Compilation of Figures for Subject to Change Replication

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Introduction

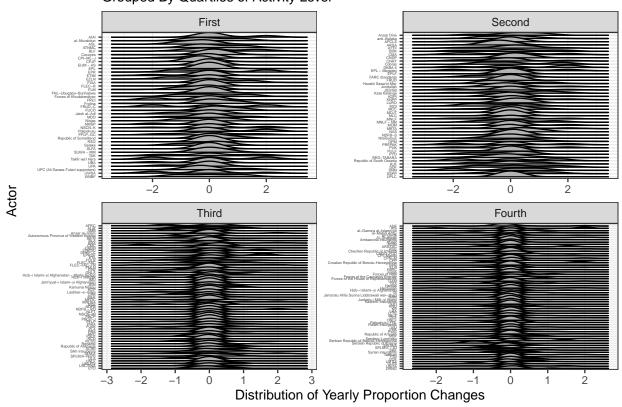
This document produces a replication log for the tables and figures made in R for Subject to Change: Quantifying Transformation in Armed Conflict Actors At Scale Using Text.

The data and analysis are replicated in the accompanying logs. However, as that log produces several hundred pages of logs, I collected the figures and images:

Manuscript Figure 1

Figure 1. Group-level distributions of one-year topic changes. It is originally produced by 03analysisFull-DataTinyThreshRep.R (and accompanying replication log)

Overview of Yearly Proportion Changes Grouped By Quartiles of Activity Level



Manuscript Figure 2 and Appendix Figure 12

The code chunk produces manuscript Figure 2 and Appendix Figure 12, which are summaries of the distribution of the new change variables.

```
> % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
> % Date and time: Fri, May 10, 2024 - 13:49:14
> \begin{table}[!htbp] \centering
           \caption{}
           \label{}
>
> \begin{tabular}{@{\extracolsep{5pt}} ccc}
> \\[-1.8ex]\hline
> \hline \\[-1.8ex]
> Variable & No & Yes \\
> \hline \\[-1.8ex]
> Had 'Low' Change & 579 & 650 \\
> Had 'Med.' Change & 823 & 406 \\
> Had 'High' Change & 1028 & 201 \\
> \hline \\[-1.8ex]
> \end{tabular}
> \end{table}
> % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
> % Date and time: Fri, May 10, 2024 - 13:49:14
> \begin{table}[!htbp] \centering
          \caption{}
           \label{}
> \begin{tabular}{@{\extracolsep{5pt}}lccccc}
> \\[-1.8ex]\hline
> \hline \\[-1.8ex]
> Statistic & \multicolumn{1}{c}{N} & \multicolumn{1}{c}{Mean} & \multicolumn{1}{c}{St. Dev.} & \multicolumn{1}{c}{St. Dev.
> \hline \\[-1.8ex]
> Number of Changes & 1,114 & 1.061 & 1.166 & 0 & 4 \\
> Years Since Change & 1,118 & 0.830 & 2.057 & 0 & 16 \\
> \hline \\[-1.8ex]
> \end{tabular}
> \end{table}
```

Manuscript Figure 3:

These images are produced in the STC_STATA_Replication.do script:

Appendix Figure 1

This is a ridge plot of the lengths of articles. It is originally produced by 03analysisFullDataTinyThreshRep.R (and accompanying replication log)

Appendix Figures 2-5, 10

The following code replicates the group-year summary plots. These are Appendix Figures 2 (AQAP), 3 (Abu Sayyaf), 4 (ULFA), 5 (LRA), and Appendix Figure 10a (PKK) The originals are produced in

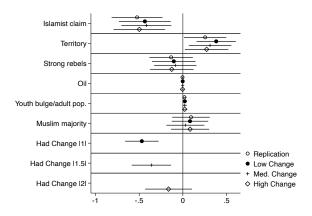


Figure 1: Fig 3: Termination Model With Change

Distribution of Article Lengths

Grouped By Quartiles of Activity Level First Second First First Forth Fourth Fo

Figure 2: Article lengths

annotedAQAPGraph.R and

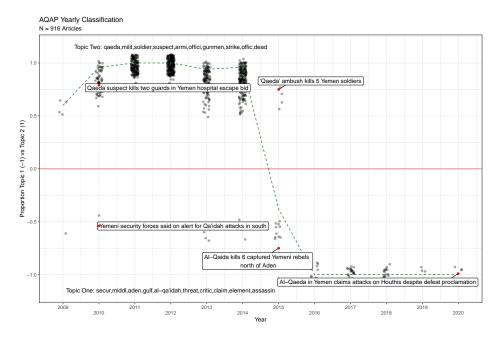


Figure 3: AQAP

Appendix Figures 6 and 7

The plots are Appendix Figures 6 and 7, which evaluate the effect of media access on estimated change points.

These snippets address whether the approach is more likely to find changes in difficult reporting environments, which would suggest that what is being modeled is something other than behavioral changes.

They are produced by 03ClocationPrecisionRep.R

Appendix Figure 6 (L) and Figure 7(R)

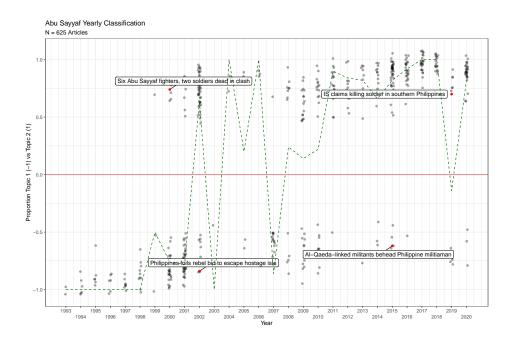


Figure 4: Abu Sayyaf

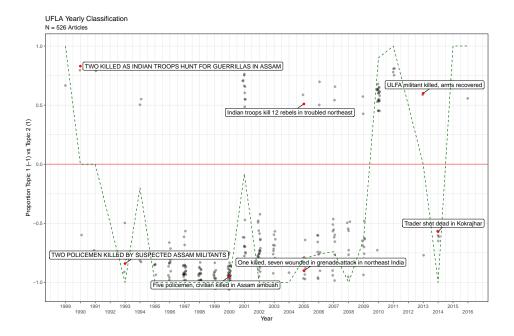


Figure 5: ULFA

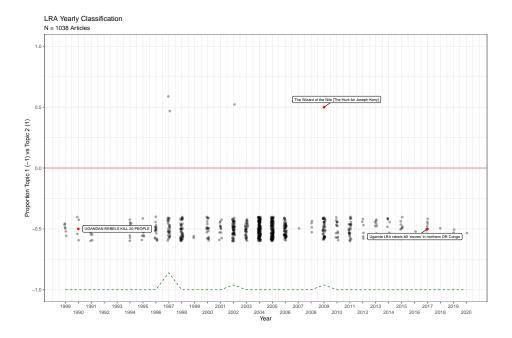
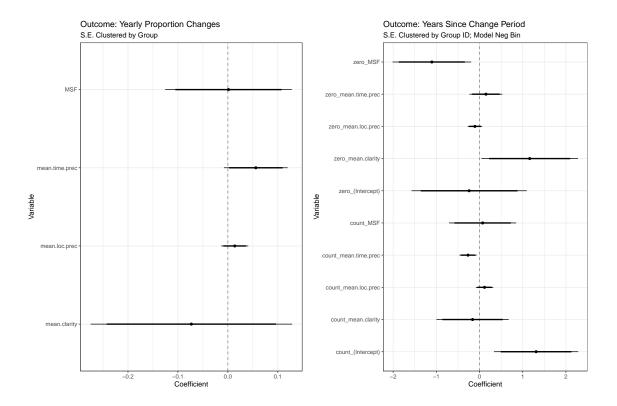


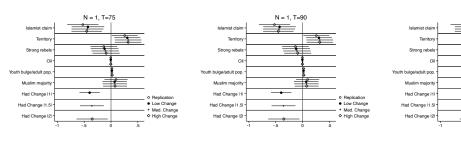
Figure 6: LRA



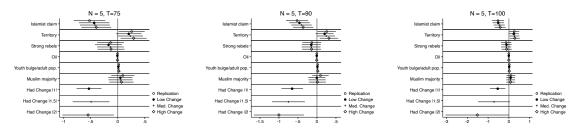
Appendix Figure 8

Effect of minimum document requirements on regression output. These plots are produced by STATA and saved into the ./images/ directory. They are collected here for convenience:

Top row:

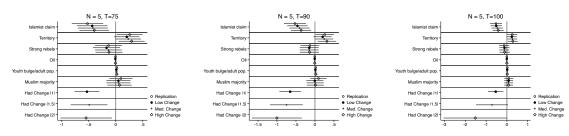


Middle row:



N = 1, T=100

Bottom row:



Appendix Section 5: Topic Model Specifications

The analysis for Appendix Section 5: Topic Model Specifications are captured here. They are produced by implementAltPKKAQAP.R (Appendix Table 1, Appendix Figure 9, Appendix Figure 10 (right)).

Appendix Table 1 is accessible in the log for implementAltPKKAQAP.html. It is the last table in the .html.

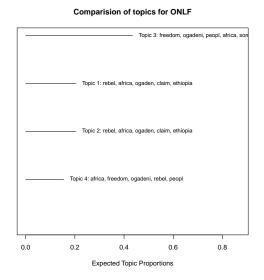
The plots are included below for convenience, from the files produced in the repository:

Appendix Figure 9:

ONLF Alternate Specifications

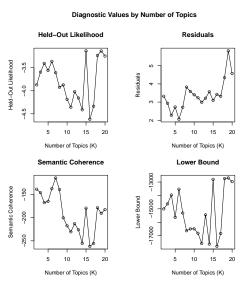
Diagnostic Values by Number of Topics Held-Out Likelihood Residuals Polymer Pour Presiduals Semantic Coherence Semantic Coherence Topics (K) Semantic Coherence Lower Bound Topics (K) Semantic Coherence Topics (K) Topic

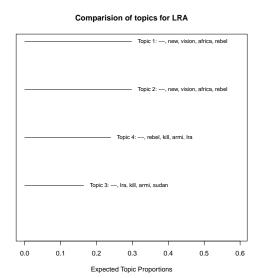
Number of Topics (K)



LRA Alternate Specifications

Number of Topics (K)

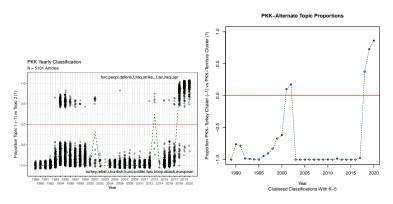




Appendix Figure 10

PKK Alternate specifications

The first plots is produced in analysis GroupPlotsRep.R, the second by implementAltPKKAQAP.R



Appendix Figure 11

Produced by 04nsPrepTerminationRep.R

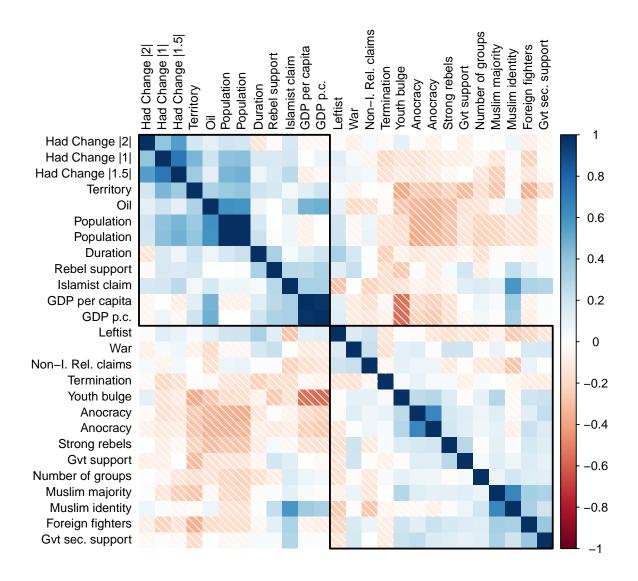


Figure 7: Correlation Heat Map

Appendix Figure 12

This table was produced above in the first chunk, with the Latex code reproduced on page 2 of the pdf.

Appendix Figure 13:

The following compiles the figures produced by the STATA .do files: Termination model with additional time covariates:

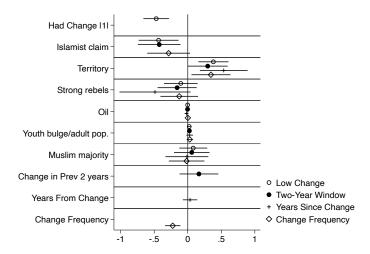


Figure 8: Termination Model with censored time windows

Appendix Figure 14

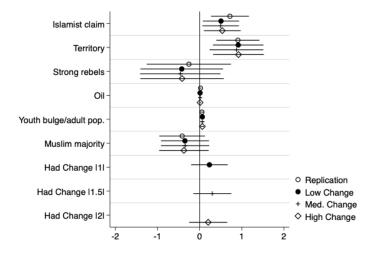


Figure 9: Recurrence model