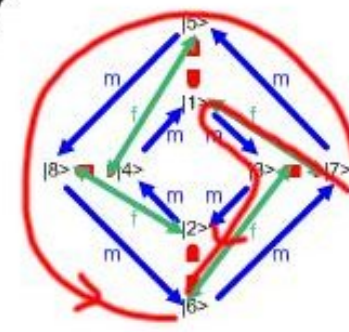
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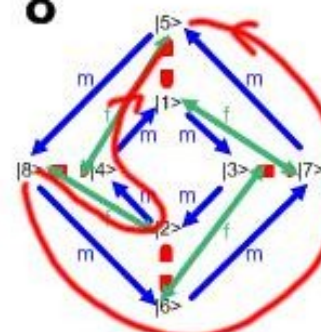
6



7



8



Better monitoring

More serious consequences

Adjudication

Locally adapted rules



5000 fence posts and nardoo cakes

Thanks to...

Pete Richerson



Sarah Mathew

Cristina Moya



Charles Perreault



Joe Henrich

Kim Hill



Bill Kimbel

Curtis Marean



