An Introduction to Selectorate Theory

POSC 1020 – Introduction to International Relations

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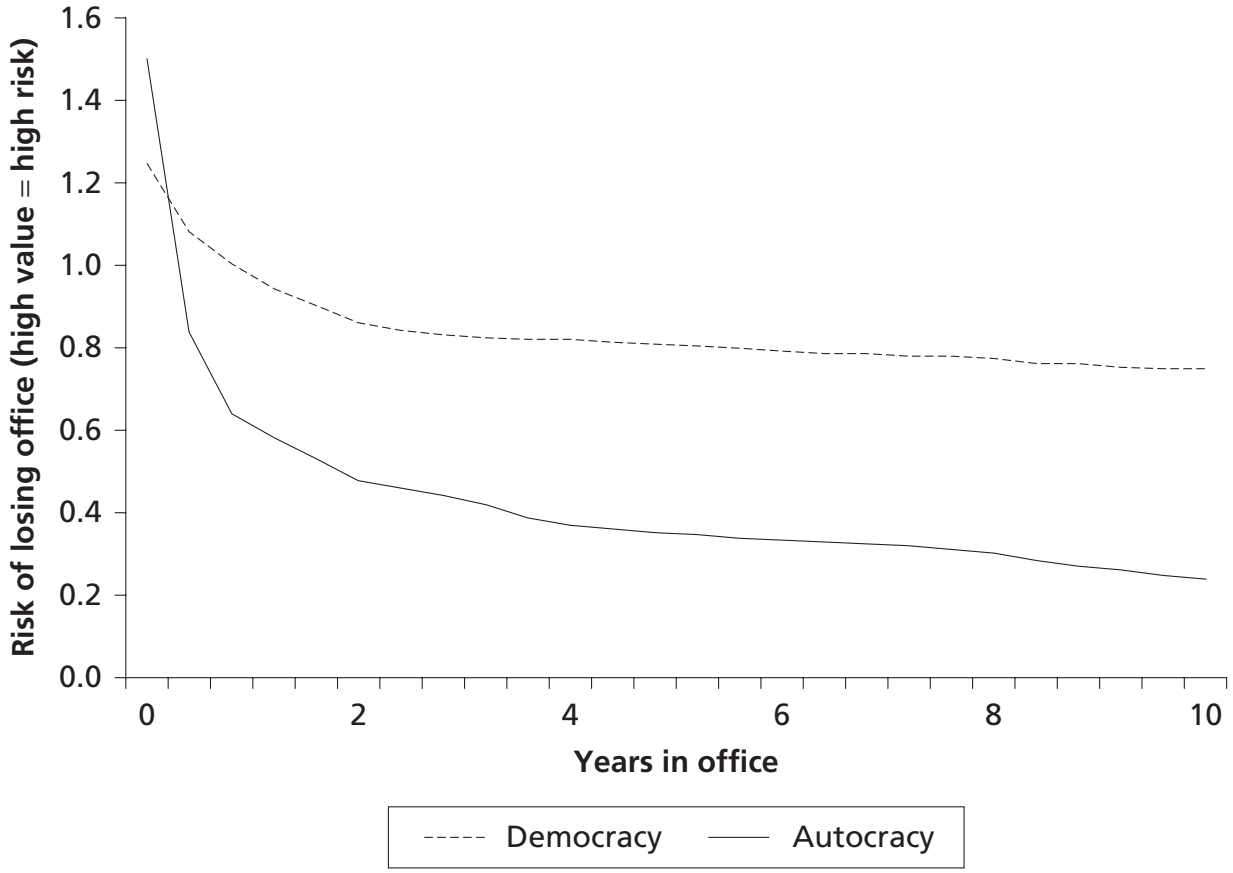
Goal for Today

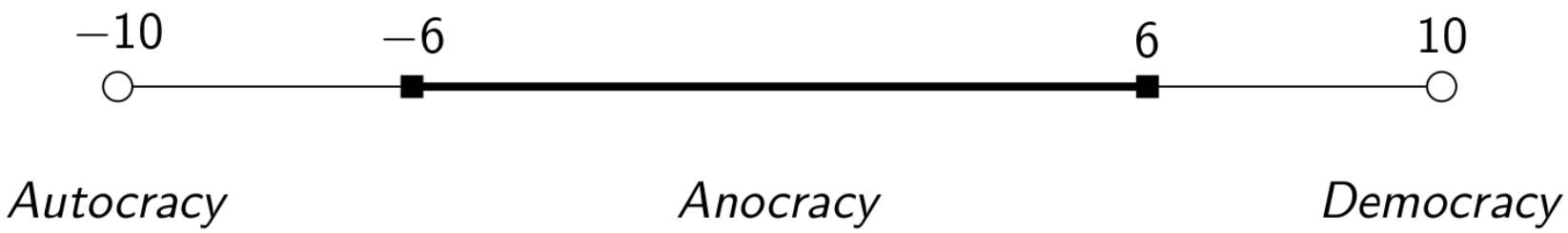
1. *Introduce students to selectorate theory.*
2. *Familiarize students with basic mathematical thinking.*

A Puzzle: How Do We Explain This?

FIGURE 1.1 **Risk of Being Removed from Office Depending on Years in Office**



Standard View of Regime Type, a la the Polity Project



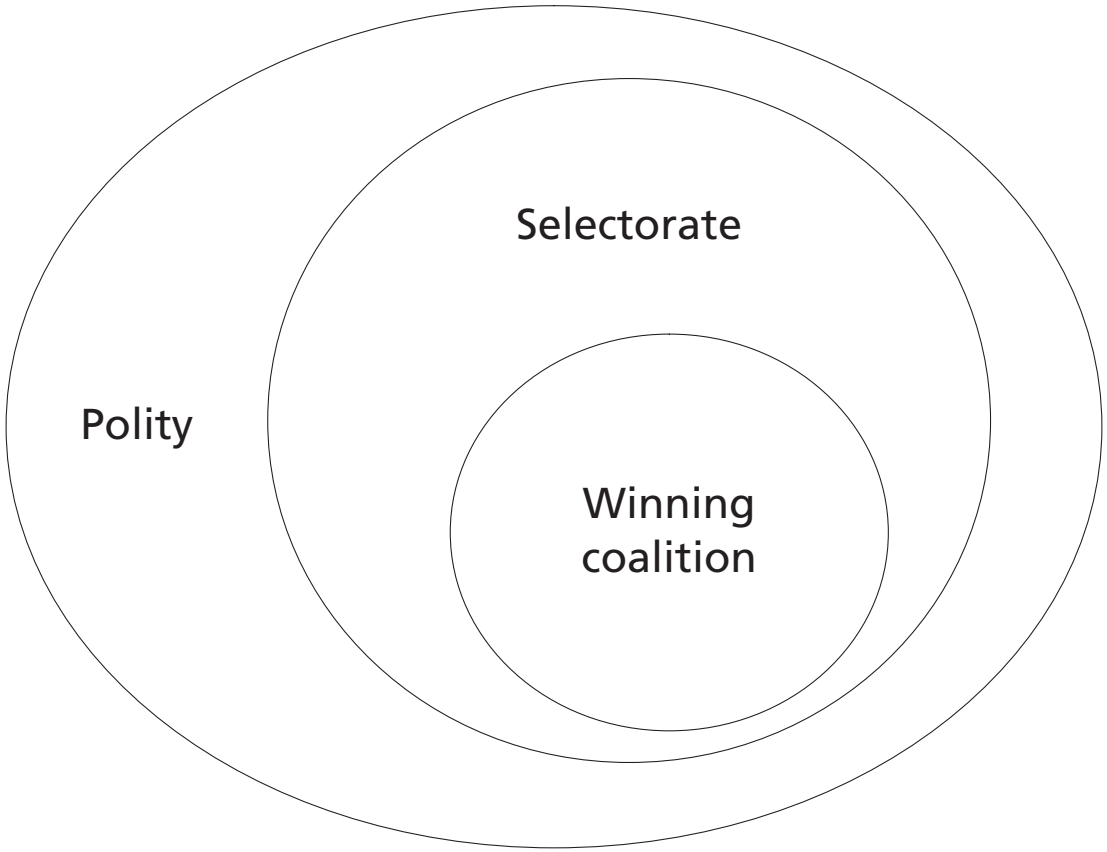
Bueno de Mesquita's Representation of State Type

The author sees states and state types differently.

- All states have citizens, the polity (N).
- The **selectorate** (S) is a subset of the citizens.
  - The selectorate has at least a nominal say in choosing the leader.
  - In the U.S. example, this is all eligible voters.
  - The disenfranchised = N - S.
- The **winning coalition** (W) is a subset of the selectorate.
  - The winning coalition is responsible for keeping the leader in power.
  - If the composition of W changes, the leader changes.
  - In democracies, W is typically 50%+1 of eligible voters.

A Representation of Selectorate Theory

FIGURE 1.2 **The Selectorate and the Winning Coalition**



Retaining Office

Recall our core assumption about leader incentives.

- So how do leaders do this?

Simple: providing goods.

- Leaders provide a combination of public/private goods for tenure.
- **Public goods**: nonexcludable, nonrivaled; everyone benefits from them.
- **Private goods**: excludable and rivalrous; only W gets them.

Finding the Right Combination

All leaders of all political systems produce both public and private goods.

- The mix varies with selection institutions.

As W increases, the leader sees more value in providing public goods.

- Bribing a lot of people is rather expensive.

When W is small, the leader provides more private goods.

- It's why the Kim family can starve out 24-million people when only 9-250 people (basically: military elites) need private rewards.

W/S: The Loyalty Norm

We can classify states by type depending on the ratio W/S.

- Size of winning coalition/size of selectorate.
- Assumption: $W \leq S$
- States with large W/S are what we would call democracies.

W/S is what the author calls a **loyalty norm**. It captures how loyal a W member is to the leader.

- Formally, it is the probability of being included in any future winning coalition.
- The smaller W/S, the *more* loyal the W member should be.

When Does a Winning Coalition Member Defect?

There is some math upcoming, so let's introduce some variables first:

- $x =$ public goods; $g =$ private goods
- $W =$ winning coalition; $s =$ selectorate
- $W/S =$ loyalty norm (Assumption: $W \leq S$)
  - Formally: the probability of being included in a future winning coalition.
- $\delta =$ discount factor (Assumption: $0 \leq \delta \leq 1$)
  - This is a "discounted" payout over repeated trials of a game.
  - Important if a player prefers a payout now vs. a payout in the future.
  - Higher values of δ mean player cares more about future payouts.
- $\frac{1}{1-\delta}$: standardized payout over infinity trials.
  - i.e. $1 + 1\delta + 1\delta^2 + 1\delta^3 + \ldots 1\delta^\infty = \frac{1}{1-\delta}$

When Does a Winning Coalition Member Defect?

This is a simple expected utility calculation.

$$EU(W_i|Loyal) = \frac{1}{1-\delta}(x + \frac{g}{W}) \tag{1}$$

$$EU(W_i|Defect) = \frac{1}{1-\delta}[\frac{W}{S}(x + \frac{g}{W}) + 1 - \frac{W}{S}(x)] \tag{2}$$

Very simply: when does W_i choose to defect?

- What else does W_i consider in her decision to defect or remain loyal?

W/S: A Simple Illustration

Assume a leader has this system: $S = 1{,}000{,}000$; $W = 100$.

- The leader has \$1 billion at her disposal to retain her office.

What could the leader do to retain office?

W/S: A Simple Illustration

The leader could divide that pie: \$10-million per W member.

- If W member (W_i) wants more, there's a .01% chance he could get a better deal and a 99.99% chance he gets nothing.
- i.e. $W/S = \frac{100}{1000000} = \frac{1}{10000} = .0001$

His expected utility for defection is \$1,000.

- $EU(W_i|Defect) = .0001(1000000) + .9999(0) = 1000$

Should the leader just spend \$10 million per W member and call it a day?

W/S: A Simple Illustration

Recall: this is a strategic problem.

- The leader should see W_i's strategic weakness.
  - i.e. W_i is easily replaceable in a winning coalition.

If the leader offers every W member at least as much as W_i could gain on average from defection, she can secure her office.

- i.e. The leader retains tenure if $U(W_i|Loyal) \geq EU(W_i|Defect)$.

Thus, the leader offers every W member \$1,000 and retains the rest for a slush fund.

W/S: Another Illustration

Assume a leader has this system: $S = 1{,}000{,}000$; W $= 500{,}001$.

- The leader again has \$1 billion at her disposal to retain her office.

What happens if the leader tries to divide the pie: \$2,000 per W member?

W/S: Another Illustration

If W_i wants more, there's a 50% (rounded) chance he gets a better deal.

- Expected value for defection: \$1,000
  - $EU(W_i|D) = .5(2000) + .5(0) = 1000$
- Doesn't seem appealing, does it?

Under these conditions, it is inexpensive for W_i to support a challenger.

- It's also impractical to buy all W members with private rewards.
- Private rewards are spread more thinly and can less easily compensate failed *public* policies.

A New Way of Thinking about IR

Leaders do not benefit equally from peace and prosperity.

- Large W: good policy and low private goods improve survival.
  - Bad public policies aversely affect tenure.
  - Because W/S is large, the cost of defection is low.
- Small W: good policy is bad politics.
  - Best survival prospects: small W/S (defection is risky, costly).

The likelihood a leader survives in office despite failed policies increases as W/S decreases.

Implications

Large-W leaders:

- High levels of cooperation
- Stable foreign relations
- Leader change has little effect

Relations with small-W leaders:

- Leaders care less about successful foreign policy (and public goods overall).
- Leader change leads to a new coalition and changes in policy, i.e. policy volatility.

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