



Simulations

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Simulations

- 1 What are simulations?
- 2 Why are simulations important
- 3 Types of simulations
- 4 How to design simulations
- 5 Example of a simulation game
- 6 Potential pitfalls

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Simulations are “ongoing representations of real situations” (Ellington et al. 1998, 2).

The real value of simulations lies not in helping students understand a particular case, but, rather, a specific concept, theory, or method.

During simulations, students assume the role of decision-makers and recognize the strategic considerations behind pursuing a particular course of action.

Simulations replicate real-world scenarios, foster critical thinking, and help students grasp the implication of actors' decisions.

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Simulations are effective teaching tools

Simulations allow students to understand:

- 1 how decisions are being made by political actors
- 2 how institutions function and how they shape decision making processes
- 3 how theories actually 'work' and how they might apply to the real world (Asal 2005, 30)

Simulations enable educators to expose students to diverse learning styles.

Overall, simulations can make otherwise abstract concepts or theories look more interesting and enjoyable (Asal et al. 2018, 1).

Simulations foster student engagement and class participation

Jones (1998, 334): “A simulation is like a case study - the serious examination of a problem - but with the participants on the inside, not on the outside.”

Simulations engage students in ways that lectures often cannot...and can bring a sense of excitement to the classroom (Asal 2005, 361).

Simulations can give added motivation and urgency (Ellington et al. 1998, 7).

Learning by doing imparts a sense of ownership over the material (Sadow 1991, 373).

Cohen (2013, 13):

“By creating a complicated environment that models some real-world problem then giving students the agency to solve that problem, simulations foster active, first-hand participation in learning. Simulations also cultivate critical thinking skills: to succeed in gameplay, students must navigate incentive structures, manage resources, and engage fellow students. Students are empowered over their learning because their decisions have consequences. In competing or cooperating with peers, students can be gripped and engaged by the experience. This cocktail of agency, gameplay, calculation, and struggle creates a genuine intellectual community in which course material jumps from the passive world of books to the active world of peer-driven interaction, and leaves students with lasting impressions and lessons that will stick with them through college and, potentially, life.”

Simulations have multiple positive externalities

Simulations foster teamwork and the social construction of knowledge (Ruben 1999).

Simulations empower students and encourage them to take the initiative (Asal 2005, 362).

Simulations nurture critical thinking and problem solving skills.

Simulations help students become more comfortable about speaking publicly.

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Types of simulations

Simulations can be used to illustrate:

- concepts (e.g. anarchy, iterated prisoner's dilemma)
- theories (e.g. bargaining)
- methods (e.g. operationalization and measurement)

Simulations can be used for:

- teaching purposes
- assessment purposes
- teaching and assessment purposes

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Questions to ask before designing a simulation game

What is the overall pedagogical objective of the game? Explain a concept? Illustrate a theory? Introduce students to a specific methodology?

For which level (introductory v. advanced courses) is the game appropriate?

For what type of class size is the game appropriate?

At which point in the course (early semester? mid-semester?) is the game most useful to be introduced?

Can the game be seamlessly integrated with the course readings?

Can the game be adjusted for contingencies?

How much effort does it take to design the game?

Stages in the design of simulation games

- 1 designing the game
- 2 getting peer feedback on the game design
- 3 piloting the game and making necessary adjustments
- 4 preparing the game (explaining the rules/ prompts and answering student questions)
- 5 playing the game
- 6 conducting a post-game oral debriefing (discussing students' strategies and actions)
- 7 discussing the connection between the simulation and the concept/theory/method it applies to

Questions for the debriefing stage (oral or written)

- What happened during the game? What was your strategy? Why do you think this particular outcome occurred? Was the outcome expected?
- What was the other actors' strategy? How did the rules of interaction affect the outcome?
- Did the simulation depict what might actually happen in the real world? Does the simulation miss anything that actually happens in the real world?
- Can the simulation apply to comparable scenarios in different contexts?
- How did the simulation help you better understand the concept/theory/method?
- What are the main shortcomings of the game?

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Negotiation in Separatist Conflicts

Purpose of the game: helping incoming postgraduate students understand bargaining theories of conflict.

Peer feedback on the design of the game.

Game piloted on one group of volunteer students.

Adjustments were made in light of comments and suggestions.

Game played in class.

Oral debriefing process (why the actors behaved in the way they did).

Discussion of how the game illustrates problems of credible commitment.

Bargaining explanations for conflict

Unresolved territorial disputes can be viewed as bargaining failures.

When is bargaining most likely to fail?

- informational asymmetry
- **commitment failures**
- issue indivisibility

How do I know that the game 'worked'?

Student evaluations at the end of the course.

Student comments before and after conducting the simulation game:

- present the theory in traditional lecture format
- ask for students' comments on what drives bargaining failures
- administer the simulation game
- ask again for students' comments on what drives bargaining failures

Why does bargaining often collapse in territorial disputes?

- ↳ Moldova + Transnistria
- ↳ Georgia + South Ossetia + Abkhazia

Moldova + Transnistria

- ↳ Moldova signed independence treaty, Transnistria did not
- ↳ Transnistria/Moldova
 - ↳ one cause that led to failure was the shift in Transnistria's military power due to Russian Federation support
 - ↳ Territory (western bank) holds cultural value for Transnistria

Bargaining can collapse due to:

- ↳ economic differences and unwillingness to let go of trade resources or privileges
- ↳ inability to guarantee a cease-fire
 - ↳ if separatist group is fragmented, a cease-fire can be difficult to successfully enact.
- ↳ possible third-party interests
 - ↳ if either group feels that the third party is favorable to one side, that group can feel at an unfair disadvantage.
- ↳ inability to guarantee an agreed level of autonomy or semi-autonomy in contested area.

Balkan Region

Why does bargaining often collapse in territorial disputes?

→ External Factors.

→ International organization involvement - U.N
- Nato.

→ Internal Factors.

→ History → land / region

→ Sovereignty dilemma

→ Ethnic tensions.

→ Reluctance to negotiation

→ Corruption i.e. bugging → Cheyna Gov.

After activity

- One or multiple actors refuse to negotiate.
i.e. Separatists not settling for gradual devolution upon proving stability + control over factional fighting.
- Historic persecution of ethnic group / culture
Can create mistrust in negotiation process
- Interference of international actors favouring one side without sympathy.
- Economic viability issues → negotiate on going support for democratic success + stability of separatist region.

Why does bargaining often collapse in territorial disputes? Case Study: Post-Soviet Region

- ⇒ The radical transition from a centralized government with autocratic tools and ideological incentive to states' independence, governing their own territories (lack of experience in post-colonial states)
- ⇒ Traditional security perspectives in governing does not take into account the non-materialistic values of the social fabric being governed. The diverse ethnicities that might co-existed under the Soviet authority might not be capable of adapting within the newly independent state (lack of legitimacy)
e.g. Crimean Conflict 2014

- ⇒ The unwillingness of the parties to compromise and their motivation to expand their powers based on their ability to mobilize people around their causes.
- ⇒ Inability of embracing societal differences from the government side and the urge of enhancing these differences from the separatist side leads to their adoption of different paths during negotiations.
- ⇒ The fragility of words when it comes into practice. Words are just words but actions are not guaranteed due to the lack of trust between parties.
- ⇒ Governments cannot be trusted and separatists are always undermined

Why does bargaining often collapse in territorial disputes?

- overconfidence on government's behalf
- international involvement (Russia?)
- commitment failures
- preference of keeping the conflict going rather than finding a solution and compromising

→ informational asymmetry but also military (in Transnistria the total military is as large as that of the Moldovan state)

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- internal pressure on the govt (from the army)
 - distrust, lack of govt credibility
 - rebel group demanding too much
 - govt needing not to appear weak
 - wanting a quick solution to a problem that might need years to be solved (temporary agreements might not hold)
 - lack of stability (govts ^{can} change very quickly in these regions; make a deal with one govt but tomorrow you might be dealing with another).

How else can one assess whether simulations achieve their pedagogical objectives?

- Surveys - any problems with that approach?
- Experiments - any problems here?
- Tests/assignments - any issues with them?

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Simulations:

- must have a clear pedagogical goal
- must be chosen very carefully to illustrate the concept/theory/method taught
- take away from traditional lecture time and class discussion
- demand time and organizational effort
- become harder to manage with large classes
- require the cooperation of the majority of the students to work
- may not be the preferred teaching method for at least some students
- may distract students' attention towards 'winning' the game rather than understanding the broader conceptual/theoretical/methodological point

Simulations (cont.):

- may create negative feelings about the exercise with some students
- could complicate assessment since roles are typically distributed unevenly among students to reflect real-world situations
- may take too much class time

Online resource on simulations

Active Learning in Political Science



Thank you!