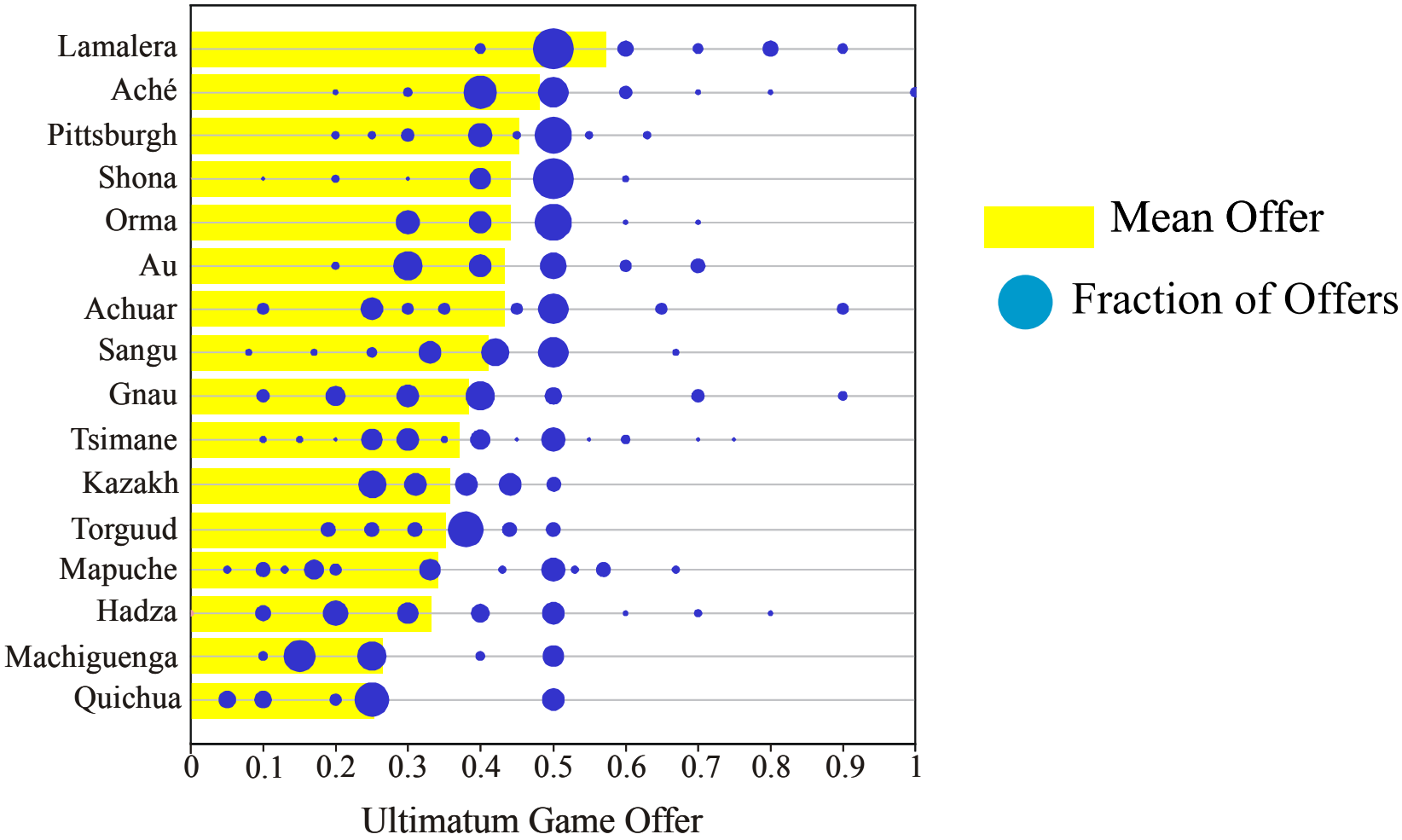
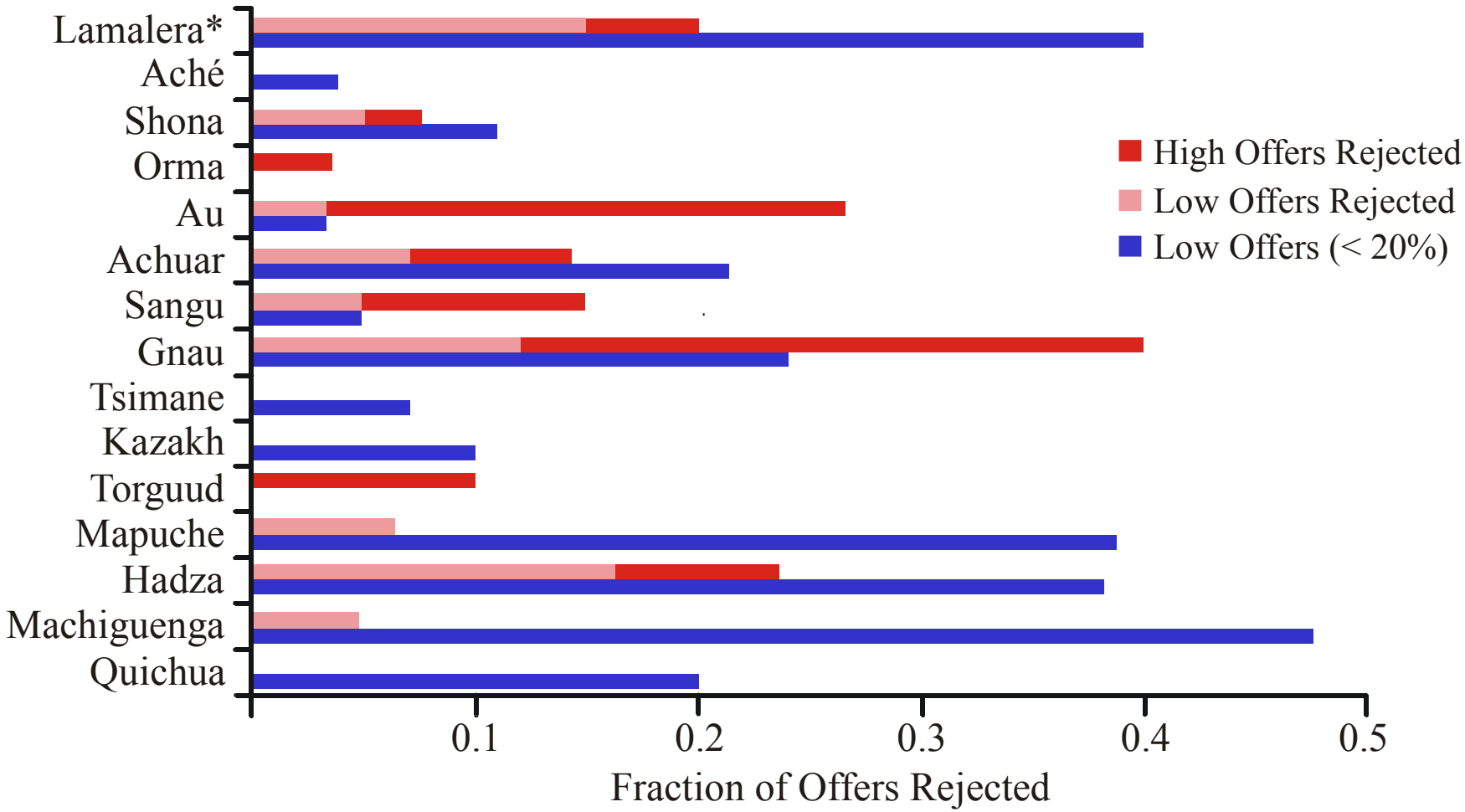
MacArthur Cross-Cultural Experimental Economics Project

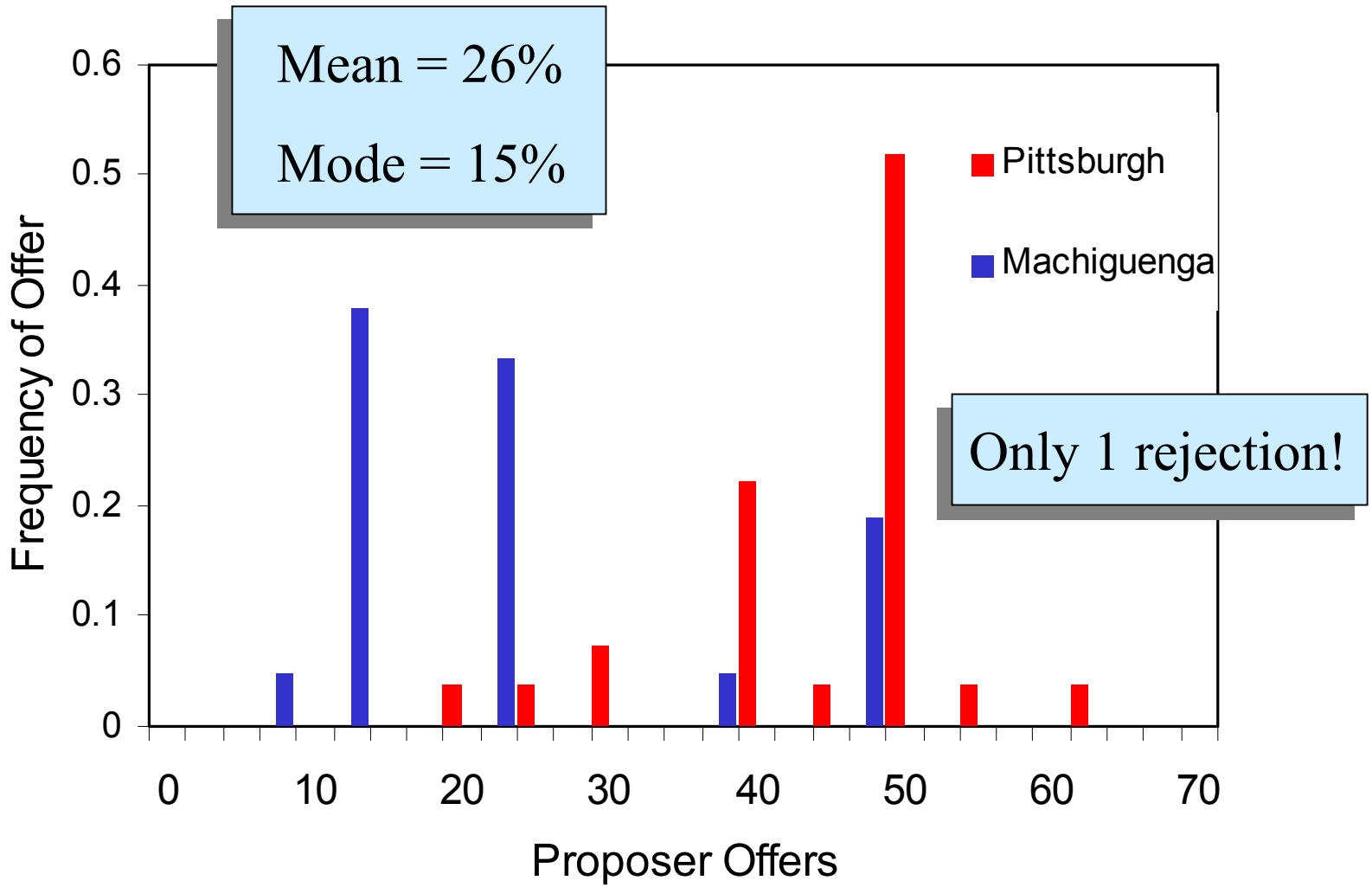
UG proposer behavior is variable but nowhere consistent with money maximizing.



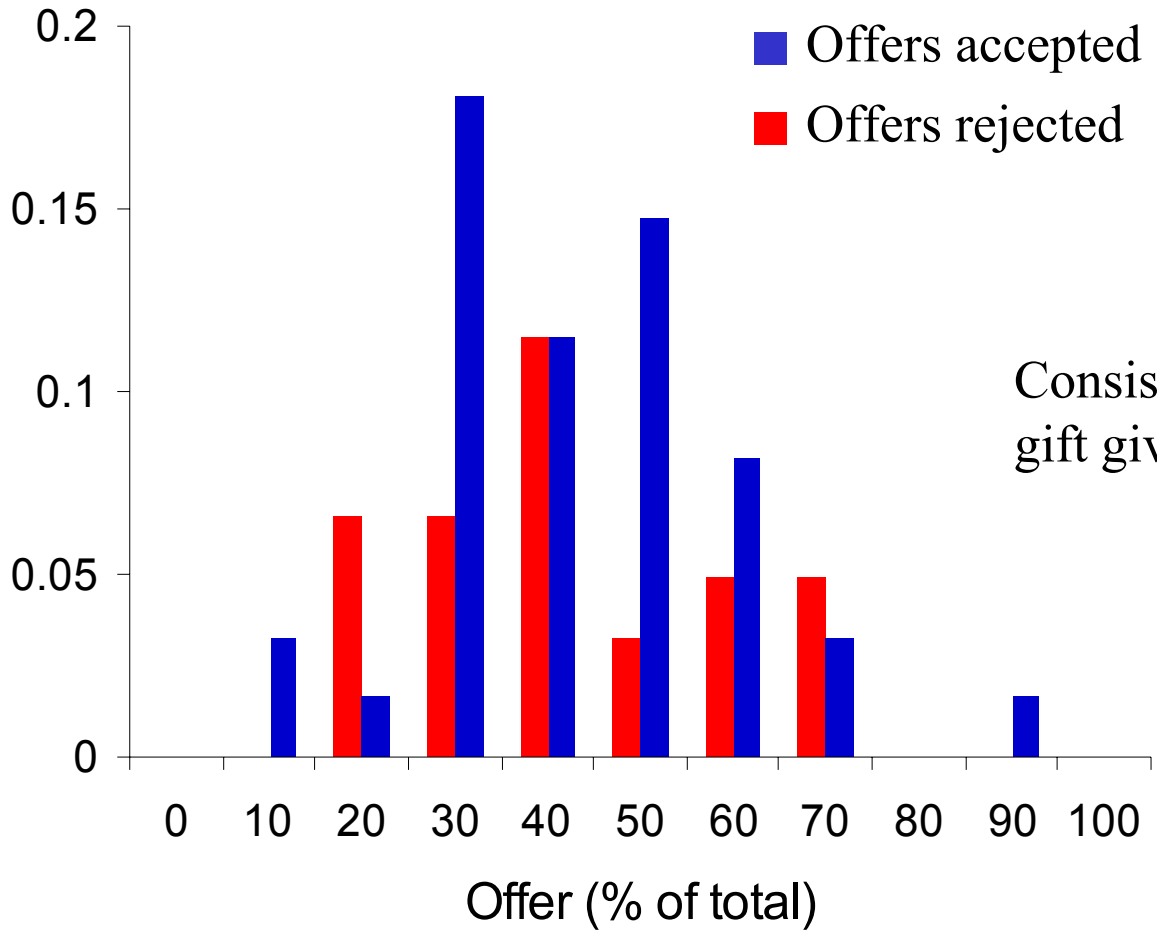
Rejection rates are highly variable



Machiguenga behave differently from students



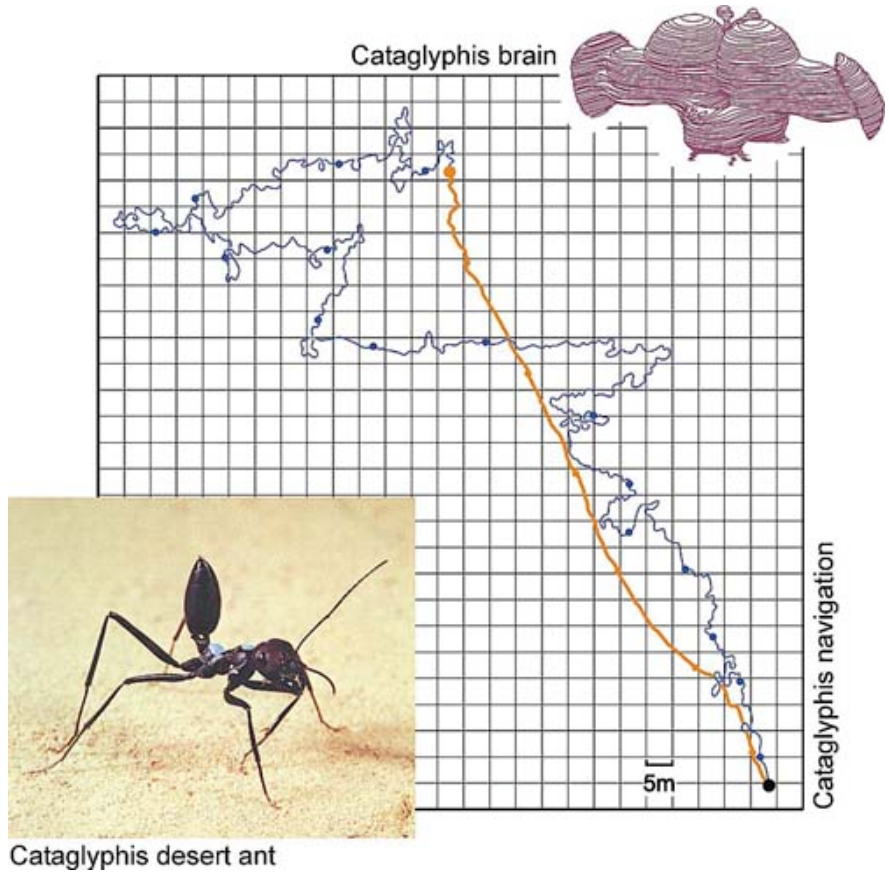
Au & Gnau reject "super-fair" offers



Consistent with competitive gift giving culture

Desert ant *Cataglyphis* navigates over great distances

- Ants leave nest to search for food
- When they find food they return home by shortest distance
- Use a combination of
  - Dead reckoning
  - Direction finding using polarization of sunlight

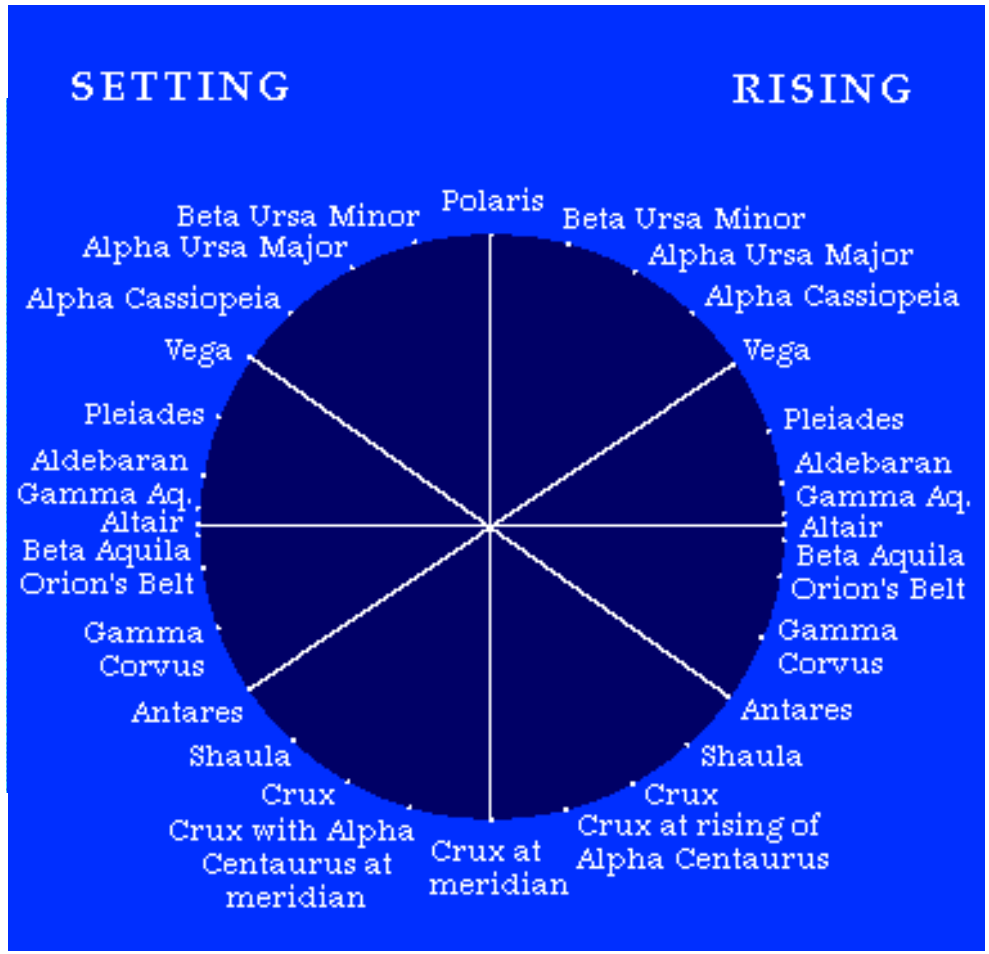


Medieval sailors had accurate system of navigation

- Problem:
  - Shallow waters close to land
  - Big tides
  - Bad weather
- Used sounding for location
  - Depth
  - Bottom
- Elaborate system for predicting tides

Micronesian navigators combined stellar navigation reckoning

- Problem:
  - Accurate way finding over great distances
  - Near equator
- Used stars for direction
- Dead reckoning for distance

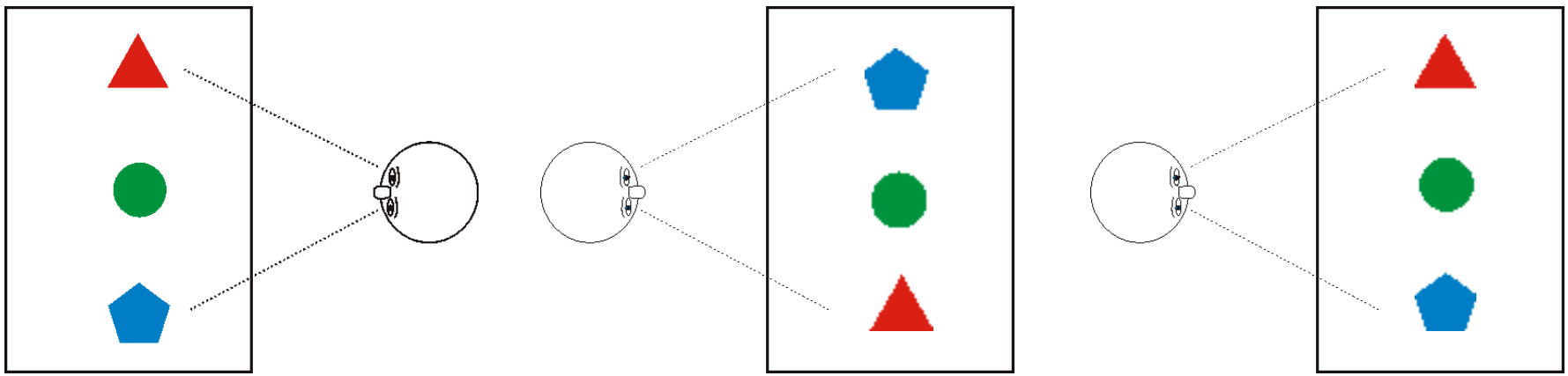


Basic spatial cognition is culturally variable

- Some languages lack words for relative directions like left and right
- Only have absolute directions like north and south
- Experiments suggest that language spoken affects spatial cognition

Subject sees 3 objects

Told to reproduce previous order.



Relative coordinates

Absolute coordinates

What causes between group variation?

- Not caused by differences in individual level variables like sex, age, or education.
- To test for effects of social and economic differences we ranked societies in six dimensions
  - Potential payoffs to cooperation (PC)
  - Privacy (PR)
  - Anonymity (AN)
  - Market integration (MI)
  - Political complexity (CI)
  - Settlement size (SS)

	β	t	
PC	0.528	2.92	$r^2 = 0.53$
Av(MI,CI,SS)	0.448	2.48	