

# Graham Noblit

---

Ph.D Candidate · Department of Human Evolutionary Biology · Harvard University  
MCZ 533E · 11 Divinity Avenue · Cambridge, MA · 02138, USA  
✉ [graham\\_noblit@g.harvard.edu](mailto:graham_noblit@g.harvard.edu) 🌐 [grahamnoblit.com](http://grahamnoblit.com) | Updated: May. 4, 2021

---

## Education

*Harvard University*, Ph.D · Human Evolutionary Biology 2016 - Present

Dissertation: The Cultural Evolution of Political Institutions  
Expected Completion 2022

*Harvard University*, MA · Human Evolutionary Biology 2018

*University of Texas: Austin*, BA · Major in Anthropology · Minor in Mathematics 2012

## Interests

Cultural Evolution · Multi-Agent Systems and AI · Institutional Design & Applied Cultural  
Evolution · Cognition and Culture · Game Theory

## Publications

### WORKING PAPERS

#### The Evolution of Chinese Lineages

I aim to understand variation in an important and relatively historically novel socio-political institution, the Chinese lineage. Notably, extensive geographic variation exists in the historical prominence and relevance of lineages. Using ethnographic and historical-economic evidence, I construct a theory explaining lineages as risk-pooling institutions which provide lineage members with access to land. More so, variation in regional demand for risk-pooling and/or access to land likely stems from well-studied rice-wheat agro-economic differences. I test this hypothesis by examining whether lineage activity is associated with landholding size, precipitation predictability, and historically documented precipitation disasters.

#### Ostracism and the Evolution of Cooperation in Public Goods Dilemmas

The ostracism of defectors is often assumed to be viable strategy permitting the evolution of cooperation in public goods games. However, if living in groups entails benefits, then when cooperators decrease group size by ostracizing defectors, they cause harm to themselves. To evaluate the evolutionary viability of ostracism as a strategy, I construct a game-theoretic model of an organism that earns a positive externality from living in groups of size  $n$  and which participates in a public goods game. I relate the evolutionary viability of ostracizing strategies to ecological determinants. Additionally, I study how ostracizing strategies interact with sanctioning strategies to stabilize costlier public goods, lower the harm associated with sanctioning or being sanctioned, and more efficiently stabilize cooperation than purely sanctioning strategies can. My model suggests that the empirical study of sanctioning behavior must consider how the presence of other punishment strategies impacts the costs associated with direct sanctions.

## Grants & Fellowships

*Harvard University: Mind Brain and Behavior* · Interdisciplinary Project Grant 2020

*Harvard University: Ash Center for Democratic Governance and Innovation* 2020

Fellow with the Harvard Project for American Indian Economic Development

*Harvard University: Department of Human Evolutionary Biology* · Travel Grant 2018

## Skills

### COMPUTATIONAL

R · Python · Julia (beginner)

### STATISTICAL

Econometrics & Data Analysis · Geospatial Data · Bayesian Statistics · Machine Learning

### METHODOLOGICAL

Ethnography · Game Theory · Vignette Studies & Survey Design · Cross-Cultural Study Design

## Fieldwork

Caucasus Mountains · Pankisi Gorge with Kist ethnic group 2018

## References

Joseph Henrich

Harvard University · Department of Human Evolutionary Biology

+1-617-384-8640 · [henrich@fas.harvard.edu](mailto:henrich@fas.harvard.edu)

Thomas Talhelm

University of Chicago · Booth School of Business

+1-434-825-9521 · [Thomas.Talhelm@Chicagobooth.edu](mailto:Thomas.Talhelm@Chicagobooth.edu)

## Workshops

Anti-Monopoly and Regulated Industries Summer Academy

Summer 2020

Asia Fellows Workshop: Harvard Kennedy School, Ash Center

Spring & Summer 2020

## Teaching

HARVARD UNIVERSITY HEAD TEACHING FELLOW

2019-2021

### Introduction to Quantitative Methods for Economics

Fall 2019 - Spring 2020 · Instructor · Michael Parzen · [michaelparzen@gmail.com](mailto:michaelparzen@gmail.com)

Fall 2020 - Spring 2021 · Instructor · Katy McKeough · [kmckeough@fas.harvard.edu](mailto:kmckeough@fas.harvard.edu)

Course is a rigorous introduction to statistics for students intending to study economics. Examples drawn from finance, decision analysis and economic decision-making. In addition to descriptive statistics, probability, inference and regression modeling, also covers portfolio optimization, decision analysis, and time series analysis. Students with prior exposure to introductory statistics will find some overlap of material but be exposed to new applications and learn more advanced modeling techniques.

- Managed team of 12+ teaching fellows and course assistants.
- Settled student administrative, personal, and other course-related issues as main communicative link between course instructor and student body
- Led course sections designed to build conceptual understanding of statistical inference and process of hypothesis testing as well as technical experience in the coding language, R.

HARVARD UNIVERSITY TEACHING FELLOW

2018-2019

### **Evolving Morality: From Primordial Soup to Superintelligent Machines**

Instructor · Joshua Greene · [jgreene@wjh.harvard.edu](mailto:jgreene@wjh.harvard.edu)

Course examines the evolution of morality from the emergence of cooperation through the psychology of intelligent primates and into the a future inhabited by machines that may be more intelligent than humans. What is morality? Where does it come from, and what does it do? How is it implemented in our brains? We then apply our scientific understanding of morality to foundational moral and political questions: How should human societies be organized? Finally, we consider the distinctive moral challenges posed by increasingly powerful artificial intelligence. Will artificial intelligence displace human labor? If so, how can we adapt?

- Led weekly section discussions with students. I designed section topics and guided discussions in order to develop students' critical thinking skills, encouraging them to use scientific evidence in order to support their broader arguments.
- Graded and provided feedback on students' argument papers. I designed the rubric and my feedback such that students learned to make original arguments which were supported with formal reasoning and empirical evidence.

### **What Game Theory Reveals About Social Behavior**

Instructor · Bethany Burum · [bethanyburum@gmail.com](mailto:bethanyburum@gmail.com)

Course examines the ultimate genetic and cultural evolutionary forces which design human behavior. Topics include the evolution of altruism, costly signaling, and modesty. Material introduces students to game theoretic reasoning and, in particular, teaches students how to test mathematical models with psychological experiments.

- Met with students individually on a weekly basis. I designed interactions to encourage students to think about course material outside of examples presented in class in addition to assess facilitate each student's distinct understanding of the course material.
- Guided students through process of designing psychological experiments meant to test mathematical models of behavior they encountered in lecture.