

LSU Honors 2030 Fall 2016
John Protevi
<http://www.protevi.com/john>

Notes on Kim Sterelny, "Cooperation, Culture, and Conflict"

- I. Introduction
- II. Two Social Revolutions
- III. War and Peace in the Pleistocene
- IV. Foraging, Mutualism, and the Folk Theorem
- V. Punishment, Shirkers, and Bullies
- VI. The Holocene: Farms, Wars, Priests, Chiefs

ABSTRACT: big picture of human social evolution. 2 major transitions in cooperation: 1) from great ape to forager (individual advantage: mutualism and reciprocity; must reconsider free-rider problem); 2) from foragers to states (group selection with war as selection pressure).

INTRODUCTION:

1. Cooperation is especially important for humans due to our propensity for cultural learning in technical skills and interpersonal conduct.
2. Bowles and Gintis propose group selection under war as selection pressure as explanation.
 - a. Behavioral economics
 - i. Show most ppl as strong reciprocators
 1. Willing to cooperate
 2. Willing to punish non-cooperators
 - ii. But methods of these experiments are not typical of everyday
 - iii. KS willing to accept presence of strong reciprocators, but think it could have evolved via individual advantage (reciprocity / reputation)
 - b. Archaeology and ethnography: climate variability produced war
 - c. Models: key assumption is presence of intergroup violence

TWO SOCIAL REVOLUTIONS

3. First revolution: from apes to obligate cooperators (75kya)
 - a. Technology: hunting with short-range weapons w/o single-shot kill capacity
 - b. Ethnography of contemporary foragers: egalitarian, nomadic, skilled, complex social ties to other bands in a "metaband" with periodic gathering.
4. Second revolution (10kya): from nomadic foraging to sedentary farming
 - a. Storage of food
 - b. Hierarchy and specialization
 - c. Anonymous / stranger interactions

WAR AND PEACE IN THE PLEISTOCENE

5. Economy of violence of foragers (murder, vendetta, capital punishment, infanticide, geronticide)

6. BG propose group selection under climate instability driven war pressure
7. KS disagrees
 - a. Psychology: intragroup cooperation isn't compatible with folks prone to intergroup berserkers / risk takers, bcs it's too hard to keep that only intergroup: it's bound to be expressed in-group. But that's what triggers in-group capital punishment.
 - b. Archaeology: KS cites those like Ferguson who challenge BG's interpretation of the archaeological record as widespread war
 - c. Economics of war: it makes sense to attack farms with stored food; it doesn't make sense to attack nomad foragers
 - i. Foragers are tough targets: they know terrain, and they have hunting skills / weapons
 - ii. Foragers don't have possessions
 - iii. Forager war hurts both sides by creating dangerous border zones, thus dropping the exploitation territory (Kelly, PNAS, 2005)
 - d. Climate instability: but famine leads to fission of groups, making organized inter-group territory conquest even less possible, as you need your group to hang together to conquer another group.
 - e. Diplomacy: foragers had lots of social ties; those are really the "social capital" on which they rely. Why risk centuries of ties for a few months or years of gain through war?
 - f. Ethnography:
 - i. Boehm's evidence of capital punishment by foragers of alpha warriors
 - ii. Valor-directed warrior culture arises with herds and other stealable resources: Iliad / Odyssey: Achilles was a gang-banger, pirate, thug
 - iii. JP: here is a spot to think about the horticultural / chiefdom societies described by Montaigne (and much later by Clastres): for them, war is anti-state; but for the foragers, vendetta and capital punishment is both anti-state and anti-war
 - g. Richerson and Boyd: climate instability would be selection pressure for group selection of cooperation even w/o war; KS says it would be supplemental to individual selection
 - h. Final technical point about equilibria:
 - i. There are multiple equilibria, and group selection is said to select for groups with better equilibrium points
 - ii. KS disagrees:
 1. ethnography reveals many maladaptive customs
 2. Besides, models are much too abstract to capture variation in individual cooperative choices

FORAGING, MUTUALISM, AND THE FOLK THEOREM

8. Kropotkin among those proposing that harsh conditions drives cooperation
9. KS agrees
 - a. First form is mutualism: sharing on the spot
 - b. Secondly, reciprocity appears
 - i. Technology and expertise:
 1. Hunting: projectiles allow small game hunting, which requires cooperation within smaller hunting parties

- 2. Gathering: depends on specialized skills / knowledge
- c. "Folk Theorem": conditions for reciprocity based cooperation
 - i. frequent, transparent interactions
 - ii. small bands
 - 1. genes are exchanged in marriage market based on metaband
 - 2. but cooperation works in economic unit, the small band

PUNISHMENT, SHIRKERS, AND BULLIES

- 10. Shirkers
 - a. can be idlers or stingy
 - b. this is what is most often modeled
- 11. Bullies are more important
 - a. Initial problem: great ape society is bully-dominated
 - b. Ethnography: foragers hate bullies; they are targets of capital punishment
 - c. Economy of violence: bullies are harder to get rid of; they are big and strong and sometimes have social support (kin and gang)
 - i. Full developed humans (language, norms, kin systems, technology) can do this
 - ii. What about early evolution of cooperation?
 - 1. Trust secured by interaction btw social emotions and history of successful cooperation
 - a. Collective defense (we are prey as well as predator)
 - b. "power scavenging": mobs drive off other predators from a kill with sticks and stones
 - 2. So the trust and cooperation gained from early defense and food production prepares for later anti-bully operations

THE HOLOCENE: FARMS, WARS, PRIESTS, CHIEFS

- 12. Transition from foragers to farmers
 - a. Foragers:
 - i. Nomadic
 - ii. Egalitarian
 - 1. Consensus
 - 2. Not command
 - iii. War not part of their economy of violence
 - b. Farmers
 - i. Sedentary
 - ii. Hierarchical (state)
 - iii. War
- 13. KS admits group selection models here: war selects for state virtues
 - a. Strong in-group adherence
 - b. Top-down command / obedience
 - c. Split social virtues
 - i. Farmers are risk averse
 - ii. Warriors are honor-motivated
 - iii. Soldiers are group-motivated