

Cooperation — Cameron Harwick

- **Cooperation is difficult to explain**
 - Exchange is a prisoner's dilemma/commons problem/time inconsistency problem
 - I have many opportunities to improve my position by “cheating” you in an exchange
 - Institutions can change the payoffs so exchange is incentive-compatible – but then the administrators face a prisoner's dilemma/commons problem/time inconsistency problem
 - Administrators have an incentive to shirk on enforcement (Miller 1992; Ostrom 1990)
 - Moving up to the constitutional level and beyond doesn't fix this problem; it just concentrates it in fewer people
 - Humans need some degree of innate prosocial preferences in order to “tie up the loose end” (Bowles & Gintis 2007; Frank 1987)
 - Vengeance is altruistic! (Tomasello 2009)
 - So *homo oeconomicus* is necessarily a solitary animal when the institutional structure is ill-defined
 - It works in the Arrow-Debreu construction because his behavioral profile is extremely limited
 - He just bids on well-defined goods. He can't rob his neighbor, or riot against the Walrasian Auctioneer
 - Cooperation declines as behavioral choices increase (Stewart, Parsons, & Plotkin 2016)
- **So how did cooperation ever arise?**
 - Tit for tat strategy? (Axelrod 1984)
 - Relatively cognitively cheap; observed in many animals
 - Mostly limited to indefinite, repeated, and two-person games; breaks down quickly at $n > 4$ (Bowles & Gintis 2007)
 - Doesn't necessarily support specialization; monitoring costs too high (Alchian 1977)
 - Group selection?
 - Possible for incentive-compatible games, coordination games, and games where defection is defined in terms of group behavior (Wilson & Wilson 2007)
 - Dubious for games where defection is relevant on the individual level (Dawkins 1976)
 - Reputation? (Kandori 1992)
 - Works better on scales $n > 4$ and comports with what we know about early human institutions
 - Cognitively expensive! (Dunbar 1992)
- **Cooperative institutions**
 - Necessary ingredients: 1) Accounting, and 2) convergence on a punishment strategy
 - Once you're willing to punish, convergence on the strategy is a coordination game. Easy!
 - But, susceptible to path dependence
 - Comparative institutional analysis on accounting (Harwick 2016)
 - Comparative institutional analysis on punishment strategy
 - How strong are the cultural vs. biological selectors? (Frost & Harpending 2015)
 - Cooperation/Defection/Reciprocation strategies (Bowles & Gintis 2003)
 - The importance of myth

- Hume's problem: rules don't justify themselves, and aren't necessarily incentive-compatible
- Overcoming time-inconsistency and "tying up the loose end" requires some non-rational or factually false basis, in the sense that you could advance your own position by defecting – a "noble lie" (Melzer 2014; Kydland & Prescott 1977; Leeson & Suarez 2015)
- Makes cooperative institutions vulnerable to deconstruction and rationalistic "myth-busting" (Hayek 1988)
- The issue of scale
 - Tribal punishment institutions have to be low-fixed-cost. Gossip, shunning, etc. Reciprocation is a good strategy here. Limited scale
 - Statist society as unconditional cooperation in practice: Wide-scale anonymous cooperation is associated with specialization in punishment (police, armies, etc)
 - High fixed cost (central administration), but low marginal cost. Scales better
 - Leftism as unconditional cooperation in principle?
 - Which is itself defection in a higher-level game
 - Then who punishes defectors?

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