MacArthur Cross-Cultural Experimental Economics Project

- Mongols, Khazaks
- Orma, Hadza
- Sangu
- Shona
- Lamalera
- Au, Gna
- Achuar, Quichua
- Machiguenga
- Mapuche
- Ache
- Tsimane
- Ache, Quichua
UG proposer behavior is variable but nowhere consistent with money maximizing.
Rejection rates are highly variable
Machiguenga behave differently from students

Mean = 26%
Mode = 15%

Only 1 rejection!
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)

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>0.528</td>
<td>2.92</td>
</tr>
<tr>
<td>Av(MI,CI,SS)</td>
<td>0.448</td>
<td>2.48</td>
</tr>
</tbody>
</table>

$r^2 = 0.53$