Russian Security State
GOVT-5519 / IPOL-3519 / REES-5519
Lecture 02. Backgrounder.
National Security Policy Analysis

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Today's objectives

1. *Distinguish*: policy analysis vs. basic research, with example
2. *Introduce*: basic strategy evaluation framework
3. *Apply*: use this framework to analyze U.S. decision to provide multiple launch rocket systems to Ukraine

Policy Analysis vs. Academic Research

There are 2 types of readings on the syllabus:

1. **Policy analysis**
   - e.g. reports from researchers at RAND and other think tanks
2. **Basic (academic) research**
   - e.g. journal articles by economists and political scientists

These two types of research products are complementary and mutually reinforcing.

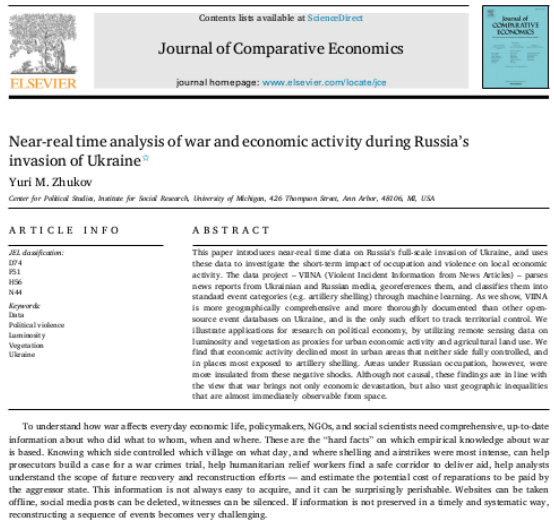
But they are written for very different audiences, with different goals in mind.


RAND CORPORATION

Lessons from Russia's Operations in Crimea and Eastern Ukraine

Michael Kofman, Katya Migacheva, Brian Nichiporuk, Andrew Radin, Olesya Tkacheva, Jenny Oberholtzer

Figure 1: Policy analysis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ELSEVIER

Near-real time analysis of war and economic activity during Russia's invasion of Ukraine☆

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ABSTRACT

This paper introduces near-real time data on Russia's full-scale invasion of Ukraine, and uses these data to investigate the short-term impact of occupation and violence on local economic activity. The data project – VIINA (Violent Incident Information from News Articles) – parses news reports from Ukrainian and Russian media, georeferences them, and classifies them into standard event categories (e.g. artillery shelling) through machine learning. As we show, VIINA is more geographically comprehensive and more thoroughly documented than other open-source event databases on Ukraine, and is the only such effort to track territorial control. We illustrate applications for research on political economy, by utilizing remote sensing data on luminosity and vegetation as proxies for urban economic activity and agricultural land use. We find that economic activity declined most in urban areas that neither side fully controlled, and in places most exposed to artillery shelling. Areas under Russian occupation, however, were more insulated from these negative shocks. Although not causal, these findings are in line with the view that war brings not only economic devastation, but also vast geographic inequalities that are almost immediately observable from space.

To understand how war affects everyday economic life, policymakers, NGOs, and social scientists need comprehensive, up-to-date information about who did what to whom, when and where. These are the "hard facts" on which empirical knowledge about war is based. Knowing which side controlled which village on what day, and where shelling and airstrikes were most intense, can help prosecutors build a case for a war crimes trial, help humanitarian relief workers find a safe corridor to deliver aid, help analysts understand the scope of future recovery and reconstruction efforts — and estimate the potential cost of reparations to be paid by the aggressor state. This information is not always easy to acquire, and it can be surprisingly perishable. Websites can be taken offline, social media posts can be deleted, witnesses can be silenced. If information is not preserved in a timely and systematic way, reconstructing a sequence of events becomes very challenging.

Figure 2: Basic research

	Policy Analysis	**Basic Research**
Primary audience	Practitioners	Scientists
Secondary audience	General public	General public
Main purpose	Inform decision-makers	Advance knowledge
Originating institutions	Government agencies	Universities
	Think tanks	Research labs
Common methods	Program evaluation	Experiments
	Systems analysis	Formal theory
	Operations research	Regression analysis
Dissemination	Memoranda	Journal articles
	White papers	Books
	Op-Eds	Patents
	Roundtables	Data and software
Metrics of impact	Implementation as policy	Scholarly citations
	Grants	Grants

These two worlds are *not* hermetically sealed, and there is cross-over.

Example: Counterinsurgency in North Caucasus, 2000-2012

Background: Second Chechen War

- Chechnya becomes de facto independent after 1996
- Chechen leadership split between moderates, Salafi-Jihadis
- Salafi faction raids Dagestan in 1999, captures several villages
- Russia invades Chechnya, captures Grozny and other large towns
- insurgency begins, spreads to neighboring republics
- Russia has great difficulty suppressing insurgency, violence lasts 10+ years

Question:

- which government strategies were most (or least) effective in reducing violence?

Figure 3: Insurgents

Figure 4: Security Forces

Strategic Options: how Russians respond to insurgent attacks

1. *Punishment*: offensive operations to increase costs of fighting
   - detail or kill suspected insurgents in towns experiencing violence
   - tactics: artillery shelling, air strikes, sweeps, raids
2. *Denial*: cordon operations to reduce insurgent mobility
   - physically isolate insurgents to restrict movement between towns
   - tactics: seal points of entry/exit, checkpoints, roadblocks, sieges
3. *Punishment + Denial*: do both (e.g. cordon and search)
4. *No action*: do neither

Russians relied on Option 1 in 78% of cases.

In one piece of basic research, Monica Toft and I asked "what if" the Russians had tried another approach (Journal of Peace Research, 2012).

Data: we parsed, geocoded incident reports from Memorial NGO

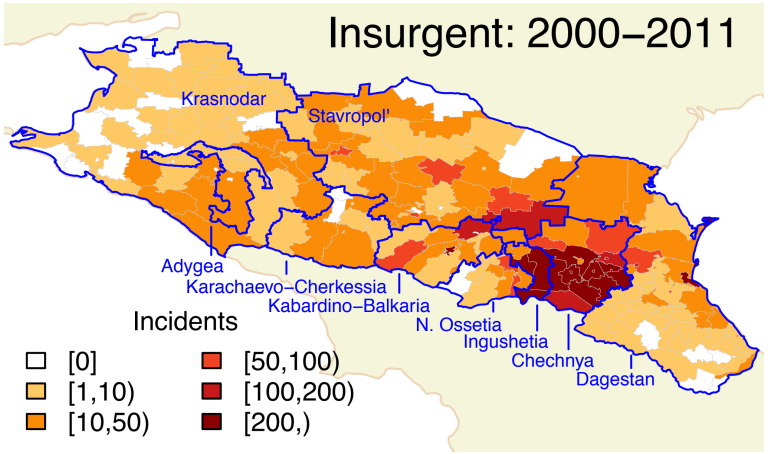

Figure 5: Insurgent Violence

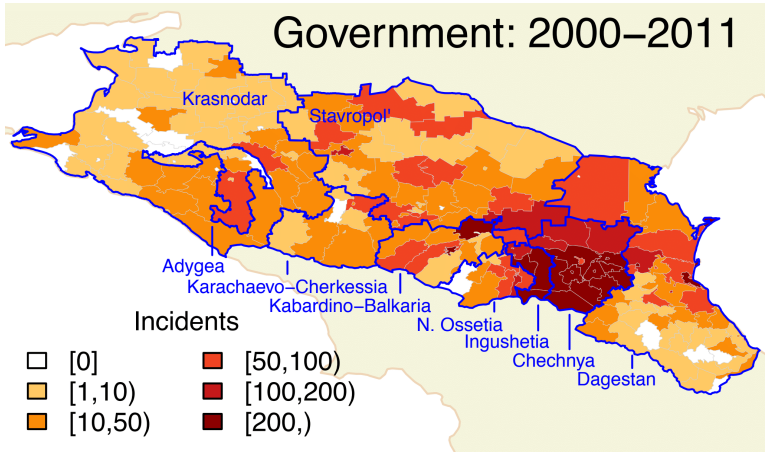

Figure 6: Government Violence

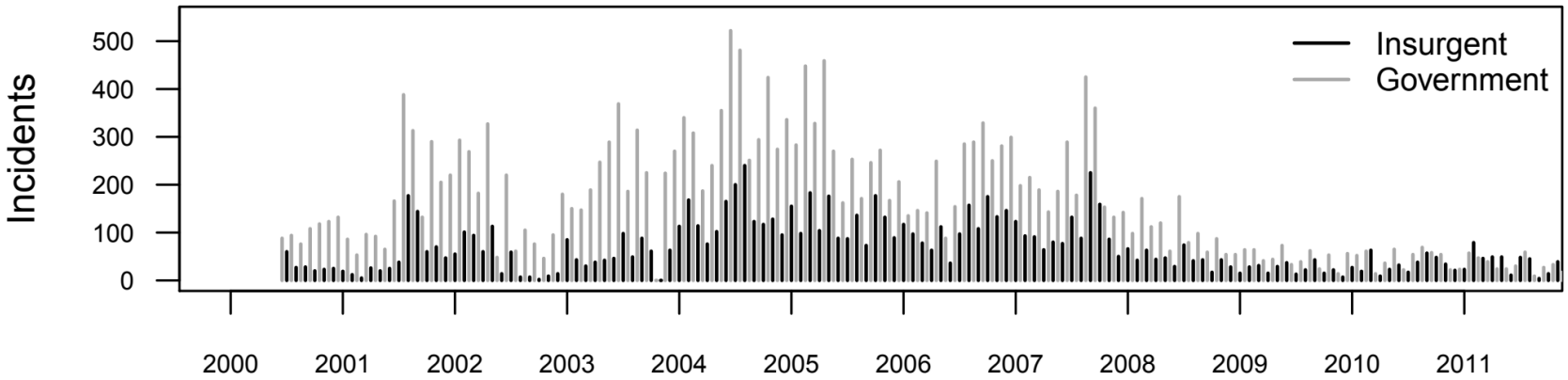

Figure 7: Violence over Time

Research Design

- we analyzed dynamics of violence using models from epidemiology
- using village-level data, we modeled probability that rebel violence:
  (a) spreads between neighboring towns (transmission)
  (b) persists vs. subsides within each town (recovery)

  conditional on road network, government tactics, population density, unemployment, terrain, distance to military bases and admin centers
- **measure of effectiveness**: basic reproduction number R_0

$$R_0 = \frac{\text{transmission rate}}{\text{recovery rate}}$$

  if $R_0 < 1$, insurgency will stop, not spread to new locations

  if $R_0 > 1$, insurgency will persist and spread to new locations
- we used simulations to see how R_0 might change under different hypothetical government strategies (punishment, denial, etc.)

Simulation Design

1. insurgents attempt to stage a series of attacks across region
   - 7,584 municipalities, connected by local road network
   - an attack can occur in any location with some probability
2. where attacks occur, government responds
   - government consistently implements strategy k ($k \in \{$punishment, denial, both, neither$\}$)
   - road network structure updated if/where denial is used
3. insurgents strike again, government responds again
   - model predicts probability of new insurgent attack in each town, based on local conditions and historical patterns for strategy k
   - where attacks occur, government implements strategy k again
4. repeat for 24 time periods (months)

We run simulation 100 times for each strategy, with different (random) starting locations for insurgent attacks.

Calculate average R_0.

Which strategy is most (least) effective?

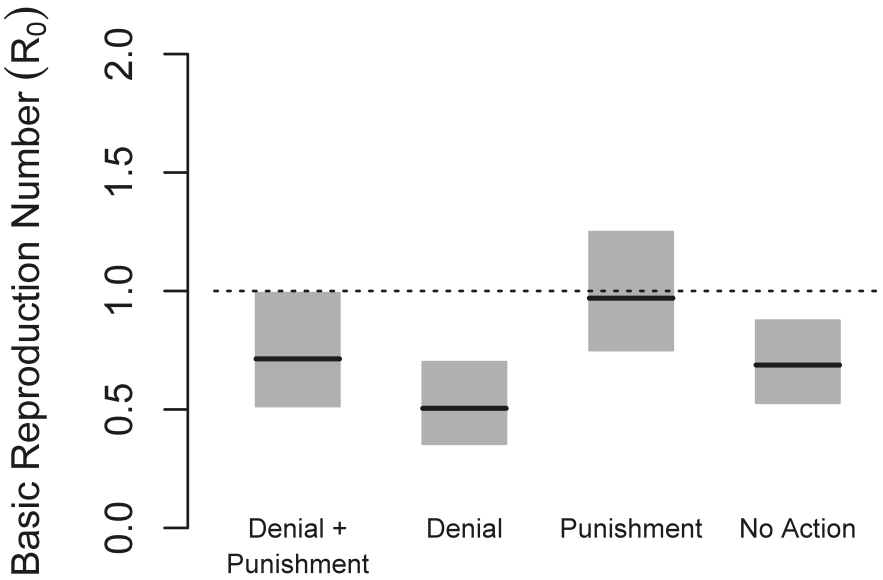

Figure 8: Simulation Results

Findings (lower values of R_0 are better):

- Denial is most effective at containing insurgent violence
- Punishment is least effective, worse than doing nothing

What are some limitations with this type of analysis?

- Assumptions about nature of Russian decision-making?
- Assumptions about range of strategic options?
- Assumptions about costs/resources/requirements?
- Assumptions about time horizons?
- Assumptions about how Russians evaluate success?
- Other issues?

How might we structure this analysis differently if it was intended for a policy, not academic audience?

Comparing Multiple Policy Options

Strategy Evaluation in 3 Easy Steps

1. *Develop an analytical framework*
2. *Perform the analysis*
3. *Disseminate the findings*

Application:
U.S. decision to send multiple launch rocket systems to Ukraine in 2022

Background: MLRS to Ukraine

- Russia enters war with huge numerical advantage in tube artillery, MLRS
- high rate of expenditure (>5,000/day)
- no domestic production of shells, barrel replacements in Ukraine after invasion
- Ukraine struggles to keep artillery units supplied, deliver counter-battery fire
- by May 2022, Ukraine's stockpile of 152mm Soviet-std shells nearly spent
- U.S. considers sending 227mm M142 High Mobility Artillery Rocket System (HIMARS) to Ukraine
- HIMARS has greater range, precision than other MLRS in Ukraine's arsenal
- but expensive, requires training, risks escalation due to high potential range

Figure 9: Destroyed BM-21

Figure 10: HIMARS

Step 1: Develop an Analytical Framework

a) What is the **problem**?
   - define the trend/development/threat being addressed
   - state the level of urgency
   - estimate the degree of uncertainty

b) What **interests** are affected by this problem?
   - define the stakes, whether they are vital/major/peripheral

c) What **goals** will advance these interests?
   - state the desired "end state"
   - define intermediate objectives that need to be attained first
   - establish criteria for judging when each goal has been attained

d) What policy **options** are available?

Application:
Let's consider these Q's in the case of whether to send MLRS to Ukraine

Step 2: Perform the Analysis

a) What is the **theory** of cause-and-effect?
   - how the policy, if implemented, might help advance key goals
   - summarize existing evidence on whether this theory is valid

b) What are the **costs**, compared to available alternatives?
   - breakdown: procurement, R&D, O&M, personnel, logistics, etc.
   - opportunity costs and trade-offs

c) What is the **implementation** strategy?
   - division of responsibilities across depts/agencies/units
   - type and level of authorization required

d) What are the **time horizons**?
   - speed of implementation
   - distribution of costs/benefits in short-term and long-term

e) What is the **feasibility** of the policy?
   - flexibility and robustness to unanticipated events
   - degree of consistency/synergy with existing policies
   - likely sources of opposition / barriers to success

f) What **assumptions** are being made?

How many of these questions can you answer in case of MLRS to Ukraine?

Step 3: Disseminate the Findings

a) How wide should the **distribution list** be?
   - general public, including foreign
   - audience is within-government or within-agency
   - audience must have clearance, need-to-know

b) What types of **written products** will be distributed?
   - memoranda (addressed to specific individuals)
   - white papers (in-house publications)
   - op-eds (accessible, for general public)

c) What types of **oral products** will be prepared?
   - briefings (for specific officials, customers)
   - conferences/roundtables/talks (open to public)
   - interviews/media appearances

d) How **senior** are the customers for these products?
   - different products needed for top officials, aides, staff
   - more senior $\rightarrow$ shorter attention span

What type of dissemination strategy is most appropriate in our case?

NEXT MEETING

Economic Foundations: Land, Labor and Serfdom (Th, Sep. 12)

- the "origin story" of Russian autocracy, imperial expansion
- things to consider:
  - what incentives led Russia to adopt institution of serfdom
  - parallels and differences between forced labor practices in Russia vs. Western Europe vs. United States
  - why did the Russian state ultimately dismantle this institution?