

# Civil Liberties and Social Structure

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## Motivation

- ▶ “Despotism deprives citizens of all necessity to reach a common understanding, and all opportunity to act in concert. It immures them, as it were, in private life. They were already apt to hold one another at arms length. Despotism isolated them. Relations between them had grown chilly; despotism froze them...” (*De Tocqueville, The Ancien Régime and the French Revolution, 1856.*)
- ▶ “The Leninist legacy in Eastern Europe consists largely... of fragmented, mutually suspicious societies...” (*Jowitt, New World Disorder, 1993.*)
- ▶ But can't the social structure also shape the kinds of civil liberties we observe?
  - ▶ These authors suggest weak civil liberties ⇒ fragmented societies.
  - ▶ Maybe a two-way relationship: Segregation ⇒ weak civil liberties.

# Motivation

- ▶ The literature on intergroup socialization, starting with [Schelling \(1969\)](#), requires *imperfect empathy*, even if small, to rationalize segregation ([Bisin and Verdier \(2011\)](#)).
  - ▶ Here we provide a mechanism where segregation arises despite no ex-ante differences in preferences.
- ▶ We will show that social segregation and weak civil liberties in the form of unequal treatment can arise as coordination failures.

## Environment: timing

1. Citizens make socialization efforts  $p_i$  to make friendships.
  - ▶ Citizens belong to one of two groups ( $a, b$ ), but this is payoff irrelevant.
  - ▶ In-group and out-group socialization efforts may differ.
2. A fraction of the citizens are members of a group  $T$  the government wants to find out about and arrest.
3. Government interrogates citizens ( $\tau$ ), collects signals about their friends.
4. If the government is too aggressive, it may trigger collective action (a riot). Participation in the riot spreads through contagion via friendships.
5. Iff contagion does not spread to all citizens, government arrests.
  - ▶ The ability of government to arrest is limited by civil liberties.

# Environment

## Citizens:

- ▶ Choose socialization rate  $p_i \in [\epsilon, 1]$ .
- ▶ May condition on group membership.
- ▶ Friendship between  $i$  and  $j$  wpr.  $p_i p_j$ .
- ▶ Citizens like friendships, dislike arrest:

$$U_i = \sqrt{d_i} - \kappa \mathbb{1}\{i \in A\}$$

- ▶  $A$ : set of arrested citizens.

## Government:

- ▶ Wants to make arrests:

$$U_{gov} = \lambda(A)$$

- ▶ Subject to civil liberties constraint: (e.g. 'standard of proof').
- ▶ Subject to collective action constraint: excessive coercion  $\Rightarrow$  riot.
- ▶ Does not observe realized friendships but can observe group  $(a, b)$ .

## Informational environment

- ▶ To make arrests, need to interrogate citizens.  $N$ : set of interrogated citizens.
- ▶ Each interrogated citizen generates a 'clue' about each of his friends  $\Rightarrow$  Clues revealed about  $i$ :  $s_i = \int_{j \in N} i \text{ \& j friends } dj$
- ▶ Government receives a binary signal  $\theta_i$ :

$$\mathbb{P}(\theta_i = 1 | i \notin T, s_i) = a_0 - b_0 s_i$$

$$\mathbb{P}(\theta_i = 1 | i \in T, s_i) = a_1 + b_1 s_i$$

- ▶ **Standard of proof:** Government can only arrest if  $i$ 's posterior is above a threshold:  $\mathbb{P}(i \in T | \theta = 1, s_i) > \underline{\chi}$ .
- ▶ Dense social network  $\Rightarrow$  effective information aggregation.

## The government's problem

- ▶ But also: Dense social network  $\Rightarrow$  strengthened collective action:

Network-based limit to the government's ability to exercise coercion: Contagion (Erol et al. (2020), Morris (2000))

- ▶ Excessive interrogation leads to contagion (of willingness to resist).
- ▶ Interrogated citizens become 'infected': they are the seed of the process.
- ▶ A citizen with  $\psi$  'infected' friends becomes infected too  $\Rightarrow$  think of  $\psi$  as an inverse measure of the strength of civil society (exogenous here).
- ▶ If all citizens 'infected', riot ensues and government cannot arrest anybody.

## The government's problem: the No-Riot Constraint (NRC)

- ▶ Recursive definition of the constraint:
- ▶ There is no contagion for citizens of group  $a$  ( $\mathbb{1}\{NCa\}$ ) if

$$\begin{cases} \lambda_a p_{aa}^2 \tau_a + \lambda_b p_{ab} p_{ba} \leq \psi (\lambda_a p_{aa}^2 + \lambda_b p_{ab} p_{ba}) & \text{if } \mathbb{1}\{NCb\} = 0 \\ \lambda_a p_{aa}^2 \tau_a + \lambda_b p_{ab} p_{ba} \tau_b \leq \psi (\lambda_a p_{aa}^2 + \lambda_b p_{ab} p_{ba}) & \text{if } \mathbb{1}\{NCb\} = 1 \end{cases} \quad (NCa)$$

- ▶ And a symmetric expression for group  $b$ .
- ▶  $\Rightarrow$  the NRC is simply  $\mathbb{1}\{NCa\} \mathbb{1}\{NCb\} < 1$ .
- ▶ Non-convex constraint set: either equal treatment ( $\tau_a = \tau_b < 1$ ), or one of the groups fully interrogated ( $\tau_b = 1$ ): Gives us govt's best reply:  $\tau(\mathbf{p})$ .



## Citizens' socialization choices

Citizens' best replies to each other given their beliefs:

$$p_{aa} = \frac{(\omega/\tau_a^e)^2 - \lambda_b p_{ab} p_{ba}}{\lambda_a p_{aa}}, \quad p_{ab} = \frac{(\omega/\tau_b^e)^2 - \lambda_a p_{aa}^2}{\lambda_b p_{ba}}$$

$\omega$ : sufficient statistic for the strength of civil liberties (depends on  $\kappa, \underline{\chi}, b_0, b_1$ )

Symmetric expressions for  $b$ 's.

Call this system of 4 eqs. in 4 unknowns  $\Psi(\mathbf{p}|\tau^e)$ .

- ▶ Two observations:
  - ▶ If  $\tau_a^e = \tau_b^e$ , these two expressions reduce to the same equation.
  - ▶ If  $\tau_a^e \neq \tau_b^e$  and one expression holds at an interior solution, the other must be at a corner (0 or 1).

# Equilibria

- ▶  $\tau(\mathbf{p})$ : government's best reply to citizens' socialization strategies.
- ▶  $\Psi(\mathbf{p}|\tau^e)$ : citizens' best replies against each other given beliefs  $\tau^e$ .
- ▶ The equilibria of this game are the fixed points of

$$\tilde{\Psi}(\mathbf{p}) = \Psi(\mathbf{p}|\tau(\mathbf{p}))$$

Main result:  $\tilde{\Psi}(\mathbf{p})$  is non-empty.

Three types of equilibria depending on the parameter region:

1. **ETE**: Equal treatment and homogeneous-degree society (ignore group labels):

$$\tau_a = \tau_b, \quad p_{aa} = p_{ab} = p_{ba} = p_{bb}$$

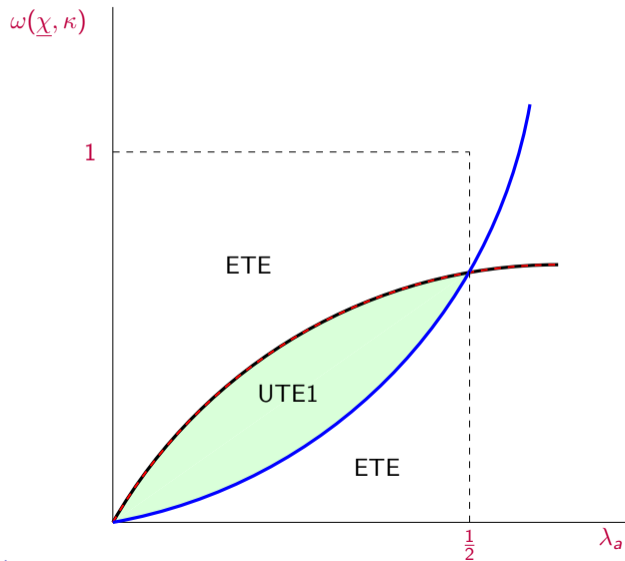
2. **UTE**: Unequal treatment (1 and 2) and segregated society:

$$\tau_a < \tau_b, \quad p_{aa} \neq p_{ab} \neq p_{ba} \neq p_{bb}$$

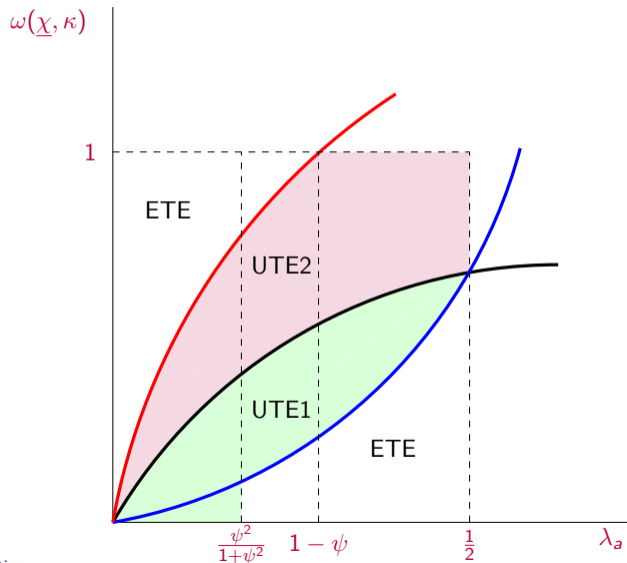
## Asymmetric equilibria: discussion

- ▶ Multiple equilibria:
  - ▶ ETE: Expectation of equal treatment  $\Rightarrow$  homogeneous socialization. Expectation of a homogeneous society  $\Rightarrow$  the government cannot interrogate at different rates without triggering riot.
  - ▶ UTE: Expectation of unequal treatment (high interrogation rate to one group)  $\Rightarrow$  reduces socialization incentives towards that group  $\Rightarrow$  segregated and less cohesive society  $\Rightarrow$  relaxed NRC  $\Rightarrow$  government can increase  $\tau$  on one group  $\Rightarrow$  expectations fulfilled.
- ▶ UTE are always the *unique strict equilibria* when they exist. ETE is non-strict.
- ▶ UTE less likely to exist when civil society is strong (small  $\psi$ ) -exogenous here-.

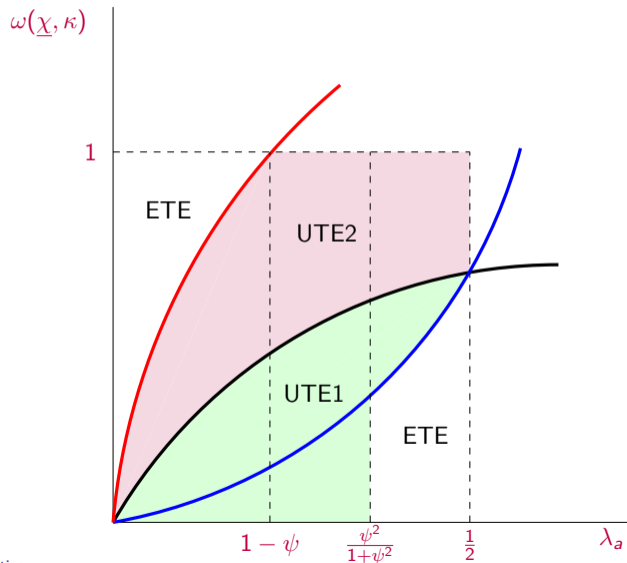
# Parameter regions sustaining unequal treatment: $\psi \approx 0$



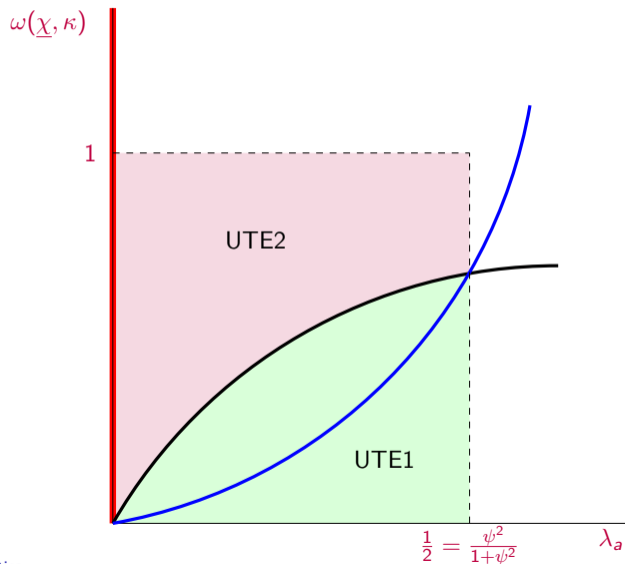
# Parameter regions sustaining unequal treatment: $\psi \in (0, \psi^*)$



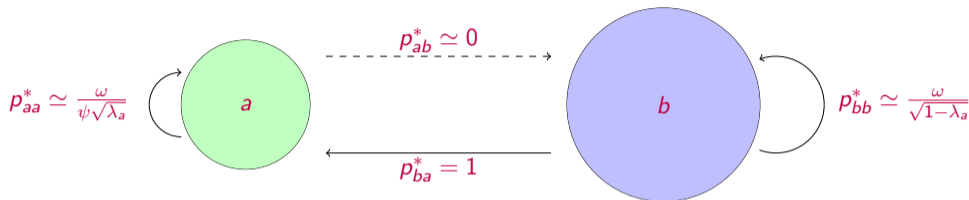
# Parameter regions sustaining unequal treatment: $\psi \in [\psi^*, 1)$



# Parameter regions sustaining unequal treatment: $\psi \approx 1$



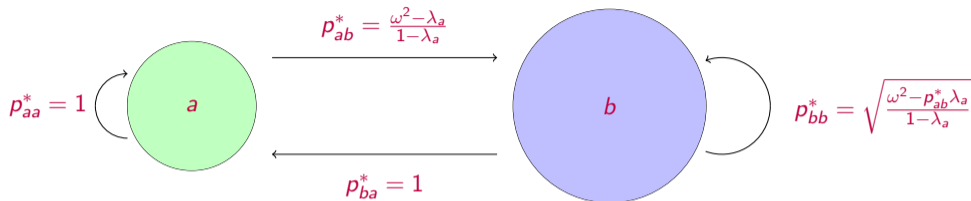
## Equilibria with unequal treatment: fully segregated society (UTE1)



- ▶ Members of the favorably treated group ( $a$ ) do not socialize with members of the unequally treated group ( $b$ )  $\Rightarrow$  only within-group socialization.
- ▶  $d_a > d_b$ .
- ▶ Stronger civil society (smaller  $\psi$ ) increases the degree of  $a$  but not of  $b$  citizens.



## Equilibria with unequal treatment: partially segregated society (UTE2)



- ▶ Asymmetric cross-socialization efforts:  $p_{ab}^* < p_{ba}^*$ .
- ▶ High within-group socialization of the favorably treated group  $\Leftarrow$  low interrogation rate on  $a$ 's to prevent contagion  $\Leftarrow$  Tighter *NRC* faced by the govt.  $\Leftarrow$  More cohesive society.
- ▶  $d_a > d_b$  (and  $a$ 's are fully connected within group).
- ▶  $p_{ab}^*$  and  $p_{bb}^*$  covary negatively.

## Equilibria with unequal treatment: payoffs

### Result: Citizens' payoffs

In all UTE the payoff of citizens of *both* groups is lower than under ETE.  $\Rightarrow$  UTE represent coordination failures by citizens. Contrast with:

- ▶ Models of social norms (e.g. [Akerlof \(1976\)](#), [Cole et al. \(1998\)](#).)
- ▶ Models of discrimination (e.g. [Alesina and LaFerrara \(2000\)](#), [Mailath et al. \(2000\)](#), [Coate and Loury \(1993\)](#)).

### Result: Government's payoff

Better off under unequal treatment only when equal treatment would lead to full cohesion (when  $\omega > \psi$ )  $\Rightarrow$  The coordination failure also involves the government.

# Extensions

- ▶ Comparative statics of equilibrium with respect to:
  - ▶ Improvements in the accuracy of the information aggregation technology.
  - ▶ Increase in the threat likelihood.
  - ▶ Improvements in the strength of civil liberties ('standard of proof').
- ▶ Unequal treatment towards the minority group.
- ▶ Information aggregation technology subject to resistance via social norms (code of silence, eg. [Banfield \(1958\)](#), [Servadio \(1976\)](#)).

# Conclusions

Civil liberties are a buffer between citizens and governments attempting to aggregate distributed information.

## Trade-off

Highly cohesive and connected societies allow governments very effective information aggregation... but they also strengthen citizens' ability to resist state coercion.

## Result

We show that a segregated social structure and weak civil liberties in the form of unequal treatment sustain each other: citizens only want to segregate their social relationships when the government unequally treats them, and the government only wants to engage in unequal treatment when society is segregated.

No need for any imperfect empathy or payoff relevant ex-ante differences.