

# **Growth Trap: Bottom-Up Organizational Transformation**

---

Margaret J. Foster

November 2022

Prepared for the médialab at Sciences Po

# Motivation

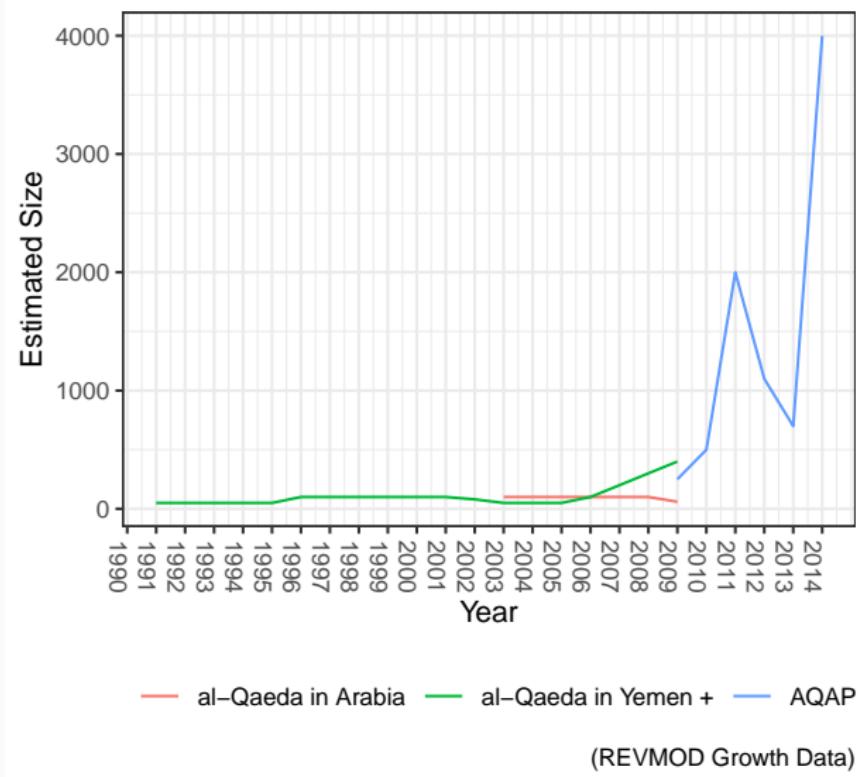
al-Qaeda in the Arabian Peninsula from 2009-2015



From "The Battle of Liberation of the Strategic Nuofan Mountain"

Trajectory of AQAP

# Consequence for AQAP



# Theory

## Theoretical Contribution:

A *personnel resource curse* produces grassroots-driven organizational transformation.

- Incompletely socialized new members transform group focus and priorities
- Organization pressured to accommodate the preferences of the base

Alternatives: Growth as Strength Growth with Problems

# Mechanism

- Organization exceeds socializing capacity due to short-term considerations (e.g. survival, consolidating gains)
- The short-term considerations mean that having recruits exit is undesirable
- Leaders begin accommodating the new grassroots by negotiating on activities and goals
- As accommodations accrue, the organization changes internally and externally

Scope Conditions

# AQAP As A Potential Typical Case

Why should we expect growth to change AQAP?

- **Inability to closely monitor agents:** Decentralized insurgency
- **Labor mobility:** Fluid militia and tribal connections
- **Restricted desire to reduce inflow:** Long-sought tribal affiliations
- **Preference divergence:** Strategic direction to avoid entanglement in local politics

Qualitative Evidence:

Difficulty Recruiting

Strategic Direction

Rank-and-file Problems

Disagreements

# Competing Expectations

## Dominant Expectation:

- Influx of recruits and resources made AQAP stronger, more of a threat to the US
- More able to pursue global objectives

## Growth Trap Expectation:

- Inflow of recruits kept AQAP locally focused
- Local preferences replaced original transnational strategic and tactical focus

# Quantitative Measurement

For a rigorous empirical test, we would want:

- Detailed internal records
- Commands and negotiations
- Motivations and priorities of rank-and-file
- Granular records of operations and strategic logic

# Larger Epistemological Issue

Streetlight Effect: Data-hungry computational tools revolutionize analysis, but create new challenges

- Existence
- Access
- Historical comparability

# Brightening the Dark Zones

Ideally, an approach would be:

- Interpretable
- Scalable
- Systematic
- Suitable to data-poor settings

# Research Design

Proposal: Suite of text and ML techniques to extract more information

- **Clustering** news stories to quantify changes in media perception of militants
  - Prediction: Convergence between AQAP and Ansar al-Shariah
- **Topic modeling** AQAP-produced media for changes in group presentation
  - Prediction: Over time, local topics dominate AQAP rhetoric

# Why work with news data?

- Event data limited in coverage<sup>1</sup>
- Qualitative sources may not be representative
- Group-produced materials may be strategic (or aspirational)

---

<sup>1</sup>e.g., ACLED Yemen coverage started 1/2015; UCDP has limited features

# (Mostly) Supervised Machine Learning

Multiple approaches:

- Interpretability: Random Forest
- Corroboration and Direction: Topic Modeling
  - Themes in AQAP self-presentation
  - Trends in a separate dataset

# Expectation

- **Basic plausibility:** Both Sunni groups distinguishable from other domestic insurgent groups
- **AQAP Strength Story:** AQAP distinct from Ansar al-Shariah
- **AQAP Transformation Story:** AQAP inseparable from Ansar al-Shariah

What is distinct?

## News Data: ICEWS

- Stories from ICEWS tagged as violence in Yemen for 2009-2015.<sup>2</sup>
- Random sample of 1,722 (16%), hand-coded for actor
- 566 stories in which either AQAP, Ansar al-Shariah, Houthis were named as the actor
- 67-33% training-test

---

<sup>2</sup>Corpus origin: Factivia and Open Source Center

## From Information to Data Points

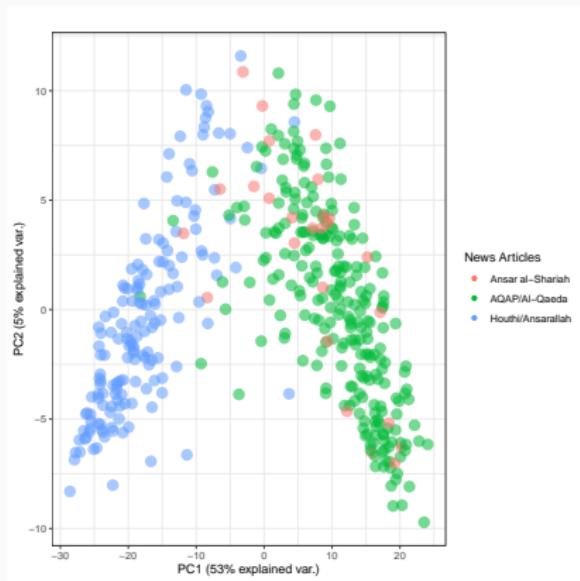
*"Al-Qaida militants carried out offensive attacks targeting the 25th Mechanized Brigade in the east of Zinjibar city, which aroused heavy clashes, leaving three soldiers and eight al-Qaida militants killed in addition to injuring dozens of others from both sides, the official told Xinhua, who asked to remain anonymous. Fierce battles are still ongoing around the military brigade, which was surrounded by the militants, the official said. Al-Qaida group was trying to bring down the military brigade by using heavy machine guns, he added. Meanwhile, a local medic at the Basuhib military hospital in Aden said that dozens of injured soldiers were receiving treatment from the clashes..."*

Xinhua, June 28, 2011

Stopwords

# Plausibility

Two-dimensional visualization of separation between the Houthi and Al-Qaeda stories



Important Features

◀ Start

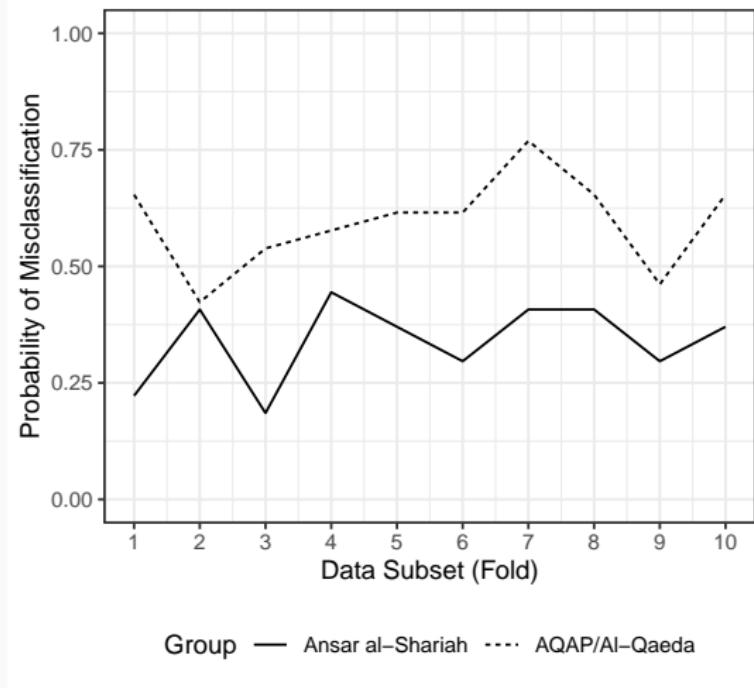
Outline

▶ End

16

# Within AQAP/AAS

A more precise view



## Problems: Attention, Direction, and Time

In general, clustering consistent with expectations about localizing

However:

- Clustering techniques do not show **why** or the **direction** of movement
- Visualization tools can be deceptive
- Attention effects could distort corpus
  - Imbalanced data is a problem

Strategy: Look *within* AQAP for changes in self-presentation.

# Looking Directly At AQAP

Does AQAP self-presentation change?  
Analysis of AQAP texts

- Structural Topic Model (Roberts, Stewart, and Tingley 2014)
- 18 topics [Topics](#)
- 875 AQAP statements released online from 2008-2016 [Histogram](#)
- Includes documents branded by both AQAP and Ansar al-Shariah [Topic Differences](#) [Communique Example](#)
- Most texts translations into English from Arabic

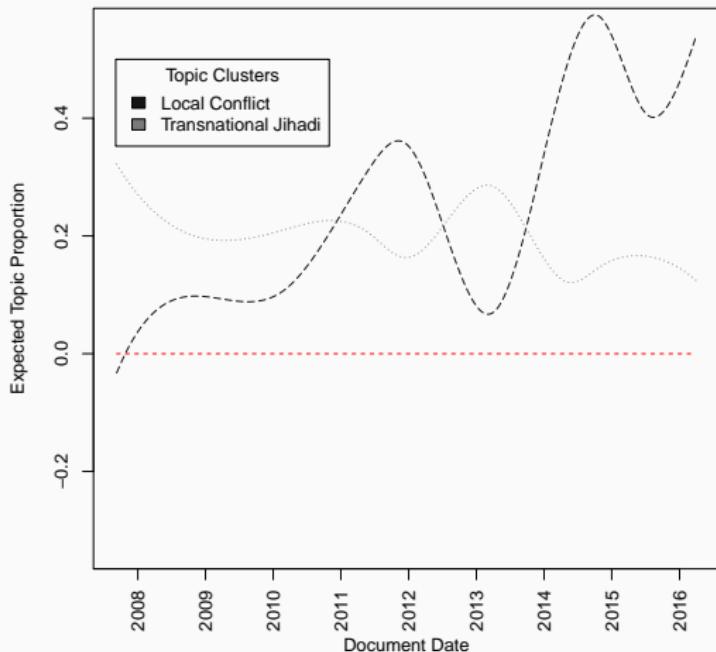
# Possible Effects

What could we see?

- Without transformation: AQAP rhetoric begins, and remains, globally-driven; civil conflict engagement under the banner of Ansar al-Shariah
- With transformation: AQAP rhetoric localizing

# Summary of Messaging Results

Point Estimates of Local and Transnational Topic Clusters



All Topics

Local Topics

Comparison to as-Sahab Corpus

Effect of AAS Branding

Responsiveness

Alternative: Elite Changes

# Status

So far, results pointing towards localizing, from:

- Modeling reporting by international agencies, via ICEWS aggregation
- Modeling self-presentation, via communiqués

Can a third corpus and a third modeling approach reinforce the impression of a thematic change around 2015?

# UCDP Strategy

Turn to UCDP event data

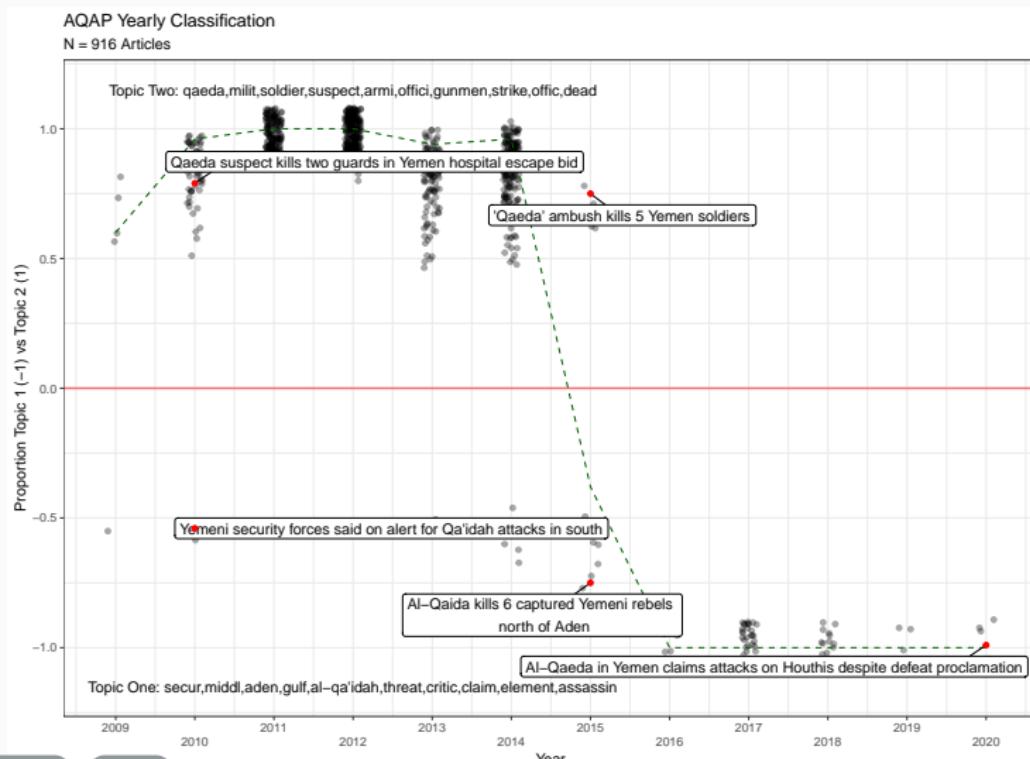
- GED includes news sources<sup>3</sup>
- Verified and deduplicated by their research team
- Can use these entries to model thematic changes over time
- Won't know *why* but can see if the results are consistent

---

<sup>3</sup>Corpus origin: Global Newswire, BBC Monitoring, local / specialized news sources and reports

# Third view

AQAP Thematic evolution in reporting covered by UCDP:



# Conclusion

No smoking gun, but multifaceted results consistent with Growth Trap expectations:

- AQAP growth accompanied by localization
- AQAP unable to sustain separate local face

# Contribution & Substantive Implications

- Substantive
  - Growth Trap mechanism of organizational change
- Methodological
  - Complementary text-as-data approaches to triangulate information
  - Approach for both sparse and rich information environments

# Larger Research Agenda

- Methods and Tools
  - Tools for maximizing information from existing data
  - Principled ways to interpret digital traces for analysis
    - Theory-informed IRT model (Morucci et al.)
    - Gridlock and coded contestation in IOs (with Johnson and van der Veen)
- Book project: The Growth Trap
  - Generalization of accommodation-transformation cycle
  - Nuanced characterization of effects of internal institutions
- Organizational Dynamics of Conflict Actors
  - Model “change” in militant groups Example
  - Gig Economy Insurgency
  - Dominoes: Do social networks shape exit?

# Q&A

Thank you!

[margaret.foster@unc.edu](mailto:margaret.foster@unc.edu)

# Roadmap

## Outline

- Proposed Theoretical Mechanism Mechanism
- Presentation of case AQAP
- Strategies for more rigorous testing Design
- Quantitative results Plausibility RF STM 1 STM 2
- Conclusion Contribution

# Beyond COIN

Framework and focus on “growth pains” has implications beyond CT/COIN:

## Substantive

- Theory of bottom-up organizational transformation
- Mechanism and model of internal negotiation
- Organizational dynamics and decision-making of hard-to-reach but significant international actors
- Heterogeneity of social movements
- Managing social and political embedding
- Predictability of proxies

# Case: AQAP

## Conflict in Yemen:

- 2009: “AQAP” develops after Sanaa prison break + Saudi merger
- 2009: US-lead War on Terror increases involvement in Yemen, especially after 2011
- 2011: AQAP establishes “local” face, Ansar al-Shariah evidence
- 2011: Government collapses, Yemen enters civil conflict
- 2015: Conflict becomes civil war & a front for regional Saudi-Iranian competition
- 2016: US intervenes

[Back to Intro](#)

◀ Start

Outline

▶ End

31

# Dominant Expectation

The dominant theoretical narrative is growth as strength

- Emphasis on proactive leaders, alliance formations, recruitment selection, and downwards management  
(Bueno de Mesquita 2005; Christia 2012, Gates 2002; Hegghammer 2013; Mironova 2019; Shapiro 2013)
- Downstream consequences of initial endowments  
(Johnston 2008; Parkinson 2013; Sinno 2010; Staniland 2012, 2014; Weinstein 2006)

[Back to Theory](#)

# Alternative Narratives of Growth

- Cohort effects and organizational learning  
(Hoover Green 2016, 2017; Horowitz and Potter 2014; Kenney et al 2013; Kenney 2018)
- Downstream effects of recruitment  
(Schubiger forthcoming; Weinstein 2006)
- Socialization failure  
(Gutiérrez 2012; Manekin 2017; McLauchlin 2010)
- Grassroots capture of activities  
(Condra and Wright 2019; Kalyvas 2016)

[Back to Theory](#)

# Scope Conditions

- Preference divergence
- Labor mobility
- Limited ability/desire to limit inflow through selection
- Inability to closely oversee and coerce agents

[Back to Mechanism](#)

# ...not just the Levant

- Afghanistan (Hamid and Ferrall 2015) Afghan-Arab Example
- Eritrea (Woldemariam 2018) Jebha Example
- The Levant (Szekely 2016) PLO Example
- Nicaragua (Mosinger 2017) FSLN Example
- Somalia (Hansen 2014) Shabaab Example
- Western European skinhead movement (B&H Field Manual) Field Manual

## ...nor only militant groups

Organizations with incentives for short-term maximization, a pool of recruits with their own agenda(s), and where viable alternatives exist.

- Businesses
- Non-profits
- Advocacy Organizations & Social Movements
- Political Parties

## Qualitative Indications: Early Struggle

“...the author’s fieldwork in Marib and more than two dozen interviews with tribesmen and shaykhs from al-Jawf find no indication that al-Qa‘ida in the Arabian Peninsula has established safe havens for its members by marrying into the tribes of Marib or al-Jawf [...] Despite the group’s media campaign, there is no evidence that any al-Qa‘ida iteration in Yemen has been effective in winning formal tribal support east of Sana`a ...”

(Koehler-Derrick (ed), 2011)

[Back to AQAP](#)

## Qualitative Indications: Strategy

*...it is very important to remind all of our brothers about it with a note to the new generation, who joined the jihad road and were not advised about this. Thus, they conduct separate operations rather than concentrating on the main objective [the external enemy, i.e.,: the US] as we heard in the news about operations in Marib and Ataq against the government forces. I hope these operations were important for the mujahidins self-defense only.*

**...many jihadist groups did not succeed in gaining their objective because they concentrated on their internal enemy.**

Letter to Abu Basir, pgs 6, 11  
(Emphasis added)

[Back to AQAP](#)

## Qualitative Indications: Later Dynamics

*"in the Radaa district that a researcher, who recently visited the area [in 2014], discovered a local AQAP leader who was complaining about new recruits not carrying out their regular religious prayers"*

(Al Muslimi, 2014)

[Back to AQAP](#)

## Qualitative Indications: Later Dynamics

*"Even if al-Qaeda and I have disagreements, if we are fighting in the same trench against the Houthis, he is my brother."*

(al Ahmad 2015, in Worth 2015)

[Back to AQAP](#)

# What is “Distinct”?

- AQAP *should* focus on the big picture:
  - Attacks against military/ central state
  - External initiatives against foreign targets
    - Embassies,
    - Tourists
    - Oil facilities
- Ansar al-Shariah *should* focus on local politics:
  - Assassinations of local leaders
  - Hyperlocal score-settling
  - Intimidation for territorial administration

[Back to Expectations](#)

# Afghan Arabs

## “Practitioners”

Proto al-Qaeda, late 1980s:



(Essam Draz/Balkis Press/SIPA,  
1989)

“Once bin Laden had followers at Jaji [in 1987]...he too ended up letting his leadership be influenced by the youth. He feared them thinking badly of him, or leaving him and then saying negative things about him...the young, brash, and impetuous youths were ultimately shaping the decisions that were made in the Arab-Afghan jihad.”

(Hamid and Farrall, 2015, pg 102)

Back to

Motivation

# Christian Transformation of ELF

## "Practitioners"

Eritrean Liberation Front, 1975:

[Responding to urban insecurity]

"Christian youths flocked into Jebha in ways that had never been seen before. In 1975, an organization that was no more than 2000 people took in nearly 10,000 recruits."

In 1975, Said Hussein escaped jail and] "...he was stunned by the altered character of the movement...the leadership and rank-and-file were increasingly dominated by a growing number of Christians."

(Woldemariam, 2018, pg 105, 143)



(Photograph of ELF fighters, 1976)

## “Practitioners”

Sandistas, 1970s:



(Voices of The Revolution)

“...an influx of recruits from a new

dissident network alters the internal balance of power between incumbent rebel leaders and their challengers... This process...tore apart the FSLN as successive waves of new recruits, mobilized by grievance-triggering focusing events, flooded into the FSLN and lent their support to challengers over incumbent leaders...”

(Mosinger 2018, pg 210)

Back to Motivation

# PLO, Reprise

## "Practitioners"

PLO, after 1968:



(Petra News Agency)

"... In the days and weeks after Karameh, the various PLO factions received thousands of new volunteers, most of whom they had no time to either train or indoctrinate....[tensions were] compounded by the fact that Arafat's pragmatic approach was not shared by all PLO factions"

(Szekely, 2016, pg 69)

Back to [Motivation](#)

## Blood & honour **FIELD MANUAL**



**MAX HAMMER**

Back to Motivation

# Practitioners

Example: Kismayo, 2008



(Image: Somali Report, 2012)

"Marehaan clan militias tried to take control of Al Shabaab around the city of Kismayo in 2008—2009 by strategically joining the organization in large numbers" (Hansen, 2013)

"... This allows them to influence al-Shabab and to gain access to resources or to enlist the support of al-Shabab in their clan conflicts" (Hansen, 2014)

Back to Motivation

# Appendix: How do we know that AAS was intended to be local?

AQ leaders:

Sheikh Abu Zubayr Adel bin Abdullah al-Abab (April 2011):

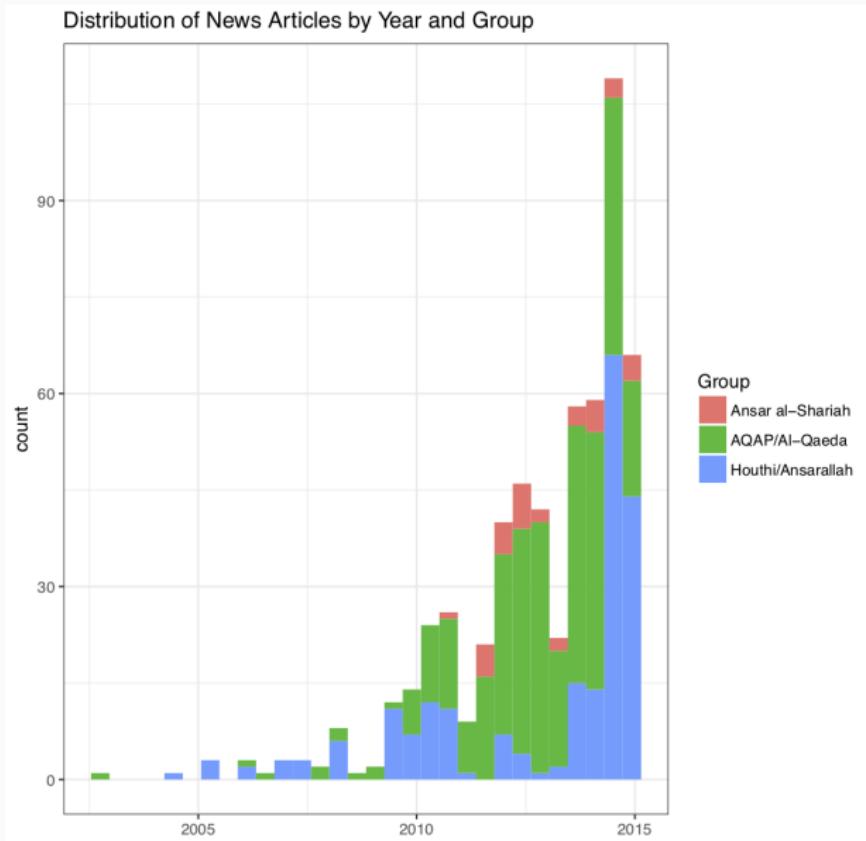
*"The name Ansar al-Sharia is what we use to introduce ourselves in areas where we work to tell people about our work and goals, and that we are on the path of Allah"*

Local experts:

*"Ansar al-Sharia (AQAP's local insurgency arm), who may not adhere to AQAP's global ideology, and work to separate them from AQAP by addressing their legitimate locally-grounded grievances." (International Crisis Group, 2017)*

AQAP

# Histogram of Stories by Tag



## Appendix: Custom stopwords, news corpus

Custom stopword list:

- Words that signal AQAP: qaeda, alqaida, alqaeda, qaida
- Words that signal Houthis: houthi, huthi, houthis, zaidi, alhouthi
- Words that signal Ansar al-Shariah: ansar, sharia, alsharia, (alshariah)
- Words that suggest an al-Qaeda affiliation: laden, osama
- Word specific to one group: peninsula, northern, southern, arabian, yemen-based
- Words that denote sectarian identity: sunni, shia, shiite

[Back to story](#)

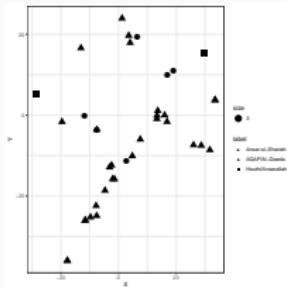
## Processed Text, Bag of Words

*militants carried offensive attacks targeting th mechanized brigade east zinjibar city aroused heavy clashes leaving three soldiers eight militants killed addition injuring dozens others sides official told xinhua asked remain anonymous fierce battles still ongoing around military brigade surrounded militants official said group trying bring military brigade using heavy machine guns added meanwhile local medic basuhib military hospital aden said dozens injured soldiers receiving treatment clashes...*

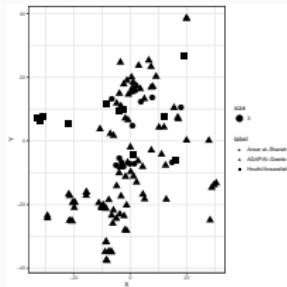
[Back to Processed Stories](#)

# tSNE Convergence Over Time

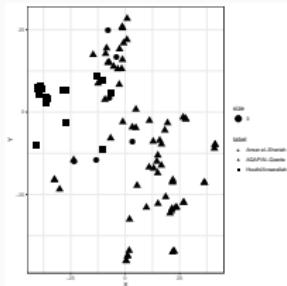
tSNE Ansar al-Sharia vs AQAP Classifications, 2011-2014



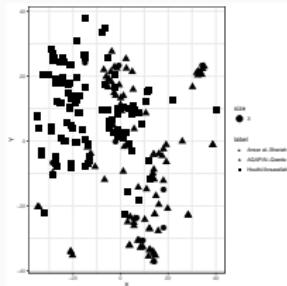
2011



2012



2013



2014

[Back to Subset](#)

◀ Start

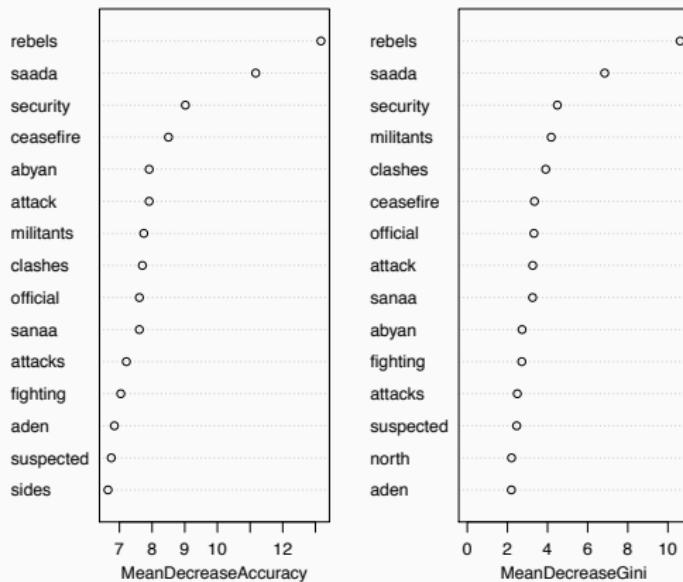
Outline

▶ End

# Appendix: Important RF Variables

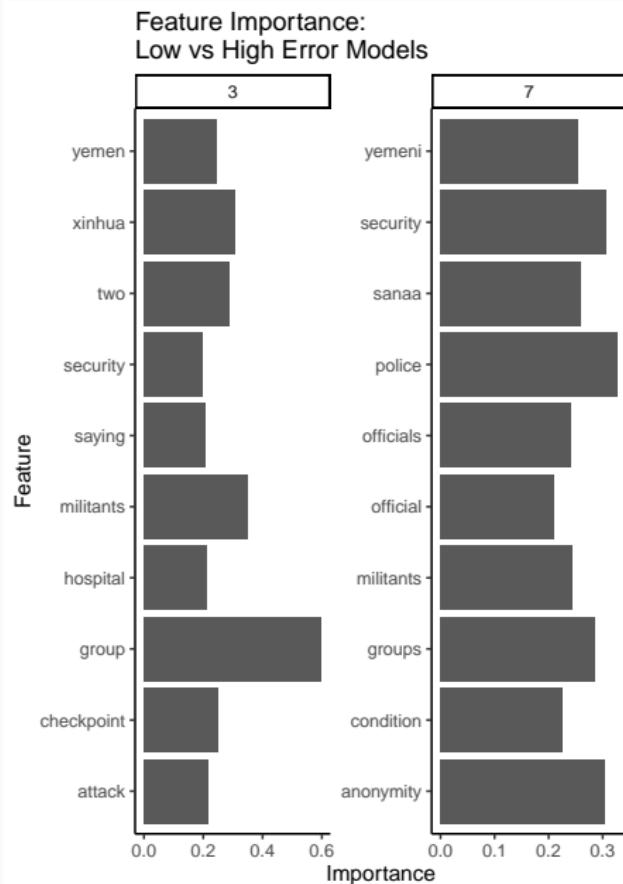
## Houthi vs AQAP vs AAS

15 Most Important Words For Story Classification

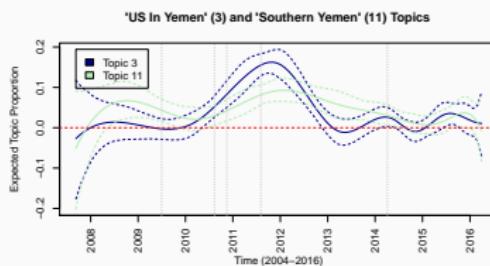
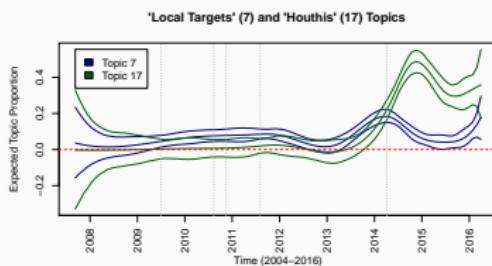
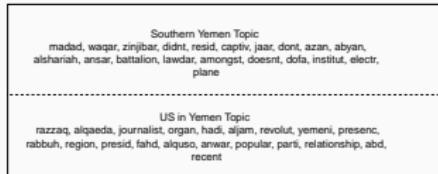
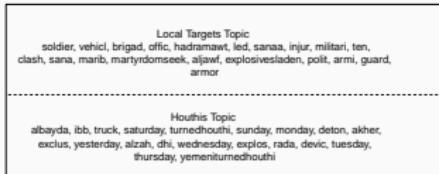


[Back to Plausibility](#)

# Sunni Groups: Important Features



# A Closer Look

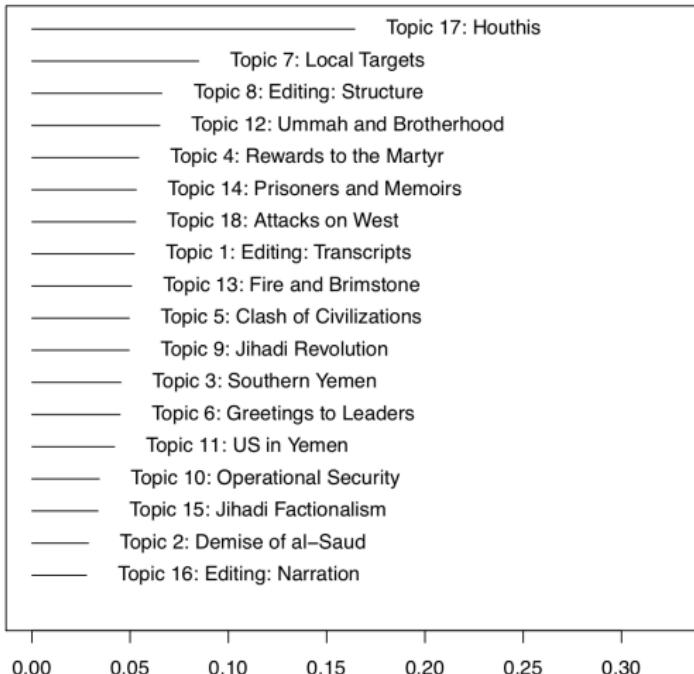


**Figure 1:** Changes over time in the prevalence of local topics

[Back to STM Results](#)

# Summary of AQAP STM

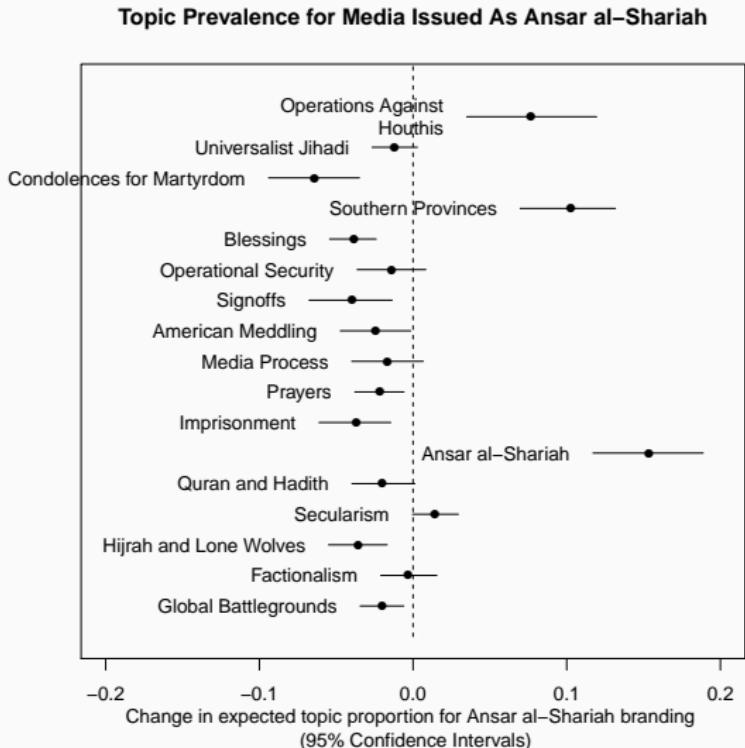
## AQAP Corpus With Day Covariates



[Back to STM Results](#)

Expected Topic Proportions

# Effect of Material Released Under Ansar al-Shariah Logo



[Back to STM Results](#)

◀ Start

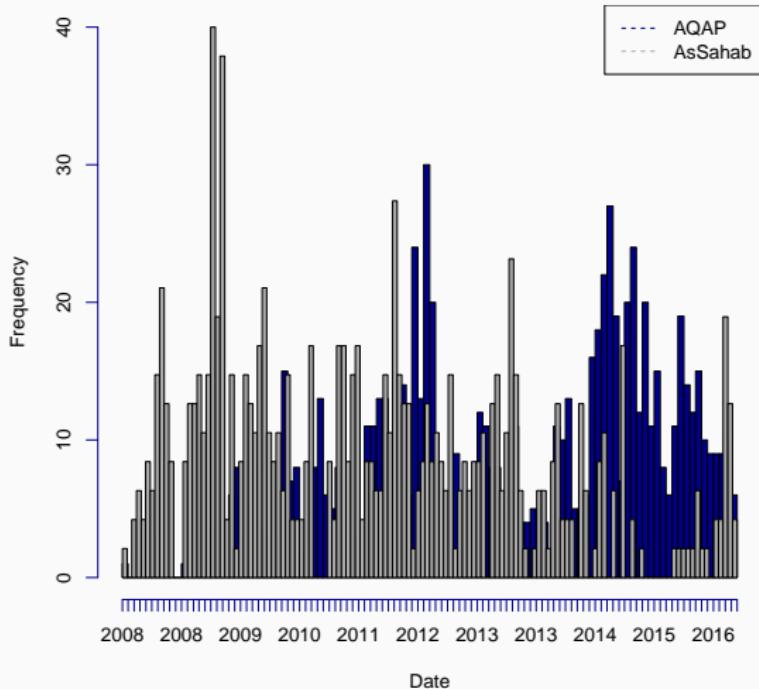
Outline

▶ End

57

# Histogram of AQAP And AQ Central Communiques

Histogram of As Sahab and AQAP Documents

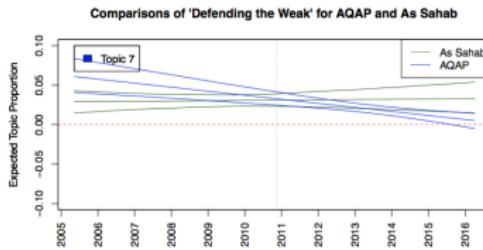
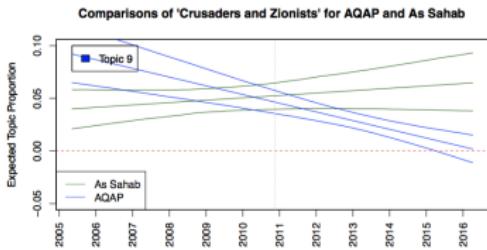


# Comparison to as-Sahab

Figure 2: AQAP and as-Sahab

Topic 9:  
gaza, somalia, palestine, everywhere, jerusalem, jew, levant, crusad, traitor, invad, defeat, liber, allianc, zionist, campaign, alaqsa, maghreb, agent, land, lion

Topic 7:  
women, sister, children, condemn, saud, injustic, crimin, crime, woman, corrupt, hurt, sanctifi, dare, univers, free, ruler, document, digniti, gang, hous



[Back to STM Results](#)

# AQAP Elites Trying to Rally Against Localizing

Khalid bin Umar Batarfi:

*Therefore, you must not be deceived by the victories you have achieved and your determination is deterred from completing the jihadi march and struggle until every part of our land is liberated.*

**Do not be sufficed with defeating the enemy in Yemen, for the Rafidha are one Ummah; they support one another everywhere. [What happened in] Iraq, Syria, Lebanon and elsewhere is not far off from you! The position of the Rafidha Safavid state government, the caretaker of the religion of rejection in the world, Iran, and its defense, its guardians in Iraq, Sham [Syria], and Yemen is not but evidence of that.**

"A Message to the Men of the Resistance in Yemen"

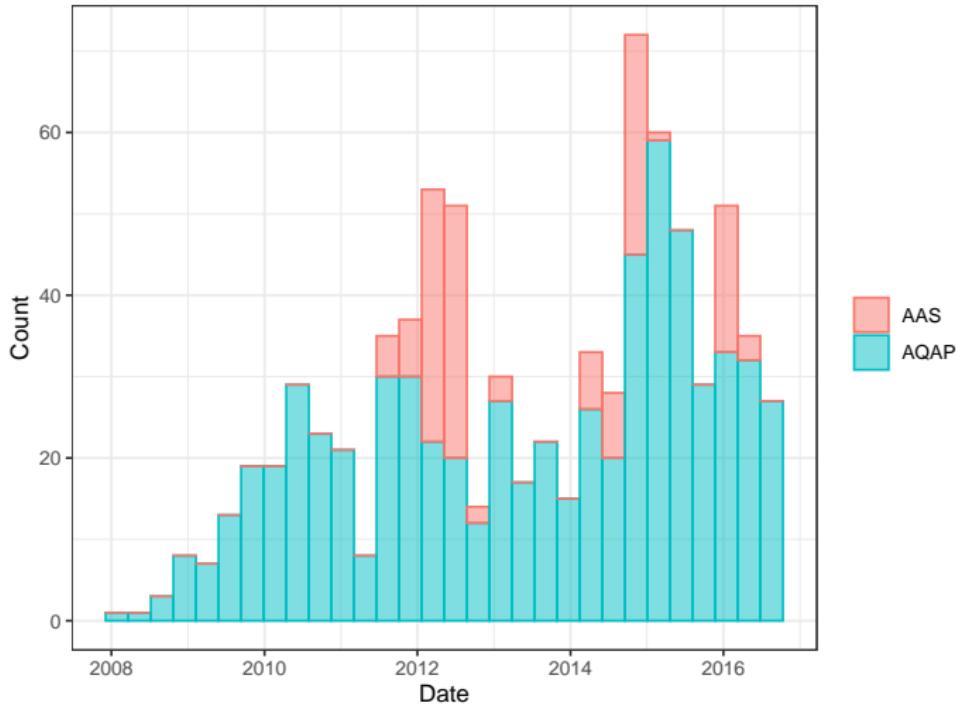
Released Online September 2015

(Emphasis added)

[Back to STM Results](#)

# Histogram of Communiques

Communiques Branded AQAP And Ansar al-Shariah



[Back to STM Overview](#)

# Ansar al-Shariah Communiqué (June 2012)



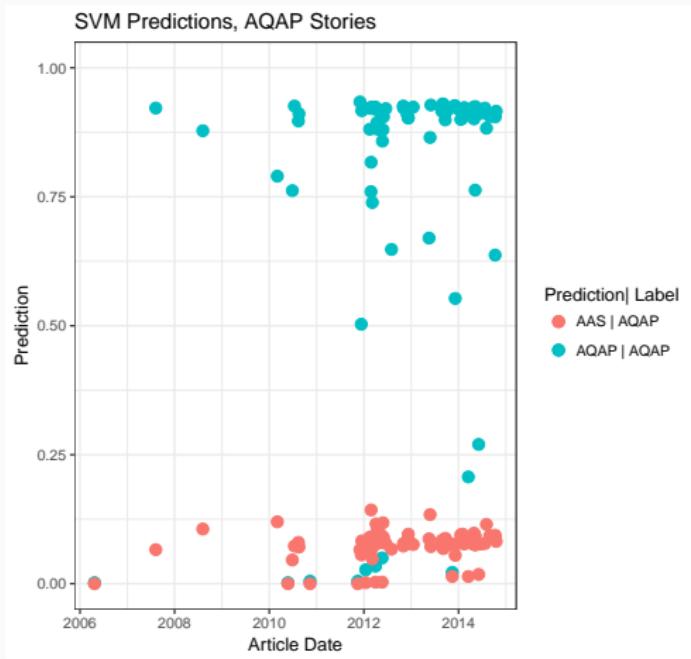
(To Our Brothers in Waqr Emirate -  
Abyan Province)

“.... It has been more than a year of war [...However you...] witnessed the institution of Shariah; the spread of security; the feeling of safety amongst people for their money, honor and blood; the promotion of virtue and the removal of vice; the disappearance of crime and the end of exploitation; the arrival of aid to the people’s villages and homes, and services to many villages; the dropping of taxes and services fees for water, electricity and municipality....”

[Back to STM Overview](#)

# Temporal Expectations

Classification difficulty for AQAP Articles Over Time:



[Back to Stratified RF](#)

◀ Start

Outline

▶ End

# About Me

## Analytical insights from deep case knowledge

### FOR TRANSIT TO SYRIA, INSTRUCTION TO SURFACE SHARED

Created: 26 June 2014



In jihadi fighters in Syria continue to provide information on jihadis' experiences in Syria. Among the recent messages shared on jihadis' websites and a European fighter who writes under the name "Abu" and about their current circumstances.

### JT FIGHTER SOLICITS MEDIA SPECIALIST FOR WESTERNERS SEEKING

Created: 29 January 2015



area Front, al-Qaeda's Syrian affiliate group, solicited media specialists and explained on trying to get married in Syria.

"Abdullah" answered an anonymous user's question, asking in part, "How hard is it to get married in Syria?" "Abdullah" responded that Syrian families are commonly "reluctant" to allow their children to marry non-Syrian citizens. The answer read in part:

### IS WRITES ESSAY EXPLAINING DEFECT FROM FRONT, PROMPTS REBUTTAL FROM FORMER IS

Created: 18 March 2015



State (IS) fighter circulated a post detailing reasons why he decided to leave al-Qaeda's branch

ng some of his claims and criticizing the IS.

4, 2015, the initial essay was attributed to user "Abu Sa'ad" and was the fourth installment of IS's "Message of the Mujahid" series. In it, he

### EXCHANGE ADVICE ON JOINING JIHADIS

Created: 04 October 2013



on a discussion thread established to provide advice for entering Syria, members of the group exchanged advice with prospective fighters.

lafsa Jihadist forum thread "Border Post into Syria Controlled by ISIS?????" was used for inquiries about the logistical details of emigrating for jihad, such as how to travel to Syria from abroad. In response, contributors issued advice, such as one user who advised to leave resources with his wife and children, that "You will be taken care of until you return home without them. The answer read in part:

INSITE BLOG  
BY THE TERRORISTS & EXTREMISTS  
HOME | ABOUT | CONTACT US | SUBSCRIBE | LOGOUT

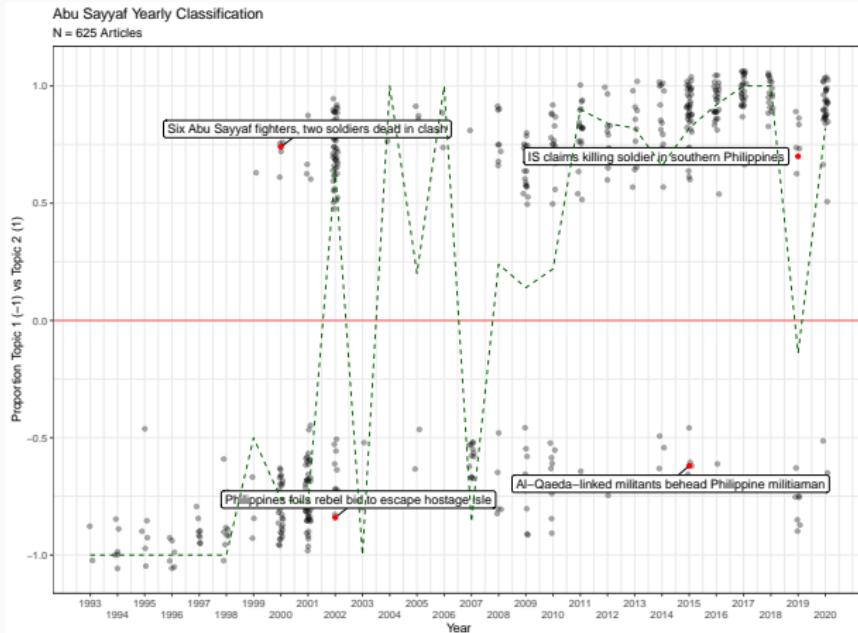
he Paris Attacks: Classic Jihadi Principals with Modern Appearances

Abu & Margaret Foster | Tuesday 11 November 2014 | 29681 hits



# A third facet

One approach to measurement at scale:



**Figure 3: Illustration of Modeling Output, Abu Sayyaf**