

# Coordination games and social movements

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# Logic of collective action: a review

- **Collective action problem:** It's puzzling that anyone bothers to contribute to collective efforts to obtain policy benefits.
- Groups that overcome the collective action problem may not deserve the resulting policy benefits: small groups are more effective!



Mancur Olson

A skeptical response to pluralism.

# How do protests, revolutions overcome collective action problems?

Selective incentives?



Tahrir Square (photo credit: Guardian)

Puzzles/questions:

- Why so unpredictable/surprising?
- Why so contagious?

# Collective action problem and the prisoner's dilemma



		Player 2	
		Contribute	Don't
Player 1	Contribute	1,1	-1,2
	Don't	2,-1	0,0

**Recall:** In prisoner's dilemma, players only contribute if there is some external enforcement or enticement.

(They may **pay** for this enforcement or enticement to be offered.)

My best action does not depend on your action. (Dominant strategy.)

# A different game: coordination game

Here the logic is different:

- if you hunt the stag, I want to hunt the stag
- if you hunt the hare, I want to hunt the hare

My best action **does** depend on your action. Two equilibria.

Risk of

- Coordination failure ( $\{\text{Stag, Hare}\}$  or  $\{\text{Hare, Stag}\}$ )
- Coordination trap ( $\{\text{Hare, Hare}\}$ )

		Player 2	
		Stag	Hare
Player 1	Stag	2,2	0,1
	Hare	1,0	1,1



# Bandwagon effects



# Timur Kuran (1991) and predictable unpredictability

Why was 1989 such a surprise?

- “preference falsification”
- bandwagon effects

Revolutions (especially in illiberal regimes) *predictably unpredictable*.



“This emphasis on unpredictability should not be considered offensive to the scientific spirit: accepting the limits of what we can expect from science is not an admission of defeat.” (47)

# Kuran's threshold model

**Key assumption:** cost of protest (risk) is lower when others protest.

**Implication:** Everyone has a “revolutionary threshold”; if the number of citizens protesting against the regime is above my threshold, I also protest.

Consider two **threshold sequences** for a ten-person population:

$$A = \{0, 2, 2, 3, 4, 5, 6, 7, 8, 10\}$$

$$A' = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 10\}$$

If we start from a situation with no one protesting, how many will eventually protest? What if we start from a situation with everyone protesting?

What are the **equilibria**?



# Classic coordination game as a simple threshold model



		Player 2	
		Stag	Hare
Player 1	Stag	2,2	0,1
	Hare	1,0	1,1

$$A = \{1,1\}$$

## Common features:

- Each player's optimal move depends on what the other player does (or what she thinks the other player will do)
- Multiple equilibria

# Preference falsification and unpredictability



What makes protest unpredictable, supposing the “threshold model” applies?

- Small changes in citizen preferences can trigger a cascade of protest (see above)
- We often don’t know citizens’ thresholds, especially in repressive regimes:
  - Citizens hide their true feelings from the regime
  - The state hides citizens’ true feelings from other citizens

Suppose there is a ten-person society in which three of the citizens are openly protesting the regime. What do we know about their revolutionary thresholds?

$$A = \{x, x, x, y, y, y, y, y, y, y\}; \quad x < 3; y > 3$$

# Explaining contagion?

Kuran's threshold model can explain contagion *within a country*.

What about the spread of revolutions across countries, as we saw in 1989 (Eastern Europe), 2011 (Arab Spring), 1830, 1848?

Protesters in Egypt following Tunisian revolution: "We are next, we are next, Ben Ali tell Mubarak he is next"



# Explaining contagion?

Basic logic of threshold model may apply: cost of protesting in country A may be lower when revolution occurring in country B. (Western attention on region makes protesting in Egypt safer?)

Let's consider two alternative explanations:

- Protests reveal information (about the regime or the cost of protesting) that changes revolutionary thresholds
- Galvanizing events solve coordination problems.

# Explaining contagion (I): The spread of information



A successful revolution in country A can inform citizens in country B that

- carrying out a revolution is **easier** than they thought
  - country B's ruler may be weaker than I thought, given weakness of country A's ruler
  - the same tactics might work in country B
  - the international community may support/not prevent revolution in country B too
- carrying out a revolution is **more necessary** than they thought
  - country B's ruler may be worse than I thought, given what I am learning about country A's ruler
  - country A's citizens were brave and we should be too

Same information can be transmitted within a country.



# Explaining contagion (2): Galvanizing events



Citizens may simply be waiting for a signal. A revolution in another country can provide it.

		Player 2	
		Stag	Hare
Player 1	Stag	2,2	0,1
	Hare	1,0	1,1



Press conference 9  
Nov 1989, Berlin

# Wrapping up/discussion

**Unpredictability** of protests comes from bandwagon/threshold effects and preference falsification.

**Contagion** of protests comes from “safety in numbers”, revelation of information, and coordinating role of galvanizing events.

Questions:

- Role for emotions?
- Useful for explaining less dramatic social movements, e.g. feminism, environmentalism, political extremism?
- When do we expect more or less contagion?