ANALYZING GLOBAL TERRORISM

Troy Hepper May 11, 2017

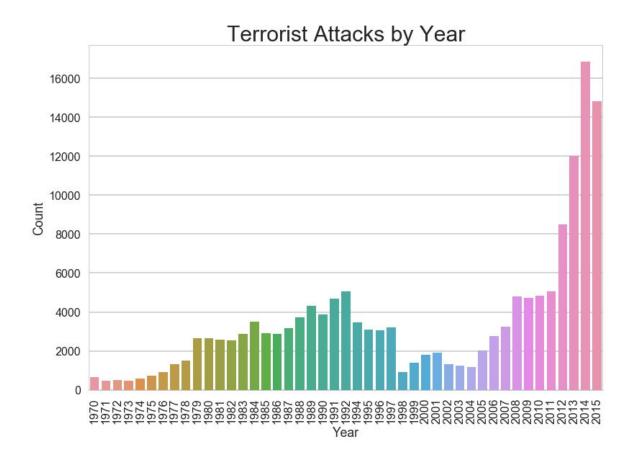
AGENDA

- Data Exploration
- Bayesian Inference between two populations
- Imputing Missing Data for 1993
- Final Conclusions

DESCRIBING THE DATA

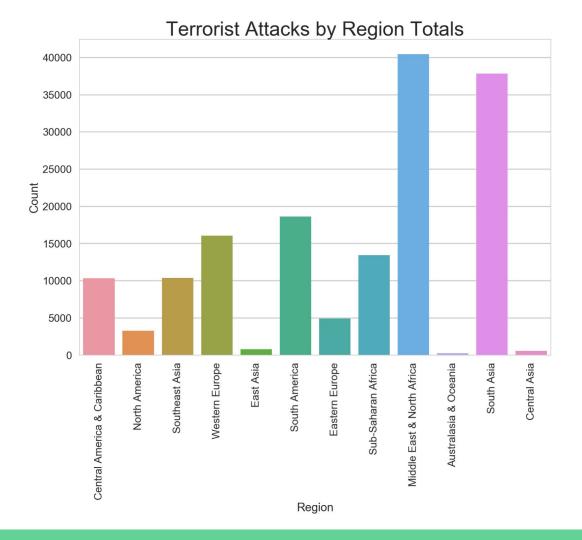
- Information on terrorist attacks around the world from 1970 through 2015
- Maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism (START)
- Includes information such as date of instance, location, number killed, type of attack, group responsible, etc.

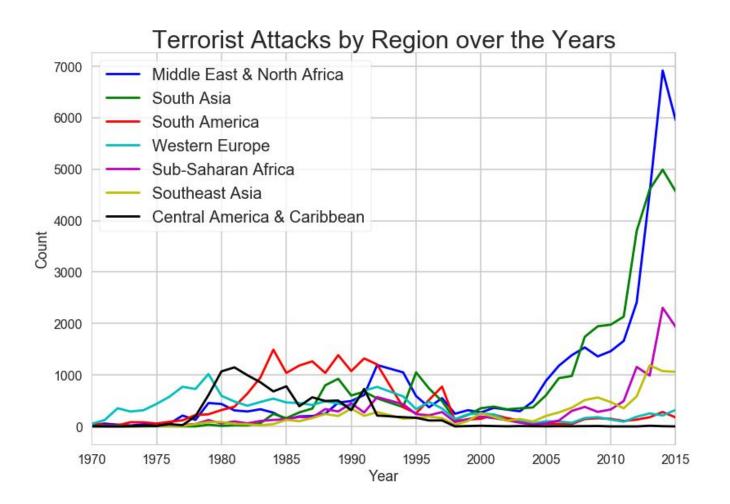
NUMBER OF TERRORIST ATTACKS BY YEAR



ATTACKS BY REGION

The number of terrorist attacks that have occurred in the Middle East, North Africa, South Asia is equal to the number of terrorist attacks in the rest of the world.

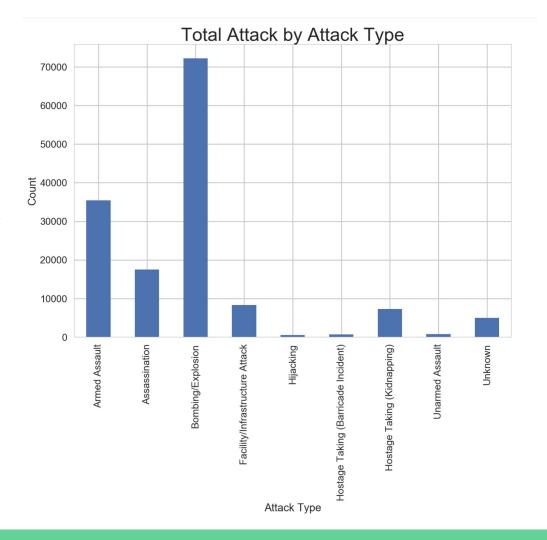






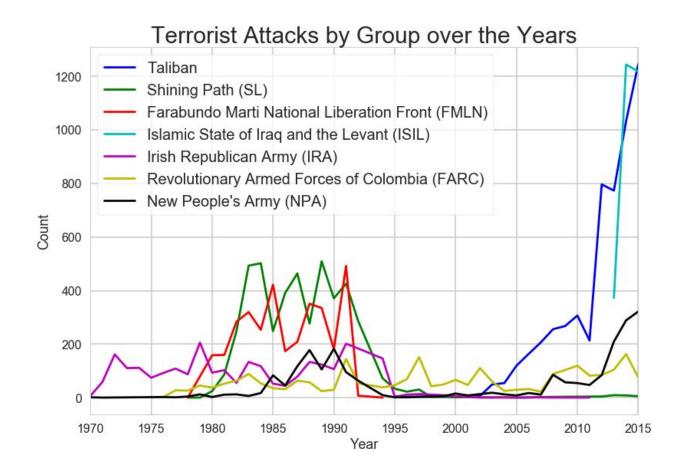
ATTACK TYPE

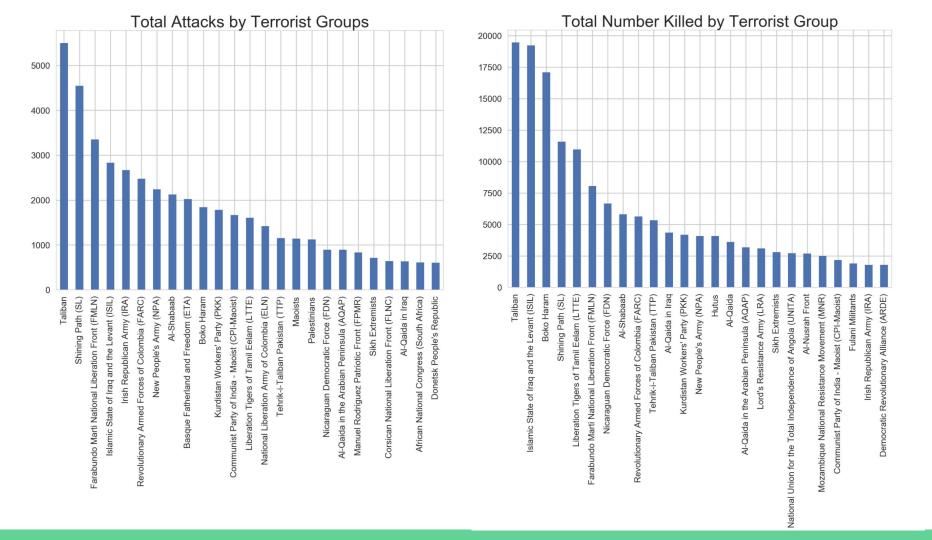
Bombing/Explosion and
Armed Assault attacks make
up about 72.5% of all terrorist
attacks



TERRORIST GROUPS

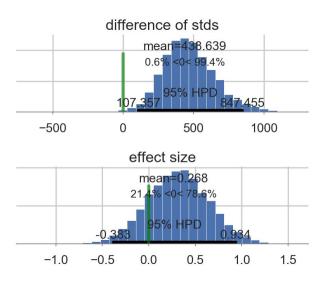
Taliban and ISIL responsible for approx. 30% of fatalities from terrorist attacks over the last 5 years

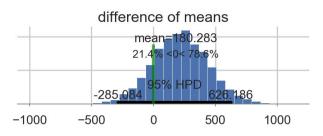




BAYESIAN INFERENCE

- Compared the number of fatalities per year from Armed Assault attacks in Afghanistan and Pakistan in the 21st century.
- Afghanistan did not prove to have a significantly more fatalities than Pakistan





Predicted Number of Bombing/Explosion Incidents in 1993

Used an autoregressive (AR) model with order of p=2.

1,649

CONCLUSIONS