Tower of Babble? Predicting (in)action by the UN Security Council

Introduction

Critics of the United Nations routinely claim that the UN does nothing in times of crisis - in fact, "does the UN… do anything" is among the top predictive search suggestions offered by Google. As the UN's primary decisionmaking body, the Security Council has borne the brunt of this criticism. Security Council resolutions "demanding an immediate end to hostilities" but resulting in little concrete action to mitigate security threats have generated biting satire, and many have come to expect that the Security Council will ultimately fail to act when action is most needed.

Where populations depend on the UN to ameliorate their condition, observers often try to analyze the text of UN records to determine how/whether the approach of the UN will change in the near future. Attempts to predict UN actions also inform operational decisions made by businesses, NGOs, and other international institutions, such as whether to expand or contract projects; these operational decisions often have major financial implications. For activists, understanding what kind of appeals or arguments made before the Security Council lead to a particular type of action on the part of UN is also useful in shaping advocacy efforts.

This project aims to build a model that could predict whether or not the UN will intervene in a crisis on the basis of discussions held in the Security Council.

If successful, the model could also be applied to the analysis of other types of documents with real-world applications, such as legislative proceedings or government directives. This could assist in the development of more actionable and responsible representative bodies, as well as help businesses and organizations better plan for future operations.

Decisionmaking in the Security Council: a Primer

The Security Council is the primary UN body charged with overseeing peace and security. The Council is comprised of 15 members, five of whom hold permanent seats (the United States, the United Kingdom, France, China, and Russia), while the remaining ten rotate through two-year terms on the basis of elections held in the UN General Assembly. Each member of the Security Council holds one vote.

The Council meets on a regular basis to discuss threats to peace. Matters brought before the Council primarily constitute crises such as conflicts, terrorist attacks, and humanitarian disasters. During Security Council meetings, representatives of Member States present their countries' position on the matter in question and call for certain actions to be taken. These meetings typically result in **resolutions**, with which all UN Member States are obligated to comply. In order for a resolution to be adopted, at least nine votes, including all five votes of the Permanent Members, must be cast in favor. Permanent Members hold veto power, although it is deployed infrequently.

Resolutions passed by the Security Council may authorize any number of actions to be taken. In certain cases, resolutions may consist of the Council simply deciding to stay apprised of further developments, with statements indicating that the Council "urges", "welcomes", or "condemns" certain actions. The Council may also choose to send in experts or observers to report on the situation on the ground, as well as to enact sanctions, travel bans, embargoes, naval blockades, and other measures to stabilize the situation in the context of a crisis.

Most significantly, the Council may decide to deploy a mission under certain provisions of the UN Charter. So-called "Chapter VI" missions, referencing the section of the Charter that deals with the "pacific settlement of disputes", typically include a mix of civilian and military observers and advisors to oversee the stabilization process within a given country or region.

"Chapter VII" missions, on the other hand, invoke specific provisions of Chapter VII of the UN Charter referencing "action with respect to the peace, breaches of the peace and acts of aggression". These missions consist of an intervening multinational military contingent that is typically allowed to use force to protect civilians, draw apart warring factions, and maintain law and order.

Missions may be extended, expanded, contracted, or drawn down upon the decision of the Security Council.

A single resolution may authorize the deployment of any number of concurrent measures. Although this remains a matter of some debate in policy discussions in international relations, for the purposes of this project, all measures up to the deployment of a Chapter VII mission will be viewed as "non-interventionist", since UN personnel do not directly intervene in the course of a conflict unless they are authorized to do so under a Chapter VII mandate.

Project Question

Based on the text of Security Council provisional meeting records (inputs) and resolutions (outcomes) passed since 1994, this project seeks to predict whether the Security Council will a) intervene, i.e. deploy, extend, and/or otherwise continue to provide support to a peacekeeping mission intended to establish and preserve stability, in a country in crisis; or b) instead enact any kind of "soft" measures, such as sanctions, embargoes, the deployment of police or expert missions, or other non-intervention options.

Issues such as the admission of new member states to the United Nations and the appointment of officials to international tribunals, which also fall under the purview of the Security Council, will be left out of this analysis, as they have no immediate bearing on matters of peace and security.

This project is predicated upon the hypothesis that appeals for direct military intervention, especially those emanating from one of the five Permanent Members of the Security Council, will be the strongest predictors of the Security Council's decision to deploy a Chapter VII mission in a crisis. As the author of this paper knows all too well, "we don't move unless America does" is a common refrain at UN Headquarters.

Data

For inputs, this project uses the texts of ~1,250 provisional records of Security Council meetings held between January 1, 1994 and December 31, 2014. The timeframe of this project was limited by data availability: records of meetings held prior to January 1994 are not publicly available.

For outcomes, this project uses the texts of ~1,250 corresponding Security Council resolutions passed during the same time period.

Data Processing

1. Obtaining text data

The texts of meeting records and resolutions were downloaded manually in PDF format from the Security Council website through the UN Official Document System (ODS). Attempts to use a bash (curl) script to automate the download process were unsuccessful, as ODS uses multiple redirects and a firewall to prevent automated downloads.

All PDF files were subsequently converted to .txt files using PDF converter applications with optical character recognition (OCR). These files were used to create the corpora of inputs and outcomes, respectively.

2. Preliminary dataset creation

A scraper was built to create a single CSV file covering all years that would be used as a dataframe to explore the data and build out further natural language processing capabilities. This CSV file contained all of the information provided in table format on the Security Council website by year: the meeting record number, the day the meeting was held, the reference number of the press release, the topic being discussed, and the corresponding Security Council resolution. The scraper read in each table from the Security Council website by year, then compiled them in order.

The next step was adding a column that would contain the year, extracted from each document number, for further data exploration and groupby operations.

Another script was written to clean these records and remove entries that are outside of the scope of this project (e.g. entries where the outcome was a note, a communiqué, or a vetoed resolution – in other words, anything other than a resolution that was adopted).

The resulting CSV file will be used as the basis for the construction of a comprehensive dataset that will include the text of the inputs (meeting records) and the category of the outcomes in binary format (0 for "soft action", 1 for "intervention").

3. Text data exploration

The next step was to explore and categorize the corpus of outcome files (resolutions) by the type of action described using the Python *glob* and *os* modules – each outcome file was read in and renamed to reflect what type of action had been decided upon. A significant amount of time was spent on human learning: reading the outcome files, gaining a deeper understanding of the format of resolutions and of the language used, and determining which phrases would be useful for categorization.

It was determined that all resolutions containing references to an intervention (mission) include the line "under Chapter VII", often in the context of "[a]cting under Chapter VII of the United Nations Charter". Resolutions referencing the extension or expansion of the mission's mandate include the phrases "renew the mandate", "extend the mandate", "extend its mandate", "adjust

the mandate", "[d]ecides to extend", "[d]ecides, in this context, to extend", "[e]xtends the stationing of", "[d]ecides to renew for a period of", "[a]uthorizes the expansion of", "[a]pproves the expansion of", "increase the overall force levels", and "[a]pproves the continuation of", among others. Files were explored with the *glob* module to ensure that the search queries returned the correct results; in the case of resolutions authorizing mission expansion, for instance, it was determined that the query phrases should include the first letter of the mission acronym, always a U or an M[1] (e.g. "authorizes the expansion of M" or "approves the expansion of U"), to avoid incorrectly tagging files that may include the phrases "authorizes (approves) the expansion of" with regards to initiatives other than missions, such as "the expansion of powers" or "the expansion of operations".

Additionally, files were searched for phrases indicative of specific types of soft measures, including the deployment of civilian police, military observers, advance teams, and panels of experts; the establishment of trust funds to finance operations; and the enactment of arms embargoes and travel bans. It was determined that specific phrases are consistently used to reference these actions, such as "prevent the entry into or transit through their territories" (for travel bans) and "the measures on arms" (for arms embargoes). Additionally, the suspension of certain measures and the drawdown of missions were also referenced using specific consistent phrases, including "[d]ecides to terminate the (remaining) prohibitions", and "terminate the mandate", "gradual reduction of", "liquidation".

At the end of this process, each file was moved to one of two folders: if the new filename contained a reference to an intervention, the file was moved to the corresponding folder for "intervention" (category 1). All other files were moved to the folder for "soft action" (category 0). The full script for this process can be found here.

Compressed archives of all input and outcome files can be found here:

1. Input files (meeting records)

2. Outcome files (resolutions), clean filenames

3. Outcome files (resolutions), renamed to reflect the type of action decided upon

[1] All mission acronyms begin with either a U (for "United Nations…") or an M (for "Mission des Nations Unies…", if the mission is deployed in a French-speaking area). English and French are the working languages of the UN Secretariat.

4. Outcome files (resolutions) renamed and categorized as either "soft action" (non-intervention, category 0) or "chapter 7" (intervention, category 1).

Next Steps

I will need to expand the working CSV file to include the following columns:

1. A "category" column with a value of either 0 or 1, to be derived from matching the resolution number in the "outcome" column (e.g. S/RES/893) with the directory in which the corresponding file is found. In order to do this, I will need to use the *glob* module to read each outcome file in each category subdirectory and match against the value of the "outcome" column.

The pseudocode for this operation looks thus:

```
for filename in glob.glob('path/to/folder0/*.txt'):
    for line in open(filename):
        ***pseudocode***
        if contents of line from file match contents of column 'doc':
            write 0 to new column 'category'

for filename in glob.glob('path/to/folder1/*.txt'):
    for line in open(filename):
        ***pseudocode***
        if contents of line from file match contents of column 'doc':
            write 1 to column 'category'
        else:
            write NaN to column 'category'
```

2. An "input" column that will contain the text of each input file, positioned next to the corresponding meeting record number.

Once this is complete, I will be able to use scikit-learn to train a Naïve Bayes classifier on the dataset.

Appendix: Auxiliary Text Exploration

Exploring Security Council Resolutions

In order to gain a better understanding of both the input and outcome corpora, I used the Natural Language Toolkit to explore frequency distributions and learn more about how the UN Security Council “speaks”. Even though the text of resolutions is only used in this project in order to categorize the outcomes as either “intervention” or “soft action”, most observers judge the actions of the Security Council based on the text of resolutions alone. In fact, it is the text of resolutions, containing phrases such as “strongly urges the parties to reach a mutually acceptable solution” and “strongly condemns the acts of violence that have occurred”, that has generated the most criticism from both outside and inside the UN, with observers claiming that the UN lacks the political will and the moral courage to protect civilians during crises and instead limits itself to platitudes.

The use of the term “genocide” in Security Council resolutions serves as an illustrative example of “UNspeak”. Below I'll demonstrate how a syntax error in my code helped shed light on one of the most frustrating trends in international policy - the lack of political will to "call a spade a spade".

Background: the problem with "genocide"

Act I. Rwanda.

In the spring of 1994, nearly a million Rwandans, most of them ethnic Tutsis, were slaughtered in the span of several months during a civil war that became known as one of the most brutal conflicts in human history. Throughout this time and for many months thereafter, the United Nations, the Clinton Administration, and countless other prominent decisionmaking bodies refused to use the term "genocide" to refer to the reality on the ground in Rwanda. Though everyone understood that the systematic murder of individuals belonging (or thought to belong) to a specific group constitutes genocide, the legal implications of the use of the term were such that it would require decisive action on the part of the international community - action it was neither willing nor prepared to take. The U.S. State Department tiptoed around the issue by infamously referring to "acts of genocide [that] may have occurred" in Rwanda; when asked by a journalist how many "acts of genocide" are required for genocide to be recognized as having taken place, the State Department provided no substantive response. For many years

following the Rwandan genocide, courts in France, a country which carefully (and unconscionably) backed the Hutu majority during the war based on long-standing ties, continued to attempt to promulgate the idea of a "double genocide" - the notion that Tutsis allegedly perpetrated just as many "acts of genocide" against the Hutus as did the Hutus against the Tutsis, and that both sides were to blame in equal measure for the horrors that followed.

Act II. Bosnia.

Between July 11-13 1995, over 8,000 Bosnian Muslim men and boys were massacred by Bosnian Serb factions in the enclave of Srebrenica, which had been declared a "safe area" by the UN two years prior. The Dayton Peace Accords were signed in December 1995, and in the years that followed, countless Serb officials and military commanders have been indicted on charges of genocide and war crimes by the International Criminal Tribunal for the former Yugoslavia (ICTY). Twenty years later, in July 2015, the Russian Federation, a supporter of the Serbs, vetoed a Security Council resolution that would have recognized the events that took place in Srebrenica in the summer of 1995 as "genocide", claiming the use of the term "genocide" in regards to Srebrenica was "not constructive, confrontational and politically motivated". *The Atlantic* most recently outlined how genocide denial with regards to Srebrenica persists around the world.

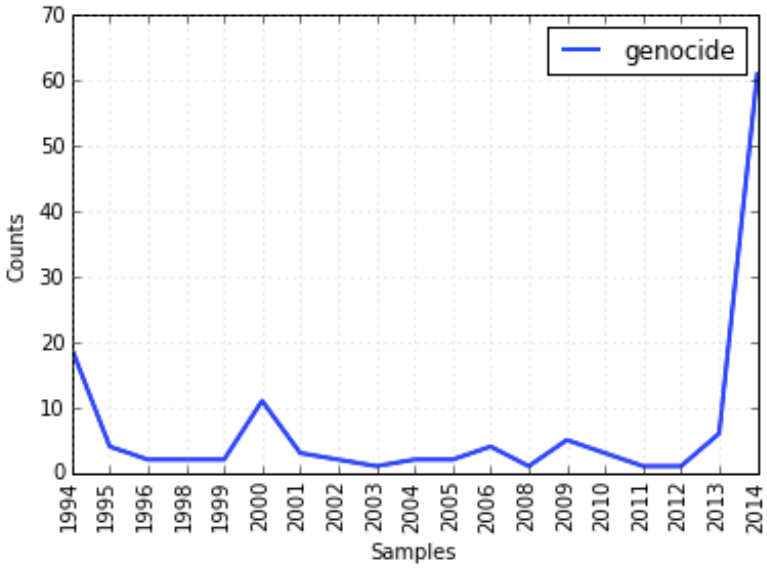
As noted above, following World War II and the Nuremberg Trials, the term "genocide" took on legal and political implications - if genocide is proven or believed to have taken place, key players within the international community must act or else be prepared to answer uncomfortable questions on their inaction. Instances in which recognized political regimes (state actors) are believed to have perpetrated genocide, such as the extermination of Armenians by Ottoman authorities in 1915, continue to be highly contentious - if genocide is recognized as such, indictments, prosecutions, and reparations must follow.

Genocide in UN Security Council resolutions

Exploring the text of UN Security Council resolutions from 1994 to 2014 allows us to see how the UN has struggled with accepting the use of the term "genocide" over the years.

I built and read in a corpus of Security Council resolutions with the help of the Plaintext Corpus Reader within the Natural Language Toolkit (NTLK). Next, I plotted the frequency distribution of

the term "genocide" across all years. (Note: the complete code for this operation is provided in an iPython Notebook on GitHub, as well as in a separate code file.)

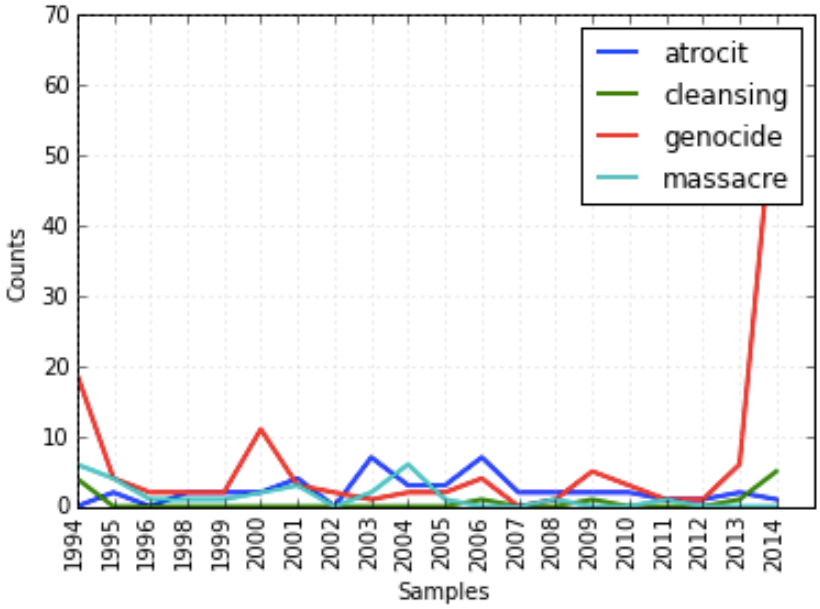


The plot demonstrates some interesting trends: while the UN was generally hesitant to refer to genocide by name in the 1990s, the events (and humiliation) of that decade led the international community to reconsider its position on genocide in 2000, likely in light of the war in Kosovo. Though genocide continued throughout the world, notably in Darfur and South Sudan, in the first decade of the new millennium, the term did not get much airtime at the Security Council until 2014, when we see a sharp uptick in the number of references to genocide in Security Council resolutions.

An educated hypothesis to explain this sea change has to do with the types of groups believed to have been responsible for genocide in 2014 - unlike in earlier cases, where the perpetrators were largely established state actors (regimes), 2014 saw an intensification of attacks against civilians by non-state actors such as ISIS in Syria and Iraq and Boko Haram in Nigeria. Accusing a standing government of perpetrating genocide requires exceptional political will along a unified front, since the governments in question stand at the helm of UN member states and get a seat at the table in the UN General Assembly on par with all other nations. Moreover, calls for the prosecution of heads of state and government will surely follow such accusations, and that would make for very awkward diplomatic meetings. On the other hand, accusing an amorphous terrorist group of doing the same requires very little, so genocide is much “easier” to recognize as having taken place when the perpetrators operate outside of a multilateral intergovernmental community structure.

The code I used includes the function "startswith" and searches for the full term "genocide". This was initially a mistake on my part - I should have searched for "genocid" to allow for the recognition of terms such as "genocidal" and "genocidaire(s)" (perpetrators of genocide, commonly used to refer to Rwandan and Congolese war criminals). However, searching for either of the terms above returns an error - neither term has been used in Security Council resolutions passed between 1994 and 2014.

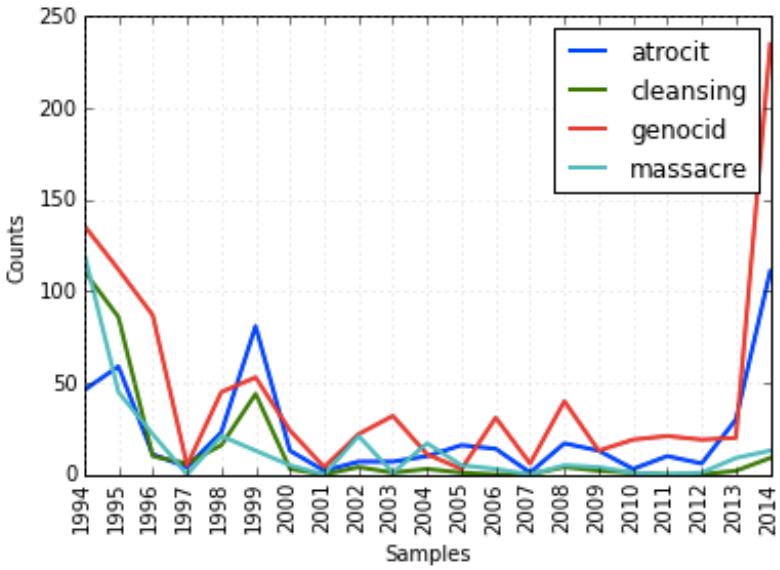
The fact that neither "genocidal" (understood to most frequently be used in the collocation "genocidal regime") nor "genocidaire(s)" have been used in Security Council resolutions is an interesting reflection of the point made earlier - the Security Council shies away from making bold statements accusing regimes and their officials of genocide. In cases where standing regimes are implicated in war crimes, such as those of Darfur and South Sudan (from 2003 onward), the Council seems to prefer the terms "atrocity (-ies)", "massacre(s)", and "cleansing" (presumed to always be used in the collocation "ethnic cleansing"):



Though ethnic cleansing is a legally defined war crime, it does not always constitute genocide and may consist of expelling civilians from the territories they inhabit, but not necessarily murdering them. "Atrocities" and "massacres", on the other hand, have no legal definition and as such can be used relatively "freely", since there is no clearly defined legal point at which the number of "atrocities" committed reaches a critical mass and must be dealt with by an international tribunal.

Genocide in Security Council Meeting Records

Statements made during Security Council meetings, on the other hand, demonstrated considerably more latitude in word choice in situations where genocide was believed to have taken place. Below is the frequency distribution for the same terms as shown above across all meeting records for all years (code available on GitHub):



The plot above demonstrates that representatives speaking before the Council are significantly more inclined to use stronger terms more frequently to describe their countries' positions on unfolding crises. There are several reasons for this: statements made during Council meetings place no legal obligations on governments, particularly on the governments of smaller states that hold the majority of the seats on the Council at any given time. These states are not viewed as carrying any "moral obligation" to deploy force in the face of conflicts; the government of a country such as Honduras or Thailand, unlike that of the United States or the United Kingdom, will not face any pressure at home or abroad to send a military contingent to a war zone under UN auspices if their UN representatives term a conflict "genocide". In addition, unlike in the case of Security Council resolutions, the language of which must be agreed upon by all voting in favor, all Council members are free to formulate their own statements during meetings and do not have to bring their verbal positions in line with the positions of other members.

Additional natural language processing operations would be beneficial to explore this line of reasoning further. For instance, it would be interesting to see how frequently terms that may

carry legal obligations, such as “genocide”, appear in statements made by representatives of the United States, the United Kingdom, and France – countries traditionally considered to be more willing to act as global “gendarmes” – and how these trends have changed over the years, as these governments faced criticism for having failed to act in past conflicts.