A Comparative Text Analysis on the Ramifications of 9/11

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Project Memo

I. Intro/Research Question

The September 11th attacks, colloquially known as 9/11, were a defining moment in American history that forever altered policy preferences among national security and foreign policy issues. After such a significant event, it can be assumed that the effects have created a ripple, with its force acting on all countries, not just the United States. Through the use of text analysis methods, the goal of this project is to analyze the UN Great Debate corpus in order to comparatively examine how international conversation have been driven by the catastrophic national events of 9/11.

II. Significance of Research Question

Closely following this great tragedy, president George W. Bush announced the War on Terrorism, "defined by military intervention, nation building, and efforts to reshape the politics of the Middle East" (CATO Institute)[1]. In the 20 years that have passed, 9/11 has had a large cultural and political impact on the world; specifically in the following years the American government has placed an emphasis on national security that has seeped into U.S. immigration laws, policies and agencies. Previous studies have largely focused on the effects of the September 11 attacks on the U.S. in regards to immigration, discrimination in the labor market[2], international political economy, etc.[3] The few studies that have examined the effects of 9/11 on

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[1] Thrall & Goepner. (2017, June 26). *Step Back: Lessons for U.S. Foreign Policy from the Failed War on Terror*. cato.org. https://www.cato.org/policy-analysis/step-back-lessons-us-foreign-policy-failed-war-terror.

[2] Kondrasuk, J. N. (2004). The Effects of 9/11 and Terrorism on Human Resource Management: Recovery, Reconsideration, and Renewal. *Employee Responsibilities and Rights Journal, 16*(1), 25–35. https://doi.org/10.1023/b:errj.0000017518.06989.85

[3] Bornstein, A. (2005). Antiterrorist Policing in New York City after 9/11: Comparing Perspectives on a Complex Process. *Human Organization, 64*(1), 52-61. Retrieved May 28, 2021, from http://www.jstor.org/stable/44127004

other countries' views have largely followed these same topics.[4] As far as we know, this is the first project to examine how 9/11 has shaped policy discussions on a global scale.

III. Background on Corpus

The UN Great Debate corpus was introduced as the data source for a text as data study on state preferences (Baturo, et al., 2017)[5]. The UN Great Debate marks the beginning of the regular session, and provides governments the opportunity to speak on the issues that matter to them. These statements are recorded on a webpage for each individual UNGA Great Debate session and the UN Bibliographic Information System (UNIBS). This corpus utilizes all speeches from 1970 - 2014, totalling 7314 country statements, all recorded in English; if a statement was given in another language, the researchers utilized the official English version provided to UN staff.

IV. Methods

In order to compare the effect of 9/11 with another region of the world, we joined the dataset *countryContinent* onto the UNGD dataframe, which includes various coding systems used to refer to countries. This dataset has a subregion category which we use to subset our data between different parts of the world. To assess how 9/11 affected policy preferences in Northern Europe & North America, we run 2 topic models—creating a binary variable, named *event*, to distinguish whether a document originated before or after 9/11. We chose to use 7 topics for each topic model to mitigate overlap.[6] To measure how 9/11 affected the discussion of each topic, a

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[4] Schüller, S. (2016). The Effects of 9/11 on Attitudes toward Immigration and the Moderating Role of Education. *Kyklos*, *69*(4), 604–632. https://doi.org/10.1111/kykl.12122

[5] Baturo, A., Dasandi, N., & Mikhaylov, S. J. (2017). Understanding state preferences with text as data: Introducing the UN General Debate corpus. Research & Politics. https://doi.org/10.1177/2053168017712821

[6] Our experience using this corpus with the Midterm Exam taught us that 10 topics resulted in a lot of overlap, and we felt 5 topics were too few to adequately encompass all issues.

regression was estimated from the STM object created. Our results show us how the topics from the model are proportionally predicted based on whether or not the event occurs. When labeling our topics, we chose to use the 3 documents associated with each topic to represent them.

V. Results

Legend	
Significant Increase	**Yellow**
Little to no change	White
Moderate Change	**Orange**
Significant Decrease	**Red**

Table 1: Topic Model Results between Northern Europe & Northern America

Topic Number	Northern Europe	Most Common and Distinct	Northern America	Most Common and Distinct
Topic 1	European Disarmament negotiations, Denmark's leading opposition against South Africa apartheid.	<u>Highest Prob</u>: nation, unit, intern, develop, countri, must, secur <u>FREX</u>: co-oper, south, disarma, namibia, apartheid, negoti, danish	Canada's commitment to advancing the UN's sustainable development.	<u>Highest Prob</u>: nation, canada, unit, secur, intern, human, will <u>FREX</u>: canada, canada', canadian, spoke, english, french, sustain
Topic 2	Human Rights, Peace agreement in Bosnia and Herzegovina, Anti-terrorism efforts carried out with consideration to human rights	<u>Highest Prob</u>: nation, unit, develop, intern, must, secur, human <u>FREX</u>: oper, peacekeep, yugoslavia, reform, personnel, bosnia, kosovo	America's commitment to fighting Terrorism in Middle East	<u>Highest Prob</u>: nation, unit, peopl, will, world, state, must <u>FREX</u>: iraq, terrorist, iraqi, regim, terror, murder, hall
Topic 3	Global/Humanitarian Issues (Gender Equality, Climate Change, Peace, etc.)	<u>Highest Prob</u>: nation, unit, develop, must, will, intern, right <u>FREX</u>: gender, peacebuild, syria, climat, arctic, mdgs, women	Racial & Ethinc Tensions	<u>Highest Prob</u>: will, peopl, world, nation, can, peac, must <u>FREX</u>: indigen, isra, syria, muslim, young, path, girl
Topic 4	Hostile Russian Relationships	<u>Highest Prob</u>: nation, latvia, state, unit, estonia, intern, will <u>FREX</u>: latvia, estonia,	North America/China Relations	<u>Highest Prob</u>: unit, nation, will, intern, state, world, assembl <u>FREX</u>: session, china,

		lithuania, baltic, estonian, russian, latvian		republ, committe, deleg, settlement, membership
Topic 5	U.K.-Irish Culture Disputes	Highest Prob: ireland, will, can, communiti, peac, peopl, unit FREX: irish, ireland, northern, british, unionist, island, britain	Poverty in the Developing World & Nuclear Peace	Highest Prob: nation, will, unit, develop, intern, world, must FREX: energi, co-oper, food, interdepend, shall, bank, product
Topic 6	Islamic Based Terrorism	Highest Prob: nation, unit, must, world, will, countri, peopl FREX: terrorist, kingdom, iraq, terror, iraqi, get, job	Putting an End to Peace-keeping Missions & Drug Related Violence	Highest Prob: nation, unit, must, will, state, world, new FREX: world, cold, millennium, peace-keep, drug, crime, non-prolifer
Topic 7	Fishing Regulations & Self Determination	Highest Prob: nation, unit, world, will, intern, state, countri FREX: fish, iceland, detent, fisheri, sea, coastal, connexion	US-Soviet Union Relations & decrease in the Proliferation of High-TechWeapons	Highest Prob: unit, nation, world, peac, state, will, soviet FREX: soviet, union, reduct, defens, strateg, talk, missil

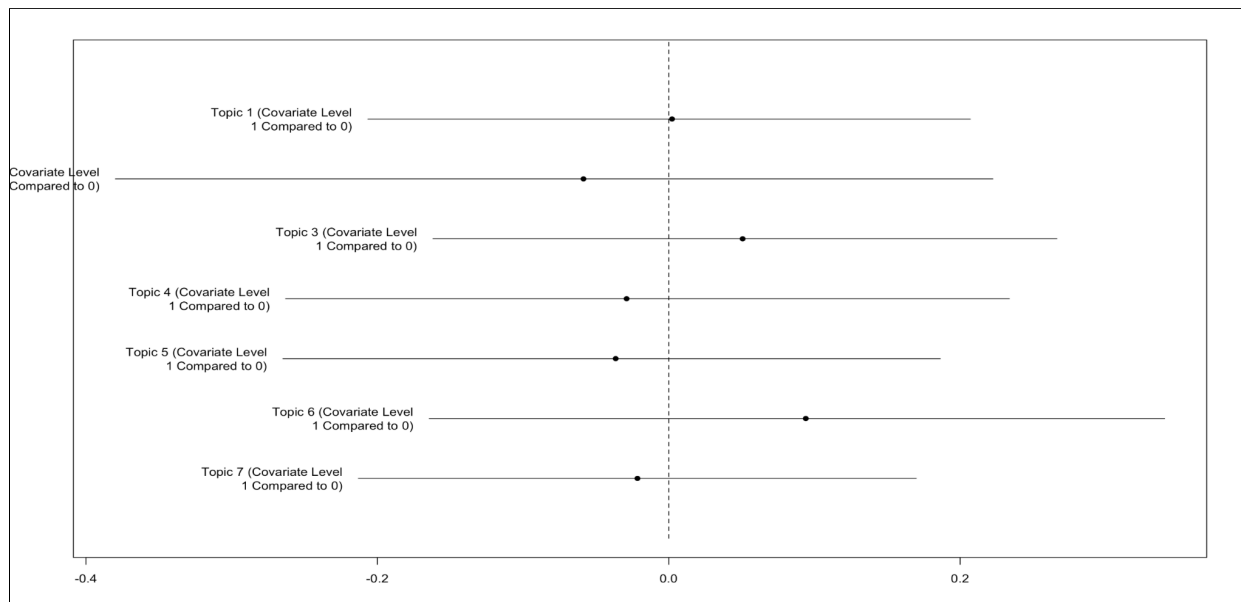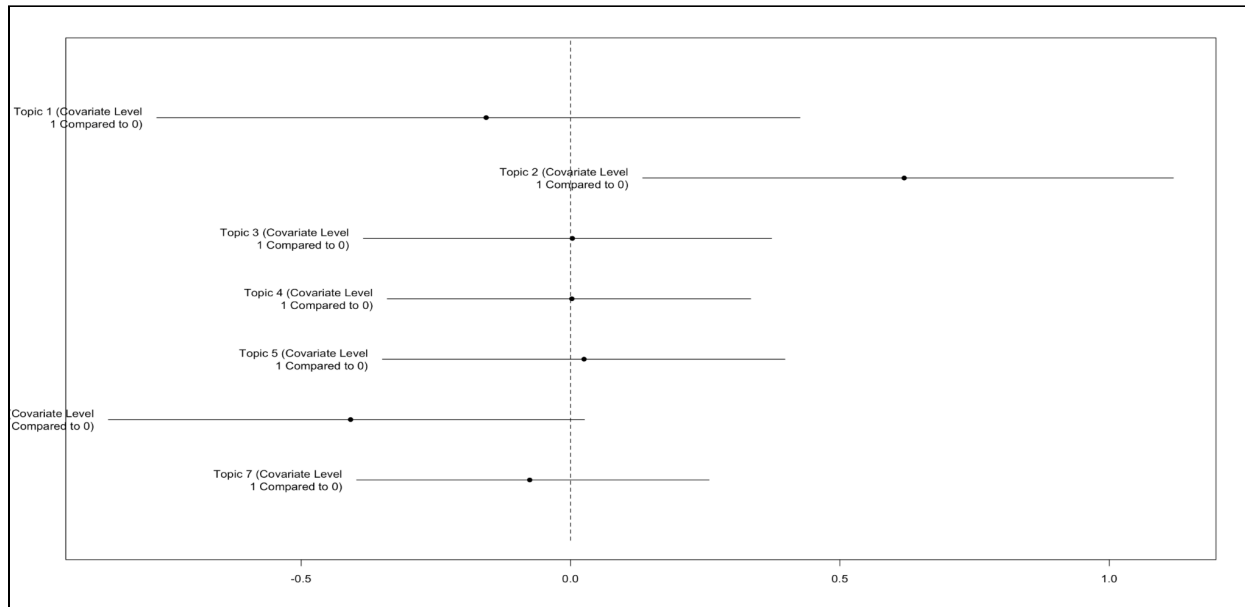**Figure 1: Northern European Topic Proportion Differences**

Figure 2: North American Topic Proportion Differences

VI. Discussion

Our results provide insight into the effect of 9/11 on the topics discussed in the United Nations General Debate. Table 1 contains the Topic Labels for both regions that were hand chosen based on the most unique words and top three documents of the Model. Figure 1 demonstrates the varying proportion distribution for the topics, with the difference revealing an increase in certain topics, and a relevant decrease in others. Given that *Figure 1* is focused solely on Northern Europe, we can see that of the 7 topics, 2 presented an increase, while 4 of the other topics decreased. More specifically, Topic 3, **Combatting Humanitarian Issues** increased by about 5% while Topic 6, **Islamic Based Terrorism** increased by 10%. As one would suspect, the increase is likely due to the topics being closely related to the conceptual concerns that arose as a result of 9/11. Moving our focus to *Figure 2*, the two topics that increased were 2 & 5. Topic 5,

Poverty in the Developing World & Nuclear Peace, increased by about 5% while Topic 2,

America's commitment to fighting Terrorism in Middle East's differential increase was about

50%. As suspected, the two topics with the most increase from both models were topics directly

involving buzz words related to 9/11, mainly terrorism. Interestingly, while both of these

analogous Topics increase, it should be noted that the scale of the figured differ, revealing that

the increase in conversations relating to terrorism was more significant in the Northern American

Topic Model; which is of course to be expected, as 9/11 occured on American soil.

In regards to the validity of our approach, one limitation would be the difference in

countries included in the region. The Northern American region only included Canada and the

United States. However, Northern Europe includes several countries: United Kingdom of Great

Britain & Northern Ireland, Iceland, Norway, Finland, Ireland, Sweden, Denmark, Estonia,

Lithuania, and Latvia. This resulted in broader topics that were harder to label using the number

of documents we chose. Another limitation was that the number of documents from before 9/11

span ~30 years, while the number of documents after 9/11 span 14 years. This could lead to

broader topics before 9/11 as the increase in time could dilute the discussion of certain topics.

VII. Conclusion

Having set out to explore the relationship between 9/11 and the topics of conversations

held on the international stage, our group has reached multiple conclusions. Our results have

shown that discourse within both regions was affected by the consequences of such a

catastrophic event. We find that there was an overall increase in the number of conversations

focused on combating terrorism and an overall decrease of conversations focused on lowering

peace-keeping interventions efforts in North America. Meanwhile in Northern Europe, after the

9/11 attacks, discussions on radical islamic terrorism had become more prevelant while human

rights and peace discussions had decreased. Further research into this topic could more thoroughly investigate how the change of topical conversation over time affects the direction the UN takes as it continues its focus to maintain peace in the world.