The Importance of Multiple Perspectives and Methods

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Briefing Roadmap

- The Challenge

- "emic" versus "etic"

- Multiple Data Lens
    - Social Identity
    - Affect
    - Integrative Complexity

- Anticipatory Analysis Results

- Applications

- Summary

The Challenges

"Gray Zone" conflicts are the purposeful, *ambiguous*, aggressive, integrated use of multiple elements of power by an adversary to achieve their objectives that exceed the threshold of normal peacetime competition yet fall below the level of major war

➢ **How can we diagnose, identify, and assess indirect strategies, and develop response options against associated types of Gray Zone conflicts?**

Current emphasis on deterrence and assurance

➢ **How can we assess successful deterrence? If something didn't happen, how can we be sure it was because of/related to our actions, messages, etc.?**

"Deterrence is back. After the end of the Cold War, the Alliance focused less on territorial defence and more on out of area crisis management…That changed in 2014 because of concerns over Russia's aggressive actions towards Ukraine…." (NATO "On Deterrence", 5 Aug 2016)

"emic" versus "etic" perspectives

"emic" – 1st person perspective, native participant viewpoint

"etic" – 3rd person perspective, observer viewpoint

- "emic" analysis – critical for supporting meaning making about behaviors, language
  - Example: "mischievous": is it harmless or not?

?

Multiple Perspectives:
Multiple Data Coding "Lenses"

Events Data – "who does what to whom"
- **Represents the behavior and actions of major actors**
- **How people behaved in the past influences how they behave in the future**

Sentiment/Emotions Data – "who *says* what to whom or about what " and "*feels* what about whom/what"
- **Represents levels of support for government and dissident actions**
- **As support ebbs and flows, behavior will adapt and change; knowing relationships helps anticipate future behavior**

Discourse Data – how people (population, bad actors, governments, etc.) communicate
- **Represents rhetoric and signals intentions**
- **Leaders, organizations encode messages to their supporters and detractors; decoding them can uncover intent and help anticipate future behavior**
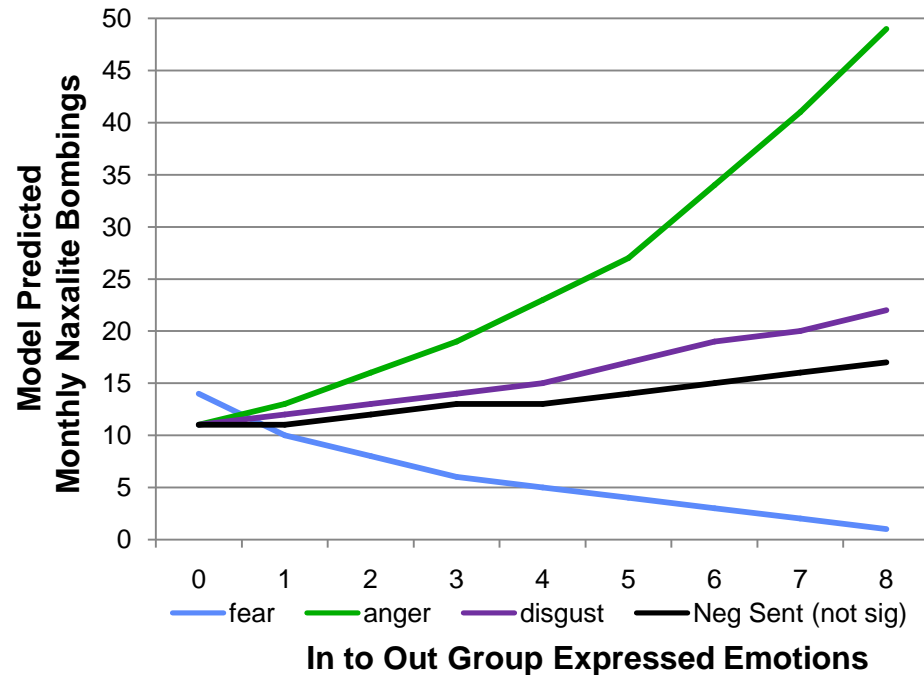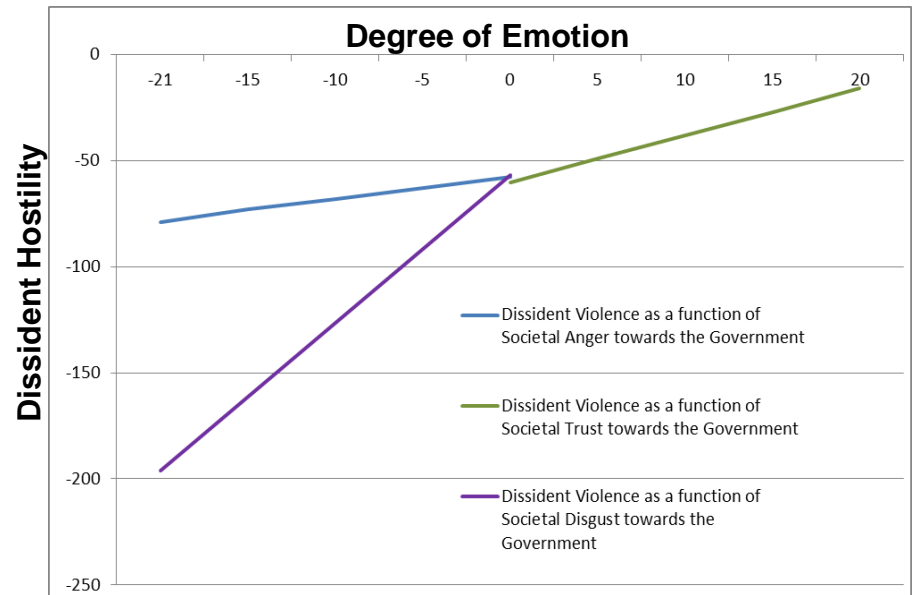
Affect

- **Emotions linked to behavior**
- **Different events ↔ different emotions**
- **Fear and anger often result in different responses**

➢ **Informative for understanding influence dynamics**

Plutchik's Wheel of Emotions

In to Out Group Expressed Emotions

(Y-axis: Model Predicted Monthly Naxalite Bombings; legend: fear, anger, disgust, Neg Sent (not sig))

Egypt: Impacts of Societal Fear & Anger Directed Towards Government on Egyptian Dissident Hostility, 2001-2012

(X-axis: Degree of Emotion; Y-axis: Dissident Hostility)

- Dissident Violence as a function of Societal Anger towards the Government
- Dissident Violence as a function of Societal Trust towards the Government
- Dissident Violence as a function of Societal Disgust towards the Government

Increased trust towards the government decreases dissident violence

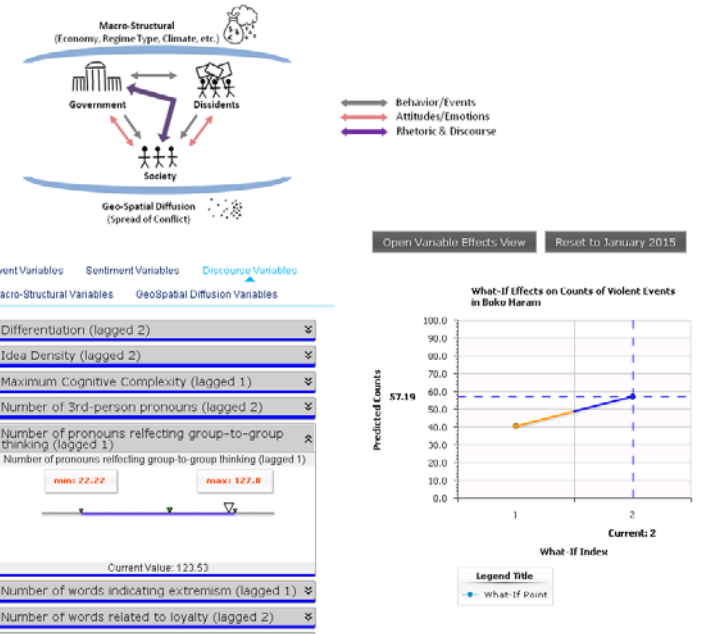**Increased disgust towards the government increases dissident violence**

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Social Identity

Effect	Phrase	Translation	Explanation	Citation
National Self-Glorification	الملك حمد بن عيسى آل خليفة عاهل البلاد المفدى	King Hamad bin Isa Al Khalifa, the king of the beloved country	Rather than using the name of the country, a possessive ending indicating "our country," or omitting the word entirely, this phrase using مفدى informs the audience how precisely they should feel about the country – or, equally, how the "in-group" feels about the country and thus how the audience should feel if they desire to be a part of that in-group.	C17
	جلالة الملك المفدى	His beloved Majesty	Ditto, with regard to glorifying His Majesty.	C17
	صاحب الجلالة الملك	His Majesty (= the owner of reverence / magnificence)	This reference's terminology would be expected from only the king's own people, the in-group; in addition, it intensifies the awe and distance	C17

Social identity based methodology used to forecast real-world events

CONTENT ANALYSIS: Use of In-Group Pronouns (IDENTITY) increases Violent Attacks

Nigeria Group Negative Binomial Model Model Drilldown for Violent Events by Boko Haram
Initial values set to January 2015

➤ **Language-based cues used to predict changes in actors' psychological posturing -- cognitive complexity of elites/leaders decreases prior to an attack, crisis, or violent action, rises before "peace" events**
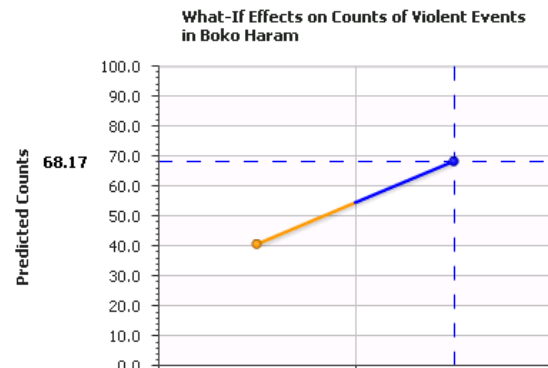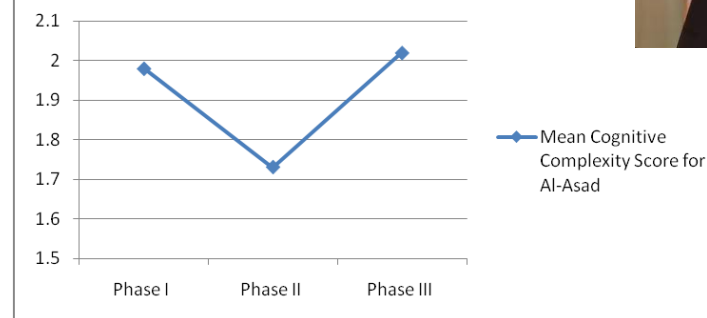
What-If Effects on Counts of Violent Events in Boko Haram

68.17

(y-axis: Predicted Counts; 0.0 to 100.0)

Cognitive Complexity: Differentiating among alternatives decreases violence: lowering (5 to 0) "Differentiation" increases violence" (inverse relationship)
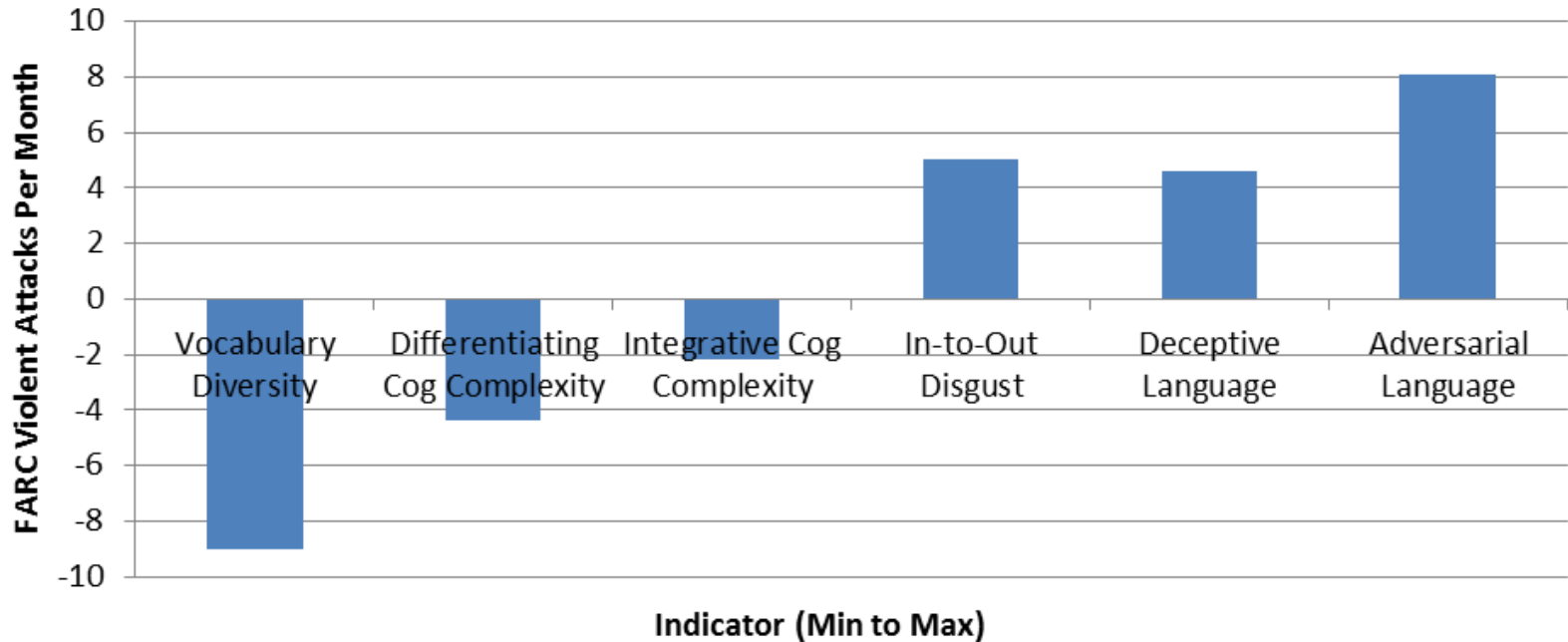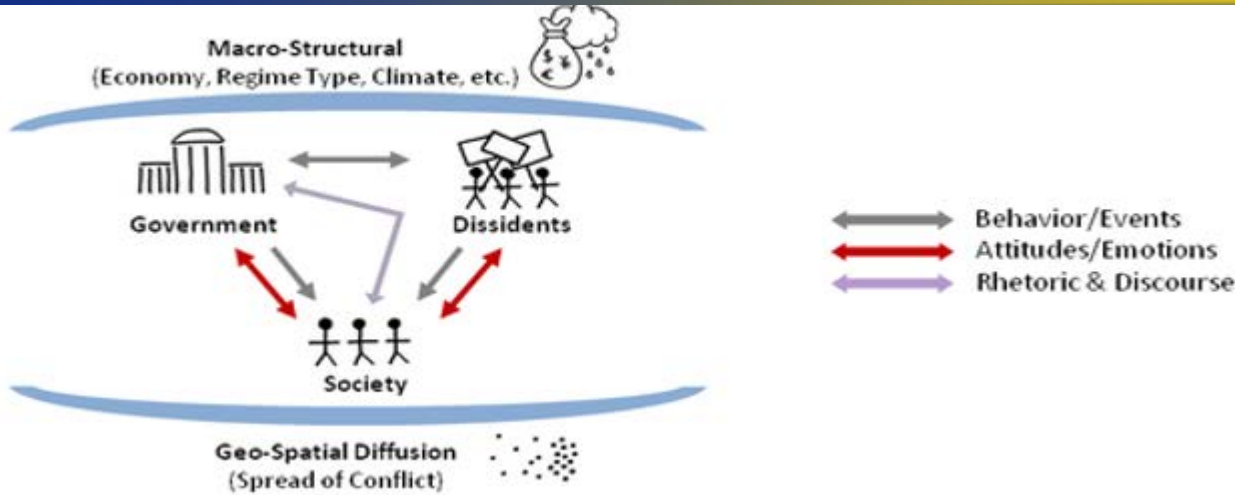
Table 6. General (Mode) ICC Patterns of Peace Events per Individual

	Before Peace	After Peace	Number of Peace Events
PM Vajpayee	↑	↓	3
President Narayanan	↑↓	↑↓	2
President Kalam	↑↓	↑↓	1
PM Sharif	↓	↓	1
PM Jamali	↓	↑↓	1
PM Aziz	-	-	1
President Musharraf	↑↓	↓	3

Cognitive Complexity Scores for Al-Assad (Proof-Of-Concept)

(y-axis: 1.5 to 2.1; x-axis: Phase I, Phase II, Phase III)

◆ Mean Cognitive Complexity Score for Al-Asad
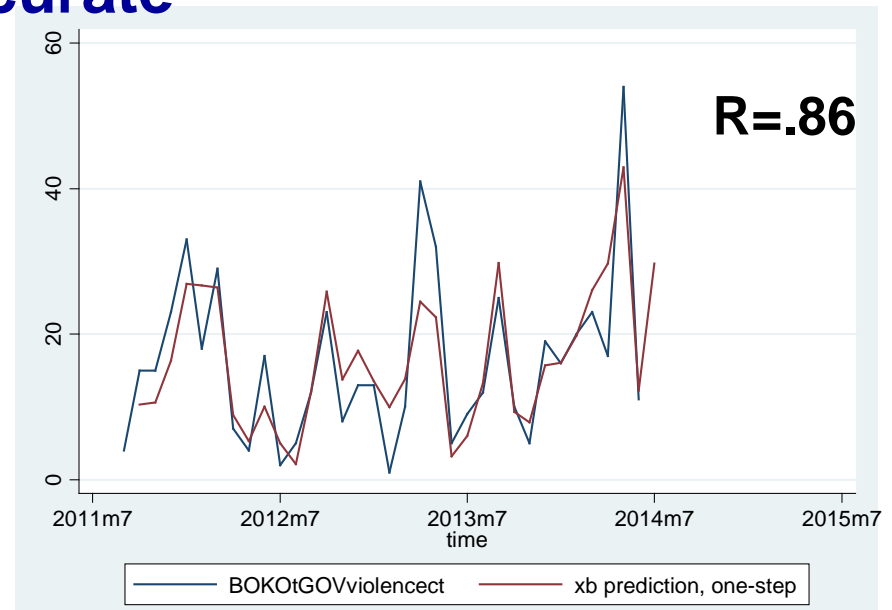
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1ˢᵗ Person Discourse Analysis

Boko Haram Case Study: the value of 1st Person

3 Forecasting (Violence) Models:
- **Events only - INSIGNIFICANT 36% accurate**
- **Sentiment only -- 49% accurate**
- **"Discourse" only -- 69% accurate**
- **Aggregated Model – 86% accurate**

R=.86

Legend: BOKOtGOVviolencect — xb prediction, one-step

Results suggest that HOW groups say things and WHAT they say is more important than what they've done in the past for forecasting what they will do next!

Applications

Anticipatory Analysis:
- **Demonstrated 77-91% accuracy in multiple case studies on extremist groups, missile launches (predicted vs actual)**
  - **Discourse Patterns (integrative complexity, idea density, etc.) are best single forecaster**
  - **Aggregating models (simple or ensemble) is even better**
  - **Forecast lead time 2-6 months!**

Course of Action (COA) Analysis:
- **Develop separate models for Sentiment/Affect, Discourse, Courses of Action and assess impact on: violence, missile launches, etc.**
- **Early case studies have been very promising, producing non-intuitive outcomes**

COA Assessment: Different data lenses support more

Summary

- **Multiple perspectives/lenses in data can facilitate decision making in ambiguous situations (Gray Zone) or tough assessment problems (Deterrence)**

- **Incorporation of an "emic" perspective to understand the actors, anticipate their behaviors, understand influence dynamics and develop appropriate COAs – more nuanced, implicit indicators**

- **Methods and text analytic algorithms enable the assessment of the "emic" perspective through the lens of affect, social identity, integrative complexity and related content analysis**