#### The integrative complexity of the heads of government of the three main great powers, and how it relates to involvement in international crises



### Overview

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# Introducing a New Corpus and Dataset

# The Corpus

#### Texts from heads of government of:

- The United States (1789 to near present)
- Russia/USSR (1917 to near present)
- United Kingdom (1803 to near present)

## Sources of Verbal Materials

The United States: The American Presidency Project Database

Russia/USSR

- Marxist Internet Archive
- Various anthologies of speeches and writings
- Speeches posted on the Russian government website
- Speeches posted on online media sites

The United Kingdom: The online Hansard database

### **Extensively Cleaned**

Types of documents that are unlikely to represent the leader' s thinking were removed.

The Hansard results were cleaned with multiple passes of code to capture different names of nobility, and remove false positives.

Scanned texts were manually cleaned to remove errors.

# Summary of Corpus

95 Heads of Government, from USA, RUS/USSR, UK

1.3 million paragraphs

95 million words

# The Dataset

We coded the paragraphs using AutoIC, an automated (computerized) system for scoring cognitive complexity from texts

It is an approximation of manually scored Integrative Complexity (see Baker-Brown et al 1990)

These 1.3 million AutoIC scores enable us to the compare complexity of thinking across heads of government, within heads of government over time, and across international crises.

It can be expanded by coding for other variables.



# Integrative Complexity

# Integrative Complexity

- Is a measure of cognitive complexity, i.e., the complexity of the structure of thought.
- Is coded from verbal materials (texts) produced by the person being studied.
- Has trait and state components.
- Some level of IQ may be a necessary condition to reach a given level of complexity, but IQ is not sufficient – complexity also involves openness and motivation to be complex.

# Correlates of Complexity

- High Complexity:
  - Flexibility
  - Searching for information
  - Taking time to decide / indecisiveness
  - Recognizing the legitimacy of opposing views
- Low Complexity
  - Inflexibility / steadfastness
  - Close-mindedness
  - Decisiveness
  - Black and White thinking



# Explanations of War

# Leaders fail to commit to co-ordinated solutions

- The prisoners dilemma
- The security dilemma (Jervis, 1976, 1978)
  - e.g., the dreadnought arms race
- Pressure to pre-emptively attack



- Low integrative complexity leads to war
- High cognitive complexity leaders can:
  - In PD, use a tit-for-tat strategy, recognizing that punishments are not aggressive
  - Link issues across domains to facilitate co-ordination, e.g., use economic sanctions to punish aggression

# Leaders fail to convince adversaries of their resolve

• Contests of resolve, e.g., Chicken (Jervis, 1978)



- Deterring aggression, requires credibly threatening to do something that would hurt oneself (Schelling, 1980)
- Problem of Salami Tactics (Schelling)
- Low integrative complexity prevents war
  - Low cognitive complexity leaders are less flexible, less compromising, less willing to see the perspective of their adversaries
  - Adversaries perceive that they have resolve, and challenge them less

# Research Design

What is the Association Between IC and Aspects of International Crises?

(1) Is IC high or low prior to International Crises?
(2) Is the IC during a crisis different for

(1) Crises with a violent trigger?
(2) Crises with different gravity of threats?

(3) Does IC predict the country' s major response to the crisis?

## International Crisis



Definition: A period of heightened stress and conflict between countries that disrupts their relations (Brecher, 2008)

#### • Examples:

- Berlin Blockade (1948)
- Suez Crisis (1956)
- Cuban Missile Crisis (1962)
- Coded in the International Crisis Behavior (ICB15) dataset

## Cases Included in the Study

All international crises listed in the International Crisis Behavior (ICB) Dataset, from 1918 to 2019, that involved

- The United States
- The Soviet Union/Russia
- Or the United Kingdom
- Total: 175 crises
- Of these, there is sufficient data from 142

# Results

# Distribution of Crisis IC

	IC	Crisis	Other Examples of low/high crises
Minimum	1.29	USA Gulf Of Tonkin 1964	GBR Libyan Civilwar 2011, USA Tet Offensive 1968, <u>USA Berlin Deadline 1958</u> , USA Taiwan Strait II 1958, RUS Berlin Wall 1961
Median	1.93		
Maximum	2.58	GBR Remilitarization of the Rhineland 1936	<u>RUS Berlin Deadline 1958,</u> RUS Berlin Blockade 1948, GBR Munich 1938, USA Libyan Jets 1988

# Q1 Is IC high or low prior to International Crises?

Aggregated the data to the two-month level. Ran a logarithmic regression with DV = Crisis triggered (yes or no) IV = IC lagged by two-months Controls = Country; International Relations Period

# Q1 Results

IC is significantly negatively associated with subsequent crisis initiation Coefficient estimate = -1.07p = .010

Conclusion: IC is LOW prior to international crises.

# Q2 Is the IC during a crisis different for crises with a violent trigger, or with different gravities of threat?

Aggregated the data to the crisis level (non-crisis data dropped) Ran a linear regression with DV = IC during the crisis IV = Violent trigger (yes or no); Gravity of Threat (four categories) Control = Leader' s General IC (i.e., lifetime IC)

Gravity of Threat Categories:

- Economic
- Territorial, political, or limited military
- Threat to influence (most of the crises)
- Existence or grave damage

# Q2 Results

IC in a crisis is significantly negatively associated with violent triggers of the crisis Coefficient estimate = -.07p = .03

IC is significantly <u>positively</u> associated with threats to Existence or Grave Damage Coefficient estimate = .11 p = .01

Model Adj R2 = .44

# Q3 Does IC predict the country' s major response to the crisis?

Aggregated the data to the crisis level (non-crisis data dropped) Ran a linear regression with DV = The country' s major response (numerical, 1 to 4) IV = IC during the crisis Controls A = Country, International Relations Period Controls B = Violent Trigger (yes or no), Gravity of threat (four categories)

Major Response levels:

- 1 = verbal or inaction
- 2 = political, economic, or other nonmilitary
- 3 = military but nonviolent (e.g., mobilization)
- 4 = violent

# Q3 Results

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When controlling for Country and IR Period,
The level of major response in a crisis is significantly
negatively associated with IC in the crisis.
Coefficient estimate = -.81
p = .04
Model Adj R2 = .17
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But the relationship is no longer significant when controlling for Violent Trigger and Gravity of Threat.

# Summary

(1) Events triggering crises are associated with low preceding IC.

(2A) Violent crisis triggers are associated with lower crisis IC in the subsequent crisis.

(2B) Threat to existence or of grave damage is associated with higher crisis IC.

(3) Low IC is associated with more extreme major responses (but not independent of violent trigger and gravity of threat).

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