Strategy and Politics:
Incomplete Information

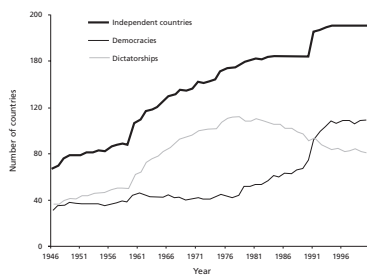### Matt Golder

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Democratic Transitions

Figure: Independent Countries, Democracies, and Dictatorships, 1946-2000

Number of independent countries in the world has grown from 67 in 1946 to 190 in 2000.

Democratic Transitions

The number of democracies in the postwar period has been increasing since about 1974.

This is the beginning of Huntington's third wave of democracy.

Three waves of democracy

- Wave 1: 1828-1926. American and French revolutions, WWI.
- Wave 2: 1943-62. Italy, West Germany, Japan, Austria, and so on.
- Wave 3: 1974- . Started with Greece, Spain, and Portugal. Then Latin America and Africa.

Democratic Transitions

We will look at two types of democratic transitions:

1. Bottom-up transition: One in which the people rise up to overthrow an authoritarian regime in a popular revolution.
2. Top-down transition: One in which the dictatorial ruling elite introduces liberalizing reforms that ultimately lead to a democratic transition.

Bottom-Up Transitions

Protests on the streets of Berlin and Leipzig in 1989 forced the East German government to open up the Berlin Wall and allow free elections.

The end result was the reunification of Germany.

From our vantage point, the collapse of communism in East Germany, and Eastern Europe more generally, is seen as inevitable. But . . .

Bottom-Up Transitions

At the time, the collapse of communism came as a complete surprise to almost everyone.

Communist regimes seem very stable. There had been very few uprisings or revolts in Eastern Europe.

- Berlin uprising in 1953
- Poland's National Road to Socialism in 1956
- Hungary 1956
- Czechoslovakia in 1968
- Poland 1981

Bottom-Up Transitions

East Germany seemed particularly stable.

Communist government in the GDR was one of the most hard-line in Eastern Europe.

No real crisis since the Berlin Uprising of 1953, when protests calling for the resignation of the Communist government were met with force and martial law.

Huge secret police force called the STASI. There was one STASI officer for every ninety citizens.

Compared with other East European countries, East Germany was relatively prosperous.

Bottom-Up Transitions

The eventual collapse of communism in East Germany had much to do with the election of Gorbachev as leader of the Soviet Union in 1985.

Inheriting a Soviet Union in crisis, Gorbachev responded with two reform policies called **glasnost** and **perestroika**.

- Perestroika - reform policy aimed at liberalizing and regenerating the Soviet economy.
- Glasnost - reform policy aimed at increasing political openness.

The aim of these reform policies was to save the Soviet Union.

However, these reform policies encouraged reformists and opposition groups in Eastern Europe.

Bottom-Up Transitions

The Polish government convened a conference, known as the Roundtable Talks, with the main opposition group, Solidarity, to help reach a compromise on how to deal with economic and political problems.

These talks resulted in the legalization of an independent trade union (Solidarity) and nationwide elections that produced the first non-Communist PM in Eastern Europe for forty years.

Bottom-Up Transitions

The Polish government convened a conference, known as the Roundtable Talks, with the main opposition group, Solidarity, to help reach a compromise on how to deal with economic and political problems.

These talks resulted in the legalization of an independent trade union (Solidarity) and nationwide elections that produced the first non-Communist PM in Eastern Europe for forty years.

The changes in Poland encouraged liberalizers elsewhere in Europe.

Hungary started to make cautious moves to ease censorship and legalize an independent trade union in 1989.

When the Soviet Union did not respond, the Hungarian Communist Party renamed itself the Socialist Party, the country changed its name to the Republic of Hungary, and multiparty elections were called for 1990.

Notes

Bottom-Up Transitions

Things began to change in East Germany when Hungary decided to open its border with Austria.

Thousands of East Germans fled to the West across Hungary's border.

A fledgling opposition group called *Neues Forum* started organizing protests in Leipzig and Berlin.

Gorbachev announced that the Soviet Union would not intervene in East Germany.

Notes

Bottom-Up Transitions

Eventually, the East German government responded to the growing protests by opening up the Berlin Wall in November 1989.

In March 1990, multiparty elections were held and won by parties promoting reunification.

Reunification finally took place in October 1990.

Notes

Bottom-Up Transitions

Crowds and protests have been important in other transitions to democracy.

- Velvet Revolution in Czechoslovakia in 1989
- Overthrow of Ceaucescu in Romania in 1989
- People Power Revolution that overthrew Marcos in the Philippines in 1986
- June Resistance which led to democratic elections in South Korea in 1987

Eastern Europe, click ▶ here
Egypt, click ▶ here
China, click ▶ here

Bottom-Up Transitions

How can we explain these types of bottom-up transitions?

Why did the collapse of communism in Eastern Europe occur in 1989 and not earlier?

Why did Eastern Europe, which in retrospect seemed to have been filled with fragile Communist regimes, seem so stable before 1989?

Why are revolutions so rare? Why are they hard to predict?

Bottom-Up Transitions: Collective Action Theory

Collective action theory focuses on forms of mass action or "collective action" such as the protests in East Germany.

Other examples of collective action include strikes, elections, fraternities, and sororities, and so forth.

Typically, collective action concerns the pursuit of "public goods" by groups of individuals.

Bottom-Up Transitions: Collective Action Theory

A **public good** has two characteristics:

1. **Non-excludable**: If the good is provided, everyone gets to enjoy it. Nobody can be excluded from it.
2. **Non-rivalrous**: If someone consumes the good, there is still just as much for everyone else to consume.

Examples: Lighthouse, fire station, national park, democracy.

Bottom-Up Transitions: Collective Action Theory

Public goods are clearly quite desirable.

This might make you think that individuals who are likely to benefit from some public good would be enthusiastic contributors to the provision of that good.

Put differently, you might expect that groups of individuals with common interests would act collectively to achieve those interests.

Bottom-Up Transitions: Collective Action Theory

Public goods are clearly quite desirable.

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Put differently, you might expect that groups of individuals with common interests would act collectively to achieve those interests.

However, there are compelling reasons to doubt whether individuals will take collective action to achieve their common interests.

The difficulty that groups have in providing public goods that all members of the group desire is known as the **collective action problem** or **free-rider problem**.

Start by asking yourself whether you would contribute to the provision of a public good that you value.

Would you join a pro-democracy protest like those in East Germany or would you stay at home?

You know that one person is unlikely to be the decisive factor in determining whether the protest is going to be successful.

You also know that it is costly to participate in the protest.

The decision to not participate is very appealing:

- If the pro-democracy rally fails, you will not have paid any costs or run the risk of incurring the dictatorship's wrath.
- If the pro-democracy rally succeeds, you can "free ride" on the participation of others because everyone gets to benefit from the establishment of democracy whether they participated in the protest or not.

The **collective action**, or **free-rider**, **problem** refers to the fact that individual members of a group often have little incentive to contribute to the provision of a public good that will benefit all members of the group.

Imagine a group of N individuals.

If K people contribute or participate, then the public good is provided.

If the public good is provided, all group members get benefit, B.

If a group member contributes or participates, then he or she pays a cost, C.

To capture the notion that the public good provides more benefits than the cost of participating, we'll assume that $B > C$.

Would you participate?

Figure: Pro-Democracy Protest: Do I Participate or Not?

	Scenario 1 (Fewer than $K-1$ participate)	Scenario 2 (Exactly $K-1$ participate)	Scenario 3 (K or more participate)
Participate	$-C$	$\underline{B-C}$	$B-C$
Don't participate	$\underline{0}$	0	$\underline{B}$

K = the number of individuals that must participate for the pro-democracy protest to be successful; C = cost associated with participating; B = benefit associated with a successful pro-democracy protest; underlined letters indicate the payoffs associated with the actor's best response—participate or don't participate—in each scenario. It is assumed that $B > C > 0$.

The fact that the logic behind these choices applies to everyone in the group suggests that there are only two possible equilibria.

1. No one participates.
2. Exactly K people participate.

Why?

Equilibrium 1: No one participates.

- If no one is participating, no one will want to individually deviate by participating because they will pay the cost of participating but the one-person rally will be a failure.

Equilibrium 2: Exactly K people participate.

- If exactly K people participate, none of the participants will want to individually deviate by staying home, because the rally will fail, and none of the non-participants will want to participate, because the rally is already successful without them

Bottom-Up Transitions: Collective Action Theory

Thus, for a pro-democracy rally to succeed, exactly K individuals must believe that they, and only they, are likely to participate.

This insight suggests that two factors in particular are crucial for determining the likely success of collective action:

- The difference between K and N
- The size of N

Bottom-Up Transitions: Collective Action Theory

Difference between K and N

If $K = N$, then there is no incentive to free ride.

- Everyone must participate to obtain the public good and everyone knows this. Thus, the public good will be obtained.

If $K < N$, then there is an incentive to free ride.

- All know that their contribution may not be necessary. If enough people free ride, then the public good will not be obtained.

The larger the difference between K and N, the greater the incentive to free ride.

Only a few people are required to contribute, so why not be one of the ones who free ride.

Bottom-Up Transitions: Collective Action Theory

Difference between K and N

The bottom line is that forms of collective action such as protests, strikes, revolutions, lobbying, and so on are less likely to be successful when the number of group members required for success (K) is significantly smaller than the number of people who would benefit from the success (N).

Bottom-Up Transitions: Collective Action Theory

The Size of N

The size of the group (N) is important because it influences the likelihood that you will think of yourself as critical to the form of collective action.

Should you run the risks associated with participating in a pro-democracy protest if N is large?

- If hardly anyone is protesting, then your individual participation is unlikely to matter.
- If lots of people are already protesting, then your individual participation is unlikely to matter.

Bottom-Up Transitions: Collective Action Theory

The Size of N

The bottom line is that larger groups find it harder to overcome the collective action problem than small groups.

Counterintuitive implications:

- Suggests that small groups may be more powerful than large groups.
- Challenges the common concern in democratic theory that the majority will tyrannize and exploit the minority.

Bottom-Up Transitions: Collective Action Theory

Collective action theory provides a possible explanation for the apparent stability of communism in postwar East Germany and for why public demonstrations of regime opposition are so rare in dictatorships more generally.

It reminds us that the fact that many East Germans shared a common interest in the overthrow of the Communist regime does not automatically translate into their taking collective action to bring this about.

Bottom-Up Transitions: Collective Action Theory

Although collective action theory helps to explain why revolutions are so rare and why dictatorships often appear so stable, it cannot really explain the mass protests that eventually brought communism down in 1989.

Participation becomes the puzzle that now needs to be explained.

Bottom-Up Transitions: Tipping Models

Start with an individual who must choose whether to publicly support or oppose the dictatorship.

The individual has a private and a public preference.

- His private preference is his true attitude toward the dictatorship.
- His public preference is the attitude toward the dictatorship that he reveals to the outside world.

It can be dangerous to reveal your opposition to a dictatorship. As a result, individuals who oppose dictatorial rule often falsify their preferences in public.

Bottom-Up Transitions: Tipping Models

Preference Falsification

Kuran (1991) writes that people in East Germany "routinely applauded speakers whose message they disliked, joined organizations whose mission that they opposed, and signed defamatory letters against people they admired."

Preference falsification provides another reason why protests were so rare in Eastern Europe.

Bottom-Up Transitions: Tipping Models

Although many people engage in preference falsification, there is probably a protest size at which they would be willing to publicly reveal their true preferences.

- They might not wish to join a protest of 100 people, but they may be willing to join a protest of 100,000.
- Reason: As protests become larger, it becomes harder for dictatorships to monitor and punish each individual.

We'll refer to the protest size at which an individual is willing to participate as his revolutionary threshold.

Bottom-Up Transitions: Tipping Models

Individuals naturally have different revolutionary thresholds.

Some people are quite happy to oppose the government irrespective of whether others do.

- These people have a low revolutionary threshold.

Other people may be willing to protest only if lots of others join in.

- These people have high thresholds.

Some people will actually support the regime and would be extremely unwilling to protest.

- These people have very high thresholds.

Bottom-Up Transitions: Tipping Models

Society A

Imagine a ten-person society (A) with the following threshold sequence:

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

$T_1 = 0$: always supports the opposition.

$T_5 = 4$: supports government if $0 < S < 4$ but joins the opposition if $4 < S < 10$.

$T_{10} = 10$: always supports government.

Society A

The distribution of revolutionary thresholds in a society is crucial in determining whether a revolution occurs or not.

Do we expect a revolution to occur in society A?

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

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

Person 1 will publicly oppose the government, but no others will join him.

Persons 2 and 3 would join if two people revolted, but only one has. Thus, they do not revolt.

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

Person 1 will publicly oppose the government, but no others will join him.

Persons 2 and 3 would join if two people revolted, but only one has. Thus, they do not revolt.

Suppose person 2 becomes more alienated from the government and her threshold drops to 1.

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

What happens now?

Society A'

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

Nine-person revolt.

- Person 1 revolts, which causes person 2 to revolt, which causes person 3 to revolt, and so on.
- Only person 10 does not join in.

A slight shift in one person's threshold generates a revolutionary cascade.

Societies B and B'

Compare the original society A with a new one B, where person 3 has a higher threshold of 3 instead of 2.

$$B = 0, 2, 3, 3, 4, 5, 6, 7, 8, 10$$

Result: One-person revolt.

Person 2's threshold now drops to 1.

$$B' = 0, 1, 3, 3, 4, 5, 6, 7, 8, 10$$

Result: Two-person revolt. No revolutionary cascade.

Some Implications

The same change in thresholds may lead to revolution in one setting (A') but to a small, abortive, and ultimately unsuccessful protest in another (B').

This result has implications for those who argue that revolutions and protests are caused by structural factors such as relative deprivation, grievances, or oppression.

The tipping model suggests that things like economic recessions may cause private preferences and revolutionary thresholds to move against the regime without actually producing a revolution.

Structural factors such as economic recessions are not sufficient in and of themselves to produce revolutions, although they may make revolutions more likely by reducing individuals' revolutionary thresholds.

Bottom-Up Transitions: Tipping Models

Some Implications

Preference falsification means that a society's distribution of revolutionary thresholds is never known to the individuals in that society.

Thus, a society can come to the brink of a revolution without anyone's ever knowing it.

Our inability to observe private preferences and revolutionary thresholds conceals potential revolutionary cascades and makes revolutions impossible to predict.

The "predictability of unpredictability" (Kuran 1991).

Bottom-Up Transitions: Tipping Models

Collapse of Communism

Structural changes in the 1980s lowered the revolutionary thresholds of East Europeans.

- Appointment of Gorbachev and his reformist policies.
- Poor economic performance of East European countries
- Gorbachev's statement that the Soviet Union would not intervene militarily in the domestic politics of East European countries.

Demonstration effects and revolutionary diffusion.

- The successful introduction of pro-democracy reforms in one country further reduced revolutionary thresholds and encouraged pro-democracy protests elsewhere.
- This led to a revolutionary cascade across countries rather than across individuals.

Bottom-Up Transitions: Tipping Models

Collapse of Communism

In hindsight, the collapse of communism seems inevitable.

Historians who interviewed individuals across Eastern Europe report that there was a huge pent-up pool of opposition to Communist rule that was bound to break out at some point.

But although this makes it appear that the collapse of communism was inevitable, we should be wary of drawing this conclusion.

Why?

Bottom-Up Transitions: Tipping Models

Collapse of Communism

Preference falsification works both ways!

As a revolutionary cascade starts to snowball, supporters of the Communist regime may feel obliged to join the pro-democracy protests.

Just as pro-democracy supporters falsify their preferences under dictatorship to avoid punishment, pro-dictatorship supporters falsify their preferences under democracy for similar reasons.

This suggests that revolutions will always appear inevitable in hindsight even though this is, in fact, far from the case at the time.

Top-Down Transitions

Some transitions to democracy do not occur through a bottom-up process in which the government reacts to public opposition or revolution by the people.

Instead, democratic transitions result from a policy of liberalization on the part of the government.

This policy of liberalization is often meant to sturdy up the dictatorship but sometimes inadvertently leads to democracy.

Top-Down Transitions

Many transitions to democracy are preceded by a period of liberalization.
- Brazil 1982-1985
- Uruguay 1983-1984
- Chile in the 1980s
- Poland in 1989
- East Germany in November 1989

Top-Down Transitions

The period of liberalization often results from a split in the authoritarian regime between "hard-liners" and "soft-liners."

Typically, the regime has come under some form of pressure due to declining economic conditions or social unrest, and the soft-liners have come to prominence.

Whereas hard-liners tend to be satisfied with the status quo, the soft-liners may prefer to liberalize and broaden the social base of the dictatorship in an attempt to gain allies and to strengthen their position vis-à-vis the hard-liners.

Top-Down Transitions

The soft-liners must decide whether to open up the political regime through a process of liberalization or to stick with the status quo.

Liberalization entails a controlled opening of the political space that might include the formation of political parties, holding elections, writing a constitution, opening a legislature, establishing a judiciary, and the like.

The goal of the liberalization process is NOT to bring about democracy but to incorporate various opposition groups into authoritarian institutions.

It is an attempt to co-opt or divide and control opposition groups.

The goal is what we might call a **broadened dictatorship**.

Top-Down Transitions

Broadened dictatorships characterized by seemingly democratic institutions such as elections, parties, and legislatures are increasingly common in the world.

Many scholars welcome these institutions as signs that these dictatorships are slowly moving toward democracy.

In fact, some scholars call these regimes "mixed," "hybrid," or "partial democracies," as if they were a halfway house between democracies and dictatorships.

Top-Down Transitions

However, there is growing evidence that broadened dictatorships are not undergoing a prolonged democratic transition.

In fact, liberalization and institutionalization can, under some circumstances, significantly enhance the stability of dictatorial rule.

This contradicts the common wisdom that institutions under dictatorship are meaningless or mere window dressing.

Top-Down Transitions

Given the potential benefits, why don't all dictatorships push for liberalization?

Top-Down Transitions

Given the potential benefits, why don't all dictatorships push for liberalization?

The problem is that the liberalization process is inherently unstable.

If the soft-liners liberalize, then the opposition groups have two options:
- They can accept the concessions on offer and enter the institutions of a broadened dictatorship.
- Or they can take advantage of the new freedoms to further organize and mobilize against the regime.

Top-Down Transitions

If the opposition continues to mobilize, then this is evidence that the controlled opening by the soft-liners has failed – their position is likely to be undermined in the regime.

At this point, the authoritarian elites have two choices.

1. Repression – If this is successful then the result will be a narrow dictatorship, in which the hard-liners return to power.
2. Allow a democratic transition.

Top-Down Transitions

The prehistory of the game is that a split has developed in the authoritarian elite between soft-liners and hard-liners.

For some reason, the soft-liners have come to prominence and are in a position to open up the political space through a process of liberalization if they choose.

The soft-liners move first and must decide whether to open up or stick with the status quo.

Top-Down Transitions

If soft-liners open up, the democratic opposition must decide to enter a broadened dictatorship or continue to organize and oppose the regime.
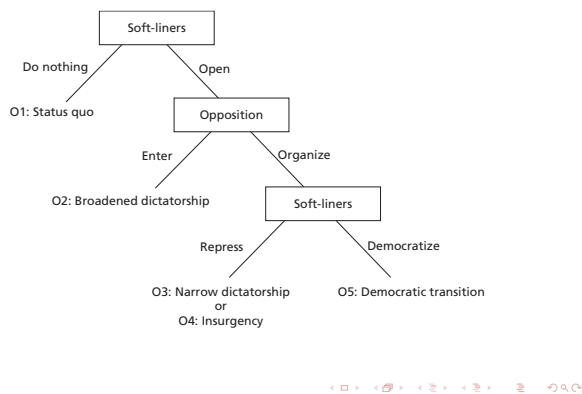
If the opposition continues to organize, the soft-liners must decide whether to allow a transition to democracy or use repression.

If repression is successful, then we have a narrow dictatorship. If repression is unsuccessful, then we have an insurgency.

Whether repression will be successful or not will likely depend on the strength of the opposition groups.

We will assume that repression is successful if the opposition is weak but unsuccessful if the opposition is strong.

Figure: Transition Game with Payoffs

Soft-liners

Do nothing — O1: Status quo

Open — Opposition

Enter — O2: Broadened dictatorship

Organize — Soft-liners

Repress — O3: Narrow dictatorship or O4: Insurgency

Democratize — O5: Democratic transition

The soft-liners have the following preference ordering:

- Broad dictatorship > SQ > Narrow dictatorship > Transition > Insurrection

The opposition has the following preference ordering:

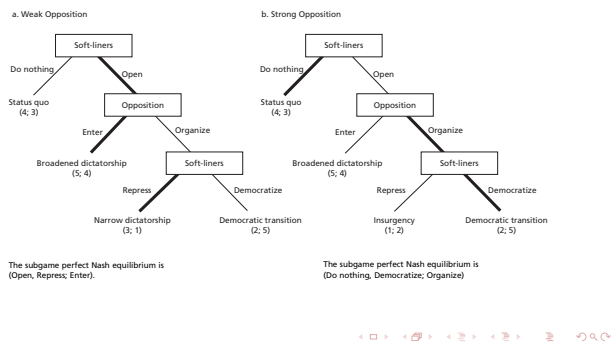- Transition > Broad dictatorship > SQ > Insurgency > Narrow dictatorship

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Figure: Turning Outcomes into Payoffs in the Transition Game

Outcome	Description	Soft-liners	Opposition
O1	Status quo	4	3
O2	Broadened dictatorship	5	4
O3	Narrow dictatorship	3	1
O4	Insurgency	1	2
O5	Democratic transition	2	5

Top-Down Transitions

Figure: Transition Game with Payoffs

a. Weak Opposition

Soft-liners
- Do nothing → Status quo (4; 3)
- Open → Opposition
  - Enter → Broadened dictatorship (5; 4)
  - Organize → Soft-liners
    - Repress → Narrow dictatorship (3; 1)
    - Democratize → Democratic transition (2; 5)

The subgame perfect Nash equilibrium is (Open, Repress; Enter).

b. Strong Opposition

Soft-liners
- Do nothing → Status quo (4; 3)
- Open → Opposition
  - Enter → Broadened dictatorship (5; 4)
  - Organize → Soft-liners
    - Repress → Insurgency (1; 2)
    - Democratize → Democratic transition (2; 5)

The subgame perfect Nash equilibrium is (Do nothing, Democratize; Organize)

Top-Down Transitions

If the opposition is strong we have the status quo.

If the opposition is weak we have a broadened dictatorship.

A transition to democracy is NOT possible as things stand.

This is when we have complete information.

- Complete information is when each player knows all the information that there is to know about the game.

Top-Down Transitions

What happens if we relax the assumption of complete information?

What happens if the soft-liners don't know whether the opposition is weak or strong?

Assume that they don't know which of the two games shown earlier they are playing.

Given our earlier discussion of preference falsification, it would make sense that the authoritarian elites would have some uncertainty about the strength of the democratic opposition.

Top-Down Transitions

It turns out that top-down transitions can occur if soft-liners are uncertain about the type of opposition (weak or strong) they are facing.

What's the intuition?

If soft-liners think that they are playing the game where the opposition is weak, then we have seen that they will open up.

But what happens if the soft-liners are mistaken in their beliefs about the strength of the opposition?

What happens if the opposition is actually strong?

Top-Down Transitions

If the opposition is strong, we have already seen that it will continue to organize and mobilize against the regime.

As soon as the soft-liners see the opposition organizing, they immediately realize that they have made a dreadful mistake – they know that only a strong opposition would organize.

Now that they know the opposition is strong, they know that repression will fail and so their best option is to allow further democratization!

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The central point is that democratic transitions from above are not possible under complete information – they can occur only when there is some uncertainty.

In effect, these types of transitions occur only because someone makes a mistake.

Top-Down Transitions

The game suggests that we are likely to see institutionalized dictatorships only when the authoritarian elites believe that the opposition is sufficiently weak.

- If they think that the opposition is strong, they will choose not to open up.

Our game does not tell us whether institutionalization will actually help dictators stay in power.

- If the dictator's beliefs about the strength of the opposition are correct, then it will.
- However, if his beliefs are wrong, then opening up the regime may hasten its fall.

Top-Down Transitions

The game suggests that it is possible to have authoritarian soft-liners who would like to open up the political system by introducing liberalizing reforms but who choose nevertheless to do nothing because they know that they cannot control the liberalization process if they start it.

In effect, some people living in dictatorships are actually living under more repressive conditions than need be the case.

If the opposition could somehow commit not to take advantage of the liberalization process, then the soft-liners might be willing to open up.

Top-Down Transitions

Poland 1989

Liberalizers attempted a policy of liberalization.

They attempted to co-opt opposition groups through Round Table talks.

- Government convened conference with Solidarity, church leaders, and intellectuals to find political compromise.
- Solidarity legalized.
- Nationwide elections.

"This game is about absorbing the opposition into our system." (Jarulzelski)

Top-Down Transitions

Poland 1989

Polish Elections

- 65 percent of seats in Sejm reserved for Communists, 35 percent up for election.
- 100 percent of seats in Senate up for election.
- Goal was to have Solidarity lend its moral authority to an electoral process in which Communists would stay in power.

What happened?

Top-Down Transitions

Poland 1989

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- Goal was to have Solidarity lend its moral authority to an electoral process in which Communists would stay in power.

What happened?

Solidarity won all 35 percent of seats in Sejm and all but one seat in the Senate. First non-Communist PM in Eastern Europe for forty years.

Top-Down Transitions: Incomplete Information Game

Recall that we previously analyzed two complete information games.

In one game the soft-liners knew the opposition was strong and in the other the soft-liners knew the opposition was weak.

In our incomplete game, we incorporate a new actor called "Nature" who determines which game the soft-liners are playing.

Top-Down Transitions: Incomplete Information Game

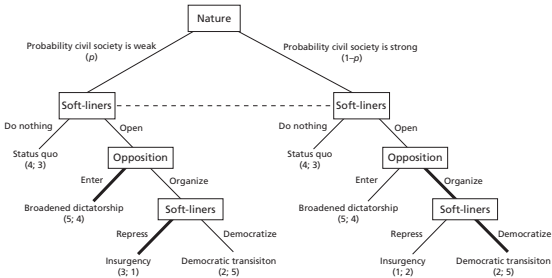The problem is that the soft-liners don't know what choice Nature made.

All they know is that with probability p Nature chooses the game in which the opposition is weak and that with probability $1 - p$ Nature chooses the game in which the opposition is strong.

We incorporate this information by using a dashed line at the beginning of the game to indicate that the soft-liners do not know which game they are playing.

Top-Down Transitions: Incomplete Information Game

Figure: Incomplete Information Transition Game

Top-Down Transitions: Incomplete Information Game

We can solve the game through backward induction only up until the first choice.

Given that the soft-liners don't know which game they are playing, what will they choose to do at the first decision node?

Top-Down Transitions: Incomplete Information Game

We can solve the game through backward induction only up until the first choice.

Given that the soft-liners don't know which game they are playing, what will they choose to do at the first decision node?

In effect, the soft-liners are choosing between doing nothing or opening up at the first choice.

Note that the soft-liners get a payoff of 4 if they do nothing no matter which game they are playing.

If they open up, they get a payoff of 5 in the game in which the opposition is weak and a payoff of 2 in the game in which the opposition is strong. The problem is that they don't know which game they are playing!

Top-Down Transitions: Incomplete Information Game

What should they do?

Political scientists answer this question by asking whether what the soft-liners could expect to get if they open up is greater than what they know that they can get by doing nothing.

In other words, is the expected payoff of opening up bigger or smaller than the known payoff of doing nothing?

Top-Down Transitions: Incomplete Information Game

What is the expected payoff for the soft-liners if they open up?

With probability p, the soft-liners are in the game with a weak opposition. Opening up in this game would give them 5.

With probability $1 - p$, the soft-liners are in the game with a strong opposition. Opening up in this game would give them 2.

Thus, the expected payoff of opening is

$$E(Open) = 5p + 2(1 - p) = 5p + 2 - 2p = 3p + 2.$$

Top-Down Transitions: Incomplete Information Game

The soft-liners will decide to open if the expected payoff from opening is larger than the payoff from doing nothing.

$$3p + 2 > 4$$
$$3p > 2$$
$$p > 2/3$$

Thus, if $p > \frac{2}{3}$, then the soft-liners will open.

If the soft-liners think that the opposition is weak with greater probability than $\frac{2}{3}$, then they will open.

Top-Down Transitions: Incomplete Information Game

The analysis illustrates how top-down transitions might occur.

In effect, we have shown that authoritarian soft-liners will choose to open up whenever they are sufficiently confident that the democratic opposition is weak.

The problem is that their beliefs about the strength of the opposition may be wrong.

Top-Down Transitions: Incomplete Information Game

Games of incomplete information highlight the important role that information and beliefs play in politics.

One implication is that political actors will have incentives to take actions that influence the beliefs of other actors.

For example, a strong democratic opposition will attempt to avoid taking any actions that would signal its strength to the soft-liners in the prehistory of the game.

Top-Down Transitions: Incomplete Information Game

In the game that we looked at, we assumed that the soft-liners did not know what type of opposition (weak or strong) they were dealing with.

However, we could easily adapt our game to examine situations in which the democratic opposition does not know what type of dictatorship (repressive or liberal) it is dealing with.

We could also examine the situation in which the opposition and dictatorship are both uncertain about each other.

Notes

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