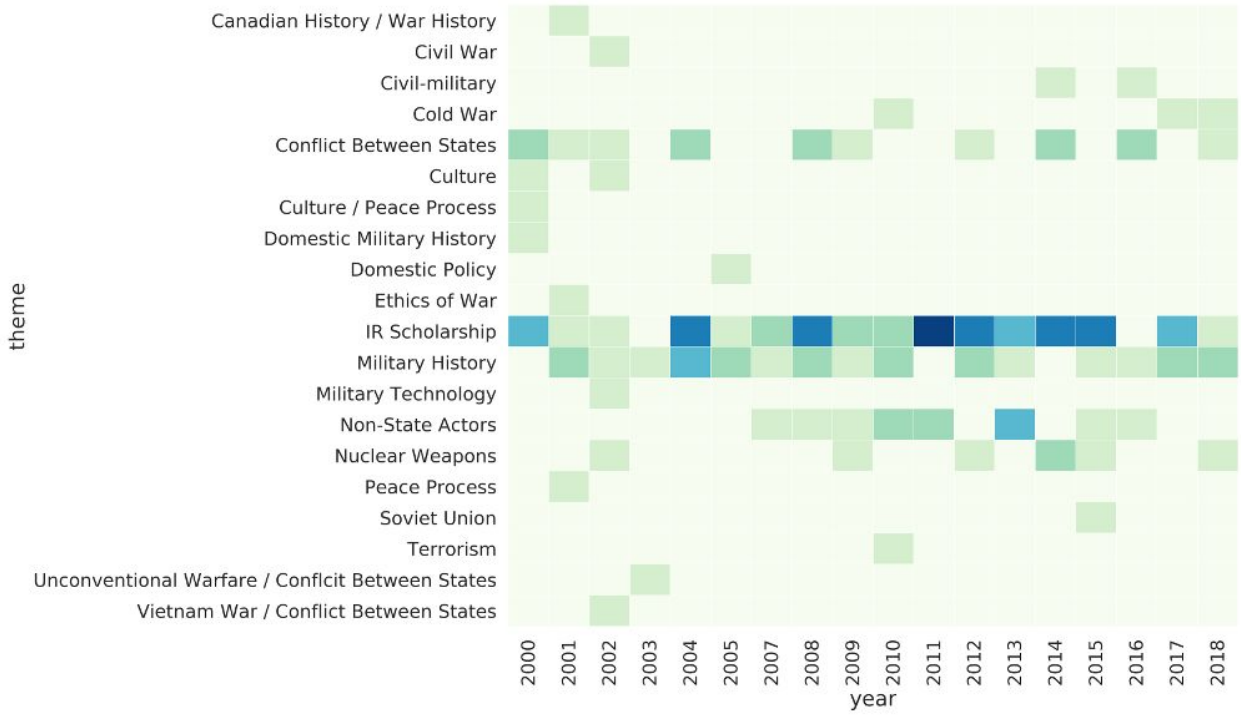
New Faces Conference

New Faces Alumni 2000-2018 REPORT

Trends, Change and Continuity

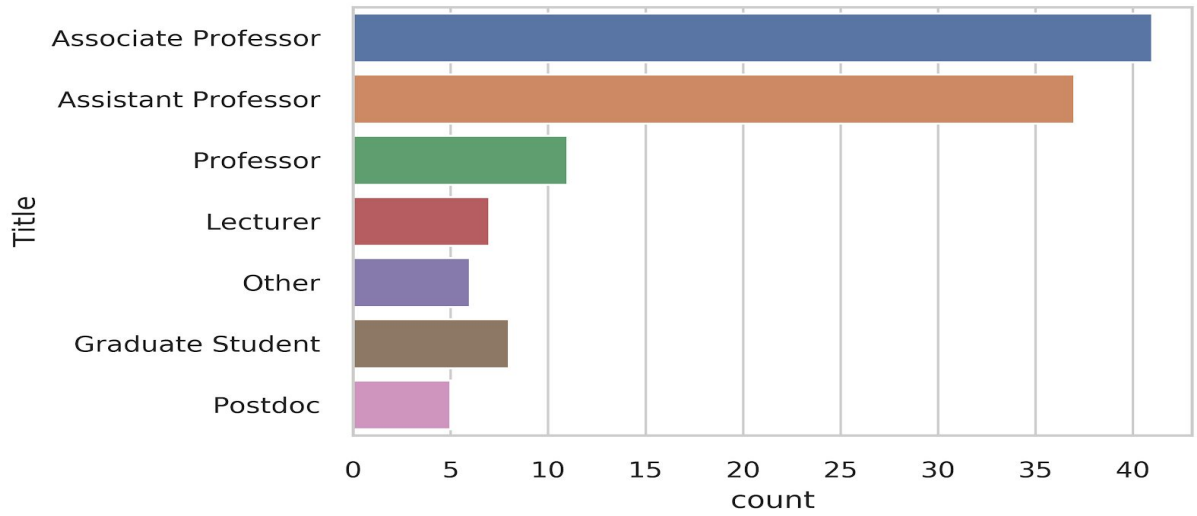


Introduction

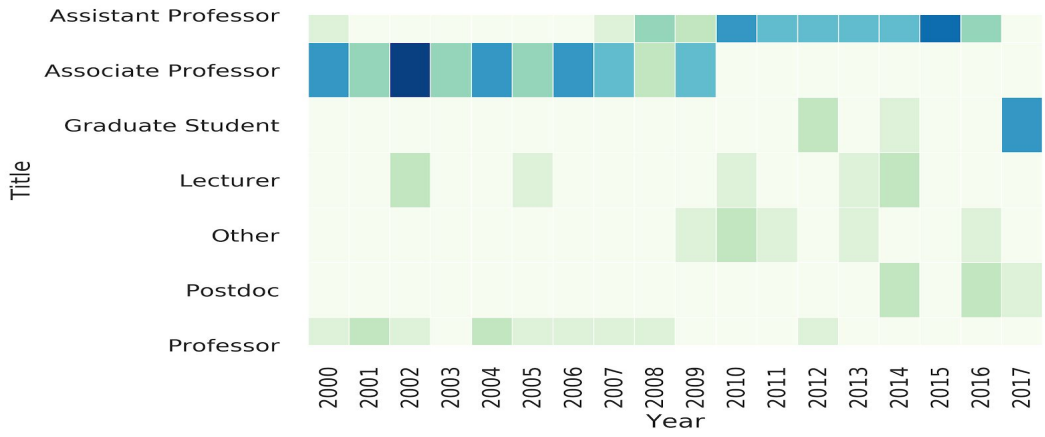
Below begins our review of ~20 years of New Faces conference alumni and presented papers.

Who are the New Faces, past and present?

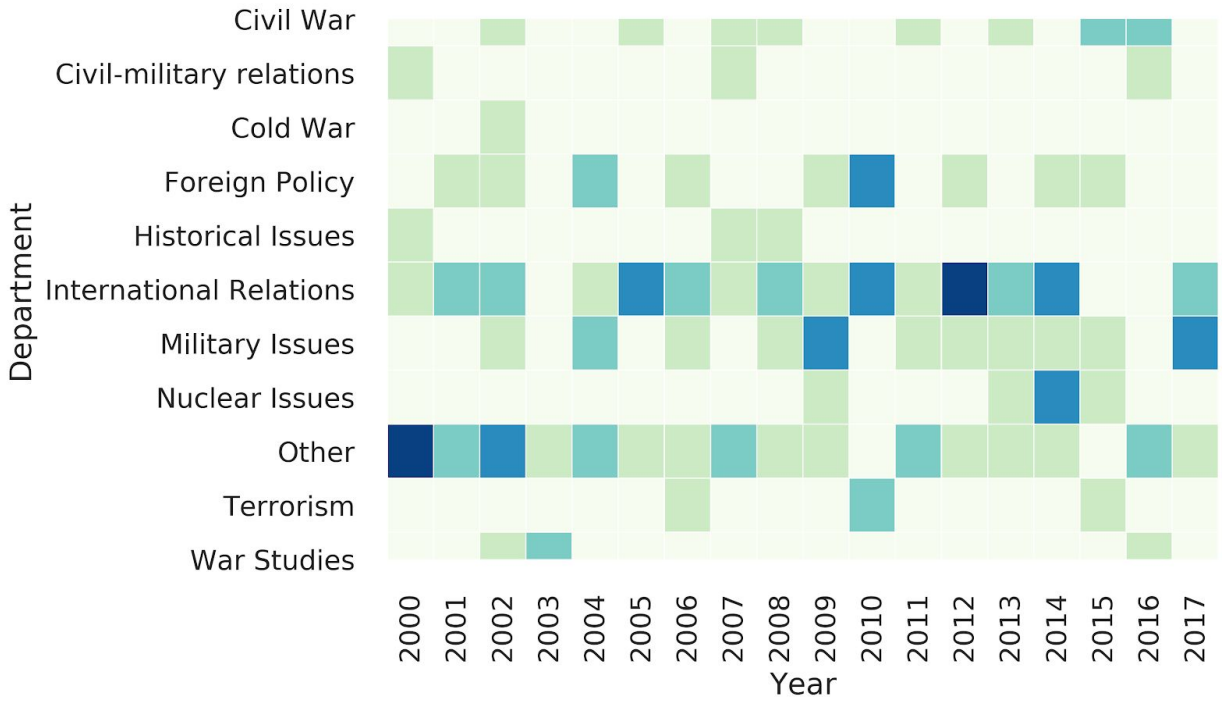
A simple count of the various titles of the new faces at the time of their presentation at the conference suggests that the overwhelming majority of participants have been either associate or assistant professors.



We can get a better sense of how things changed over the two decade history of the conference by counting the titles of fellows by year. As we can see from the heatmap below, during the latter half of the conferences history, a greater emphasis has been given to assistant professors. Most recently there has been a substantial increase in the proportion of graduate students participating in the conference.



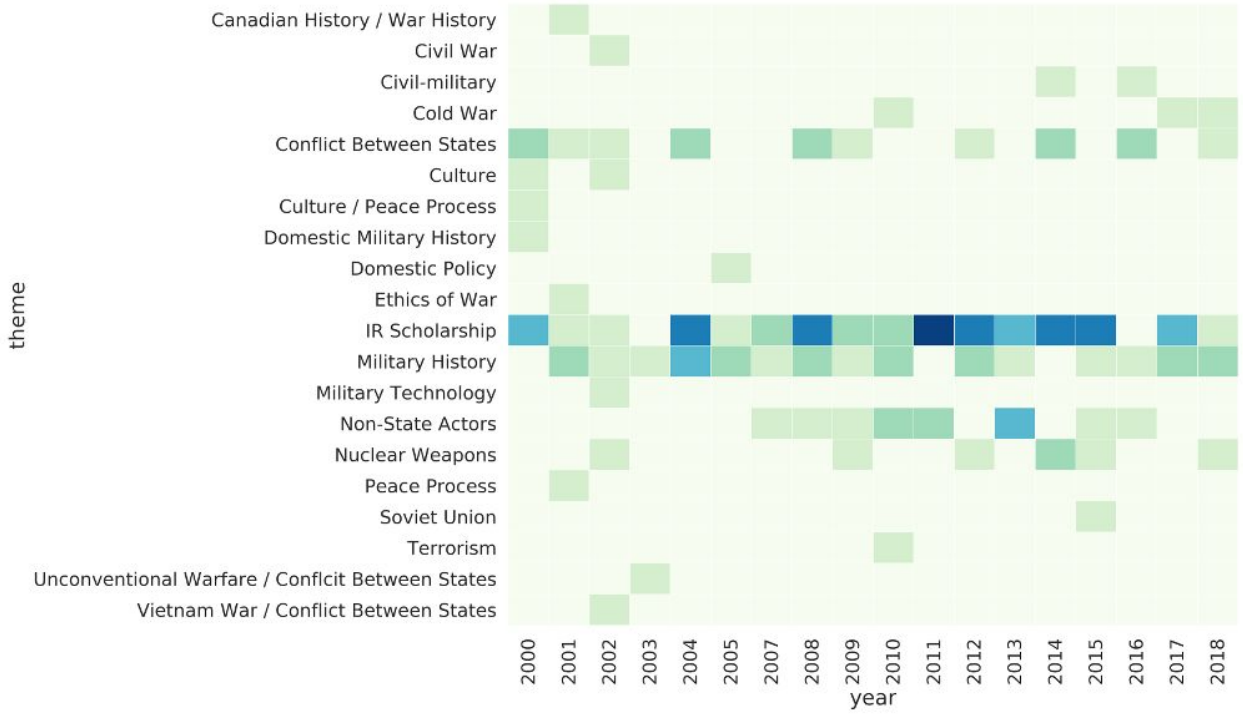
Changing Fields of Interest



Looking at the self-reported fields of participates lets us consider some trends at a relatively high level. Some trends that are revelaed in the above heatmap include an uptick in both civil-war and terrorism as a central field of study. Conversely, Cold war as a self-described central field of study decreases over time. These trends are broadly congruent with expectations with respect to the direction of the field over this period. Most outstanding in the data is perhaps the strong and increasing identification with 'international relations' as a principal field for new faces alumni.

As an example of what we might gain from building on this extant data, we can consider the below hand coded themes of each fellows abstract from 2000-2018. From the below heatmap of these themes, we can chart a growth in abstracts centered around Non-State Actors and Nuclear Weapons as well as Civil-military relations, and a decline in culture, ethics of war, and peace process theme coded abstracts. This provides an important lens

into trends in security studies as found the nearly two decades of new faces scholarship considered here.



Expansion of the Data

While the above analysis of the extant self reported and hand coded data gives us some sense on trends in the new faces conference over time, much remains unclear. Clearly, to develop a better understanding of trends in the scholarship showcased by the conference , we need more than the extant data and to drill down further into trends. We can achieve this by drawing upon a new data source: the titles and abstracts of the papers presented by each fellow over the course of the New Faces conference (2000-2017).

One way we can use this new data source is by using regular expressions to search through titles and abstracts for the discussion of certain topics, for instance “Soviet Union” or “Nuclear weapons”, which allows us to trace the inclusion of those topics among the presented work of the New Faces over time. In addition to its effectiveness an examining trends over time, another merit of this approach is that it is very expandable and lends

itself to easily being applied to tracing the use of any other concepts of interest over time with just a few lines of code. It is also of use for expanding this analysis into the future as the New Faces conference continues.

The next way that we can use the title and abstract data is to consider overall word frequencies overall and over time as well.

Finally, we are able to use the abstract data within a Latent Dirichlet allocation (LDA) topic model, an unsupervised machine learning technique, to identify the five most common topics across all the abstracts from 2000-2018.We will consider each in turn.

Word Frequency

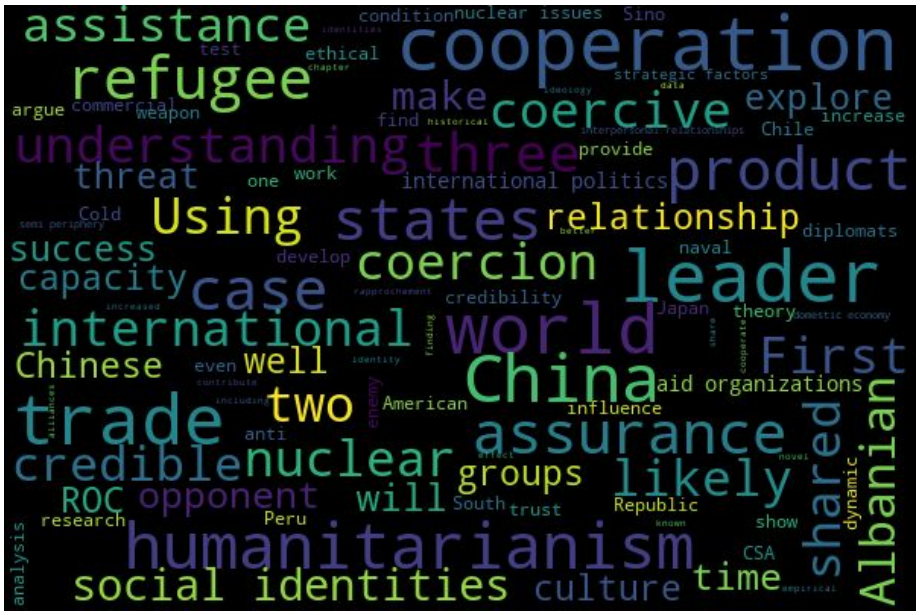
First, with regard to word frequency. Overall we can see that the words and phrases that garner the greatest number of mentions across all abstracts include words like American and United States, military, political, leader and preference and phrases like military institutions and civil military.

Word Cloud: Overall

To examine change over time, we can examine word clouds for 2000 and 2018. These different times provide a sense of how the emphasis of different words and concepts may have changed over the course of the conference's history.

Word Cloud: 2000

Word Cloud: 2018

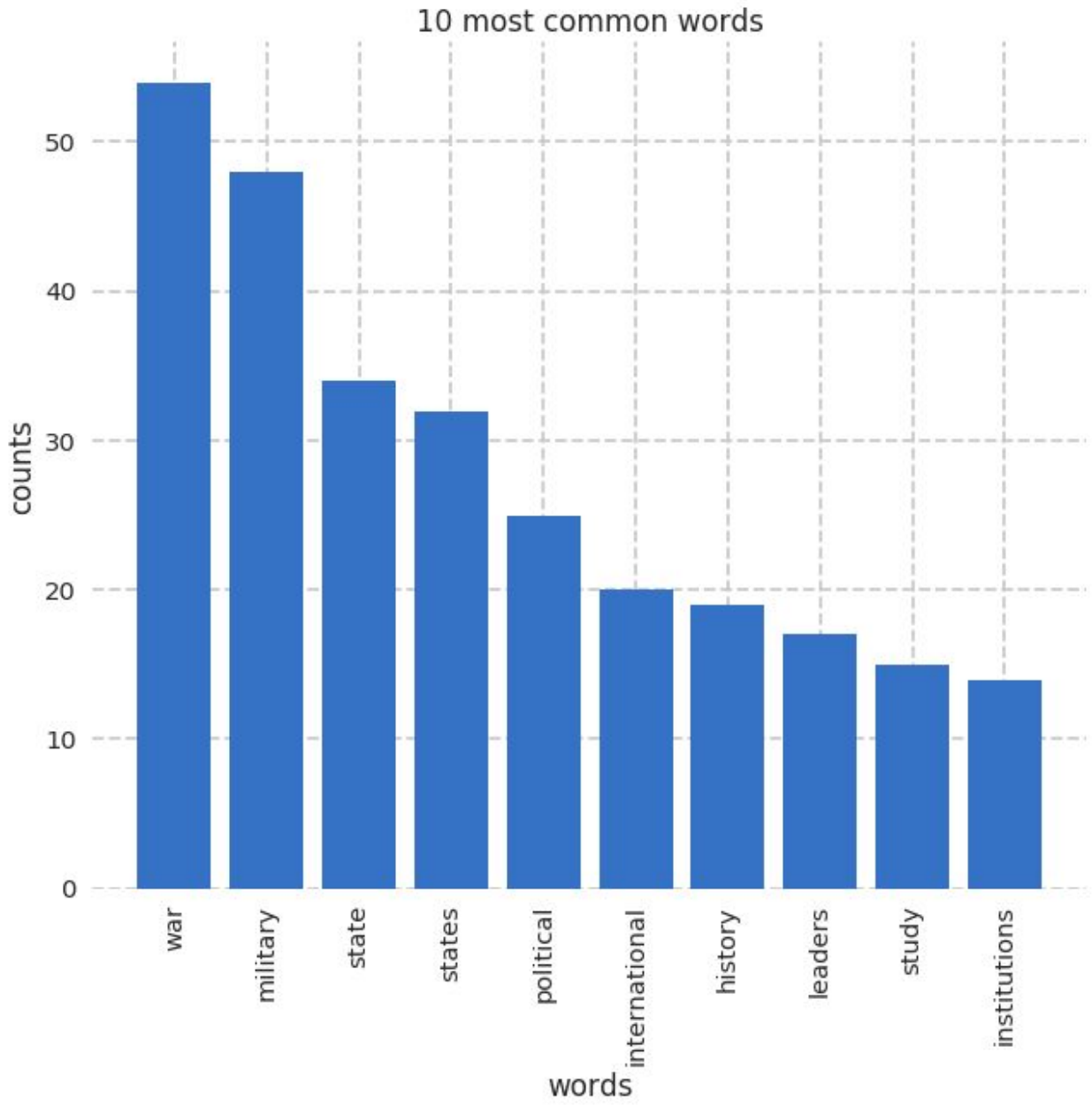


Word Cloud, Title: Overall

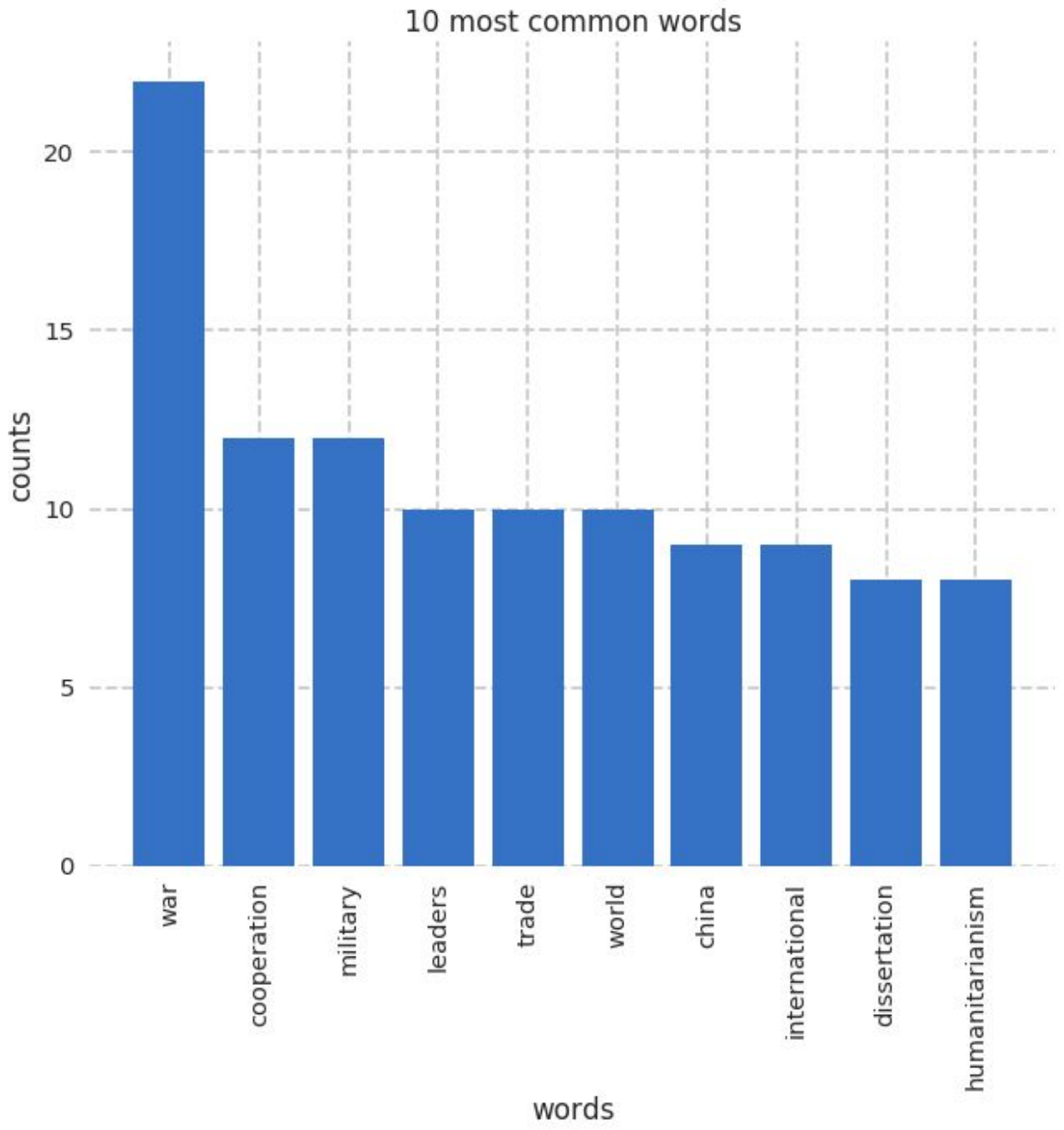
Word Counts in the abstracts

To get an augmented sense of how word usage evolved over time we can also examine the word counts for the first and final year of the new faces data, visualized below.

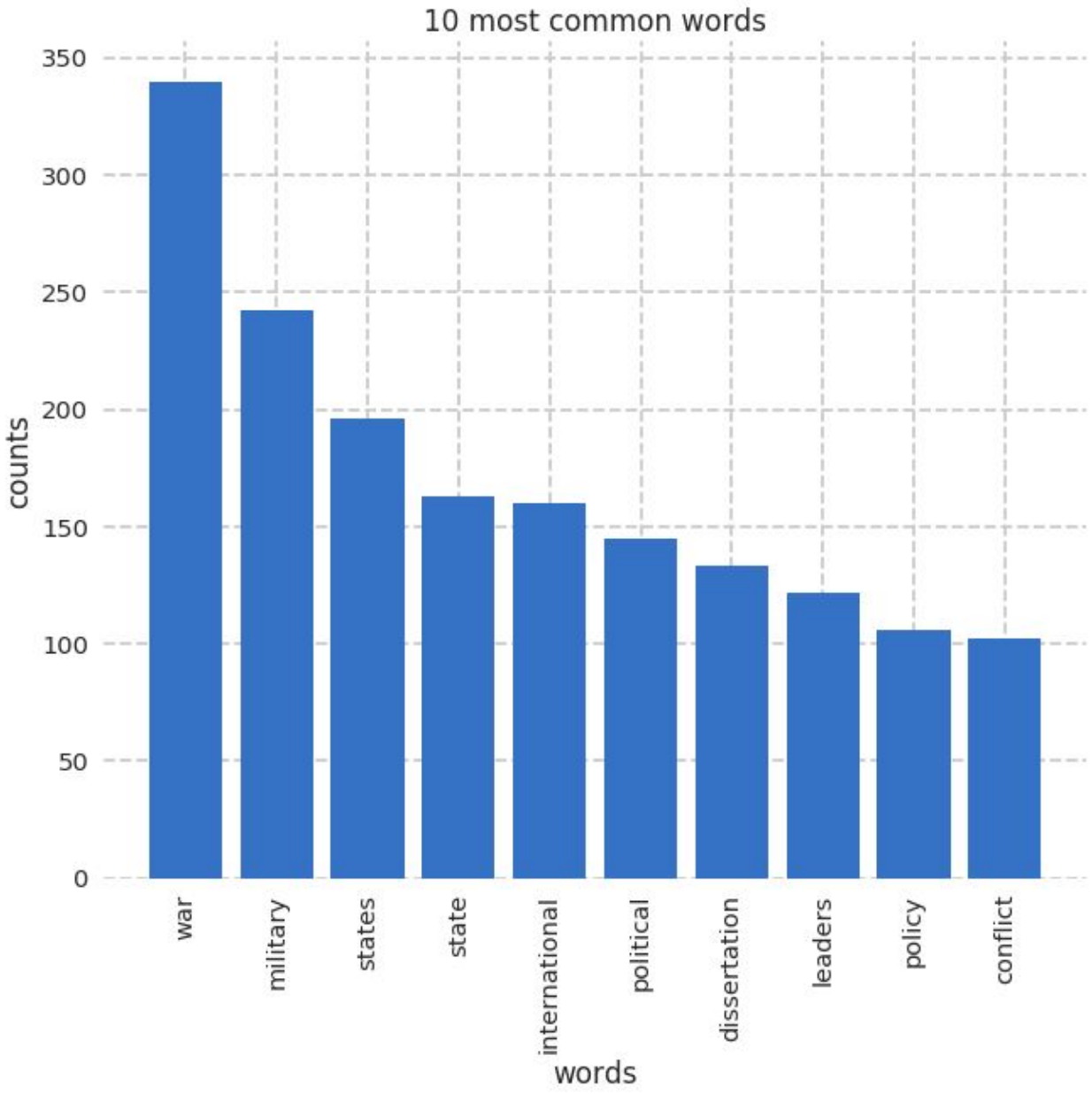
Word Counts: 2000



Word Counts: 2018


10 most common words
counts
0
5
10
15
20
war
cooperation
military
leaders
trade
world
china
international
dissertation
humanitarianism
words

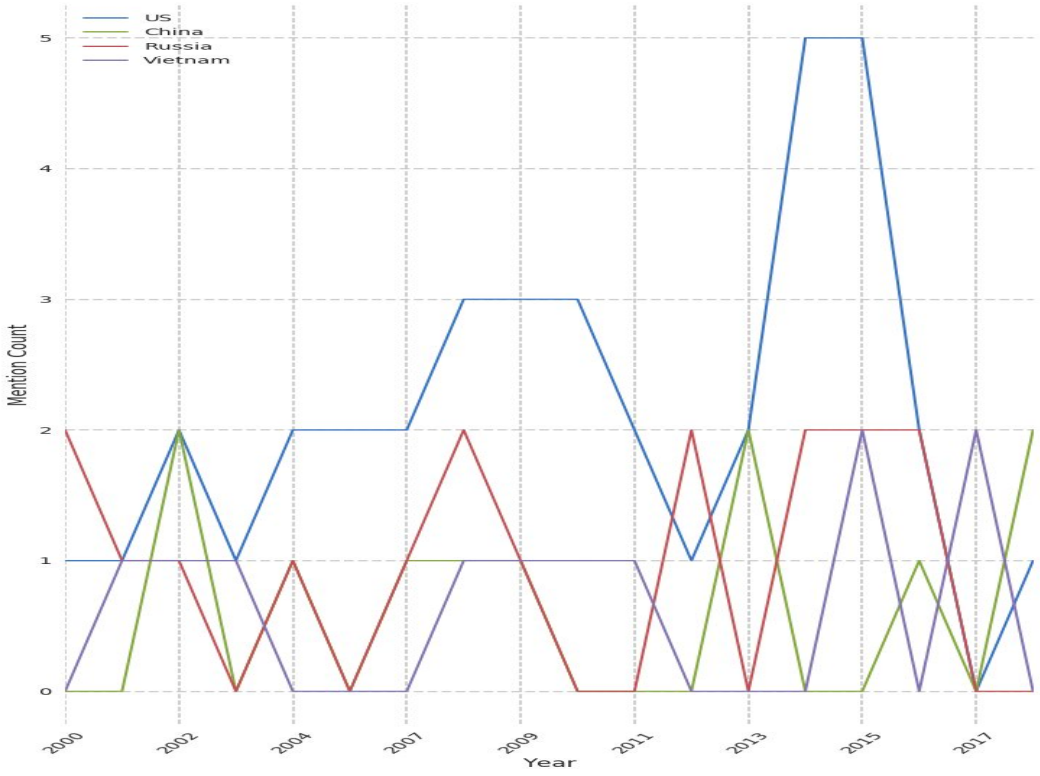
Word Counts: Overall



We can see that in 2018, focus has shifted to issues like China, trade and humanitarianism, which were not as present in 2000, at the inception of the conference, and away from

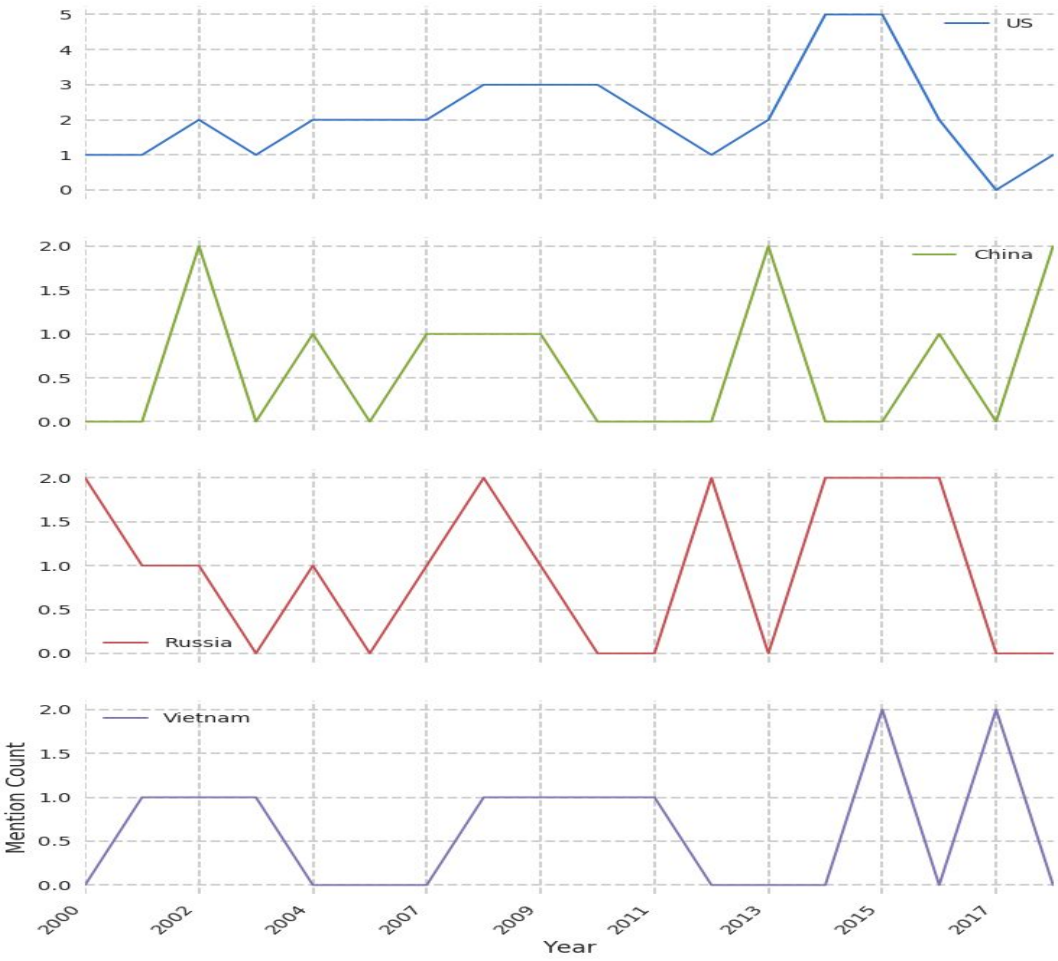
history to some extent. War and military related issues remain perennial concerns, a fact which is also reflected in the overall word count from all abstracts (2000-2018).

Topic word mentions in abstracts



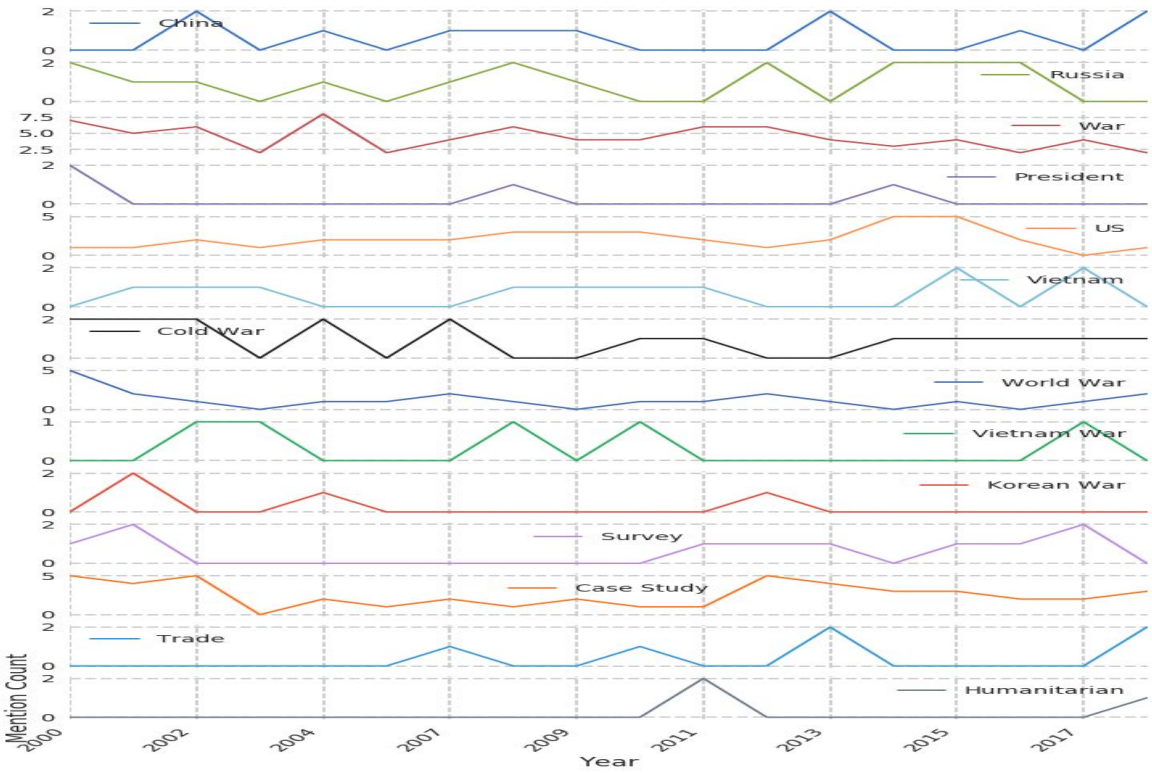
Country mentions

To take a broad view of how much attention different countries and wars have received in the scholarship of the New Faces over time, we consider the mentions of several countries and wars in their research abstracts from 2000 to 2018. From the visualizations, we can see that until recently, the US received the greatest share of attention from scholars compared to Russia, China and Vietnam.



War mentions

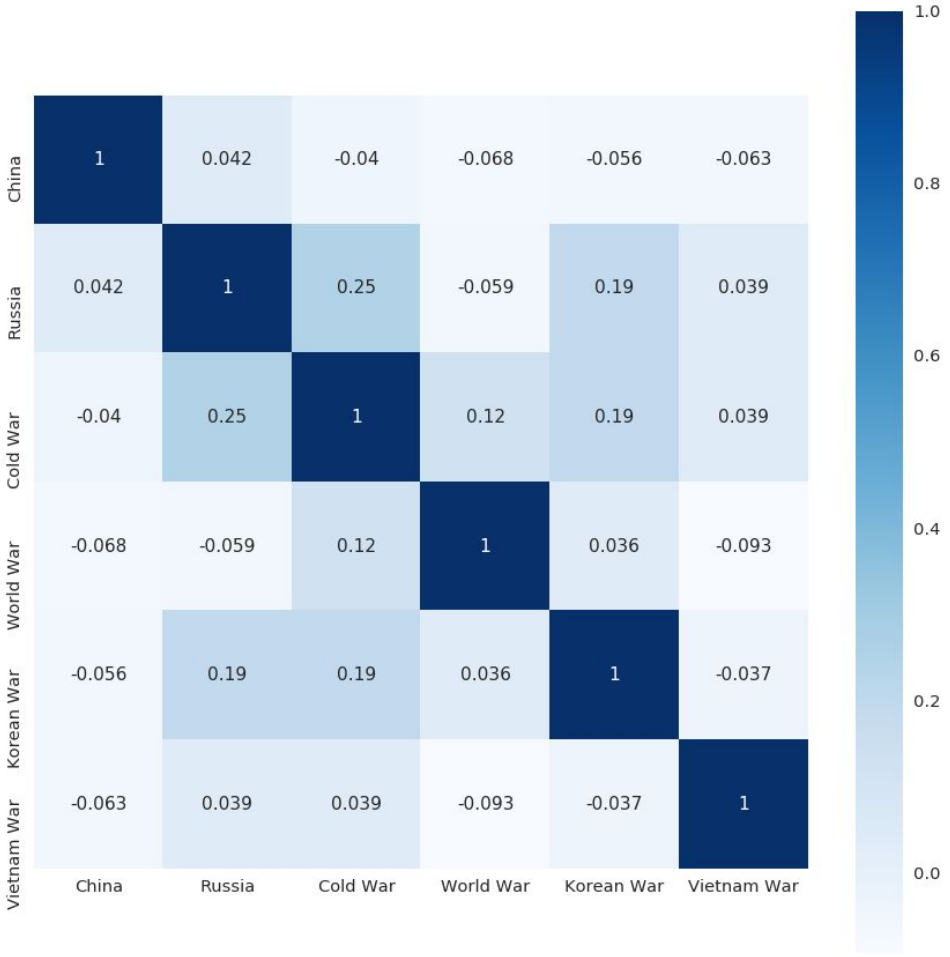
With respect to war mentions, we find that World Wars in the early years of the conference receive the greatest attention from scholars, but that attention attenuated in the contemporary period, as has mentions of the Korean war.



Looking at a broader array of mention features, we can see that trade and humanitarian issues grow in mentions over time and that case studies, while potentially declining in popularity to some extent, remain in use. Surveys, similarly remain in use for fellows in the contemporary period.

Correlation Matrix

Looking at a correlation matrix of the mention features, we find that paper abstracts which mention the Cold War are also likelier to mention Russia, the Korean War and a World War, by 25, 19, and 12 percent doing so, respectively. Such paper abstracts are less likely to mention China,, than those that don't mention the Cold War.



Finally, we will consider our latent Dirichlet allocation (LDA) topic model. A type of natural language processing, LDA is "a generative probabilistic model for collections of discrete data such as text corpora. LDA is a three-level hierarchical Bayesian model, in which each item of a collection is modeled as a finite mixture over an underlying set of topics' (Blei, Ng,

Jordan (2003)). The five topics provided by the LDA model, as labeled by me are the following:

The use of military force, and the cessation of that use (Topic #0: military talk conflict world navy making mediation labor), The Cold War and the struggle between Democracy and Communism (Topic #1: war military cold vietnam conflict world state civil) State-to-State Relations/Sovereignty and its limits (Topic #2: relations war state international power political enforcement states) The US and Security Peace and Conflict (Topic #3: war world united states army violence peace international) and Nuclear Weapons and International Security (Topic #4: international policy nuclear foreign politics military security power)

Three takeaways:

Topically, there appears to be growth of some topics like trade, humariatariansism, civil-wars and terrorism and a decline in others like the Cold War and the World Wars, which makes sense.

Thematically, we find a growth in paper abstracts centered around Non-State Actors and Nuclear Weapons. Civil-military relations themed dissertation abstracts are also more common in recent years. Culture, ethics of war, and peace process theme coded abstracts, on the other had, have become less common in more recent years.

We can learn a lot about lots of text data like abstracts or in principle the dissertations on which they are based which would be difficult for a human to review using unsupervised learning techniques like LDA, we can get a sense of the topics that are most important in the field and among new faces scholars.

Critically as discussed above, this work is arbitrarily expandable with the introduction of new data, and the same analysis could be run on hundreds of thousands of journal articles in the field of IR in order to get a better sense of the field as a whole, given data availability. The code for the project is available on github for those interested in building on the project.

References:

Blei, David M., Andrew Y. Ng, and Michael I. Jordan. "Latent dirichlet allocation." Journal of machine Learning research 3.Jan (2003): 993-1022.