

List of some theoretical questions for work groups to consider:

### 1) Context dependency of leadership preferences

- a. Do preferences for dominant leaders in wartime and non-dominant leaders in peace time generalize cross-culturally or not?
- b. How well do dominant physiological features (e.g. masculinized faces) predict actual behavioral dominance of leaders?
- c. Are preferences for dominant leaders about authoritarianism or an indication that leaders can deploy dominance favorably for followers (e.g., punishment, coordination efficiency)?
- d. Are context-dependent preferences for dominant leaders driven by leaders' promotion of aggressive action, ability to make coordination more efficient, sanctioning efficiency, or phenotypic correlation with intelligence, health or confidence?
- e. What are the relative effects of different contexts on preferences for leader dominance: us vs. them (aggressive intergroup conflict), us vs. them (defensive intergroup conflict), us vs. them (trading negotiation), us vs. nature (flood), us vs. group member (conflict resolution), us vs. us (intragroup coordination, particularly with greater cultural heterogeneity and larger group size)?
- f. Do leaders strategically adjust their behavioral dominance according to these contexts?
- g. How do leaders strategically adjust the context to enable their dominance?
- h. How do followers balance benefits of dominants as leaders with costs (e.g., risks of exploitation)?
- i. What attributes of followers predict preferences for dominant v prestigious leaders? (e.g., personality traits, physiological or cultural factors, social learning biases)
- j. How do leader selection procedures (achievement or ascription-based) moderate context-dependence of leader preferences?
- k. Are context-dependent preferences for dominant leaders functionally mismatched to state-level politics (and how can we test this mismatch hypothesis)?
- l. Do preferences for prestigious traits in leaders show more or less context-dependency than for dominant traits?

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## **2) How leadership styles/behaviors affect cooperation**

- a. Under what conditions do leaders encourage cooperation: anonymity, group size, group heterogeneity, shadow of future, public cues to their generosity?
- b. Which leader style or function (e.g. designated punishers, coordinators, public goods allocators, or prestigious leaders by example) is more effective in enhancing cooperation in public goods?
- c. What role do kinship ties or network centrality play in predicting leader efficacy?

- d. Is procedural fairness more important to judgments of leader legitimacy than outcome fairness? When not?
- e. What is charisma? How does it impact the efficacy of leader functions?
- f. How do physiological features of leaders (e.g., formidability, testosterone) predict cooperation rates among followers? How does leader physiology interact with context (ecological, demographic, institutional) in predicting cooperation rates among followers?
- g. Are there ontogenetic, ecological, demographic, or institutional patterns to when leaders are more likely to facilitate collective action for immediate rewards (e.g. direct payment, greater share of production) vs. reputational benefits?
- h. Are group members punished for not rewarding prosocial leaders?
- i. Do high status individuals feel obligated to take on leader roles; are they punished for not doing so?
- j. Is leader prosociality contagious?
- k. What role do levelling mechanisms (like gossip, threat of exclusion, direct punishment) play in shaping leader behaviors?
- l. What factors promote or limit leader corruption?
- m. How do within and between group selection pressures affect leadership behaviors?

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### **3) Gender and leader emergence/effectiveness**

- a. Do context-dependent preferences for dominant leaders disfavor women as leaders?
- b. Do women and men differ in cooperation strategies? Do these strategies tend to produce differences by gender in leader emergence and effectiveness?
- c. Do gender differences in leader emergence or effectiveness depend on the context of leadership, e.g. conflict resolution versus community coordination?
- d. How do sex differences in cooperation strategies interact with the gender division of labor, and other norms and institutions that regulate behavior by gender?
- e. Which aspects of socio-ecology most limit or advance women's leadership opportunity: war prevalence, women's access to wealth, childcare support, educational opportunity, etc.?

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