Lecture 12
Social engineering

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Social identity, norms & engineering:
A political economy perspective

Nation-building

Group socialization

Behavioral modification

Social norm change

Research frontiers

Social identity, norms & engineering:
A political economy perspective

Most homogenous nations did not begin homogenous
e.g. Extreme linguistic differences in early modern France

Being French was not a source of personal pride, let alone the basis of a common identity. Before the mid-nineteenth century, few people had seen a map of France and few had heard of Charlemagne and Joan of Arc. France was effectively a land of foreigners.

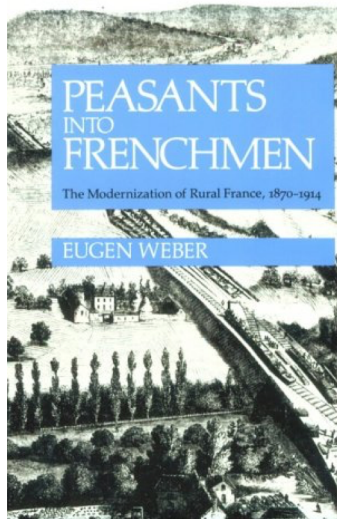— *Graham Robb (2008) "The discovery of France"*

Figure: France in 1477

State & nation building a gradual process of projecting power into periphery and people, reshaping society
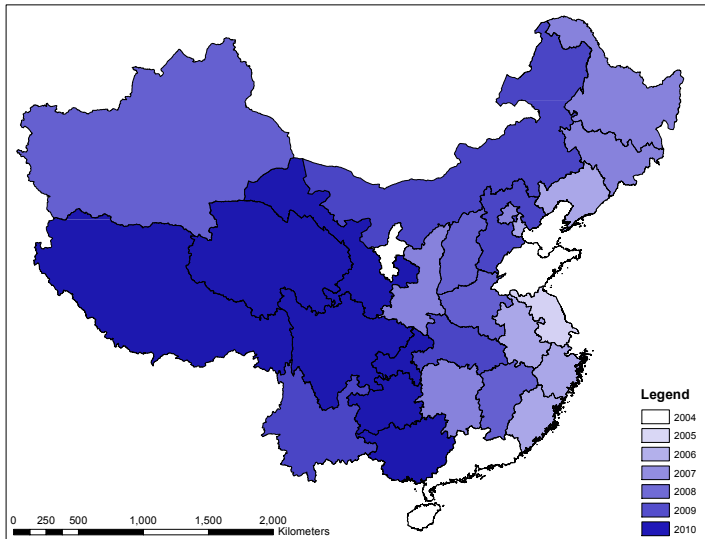
The last miles of state building:

- ▶ In early 19th century, most villages have never seen agents of the national state
- ▶ Provincial loyalties often transcended national bonds of the nation
- ▶ 1870-1914, new forces penetrated the isolated countryside
  - ▷ Judicial and school systems
  - ▷ Army
  - ▷ Catholic Church
  - ▷ Rail & roads
  - ▷ Market economy

PEASANTS
INTO
FRENCHMEN
The Modernization of Rural France, 1870-1914

EUGEN WEBER

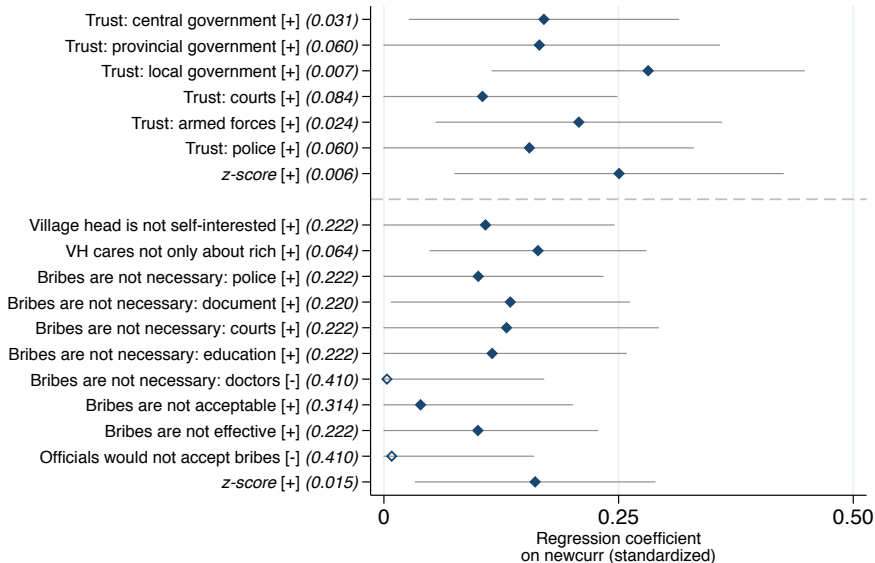# Cantoni et al 2017: Impact of China's 8th textbook reform
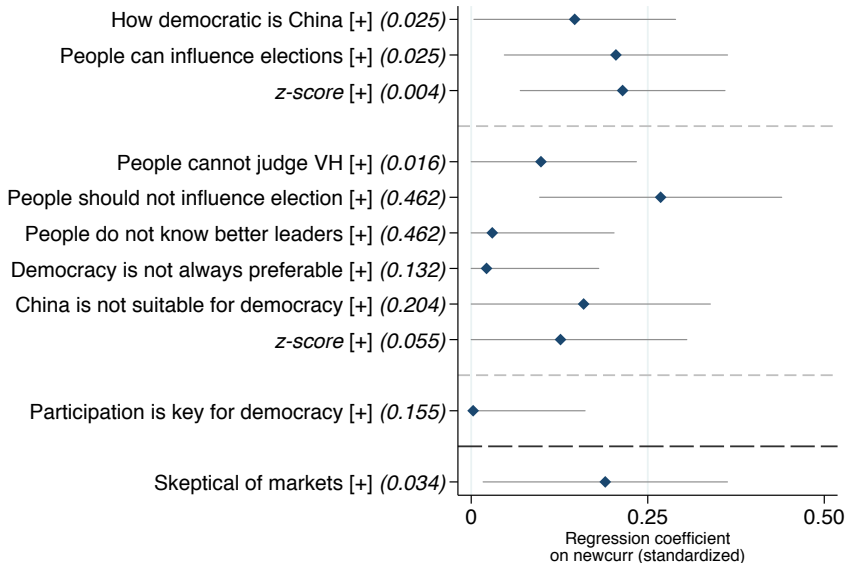## Staggered introduction of new curriculum, 2004–10

Test for an impact of new curriculum by analyzing survey conducted with Peking University undergraduates

▶ It is extremely difficult to find opportunities to (let alone causally) identify government actions on ideology, preferences, identity

▶ Using a diff-in-diff design, Cantoni et al find significant effects of the new curriculum on students' views of:

    ▷ Chinese *governance*; e.g., greater trust in officials
    ▷ China's *political institutions*; e.g., viewing China as more democratic
    ▷ *Economic institutions*; greater skepticism toward markets

▶ On the other hand, no significant effects on students':

    ▷ Ethnic or national *identity*
    ▷ Attitudes toward the *environment*

▶ Effects on *behavior* mixed

    ▷ e.g. Member of Communist Party, cooperation with minorities

e.g. Governance outcomes

Trust: central government [+] *(0.031)*
Trust: provincial government [+] *(0.060)*
Trust: local government [+] *(0.007)*
Trust: courts [+] *(0.084)*
Trust: armed forces [+] *(0.024)*
Trust: police [+] *(0.060)*
z-score [+] *(0.006)*

Village head is not self-interested [+] *(0.222)*
VH cares not only about rich [+] *(0.064)*
Bribes are not necessary: police [+] *(0.222)*
Bribes are not necessary: document [+] *(0.220)*
Bribes are not necessary: courts [+] *(0.222)*
Bribes are not necessary: education [+] *(0.222)*
Bribes are not necessary: doctors [-] *(0.410)*
Bribes are not acceptable [+] *(0.314)*
Bribes are not effective [+] *(0.222)*
Officials would not accept bribes [-] *(0.410)*
z-score [+] *(0.015)*

Regression coefficient
on newcurr (standardized)

e.g. Political and economic institutions outcomes

How democratic is China [+] *(0.025)*
People can influence elections [+] *(0.025)*
z-score [+] *(0.004)*

People cannot judge VH [+] *(0.016)*
People should not influence election [+] *(0.462)*
People do not know better leaders [+] *(0.462)*
Democracy is not always preferable [+] *(0.132)*
China is not suitable for democracy [+] *(0.204)*
z-score [+] *(0.055)*

Participation is key for democracy [+] *(0.155)*

Skeptical of markets [+] *(0.034)*

0   0.25   0.50

Regression coefficient
on newcurr (standardized)

Some notes on surveys

- ▶ Strategies for survey design
- ▶ Strategies to reduce non-response/attrition
- ▶ Strategies to reduce experimenter demand
- ▶ Ex-post sensitivity analysis
- ▶ Design-based ways to test for biased selection or survey responses

Social identity, norms & engineering:
A political economy perspective

Groups use a common set of tools to socialize its members
Including use of rituals, formal education, practice

For example

- ▶ Rites of passage, initiation, hazing
- ▶ Formal education in new values, norms
- ▶ Appearance change
- ▶ Activities that promote strong in-group bonds
- ▶ Practicing new behaviors consistent with identity
- ▶ Often to the *exclusion* of material incentives

Commonly observed among

- ▶ Gangs (Maruna, S. and K. Roy 2007; Vigil, J.D. 2003)
- ▶ Armed groups (Wood, E.J. 2008; Weinstein 2007)
- ▶ Universities, fraternities
- ▶ PhD programs

In principle, group socialization can solve principal-agent and coordination problems

▶ Rewarding agents for effort is expensive and difficult, especially when there is imperfect information

▶ Sanctioning and rewarding group members for public good contributions, collective action, or other cooperation and non-deviant behavior is also costly and tedious

▶ All of these cooperation challenges become much easier if there is some process by which the individual or agent internalizes the preferences of the principal or group

  ▷ Principals could choose to invest in this technology or process, or in R&D to develop that technology

▶ Social animals exposed to natural and group selection would have advantages if they evolved psychological traits or cultural practices that

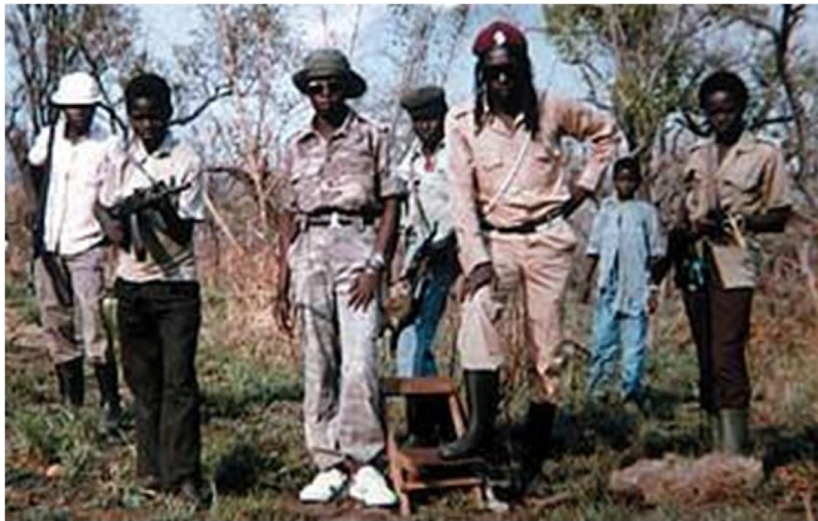# Chilling example: Recruitment of child soldiers

Figure: Joseph Kony and the Lord's Resistance Army in northern Uganda

Evidence from a representative survey of (surviving) former child soldiers (Beber & Blattman 2013)
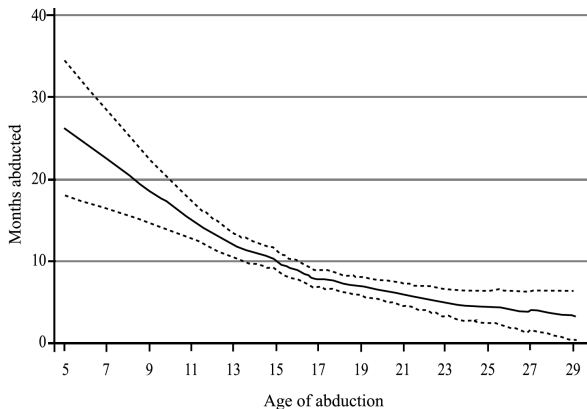

Figure: Forced recruitment involved violent initiations, physical and spiritual threats, spiritual and political ideological training
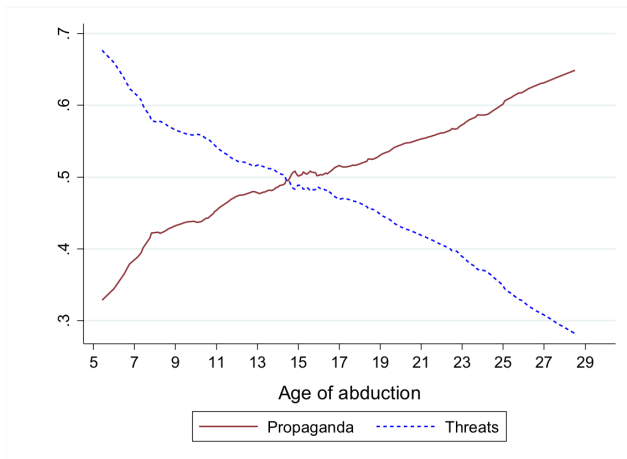
Figure: Differential application of socialization strategies.

Underexplored territory: Military socialization

▶ Militaries have to solve participation and (more importantly) incentive compatibility constraints

▶ Few use material incentives

▶ There is a huge body of practice and some (internal to military) social science on this process of socialization, but little investigation by behavioral scientists or economists

▶ In addition, a body of qualitative military sociology making interesting but highly controversial claims:
  ▷ Humans have an innate reluctance to kill
  ▷ Most soldiers in WWII either did not fire their weapons, and when they did they did not shoot to kill (Marshall 1947)
  ▷ This reluctance can be systematically broken down by use of standard conditioning techniques (Grossman 1996)

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Cognitive behavior therapy
One of several methodologies used for re-socialization

▶ A method for treating problematic thoughts and behaviors

▶ Huge rigorous evidence base (mainly in US), especially for depression, anxiety, phobias, anger, PTSD, and (less successfully) addiction

▶ Unlike talk therapy or psychotherapy, sees a "two-way street" between thoughts and behaviors:

  1. Changing people's thinking changes behavior

      ▶ Explicit discussion of problems and therapeutic method
      ▶ Identify & challenge causes and consequences of harmful thoughts & behaviors

  2. But changing behaviors also changes cognitions

      ▶ Role playing, practicing tasks
      ▶ Expose to real situations
      ▶ Processing experiences through discussion
      ▶ Start easy, get more difficult

Blattman et al 2017: CBT as non-cognitive skills development and also identity change

Figure: A CBT session in Monrovia with street youth – homeless, drug users, petty criminals, drug dealers, embroiled in regular everyday violence

Can CBT shape adult self-image/identity?

- Hypotheses:
  - ▷ "Criminal outcasts" know the "regular people" norms, but those prescriptions do not apply to their social category
  - ▷ CBT a wat for outcasts to practice a higher-status social category
- Key elements of the group therapy:
  - ▷ Start with appearance change, home cleanliness
  - ▷ Exposure (banks, supermarkets)
  - ▷ Success positively reinforced by family, friends
  - ▷ Process failures and setbacks with group
- A second treatment arm, cash grants, enabled another form of "practice": starting a legitimate microenterprise

Another possible channel: Developing self control and emotional regulation as a skill

- ▶ "Noncognitive" form of human capital
    - ▷ A strong predictor of long run economic performance, including crime (Borghans et al. 2008, Heckman et al. 2006)
    - ▷ Evolves over life cycle and is affected by upbringing, self-investment, and interventions (Heckman & Kautz 2013)
    - ▷ Thought to be malleable in childhood and, to a lesser degree, adolescence
- ▶ Could affect productivity at tasks θ
- ▶ Could affect time preferences (to the extent they are a skill not a identity-driven preference)
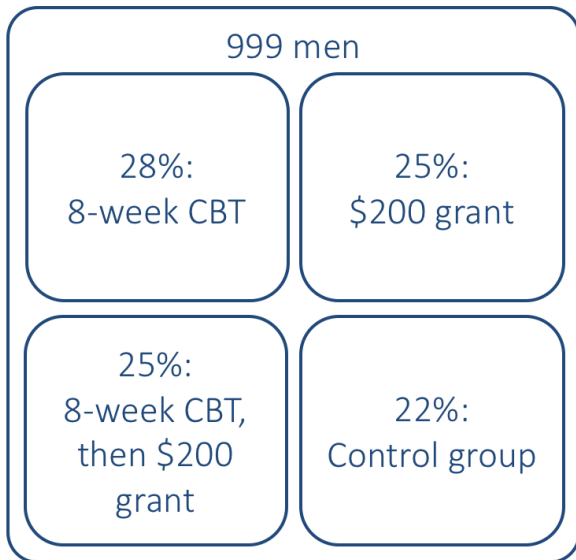
Model of criminal occupational choice with financial market imperfections

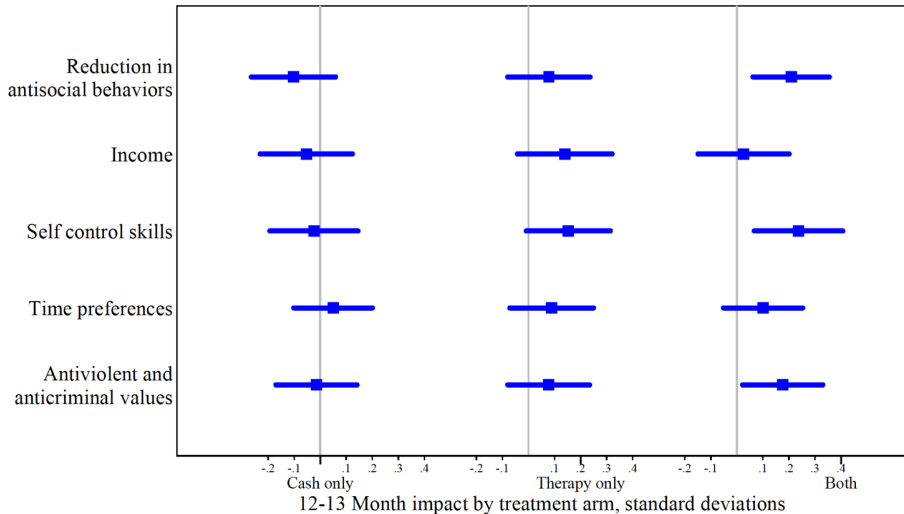With preferences σ over occupation, time preferences β and δ, and productive skills or traits θ

$$\max_{c_t>0, 0 \leq l_t \leq \bar{L}, L_t^b, L_t^c, K_{t+1}, a_{t+1}} U(c_t, l_t, \sigma L_t^c) + \beta \sum_{i=1}^{\infty} \delta^i U(c_{t+i}, l_{t+i}, \sigma L_{t+i}^c)$$

$$s.t. \quad c_t + a_{t+1} + K_{t+1} = F(\theta, L_t^b, K_t) + w_t L_t^c - \rho f L_{t-1}^c + (1+r)a_t \quad for \; each \; t$$

$$a_0 \quad given$$

where $L_t^b + L_t^c + l_t \equiv \bar{L}$.

2×2 factorial design

999 men

28%: 8-week CBT	25%: $200 grant
25%: 8-week CBT, then $200 grant	22%: Control group

ATEs on primary outcomes and channels

12-13 Month impact by treatment arm, standard deviations
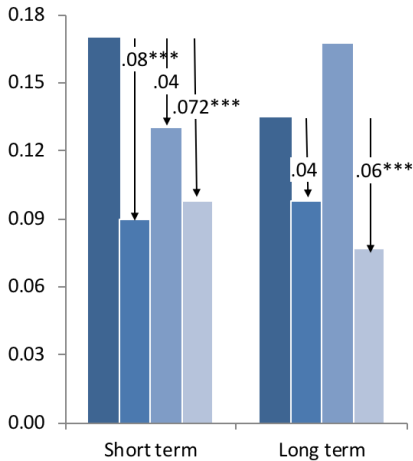
ATEs on crime outcomes

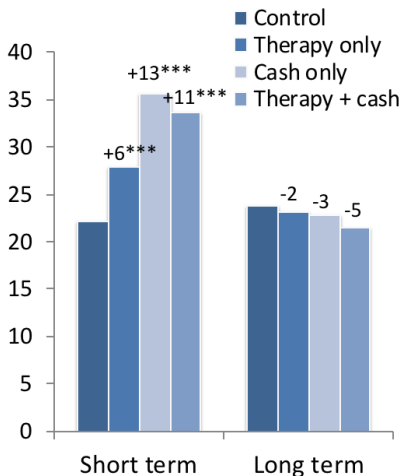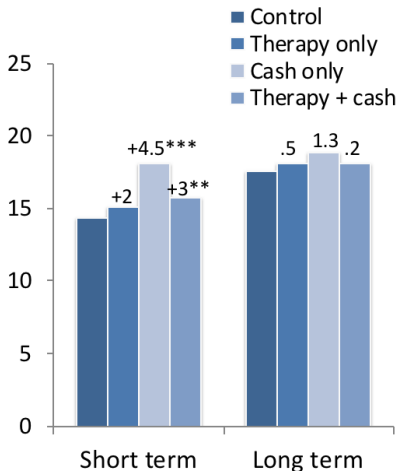## Thefts/robberies in past 2 weeks

Sold drugs in past two weeks

ATEs on income

Why was identity and preference change persistent with income cahnge was not? Cash = Extra months of "practice"?

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Social norm change as changing prescriptions *P*

▶ **Norms:** Informal, unwritten rules enforced by social praise and sanctions.

▶ **Descriptive norms:** What you believe others in group J do

▶ **Prescriptive norms:** What you believe others in group *J* believe *J*'s ought to do

▶ **Personal attitude & preferences:** Internalized social norms?

▶ **Culture:** A body of persistent social norms/prescriptions?

▶ Examples of norms
  ▷ Shake hands and make eye contact
  ▷ Stand right, walk left
  ▷ Allow a presenter to present without interruption (or not)

Norm change takes identities, status & salience as given
But tries to shape prescriptions, directly or through influencing actions or actions of others

$$U_j(a_j, a_{-j}, y_J, \kappa_J, I_j \mid \psi_j)$$

$$I_j(a_j, a_{-j}; c_j, \epsilon_j, P_J).$$

▶ **Others' observed action a_{-j}**
▶ Group status y_J
▶ Group salience κ_J
▶ Internalized values/preferences of group J, ψ_j
▶ Own assignment/association with group c_j
▶ Own characteristics ϵ_j
▶ **Prescriptions of group P_J**
▶ Existence of identity group I with prescriptions P

Examples of social norm change

▶ Campaigns against female footbinding in China, female genital cutting in MENA/SSA, slavery in 19th century successfully change prescriptive norms associated with moral uprightness and respectability

▶ Trump election outcome changes descriptive social norms and wlllingness to express xenophobic views in public (Bursztyn et al 2017)

▶ New information on popularity of female workforce participation leads Saudi husbands to allow their wives to work outside the home (Bursztyn et al 2018)

Recall Blouin & Mukand's 2017 state propaganda program

Strengthening identification with, salience of, or status of national identity? Changing norms of national identity? Or changing norms within ethnic identities?
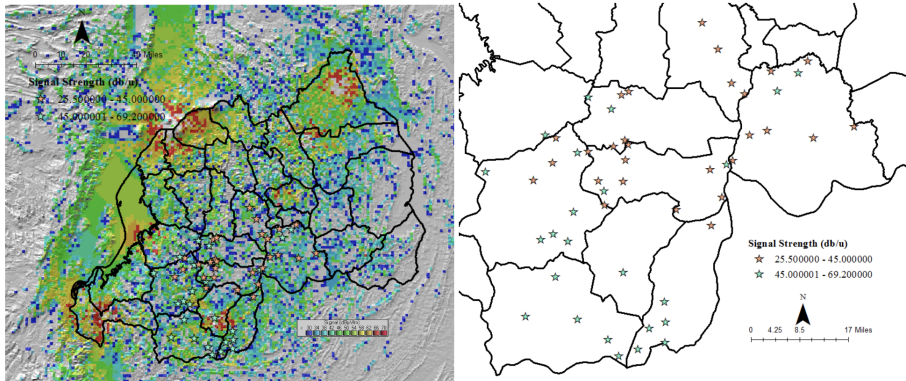

Figure 2: Radio Rwanda signal, district boundaries and subjects' village locations

Figure: Use village-level variation in reception of government-owned-and-operated Radio Rwanda, which broadcasts ethnic trust/unity propaganda post-genocide

Glenna Gordon

Property disputes endemic
2010 survey of 5000 residents of 246 rural Liberian communities

Category	Percentage
Any serious land dispute in past year	22%
Any land dispute that results in violence, property destruction or threats	12%
Any land dispute currently unresolved	6%
Any serious money/business dispute in past year	13%
Any money dispute currently unresolved	6%

Mass education in alternative dispute resolution

Promote new skills, practices and norms to help make and sustain bargains

- ▶ Reduce asymmetric information
  - ▷ Teach communication skills (e.g. active listening, seeing from other side)
  - ▷ Inculcate norms of information sharing, discussion
  - ▷ Encourage others to mediate
- ▶ Facilitate commitment
  - ▷ Discourage defection from a forum
  - ▷ Mediators, leaders, community norms informal enforcers of agreements
- ▶ Make people more rational
  - ▷ Techniques for managing anger
  - ▷ Encourage norms of non-violence

Program impacts after 1 and 3 years

Dependent Variable	1-year endline				3-year endline			
	Control mean	ITT	SE	ITT / control mean (%)	Control mean	ITT	SE	ITT / control mean (%)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outcomes for all residents (N=4,011)								
Any serious dispute	0.221	0.003	0.016	1.2	0.087	0.008	0.011	9.3
Any unresolved dispute	0.07	-0.02	0.008**	-28	0.024	0.002	0.005	6.4
Any dispute with threats, property destruction, or interpersonal violence	0.122	-0.01	0.012	-8.1	0.041	-0.012	0.006**	-28.4
Conditional on a dispute occurring (N=353)								
Length of dispute (months)					13.247	3.628	2.885	27.4
Resolved dispute	0.684	0.072	0.027***	10.5	0.668	-0.024	0.046	-3.6
Resolved via informal mechanism	0.193	0.032	0.024	16.4	0.251	0.031	0.051	12.3
Any threats, property destruction, or interpersonal violence	0.554	-0.024	0.035	-4.3	0.476	-0.193	0.047***	-40.6
Any property damage or violence	0.411	-0.037	0.03	-9.1	0.243	-0.091	0.042**	-37.5
Any threats	0.515	-0.013	0.035	-2.5	0.408	-0.159	0.048***	-38.9
Any property destruction	0.186	-0.051	0.025**	-27.4	0.114	-0.068	0.027**	-59.3
Any violence	0.349	-0.022	0.028	-6.3	0.202	-0.057	0.042	-28.5

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Research frontiers

Research frontiers
Wide open and so difficult to predict directions

▶ What is the effect of identity on motivated reasoning and information processing/avoidance?

▶ Nationalism and other imagined communities
  ▷ Demonstration of purposive identity change
  ▷ Understanding effectiveness of techniques and reasons for this

▶ Huge amount of behavior change research ongoing (especially CBT)
  ▷ Little of it so far exploring mechanisms, interactions, persistence of effects
  ▷ Little focused on identity change

▶ "Military sociology" and socialization into armed groups is much asserted but never convincingly demonstrated

▶ Have minimal groups been over-interpreted?
  ▷ Is this a focal point that dissipates in normal contexts?
  ▷ How powerful is parochial altruism or out-group antipathy in the "field"
  ▷ Understanding "dehumanization" and other techniques

▶ What is propaganda and why does it work?