

Human Interaction and Cooperation

A Quantitative Analysis of a Mongolian, Pastoralist Camp

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Human Interaction

- Cross-Cultural Themes:
 - Wealth
 - Dependent on herds for pastoralists
 - Kinship
 - Proximity



<http://pulitzercenter.org/reporting/timbuktu-mali-west-africa-city-islamists-rebels>



http://en.wikipedia.org/wiki/File:Saami_Family_1900.jpg



<http://johnbatdorff.com/living-the-maasai-way/>

The Dukha

■ Nomadic Pastoralists and Foragers

- ~30 Households
 - ~200 individuals
- Influences over the last century
 - Changing borders
 - Reindeer
 - Globalization and Modernization



Statement of the Problem

- To what extent is human movement and interaction affected by wealth, kin relations, and proximity?



Hypotheses

1. A household will interact more frequently with other households which are closer in proximity than those farther away
2. Closer kin will interact more often with each other than will distant relations or non-kin
3. Households which have large reindeer herds will receive more guests than those households who have small reindeer herds
 1. Wealthier households will receive relatively more non-kin guests

Methods and Data

- Raw data was taken from Dr. Todd Surovell's ethnoarchaeological study
- Type of data
 - Time lapse images (exterior data)
 - Direct observation (interior data)
 - Exterior data from Houses 1, 3, 6, & 7
 - Interior data from Houses 1, 3, 4, 5, 6, & 7
- Time frame
 - July and August of 2012

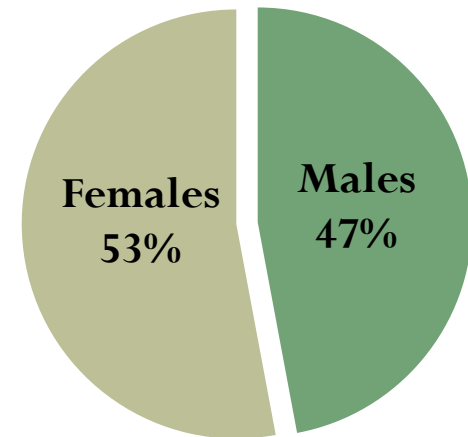


Methods and Data

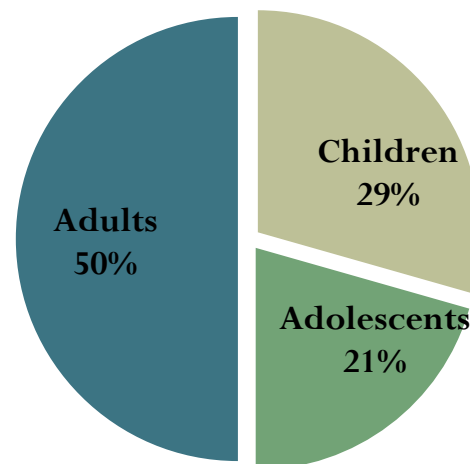
- Participants
 - 34 people within 9 households
 - Infants to 75 years old

- Statistical tests:
 - Regression analysis
 - Chi-square

Sex



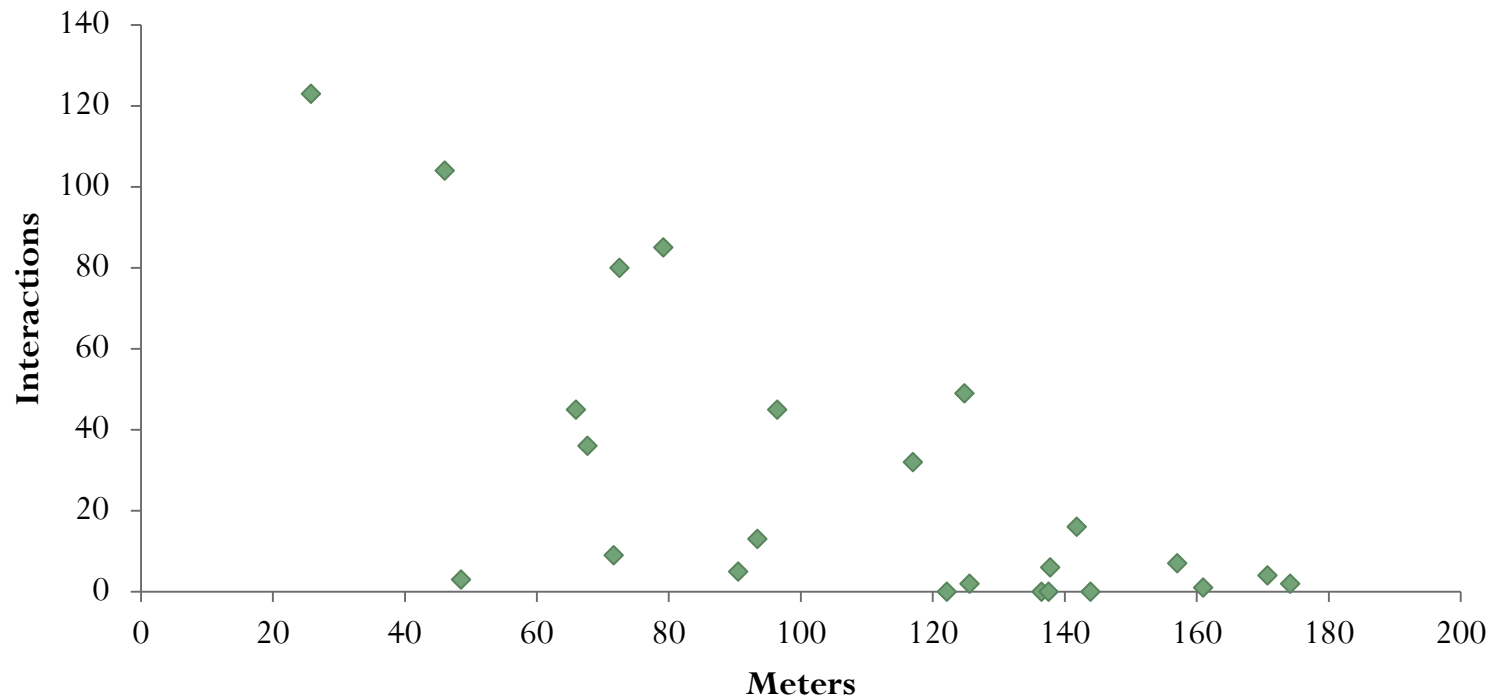
Age



Results: Hypothesis #1

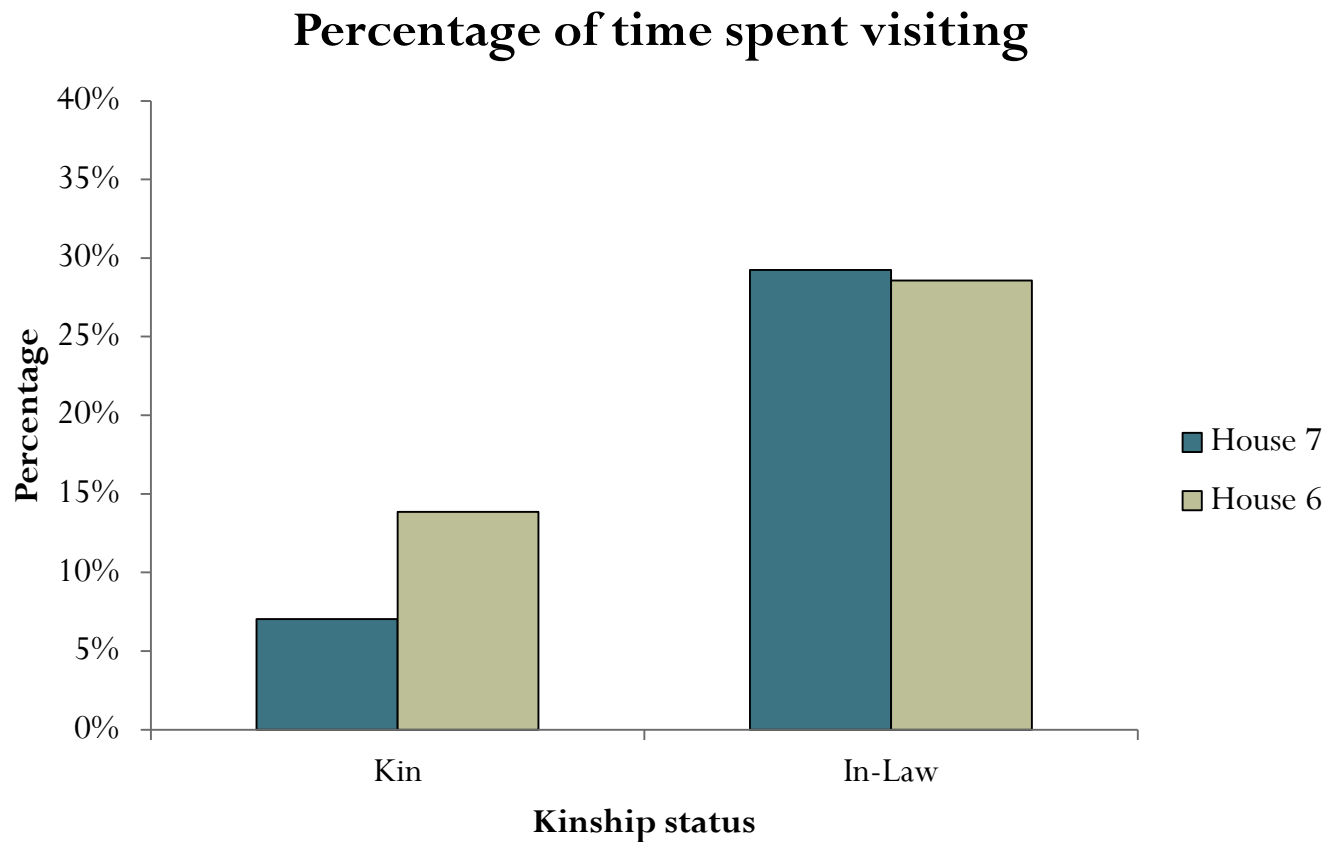
- A household will interact more frequently with other households which are closer in proximity than those farther away

Interactions per meter away from household



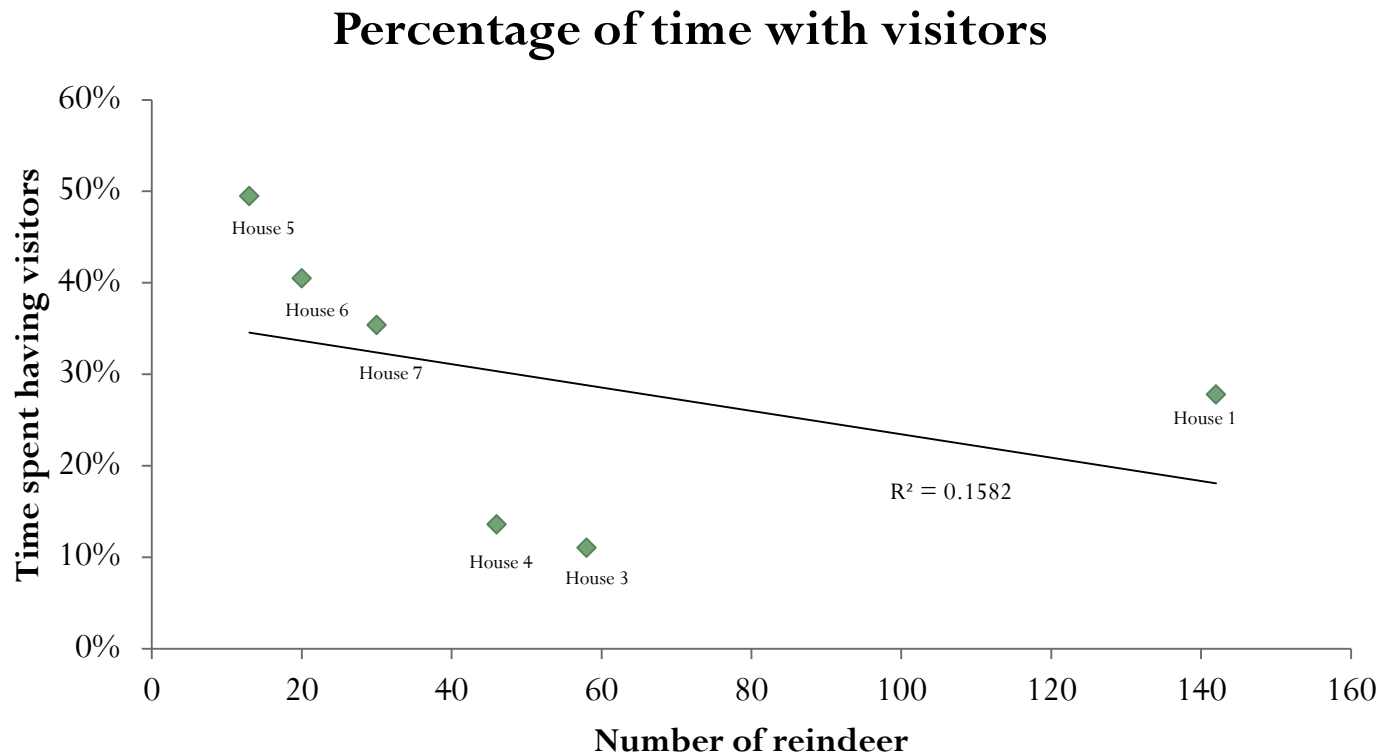
Results: Hypothesis #2

- Closer kin will interact more often than will distant relations



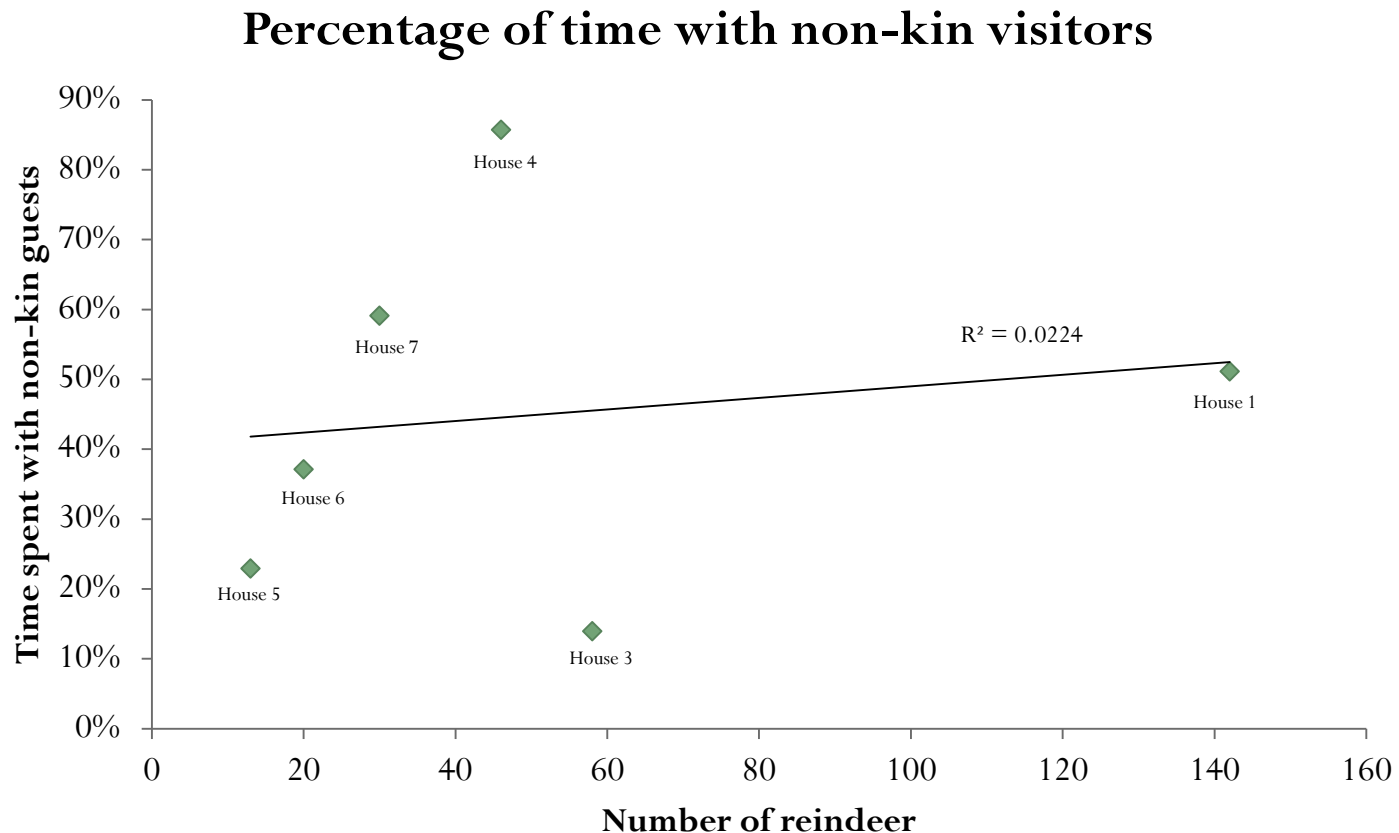
Results: Hypothesis #3

- Households which have large reindeer herds will receive more guests than those households who have small reindeer herds



Results: Hypothesis #3a

- Wealthier household will receive relatively more non-kin guests



Problems

- Small sample size
- Age and gender
 - Adolescent and child activities do not necessarily equal adult activities



Conclusions

- Mixed results
 - Hypothesis #1 was supported
 - Distant households were visited less frequently than closer ones
 - Hypothesis #2 seems to be supported
 - A distinction in spousal visitation rates
 - Significance will be determined by chi-square analysis
 - Hypothesis #3 was not supported
 - Less wealthier households received more visits from kin and non-kin

Future Research

- What governs how children interact with one another?
- How does interaction look between camps rather than within them?
- How does interaction look during the winter season versus the summer?

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Маш Их Баярлалаа!

Questions?

