

# Globalization and Border Securitization in International Discourse

Beth A. Simmons

Andrea Mitchell University Professor of Law, Politics and Business Ethics  
University of Pennsylvania  
[simmons3@law.upenn.edu](mailto:simmons3@law.upenn.edu)

Robert Shaffer, PhD

Post-doctoral Fellow, Perry World House Project on Borders and Boundaries  
University of Pennsylvania  
[shafferr@upenn.edu](mailto:shafferr@upenn.edu)

**Abstract:** International borders have become a growing concern for international security. Moreover, they appear to be associated with a growing set of international concerns arising from transnational nonstate violence and criminality. Because international relations theorists have been concerned primarily with systemic polarity, globalization and interstate territorial disputes, IR scholars are missing a central change in global security orientation toward a perceived need for *border control*. We argue that global structural shifts that heighten uncertainty about the status of nation states themselves help to account for growing border anxiety. First, we show that there is indeed a shifting empirical reality in need of explanation: though interstate border disputes have declined, border concerns are on the rise. Second, we argue structural shifts – primarily processes of globalization and human mobility – have exposed a growing sense of threat surrounding international borders. At least in the United Nations, we show that border-related discourse has become more frequent, decentralized, localized, negative, and focused on non-state threats since the 1990s, particularly among wealthier and more democratic states. Our research highlights both the persistent, historical importance of non-state challenges to national and international security, and their growing importance in a shifting and uncertain political world.

Prepared for presentation at the Annual Meeting of the American Political Science Association, Washington DC, August 29-September 1, 2019.

**Acknowledgements:** We are grateful for comments and discussion with Miles Kahler, Michael Kenwick, Josh Lerner, Andrew Owsiak, and Lauren Pinson. Thanks to the undergraduate and graduate students who assisted in this research: Sabrina Aras, Alexa Breyfogle, Oscar Contreras, Ryan DelGaudio, Meghan Everts, Dillon Horwitz, Huilin Kong, Jonathan Lahdo, Siyao Li, Justin Melnick, Andrew Noh, and Rachel Steinig. Funding for this research was provided by the Carnegie Corporation of New York (G-F-18-56213) and the University of Pennsylvania Borders and Boundaries Research Project.

## I. Introduction

International borders have become a growing concern for international security. Moreover, they appear to be associated with a growing set of international concerns arising from perceptions of transnational nonstate threats. For realist international relations theorists who have stressed the connection between legitimate borders and interstate war over the past century, the low-grade fever surrounding today's international borders has barely merited attention. Similarly, globalization scholars - who stress market integration within a relatively borderless world - have missed one of the most central changes in states' global security orientation: toward a perceived need for border *control*.

For those who see contested international borders as a prime provocation for militarized interstate conflict, there is good news: the average number of official state disputes over territory has declined since about 1970 (Frederick, et al. 2017). From this perspective, states are increasingly "solving" their border problems. But for those who take open borders for granted, the last several years have presented surprises. The United States endured the longest government shut-down in its history over the largely symbolic issue of funding construction of a "border wall." The terms of Brexit and the future of the European Union have foundered in no small part on inspection and security at the Northern Ireland border. Physical markers of state authority in Saudi Arabia and elsewhere in the once-physically open Middle East have been constructed, violently challenged, and reinforced.

It is now broadly recognized that the world is hardly borderless. This paper goes further to argue that border security is both a historically persistent and growing global concern for states. Just as the world seemed on its way to peaceful territorial understandings, and just as connective technologies seemed to render political borders meaningless, border anxieties have once again come to the national and international fore.

Why are states so concerned about their borders? State territorial integrity and sovereignty are core principles of international law.<sup>1</sup> Macroeconomic theory has clearly established the efficiency of transborder market integration. And yet border security is an ascending state priority, not only in obvious places like the United States, Europe and Israel, but around world; and not only for domestic constituents but for international audiences as well. The reasons are complex, but we point to global structural changes that raise new security concerns and reveal traditional ones, with a focus on the economic and political uncertainty created by transborder movement of people and goods across borders. Some of these conditions challenge the legitimacy of the state itself. International relations research needs to expose and explain the sources and consequences of these intensifying anxieties.

The paper proceeds as follows. First, we contextualize discourse patterns on international borders, with a focus on twentieth-century discussions in the international arena. We then discuss how post-cold war uncertainty combined with integrative global pressures set the stage for new anxieties about international borders. In the second section, we define the scope of "border issues," and use this definition to extract border-relevant discourse from Baturo et al. (2017)'s United Nations General Debates corpus. We then use this dataset to study patterns in *locations*,

---

<sup>1</sup> The IR literature has always recognized that territorial and border disputes easily turn violent, but relatively optimistic findings include evidence that clear legal and historical precedents have produced stable borders and enhance prospects for peace (Carter and Goemans 2011, Prorok and Huth 2014, Schultz 2014, Abramson and Carter 2016, Owsiak, et al. 2018). Moreover, "settled" borders have produced "joint gains," including peace, increased bilateral trade, and investment (Simmons 2005, Lee and Mitchell 2012, Schultz 2015, Clay and Owsiak 2016).

*sentiment*, and *policy content* of United Nations border conversations. We find that that discourse on international borders is becoming more frequent, more localized, more negative, and more focused on issues of enforcement and human mobility rather than traditional concerns such as interstate competition or violence (Andreas and Biersteker 2014). In our conclusion, we call for a research agenda that digs deeper into the causes and consequences of these state concerns. Not only does this discourse reflect issues that affect the quality of life for millions of people world-wide, it provides clues about nascent challenges to the legitimacy of the sovereign territorial state itself. International and comparative politics should investigate why these concerns exist and connect them to a broader research agenda on legitimacy challenges to governance in a world of unfolding structural change.

## II. The Rising Challenge of Border Security

### *The empirical issue: a new age of border anxiety?*

International borders have been sites of international conflict and nation-building for as long as the state system has existed. Modern states depend on territorial control, which supplies the essential resources for the consolidation of state power and solidification of national identities (Wilson and Donnan 1998, Atzili and Kadercan 2017). Territorial integrity and the inviolability of state borders were written into two of the international “constitutional” documents of the twentieth century: The Covenant of the League of Nations and The United Nations Charter.<sup>2</sup> Before mid-century, territorial control was part of what it meant to be a sovereign state.<sup>3</sup>

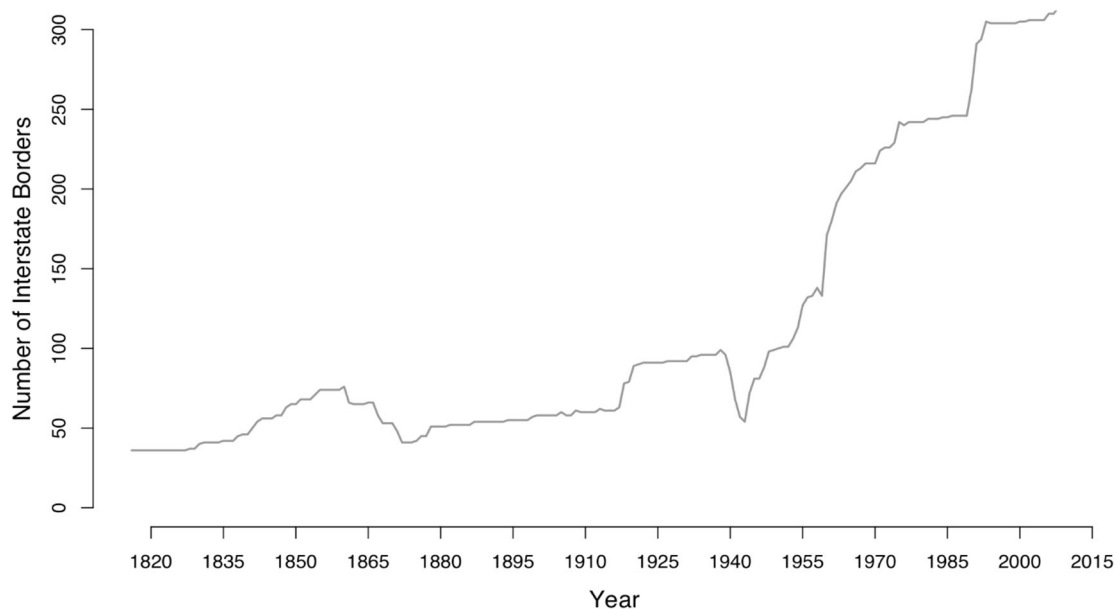
States as a form of political organization generally prospered with bounded territorial sovereignty.<sup>4</sup> The number of independent states doubled over the nineteenth century, exploded as part of the post-World War 2 decolonization process, and leapt again with the breakdown of the former Soviet Union in the 1990s. Consequently, the number of land borders shared between states proliferated as well (Figure 1). To be sure, states occasionally contest territorial agreements, as Russia’s recent annexation of the Crimea from Ukraine illustrates, but few would disagree that by the mid twentieth century, the inviolability of states’ borders constituted a core norm of international relations (Zacher 2001).

---

<sup>2</sup> Covenant of the League of Nations, Article 10. Available at [http://avalon.law.yale.edu/20th\\_century/leagcov.asp](http://avalon.law.yale.edu/20th_century/leagcov.asp); Charter of the United Nations, Article 2(4). [http://avalon.law.yale.edu/20th\\_century/unchart.asp](http://avalon.law.yale.edu/20th_century/unchart.asp).

<sup>3</sup> Montevideo Convention on the Rights and Duties of States. Entered into force December 26, 1934. Article 1(b): “The state as a person of international law should possess the following qualifications: a) a permanent population; b) a defined territory; c) government; and d) capacity to enter into relations with the other states.” Available at: <https://www.ilsa.org/jessup/jessup15/Montevideo%20Convention.pdf>.

<sup>4</sup> Scholars have noted that territorial integrity delineated by clear borders has contributed to interstate peace, economic prosperity and systemic stability (Hurrell 2003, Simmons 2005, Lee and Mitchell 2012, Schultz 2015, Clay and Owsiaik 2016). By one count, about 90 percent of state borders today are defined by *de jure* international agreements (Owsiaik, et al. 2018). However Atzili (2012) claims that fixed borders contributes to state weaknesses in various ways.



**Figure 1: The Proliferation of Interstate Borders, 1815-2015.** Total number of interstate land borders in 'direct contiguity,' generated from the Correlates of War Dataset. Available at <http://www.correlatesofwar.org/data-sets>.

The end of the Cold War and the intensification of globalization in the 1990s, however, revealed a more complex reality. The 1990s saw soaring trade, a sharp increase in localized civil strife and transnational crime. The breakdown of the Soviet Union opened borders to the west to the flow of people and goods, both legal and illicit, at unprecedented rates. Transnational crime – estimated to take in over \$3 trillion per year, or “twice all military annual budgets combined”<sup>5</sup> – was increasingly viewed as a threat to legitimate local economies with the potential to undermine law and order. Concerns only intensified after the terrorist attacks of 9/11, heightened by real and imagined threats of transnational radicalism, stoked by wars in Iraq and the Middle East, and fed by the consequent rise in migrants and refugees these conflicts created.

For many reasons, transborder migration expanded dramatically over these years. In 1960, 2.6% of the world’s population did not live in their birth countries. By 2015, it was 3.3%. Some western industrial democracies, such as Australia, Canada and the United States had much higher shares, as did several countries near areas of intense violence, such as Lebanon, where Syrian and Iraqi refugees peaked at about 20% of its population. People have of course always migrated, but the diversity, intensity and pace has picked up significantly since the Cold War’s end. Controversially, migration was becoming a security issue in many parts of the world (Adamson 2006, Huysmans 2006).

By the 2000s, borders were back on the international security agenda with a vengeance. For the first time, a multilateral transnational crime agreement was negotiated and widely ratified that created obligations not of border settlement and recognition, but of border security, control

<sup>5</sup> Global Challenge 12, The Millennium Project, Global futures Studies and Research. Available at <http://www.millennium-project.org/challenge-12/>. [Accessed March 31, 2019.]

and management.<sup>6</sup> New kinds of non-state threats were addressed in Security Council debates (Fasulo 2015, 73), eventually producing obligatory border-related resolutions. For example, the UNSC's concerns with non-state actors' possession of weapons of mass destruction (nuclear, chemical and biological weapons) called on states, for the first time, to *secure* their borders.<sup>7</sup> By 2014, the Security Council required states to prevent terrorist movement across borders by cracking down on fraudulent documents and other evasions.<sup>8</sup> A series of resolutions increasingly called for follow up.<sup>9</sup> Historical context here is useful: the last 15 years of debate and decision-making in the UNSC has shifted from the *legitimation* of specific borders to their security, control and governance (Simmons 2019) (Figure 2).

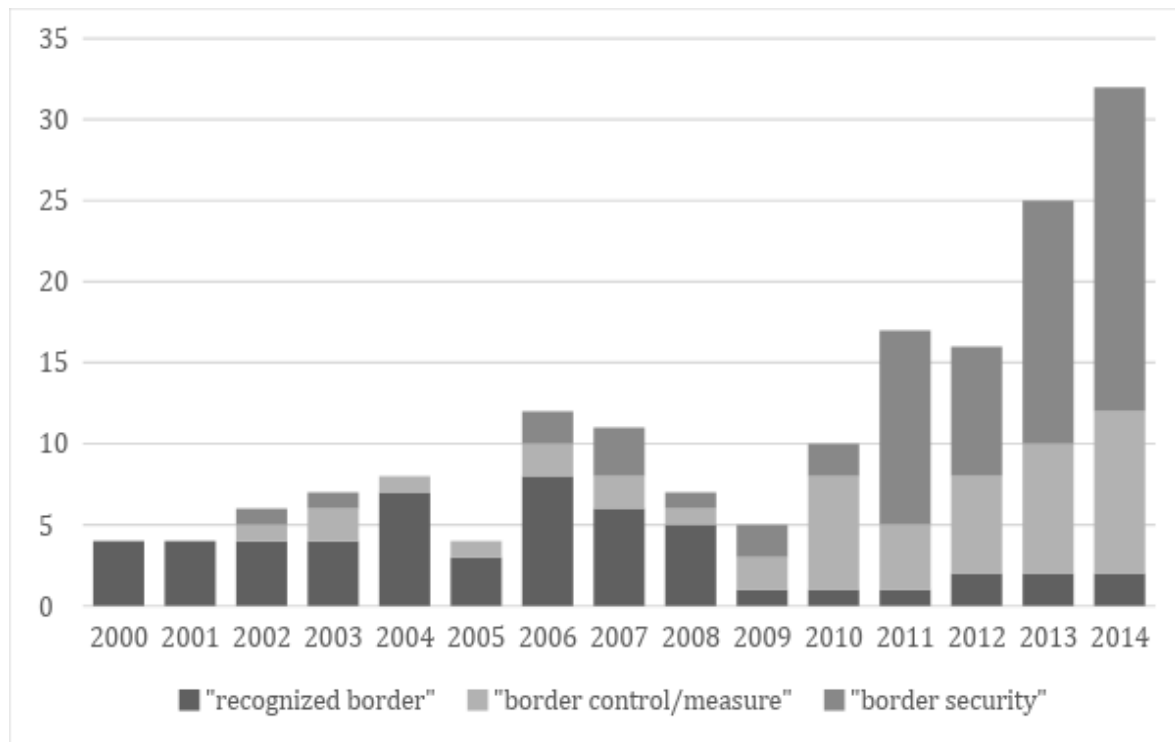
---

<sup>6</sup> The 2000 Palermo Convention's smuggling and human trafficking protocols require states to "strengthen border controls as may be necessary to prevent trafficking and detect smuggling, including...denial or revocation of visas for protocol violators..." and to "consider strengthening cooperation among border control agencies by, inter alia, establishing and maintaining direct channels of communication." These provisions are basically identical for both protocols. See Protocol Against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention Against Transnational Organized Crime<sup>1</sup> Adopted 15 November 2000 Entered into force 28 January 2004; available at <http://www.unhcr.org/en-us/protection/migration/496323791b/protocol-against-smuggling-migrants-land-sea-air-supplementing-united-nations.html>. (Accessed 5 August 2018.)

<sup>7</sup> Resolution 1540 obligated member states to "Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items [WMD: nuclear, chemical and biological weapons] in accordance with their national legal authorities and legislation and consistent with international law." Available at <https://www.un.org/disarmament/wmd/sc1540/>.

<sup>8</sup> UNSC resolution 2178 para. 2 provided "all States shall prevent the movement of terrorists or terrorist groups by effective border controls and controls on issuance of identity papers and travel documents, and through measures for preventing counterfeiting, forgery or fraudulent use of identity papers and travel documents..." See also articles 4 and 14. See also UNSCR 2195 (2014).

<sup>9</sup> UNSCR 2396 mandates all UN Member States to step up implementation of Resolution 2178 (2014) and to adopt measures on border control, criminal justice, information sharing and prevent and counter violent extremism that leads to terrorism.



**Figure 2: Increasing and Shifting Border Concerns at the UN Security Council.** References to borders are on the increase, and attention has shifted from a call for ‘recognized borders’ to aspects of border control and border security itself. Number of mentions of each phrase in the decisions and resolutions of the Security Council, by fiscal years, 2000/2001-2014/2015. Years 2001/2002 and 2002/2003 are estimated because the document are not searchable. No documents are searchable prior to 2000. Original documents are located at <http://www.un.org/en/sc/documents/volumes/>. (Accessed 10 July 2018)

### *Structural Shifts and Border Anxieties*

What factors account for this rising concern with the security of interstate borders? In brief: the perceived negative externalities of open borders (Simmons, et al. 2018). Major structural shifts since the 1990s have influenced perceptions about the nature of international and transnational threats. Breakdown of the bipolar system of alliances undermined the relatively certainty of major power protection, disturbing expectations about border conflicts and arguably reducing deterrence (Mearsheimer 1990). Governments of minor powers could not so clearly rely on superpower deterrence in their struggles with domestic challengers. Outside of the strategic logic of bipolarity, much of the world was no longer of interest to the major powers, and thus “ripe for rivalry” (Friedberg 1993). On the positive side, tragedies such as Vietnam were less likely. But on the negative side, intervention to prevent or contain civil conflict was much less likely (Posen 2017). International relations scholars speculated that post-conflict states might never be constructed within UN-mandated bordered territorial space (Fearon 2017). In politically unstable parts of the world, non-state challengers abused international borders for their own protection, even while contesting the territorial control of the state (Buhaug and Gates 2002, Gleditsch, et al. 2008, Salehyan 2009). Such challenges plausibly impact the taken-for-granted nature of territorial sovereignty and secure international borders.



The end of the Cold War shifted social purposes as well. Former Communist countries lost their lust to control their populations – the fall of the Berlin wall is iconic – giving rise to new population movements across Europe, and contributing to a host of social and criminal problems, real and imagined. Western powers lost their will to “lead” the liberal order – a consequence that John Ikenberry (2011) diagnoses as *the* crisis of liberal hegemony. Realists agreed, in part. “Roles,” Charles Krauthammer noted, “are not invented in the abstract, they are a response to a perceived world structure” (Krauthammer 1990). The removal of the Soviet threat from the global geopolitical stage helped to undermined an American national image of globally-oriented internationalists in favor of territorially-oriented isolationists that had been temporarily eclipsed during the Cold War years (Agnew and Sharp 2016). Shifting superpower identities left much of the world to wonder about their future security.

Interlaced with these political changes was an even more powerful structural shift: the intensification of economic integration and human mobility.<sup>10</sup> Political, economic and social globalization have, by one widely used measure, increased practically every year since the end of the Cold War, to the Financial Crisis of 2008-2009, though flattening since 2015.<sup>11</sup> In a number of relatively wealthy countries, international trade is blamed for downward wage pressure and mobile capital for “deindustrialization” (van Neuss 2018). In Europe, publics became more nationalist in response to localized import shocks (Colantone and Stanig 2018), suggesting a gathering anxiety about economic threats from without.

Immigration – arguably a form of “social integration” – is an especially sensitive form of globalization. In 2019, across a broad range of 27 destination countries, people were much more likely to say they wanted less immigration than rather than more or that policies were “about right.”<sup>12</sup> Political violence has made societies sadly interdependent: about 25.4 million people were forced to flee from their countries and living abroad as refugees in 2017; another 3.1 million were official asylum seekers.<sup>13</sup> Whether or not these movements pose threats, they have become part of a narrative that sees permeable borders as threats to local values and well-being. Indeed, Simmons and Kenwick’s (2019) research shows that states tend to take unilateral actions to harden their borders in the face of sudden surges of migration. Fears associated with migration have led to border hardening and “crimmigration” strategies (Stumpf 2006). For the first time, in the 1990s national security threat assessments began to place transnational organized crime near the top of the list.<sup>14</sup>

These perceived negative externalities of globalization stoke palpable anxieties within many national polities. A growing literature stresses the role of globalization in undermining a subjective sense of state sovereignty and control (Van Schendel and Abraham 2005, Brown 2010, Vallet and David 2012, Kinnvall and Svensson 2015). These anxieties leave noticeable traces in the discourse of state representatives. We assume that leaders, bureaucrats and

---

<sup>10</sup> Whether political polarity or economic globalization are the main contributor to uncertainty and instability are not our main concern, as these are likely to be highly interactive structural changes (political restructuring both responds to and conditions economic pressures and flows).

<sup>11</sup> KOF Globalization Index, available at <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.

<sup>12</sup> See Pew Center research polls at <https://www.pewresearch.org/fact-tank/2018/12/10/many-worldwide-oppose-more-migration-both-into-and-out-of-their-countries/>.

<sup>13</sup> United Nations High Commissioner for Refugees (UNHCR), <http://www.unhcr.org/en-us/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html>. (Accessed 5 August 2018.)

<sup>14</sup> In 1995, Presidential Decision Directive-42 (PDD-42), created by President Clinton, recognized Global Organized Crime as a threat to national security. Available at <https://fas.org/irp/offdocs/pdd/pdd-42.pdf>.

diplomats experience the structural environment, consider their domestic goals, and express their international concerns in global forums when they have the opportunity. Utterances at the United Nations represent interpretations of national interests contextualized by international constraints and opportunities. The swelling references to borders and border security at the UN, especially in the past decade or so, reveals concerns about non-state forces relative to interstate challenges. Human mobility in particular increases negative sentiments in the wealthier states that are typically destinations for migrants.

These trends are explored in the context of the yearly General Debates of the United Nations General Assembly (UNGA). To clarify our position, we do not believe that discourse is per se causal; rather, we view it as evidence of motivation for consequential decisions and choices such as international agreements, multilateral coordination, foreign aid commitments and unilateral actions of border hardening (Simmons and Kenwick 2019). Research on discourse suggests useful causal paths for future research on such choices.

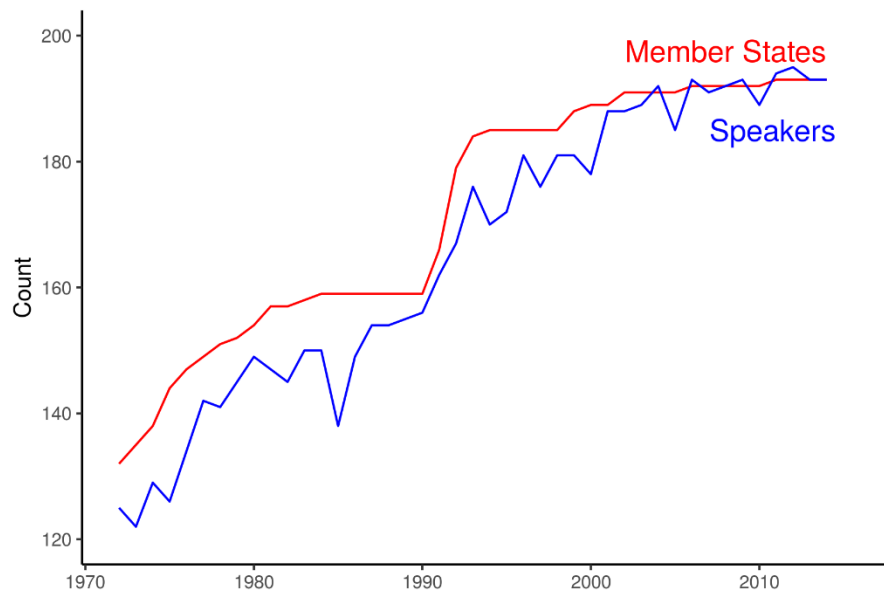
### **III. Conceptualizing and Measuring Global Official Border Discourse**

#### *The United Nations and Global Official Discourse*

Documenting interstate policy prioritization on any issue is a challenging problem, and border-related policy discourse is no exception. Ideally, we would like a world-wide time-series of unfiltered official views about borders locally and worldwide. In our view, the closest approximation of such a time-series is the United Nations General Assembly General Debate. General Debate speeches – which are usually given by the head of state, head of government, or chief foreign minister of each state – offer an annual opportunity for every UN member state to articulate policy priorities and preferences in a relatively unfiltered fashion to an international and domestic audience (Luard 1994, 42-43, Kentikelenis and Voeten 2018). This forum is thus one of the rare settings in which it is possible, at least in principle, to collect information relatively free from western media filtering (Binder and Heupel 2015) and other biases. Some studies suggest speeches are prepared in advance of delivery, and are thus fairly “independent” (Nicholas 1971, 108) or at least “uncoordinated” (Chelotti, et al. 2018). Because speech contents run the gamut of issues with which the UN deals – from economic development to human security to international stability – it is possible to investigate relative issue salience over time, while avoiding the coordination bias involved in looking only at issues that come to a roll call vote (Häge and Hug 2016, Gurciullo and Mikhaylov 2017b, Pomeroy, et al. 2018). Since states rarely decline the opportunity to provide remarks in the General Debates (see Figure 3), these speeches offer a rare opportunity to identify the priorities and issues that each state would like to place at or near the top of the international agenda over time. As such, they present a unique opportunity to explore border anxieties as reflected in official state discourse worldwide.



Of course, one can wonder whether talk at the United Nations matters at all. During the Cold War, scholars tended to view debates in the UNGA as little more than sham public relations, and even today criticisms of the UN abound. We assume, as studies have generally shown, that political communication has the potential to affect political behavior and policies (De Boef and Kellstedt 2004). While we are not inferring a straight causal arrow between UNGA discussions and specific outcomes, research shows that debates in the United Nations help to frame international issues, develop consensus, legitimate collective decisions and even influence major powers (Claude 1966, Bearce and Bondanella 2007, Taninchev 2015). As other researchers have done, we offer analysis of UNGA General Debates as evidence of issue salience (Hecht 2016) and associated sentiments.<sup>15</sup>



**Figure 3: UNGA Speeches and UN member states, by year.** Non-member states and organizations (e.g. the European Union) are occasionally invited to speak at the UNGA. As a result, in a few years there are more speeches than member states

The yearly UNGA General Debates have some clear limitations, to be sure. These speeches are unfiltered, but they are hardly free from political influences. Even though scripts are prepared well in advance, states may jump on bandwagons by repeating earlier speakers, they may say what they believe their patrons want to hear, and they may coordinate their messages regionally. We do not claim these utterances are free from politics. But no theory of speech action is so compelling in our view as to invalidate the General Debates as a representative source of state concerns over time. We also recognize these are official utterances and may or may not reflect mass opinion. Our study is a complement to, and not a replacement for, the study of public opinion. Furthermore, we aim to tap broad sentiments and pervasive content, not to prove these become actionable multilaterally. Multilateral action can instead be studied directly, as in Figure 2.

<sup>15</sup> Other researchers have used this corpus for more complex tasks, such as the detection of ideological and communicative clusters of countries. For such tasks, researchers similarly assume the UNGA General Debates are on “topics of high salience to international community” (Gurciullo and Mikhaylov 2017a).

## *Conceptualizing and identifying border-relevant discourse*

As with any text-based initiative, a key challenge is to identify which texts are conceptually relevant. Almost any interstate policy issue can be plausibly linked to international borders.<sup>16</sup> This problem is particularly pervasive in the UNGA general debates, in which states are allowed (and even incentivized) to introduce a wide variety of ideas simultaneously. To bound the underlying phenomenon of interest, we therefore begin with two key preprocessing steps. Using Baturu et al. (2017)’s United Nations General Debates corpus, we segmented all speech transcripts into semantically coherent “pseudo-paragraphs.” Because UNGA speech transcripts are sourced from scanned images, line breaks, spaces, and other formatting elements are often not preserved in this corpus, making it difficult to identify when discussion of one issue begins and another ends. To address this problem, we first break each speech transcript into sentences,<sup>17</sup> and use Hearst (1997)’s TextTiling algorithm to merge semantically similar sentences into paragraph-length chunks ( $n = 135,292$ ).<sup>18</sup>

Next, we identified all border-relevant pseudo-paragraphs. We define a paragraph as *relevant* to international borders if it (1) discusses a *specific* physical, non-metaphorical international border or collection of borders (e.g. a regional border compact), *or* (2) discusses a concrete policy problem with a clear impact on a physical, non-metaphorical international border. The presence of either attribute alone is sufficient for inclusion. For example, a document which discusses cross-border cultural initiatives in El Paso/Ciudad Juárez would be included because it clearly discusses a specific border, though the policy issue it discusses does not have a precise physical impact. Similarly, a document which describes Serbia’s general interest in building cross-border infrastructure would also be relevant because it clearly discusses a policy issue with a physical border presence, even though a specific border is not mentioned. By contrast, a document which only mentions “transborder” counterterrorism cooperation or the “disappearance” of physical barriers to trade would be excluded, since it neither discusses a specific border nor a policy issue with precise physical consequences.

To identify all documents that meet this definition, we began by identifying all pseudo-paragraphs that contained any of a set of predefined border-relevant keywords, such as “border”, “boundary”, or “demarcate.” Next, we assigned a series of undergraduate researchers to read this set of paragraphs, which we used to refine our keyword list and eliminate false positive cases. As shown in Figure 4, this process left us with a total of 5,377 border-relevant pseudo paragraphs, representing approximately 4% of pseudo paragraphs in most years. This reduced dataset forms the basis for our analyses in the following sections.

This exercise reveals an insistent pattern: states are increasingly talking about specific international borders *as a proportion* of all communication in the annual General Debates

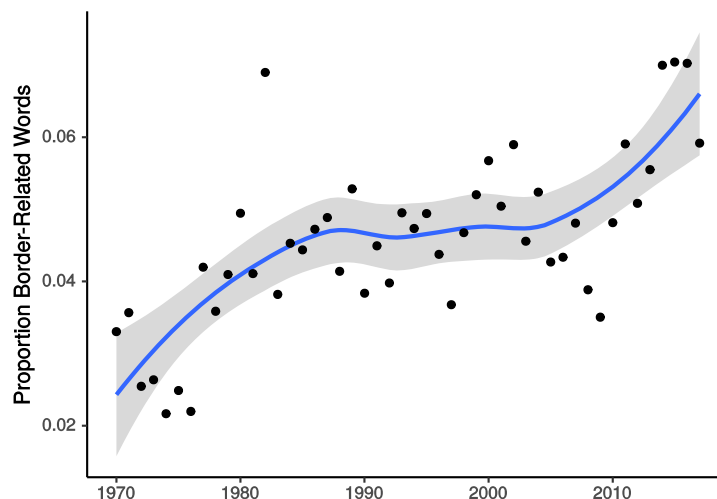
---

<sup>16</sup> For example, any military dispute involving one or more states will likely involve one state’s troops or military assets penetrating an international border, or both state’s troops or assets entering territory whose borders are disputed. A “stretched” definition of border relevance might therefore encompass all of these disputes, though few actually involve border security or border policy decisions. Any discussion of international trade, international finance, or even international communication and cultural exchange could be categorized as “border-related” using a similarly imprecise definition.

<sup>17</sup> Using NLTK’s [sentence tokenizer](#).

<sup>18</sup> The TextTiling algorithm requires two researcher parameters, which roughly correspond to the average number of sentences in a paragraph and the average number of tokens in a sentence. Here, we use the empirical per-speech averages for both parameters, rounded to the nearest integer.

(Figure 4). The uptick since the mid-2000s is especially strong. This trend echoes the upward swing in the Security Council in Figure 2, even though the UNGA and UNSC have different membership principles and distinct functional responsibilities.



**Figure 4: Proportion of border-relevant pseudo paragraphs in all speeches made by United Nations member states from 1970-2017 during the UNGA's yearly General Debate., by year.** The denominator is the total number of pseudo paragraphs in a given year.

This pattern raises several issues: who is so concerned with border issues, and why? To explore these patterns, we began by examining *border mentions*. In particular, we fit a conditional logistic regression model, which estimated the probability that a given country's General Debate speech in a given year contained at least one pseudoparagraph that discussed international borders and boundaries. The framework developed above suggests that border concerns are a response to political and economic uncertainties, security threats, and heightened human mobility. We therefore included predictor variables corresponding to standard political and economic globalization indices,<sup>19</sup> dummy variables indicating the presence of an ongoing civil or interstate dispute,<sup>20</sup> estimated net migration,<sup>21</sup> and Polity score (Marshall et al. 2002). Since democracies have been especially attractive and sensitive to mobile populations, we further include an interaction between Polity and net migration to capture this effect. Finally, we include controls for country size and wealth, as well as an indicator variable for the post-Cold War period to capture systemic changes in attention to border issues following the breakup of the Soviet Union.

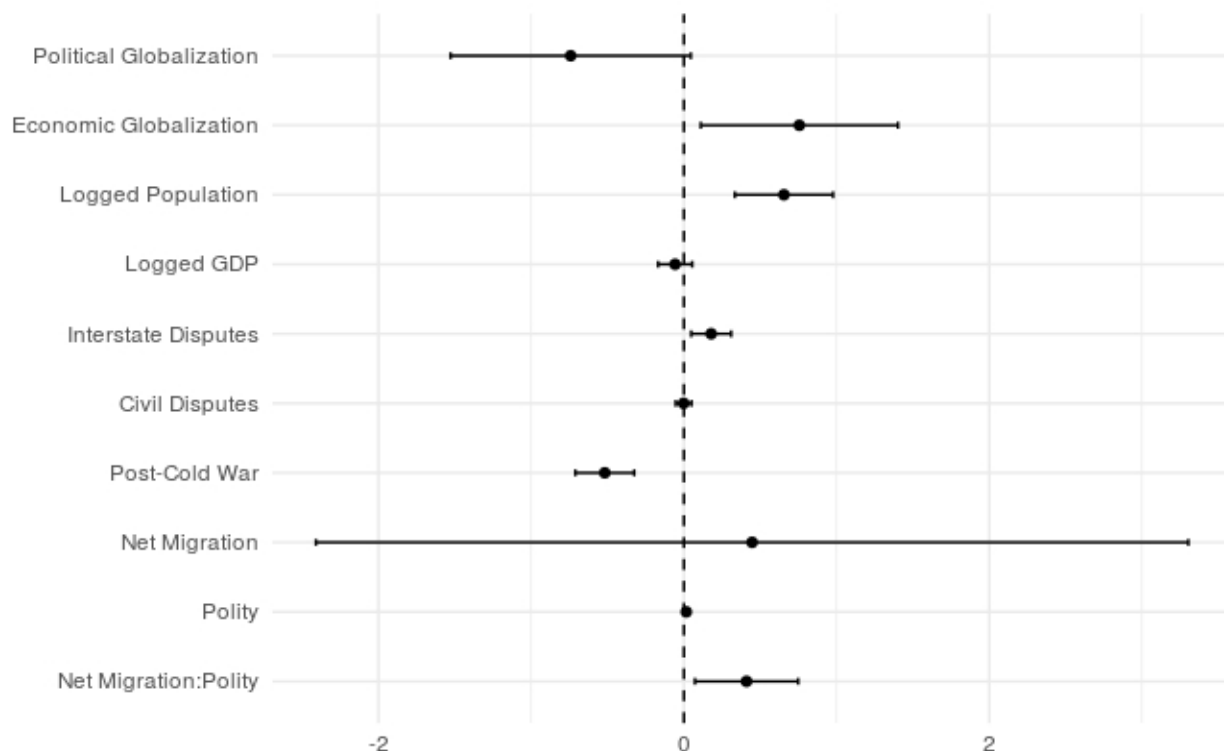
<sup>19</sup> In particular, the de-facto globalization scores in the KOF Globalization Index, available at <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.

<sup>20</sup> As measured by the Polity IV project (Marshall et al. 2002).

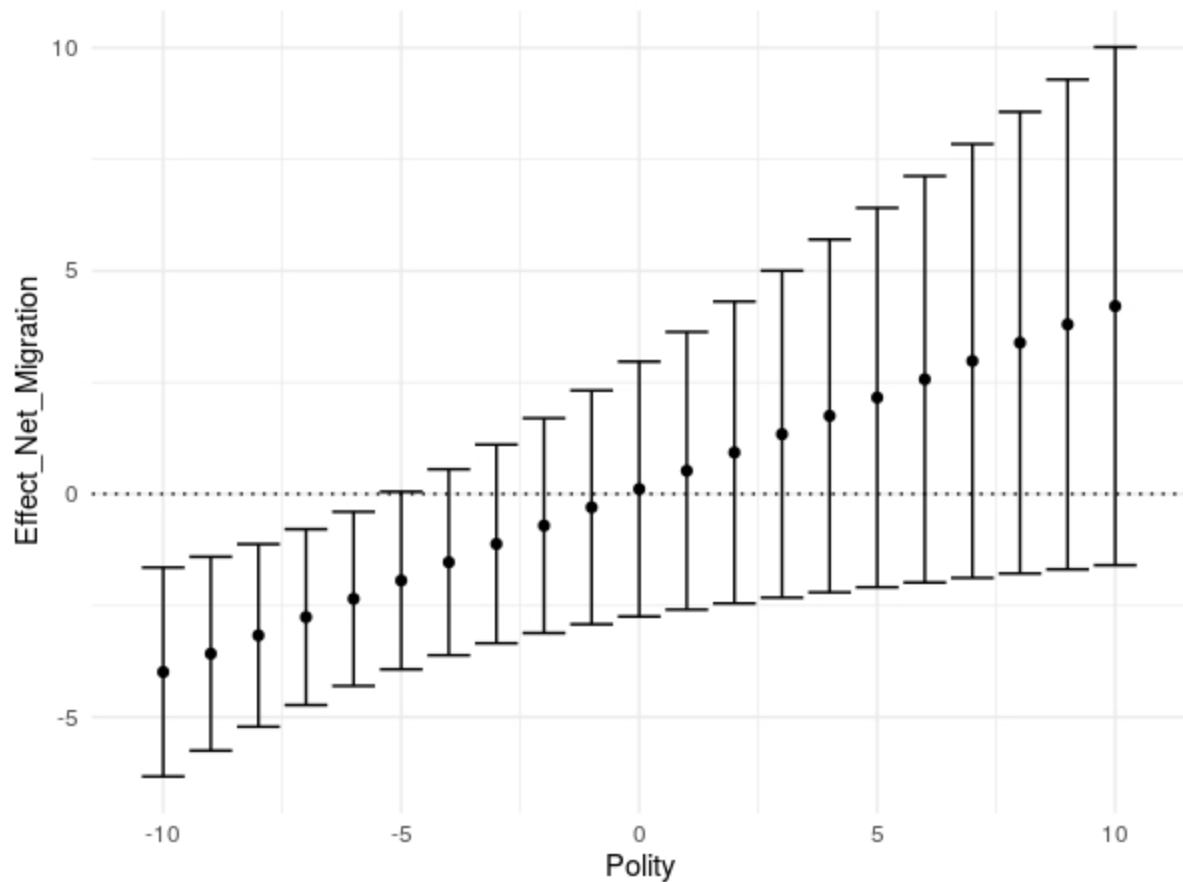
<sup>21</sup> Normalized by country population, using estimated net migration flows drawn from the [World Bank](#). Since estimates are only available at five year intervals, we interpolated migration values for off-years. Here, we use a linear interpolation, but all values are consistent with a piecewise constant interpolation.

Figure 5 suggests that our expectations are partially supported. As we would expect, involvement in an interstate dispute is strongly, positive correlated with border mentions, as is country size. Surprisingly, however, we found no relationship with a civil war in the speaking country. Political globalization – which is essentially a measure of participation in international law and organizations – may be weakly negatively associated with border mentions at the United Nations, signifying that countries more involved in international institutions are somewhat less likely to mention borders. On the other hand, countries exposed to the international economy – defined here as trade and financial flows as a share of GDP – are more likely to mention borders in their UN speeches.

The most interesting explanation for border mentions, however, is potentially the conditional role of net migration. We interacted net migration with regime type to capture the idea that democracies may be more sensitive to net migration. The interaction term is indeed strongly positive, but much of the action appears to be concentrated in *outflows* from *autocracies*, who appear to mention borders when they are *losing* population (Figure 6). The opposite appears true, although it does not quite reach statistical significance, for democracies, who tend to mention borders the higher are immigration inflows. These results are suggestive that net migration – human mobility in and out – interact with regime type to influence border mentions on the world stage.



**Figure 5: Correlates of Border Mentions.** The dependent variable is a dichotomous indicator of whether or not a country included a border-relevant mention in their annual address to the UNGA. Explanatory variables are speaker characteristics. Results of a logit model with country fixed effects.



**Figure 6: Correlates of border mentions** (based on model in Figure 5) Illustrating the interaction between net migration flows and regime type in explaining the likelihood of a border mention at the UNGA. The figure suggests a sensitivity of autocracies to outflows and a (weaker) sensitivity of autocracies to inflows.

### *Aspects of Border Discourse in the UNGA*

If structural uncertainties and insecurities contribute to border anxieties, this should be manifest in other ways as well, namely by who speaks, which borders they prioritize, tone and issues associated with the mention. To demonstrate the plausibility of these claims, we used border-relevant paragraphs from the UNGA debates to distinguish three classes of clues about border-related policy concerns:

(1) *Speaker-target dyads*. We expect some significant reorientations in the geography of border concerns over time, largely related to reconfigurations in the structure of the international system. The bipolar world order of the Cold War period is likely to reflect fewer but very intense border rivalries in which major powers took stake public positions and minor power have an incentive to reinforce, even when such conflicts are far afield. Post-Cold War, global alliances are much less at stake. One consequence is the proliferation of localized, non-systemic conflict as major powers have become less interested in maintaining local alliances. Under these conditions, border concerns should “telescope” as states become increasingly concerned with cross border challenges in their region and at their own borders. Compared with the Cold War, *the average geographic distance between speaker and subject should decline*. We also expect

evidence of sensitivity to human mobility; borders of particular concern will be those of net outflows of people, especially when the speaker is a destination country.

(2) *Sentiment*. Sentiment analysis focuses on the positive or negative tone of a given document with respect to international borders. We are especially interested in sentiments of (dis)satisfaction related to some kind of (dis)utility the agent associates with international borders – for example, that they are legitimate and stable (ensuring a secure sense of state sovereignty and control) or that they are contestable and dangerous (threatening the state and/or society in some way). Sentiment analysis is typically performed on expressions made by individuals,<sup>22</sup> but here we conceptualize UN representative’s speech as a signifier for a “corporate” attitude or opinion. That is, we assume the sentiment reflected is that of a relatively broad swath of politically relevant official actors, and not the diplomat him/herself. We are primarily interested in changes in positive versus negative sentiments over time.

(3) *Policy language*. Finally, substantive border issues are likely to have changed over time, as we saw in the Security Council documents. Our strongest expectation is that the Cold War concern with interstate relations (demarcation, settlement, war) has been augmented by nonstate border concerns (migration, refugees, terrorism, rebels, transnational crime). In addition, as the focus shifts from interstate concerns to the challenges of globalization, we should see more emphasis on border management, including references to control/measures and security.

#### IV. Changing Emphasis on International Borders

*Dyadic Analysis: who speaks about whom?*

If *global* politics matters less, and *local* pressure from globalization matters more, border mentions should come home; that is, in the post-Cold War period we should expect the median distance between speaker and subject to decline. As a first step, speaker and subjects must be accurately identified. Using a pre-trained identity recognition model, followed up with manual extraction and additions, we identified 8,408 entity mentions and 533 unique entities.<sup>23</sup>

Figure 7 demonstrates some unexpected ups and downs in the distance associated with border mentions. However, following the end of the Cold War, the average distance between speaker and the locality mentioned declined by approximately 25%, attributable to a decline in the prevalence of “epic” border conflicts, which in the earlier period had attracted substantial

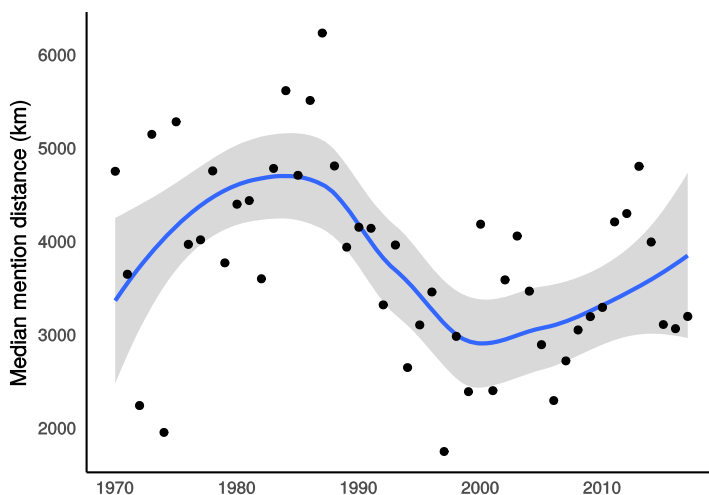
---

<sup>22</sup> Sentiments are “a psychological state that relates to the opinion holder’s satisfaction and dissatisfaction with some aspect of the topic in question”(Li and Hovy 2017).

<sup>23</sup> First, using the GPE entity type as identified in [spaCy](#), we used a pre-trained named entity recognition model to identify all “geopolitical entities” from our dataset of border-relevant paragraphs. Here, “geopolitical entities” refer to named political entities with a clear geographic location, such as cities (e.g. “Jerusalem”; “Ciudad Juárez”), federal units (“Texas”; “Punjab”), states (“USA”; “Cambodia”), or regions (“Sinai Peninsula”; “Crimea”). Second, we associated each unique entity with a latitude/longitude point and a country using the Google Maps API. For instances in which the named entity was a country, we use the location of the country’s capital as the point location. Otherwise, we used the centroid of the identified place name as the point location. Third, we manually checked each extracted entity, and removed entities that were either erroneously identified as “geopolitical” or associated with clearly erroneous location data by Google Maps. Fourth, we supplemented this list by manually adding location data for defunct or outdated country names (e.g. “Yugoslavia”; “Soviet Union”).



attention from across the international community (e.g., the Khmer Rouge genocide and the Vietnamese invasion of Cambodia during the 1970s and 1980s). By the 2000s, distance between speaker and border target was decidedly down, but increased again somewhat after 2000.



**Figure 7: Median distance (km) between speaker country and mentioned location, over time.**  
For both speaker and mentioned countries, the point location of that country is the country's capital. For all other non-point locations, the point location is the centroid.

Who targets whom contains important clues about the nature of border concerns. These concerns can be inferred from the dyadic relationship between speaker and target. The Cold War's end significantly changed states' security environment, suggesting that we should expect some important shifts whose borders speakers chose to talk about. Concerns closer to home, the rise of civil war and the erosion of traditional alliances are all purported features of the post-Cold War security setting. Border mentions are likely to shift to nearer neighbors, targets involved in civil wars, and away from far-flung alliance partners.

To investigate these patterns more systematically, we fit a conditional logistic regression model to a binarized version of the locations data, with fixed effects corresponding to the speaker and target country.<sup>24</sup> Our unit of analysis in these models is the directed dyad-year, with our dependent variable coded one if the speaker state mentioned the target state in a given year, and zero otherwise. Conflict (civil and interstate), alliance relationships, and distance are interacted by time period, since they are theoretically sensitive to Cold War polarity. Since states are always theorized to be sensitive to net migration conditions, these are not interacted. We also control for relative GDP and population (both measures of size) and shared colonial history (potentially a marker of cultural and/or political salience).

The evidence by period suggests that the post-Cold War strategic environment has shifted some traditional security related border concerns systematically (Figure 8). States have always commented more on borders nearer to home, but this relationship becomes noticeably stronger following the end of the Cold War (the coefficient on distance shifts more strongly negative post-Cold War). States have always commented more on the borders of other states involved in

<sup>24</sup> This set up accounts for unmodeled time-constant speaker- and target-country characteristics. For example, Israel is a frequently-mentioned country throughout the dataset because of the ongoing salience of the Israel-Palestine conflict. Effects like these should be captured by target-country fixed effects.

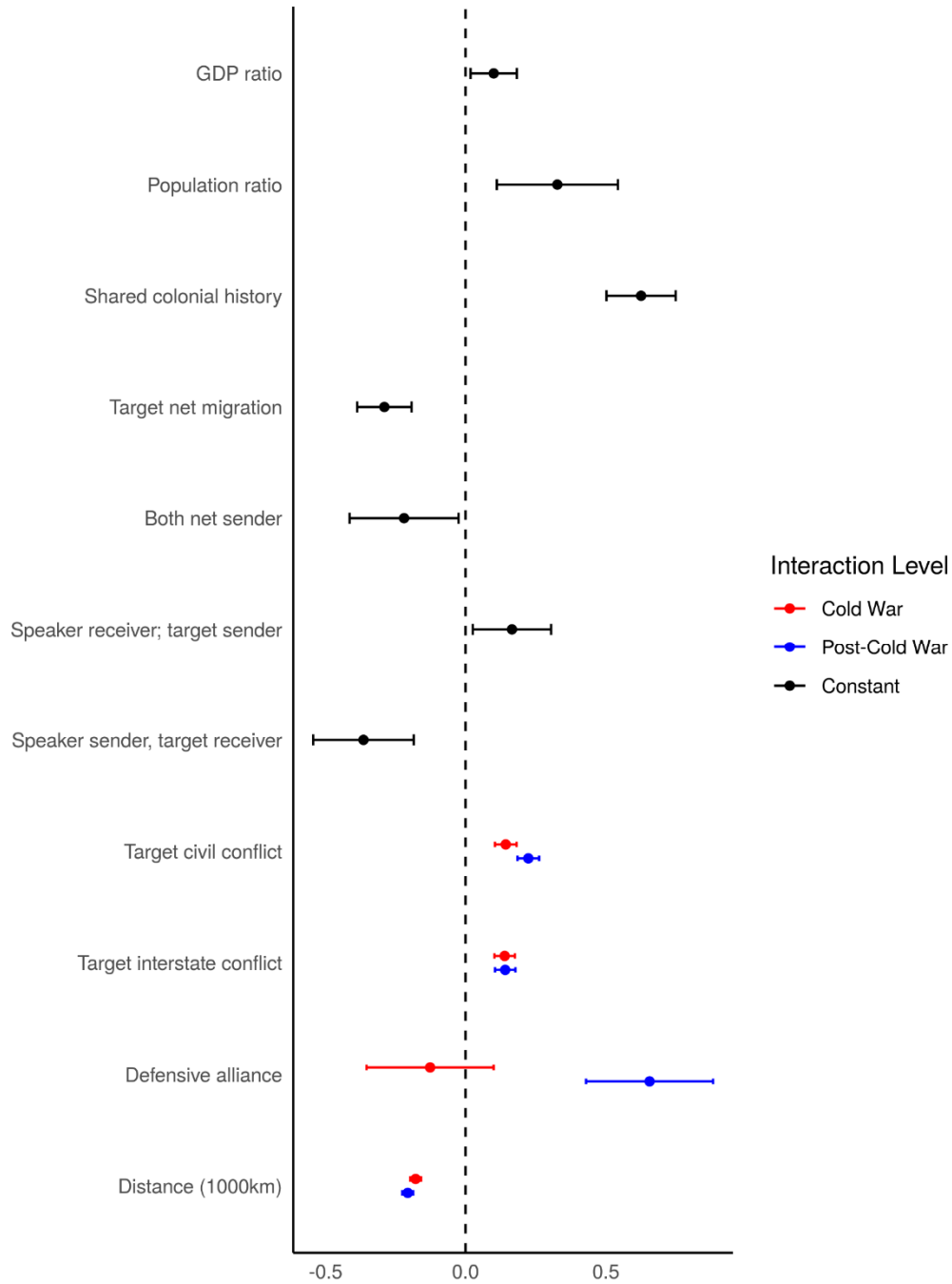
conflict, but there has been a significant shift toward commenting on borders in civil conflicts in the post-Cold War period relative to mentions of international conflicts in targeted states. Against our expectation, allies' borders actually increase significantly in the post-Cold War period. States have always been more concerned with the borders of their allies<sup>25</sup> than those of other states, and the evidence suggests this concern has persisted and even intensified in more recent years.

These results fit a narrative that the end of the Cold War reduced the orchestration of international affairs around the global interests of the superpowers, and to some extent shifted conflict pressures from interstate to civil war. What may be less well understood is that human mobility is a significant, systematic and persistent predictor of border mentions for the whole of the period. Figure 8 displays the influence of net migration status on the likelihood that a country's borders will be mentioned in UNGA debates. All four migration measures tell the same story. The first is raw migration flows. The negative relationship indicates that the larger a country's net migration inflows, the less likely its borders will be mentioned by any speaker; the larger the net outflows, the greater that likelihood.

The next three migration variables test for the dyadic status of the speaker and target. We coded states as "receivers" and "senders" simply by dichotomizing the net migration data for each country-year. The pattern is clear and consistent: net receivers of migrants are especially likely to mention a border of countries with net human outflows compared to the borders of other net receivers. If both speaker and target have net negative outflows, the target's border is similarly unlikely to be mentioned. Senders are least likely to mention the borders of net migration receivers. These results reveal that human mobility may have been a major border concern for the whole of the period under investigation. We also note that it is robust even when controlling for civil conflicts, which sparks refugees and other involuntary movements. Moreover, the human movement itself need not be dyadic. Rather, this finding suggests a general anxiety among destination countries about the porous borders of net human exporters.

---

<sup>25</sup> As identified using the ATOP data (Leeds 2003).

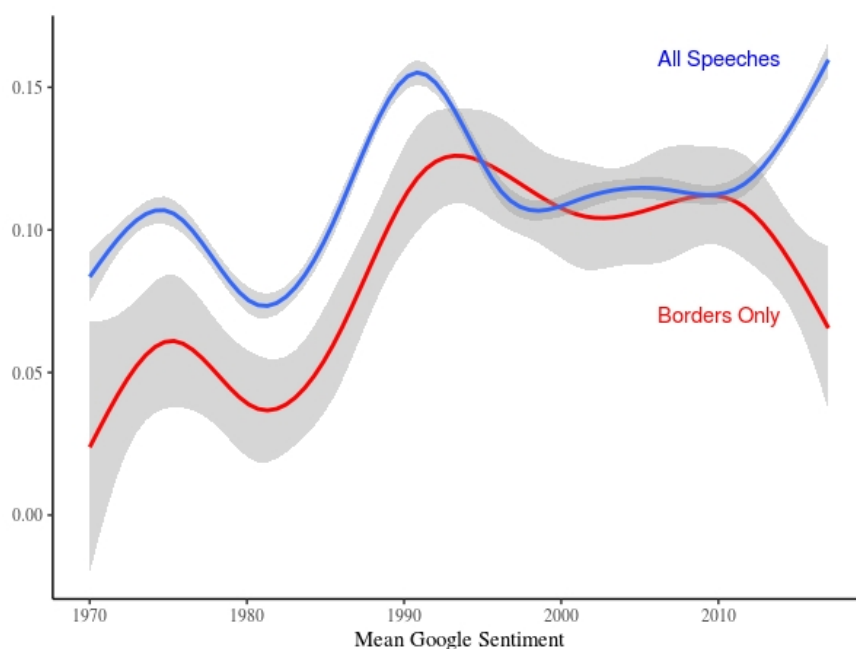


**Figure 8: Coefficient plots, directed dyad-year binary mentions data.** Dots represent point estimates, while lines represent 95% confidence intervals from a conditional logistic regression model. Speaker and target country fixed effects estimated but not shown. Democracy/Democracy is the held-out baseline for the government type variable.

## Sentiment

So far, the evidence points to growing attention at the United Nations to international borders, especially those “close to home,” and consistent evidence that net migrant source countries provoke the most border mentions. We have argued that these patterns are suggestive of the loosening of Cold War polarity, the tendency to view border issues through much more localized lenses, and growing anxieties about human mobility as a major border challenge. In this section we are interested in *sentiment* – the extent to which a speaker is positively or negatively disposed towards border-related concerns. We ask, how are sentiments about international borders shifting over time?

In most studies, scholars study sentiment patterns using dictionaries of positive or negative words (Young and Soroka 2012) or general-purpose algorithms trained on “emotive” documents like movie or restaurant reviews.<sup>26</sup> We employ such a Google-generated measure to compare border-relevant paragraphs to the entire corpus of UNGA speeches. The results are striking. Between 1970 and 2010, references to borders are less positive than are scores for the corpus as a whole (Figure 9), but they tend to track each other closely and for the years between 1992 and 2010 are indistinguishable. After 2010, border sentiments deteriorate drastically while sentiments associated with the rest of the corpus trend suddenly positive. Even though UNGA speeches are getting more positive overall, border topics are an exception.



**Figure 9:** Google sentiments scores, aggregated by year and country, comparing sentiments associated with border relevant paragraphs with all other paragraphs in UNGA General Debates.

However, we can improve on ready-made dictionaries, which for a number of reasons are not the most appropriate for diplomatic contexts. First, diplomats communicate in code, which is intended to signal meanings to other diplomats who know the code. To the general public (or to a

<sup>26</sup> For example, the Google Sentiment tool available through the [Google AI API](#).

general-purpose algorithm), diplomatic language may therefore sound ambiguous (Jönsson and Aggestam 1999). Second, compared to ordinary language or movie/restaurant reviews, diplomatic language is moderate. It generally expresses “hostility with courtesy, indifference with interest, and friendship with prudence” (Satow 2009). It may seem monotone compared to the extremes in ordinary and especially online communication. Third, diplomatic language is likely biased toward positive sentiment, since it “promotes mutual cooperation over conflict and divisiveness” (Burhanudeen 2006). These characteristics suggest it may be wise to develop a meaningful scale for detecting sentiments in diplomatic language.

To address these problems, we opted for a supervised machine learning approach. To develop a ground-truth dataset, we asked human workers on Amazon Mechanical Turk to code sentiment values for approximately 10% of our corpus ( $n = 589$ ).<sup>27</sup> Because rating documents on an abstract sentiment scale is cognitively demanding, we presented MTurk workers with a pair of documents at a time, and asked them to indicate which document was more “optimistic” regarding the international border issue it discussed.<sup>28</sup> Each unique document was presented in twenty total comparisons, for a total of 5,890 comparisons. We then used these rankings to fit a Bayesian latent variable model, which allows us to infer a continuous human-generated sentiment score for each individual document. This score formed the “ground-truth” training set in our subsequent modeling work.

Using this ground-truth dataset, we trained a custom machine learning model to predict document sentiment given that document’s text. We used two types of features as predictors in this model. First, we used a series of off-the-shelf sentiment analysis dictionaries and algorithms to extract unsupervised sentiment scores for each document. Second, we augmented these dictionary sentiment values with a document-level vector embedding designed to capture the overall substantive themes present in each document.<sup>29</sup>

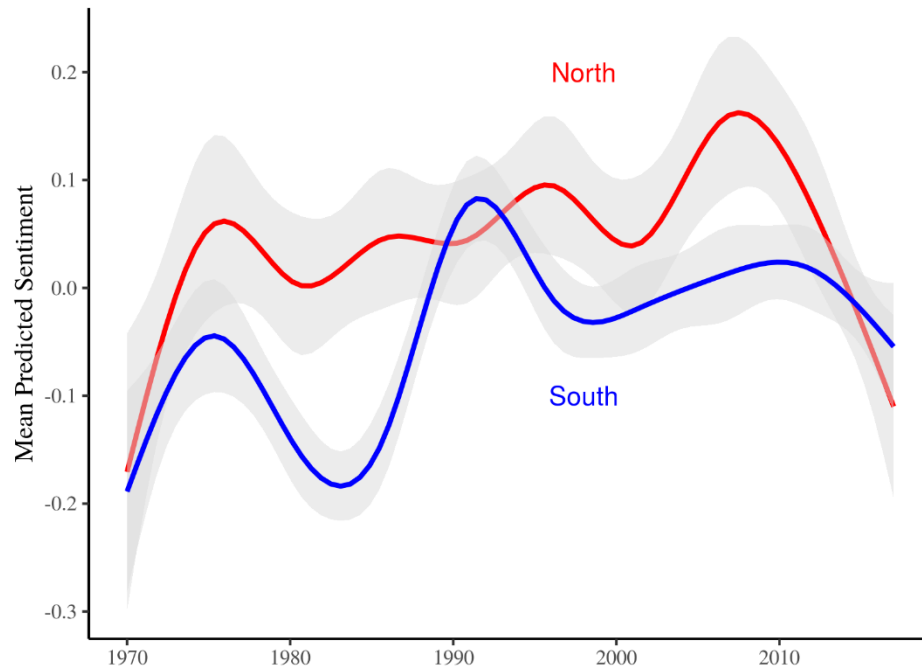
The results are shown in Figure 10, which distinguishes sentiment of the Global North from the Global South. This customized measure confirms that sentiments associated with borders have generally improved worldwide since 1970. In particular, the 1980s saw steeply improving sentiments in the Global South, which then dipped in the 1990s. Sentiments in the Global North trend positive for most of the period. However, starting in the late 2000s, this pattern began to reverse, with a noticeable decline from approximately 2010 to the present. This decline was sharp and sudden in the Global North, which coincides with increased anxiety regarding immigration and the rise of far-right populist movements in the United States and Europe during the period.

---

<sup>27</sup> Before participating, we required all workers to pass a 10-15 minute training and testing. A total of 61 workers participated in the task, of which 4 were banned for low inter-coder reliability.

<sup>28</sup> Throughout this process, we followed the pairwise comparison procedure proposed by Carlson and Montgomery (2017). To incentivize careful reading, we paid workers relatively well at \$0.07 per paragraph-length comparison.

<sup>29</sup> As shown in Appendix A, we experimented with a variety of models and feature combinations, but found that a simple ridge-penalized linear model trained with all features performed best out-of-sample. Relative to a Google Sentiment baseline – the best-performing unsupervised approach and that used in Figure 7 – our method reduced out-of-sample RMSE by approximately 10% and increased out-of-sample correlation between predicted sentiment and the MTurk baseline from approximately 0.52 to 0.63.

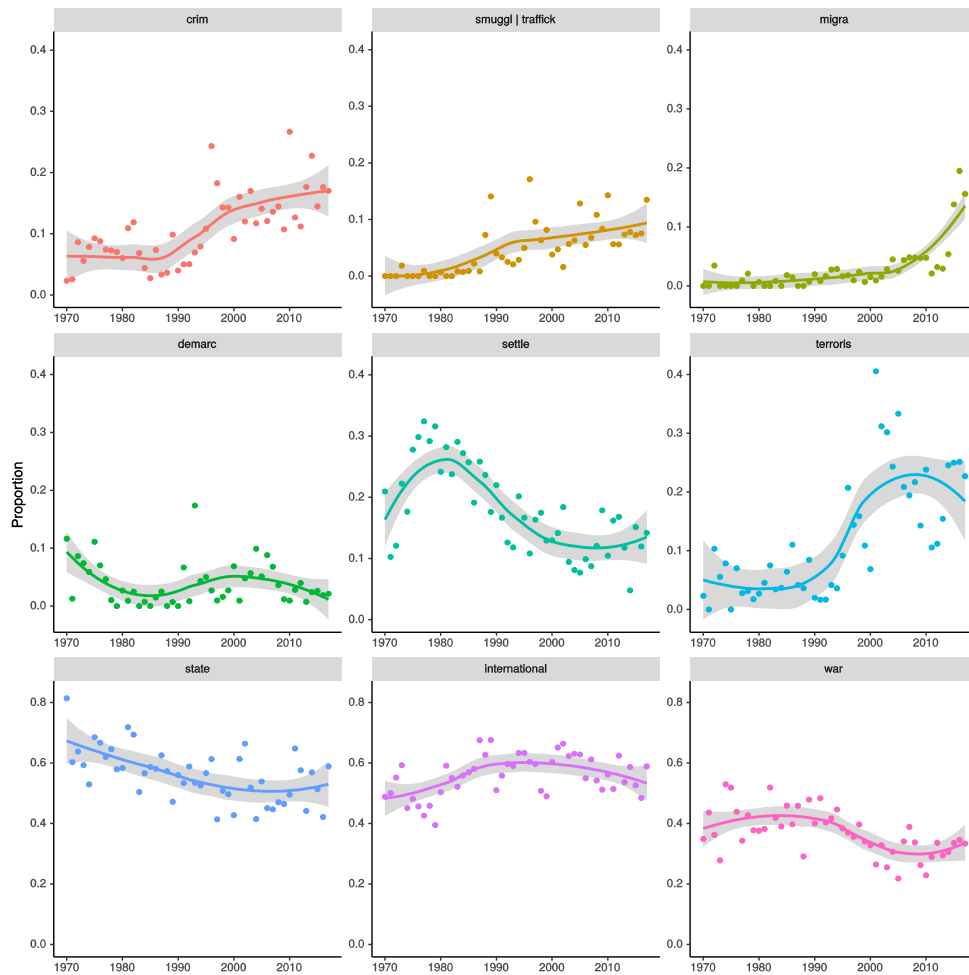


**Figure 10: Model-predicted sentiment**, aggregated by year and country and split by Global North and Global South; shading represents xx% confidence intervals.

## Content

What policy topics have driven this decrease in sentiment? As a first look at this question, we identify a set of word stems that are associated with key border-related policy concerns – such as “crime”, “terrorism”, and “migration” – and track their prevalence of pseudo-paragraphs containing these tokens relative to a set of “standard” international relations-related baseline terms (e.g. “state”, “international”, or “war”). As shown in Figure 9, since 1970 terms associated with border-related policy concerns – like “criminal” or “smuggle” – are largely on the rise. Unsurprisingly, the rise in usage of these terms is largely associated with important focusing events in the time period; for example; “terrorism” increases markedly in usage following the 9/11 attacks, while “migration” became substantially more common following the 2015 Syrian refugee crisis. Moreover, “traditional” international relations words like “state”, “war”, “settle” and “international” broadly *decline* in usage over the same time period. Combined with the sentiments data shown above, these patterns suggest states are becoming more concerned about localized border policy concerns, as opposed to large-scale, interstate geopolitical conflicts traditionally highlighted by the international relations literature.





**Figure 11: Proportion of pseudo-paragraphs that mention specified terms, 1970-2017.** The top panel highlights growth in problem frames that tend to involve non-state actors (Crime, smuggling and trafficking, migration, terrorism), while the bottom panel suggests state-to-state relationship (demarca-, settle-, state, international, war).

Figure 11 also reveals a convincing shift in the actors of greatest concern to state representatives over time. Whereas the traditional border terms connecting with *interstate* relations – including demarcate-, settle, state, international and war – are generally on the decline, the terms that are most readily linked to *non-state threats* (crime, smuggling and/or trafficking, migration and terrorism) are on the rise. These categories challenge the very legitimacy of states to control the monopoly of the use of force, to control permission to enter, and to enforce rules for trade and economic relations within their national territory. These categories are not mere disputes within the paradigm of territorial sovereignty; they are the most serious challenges to state sovereignty itself. Strikingly, these non-state challenges are addressed using the most negative sentiments in diplomatic discourse, as Figure 12 demonstrates.

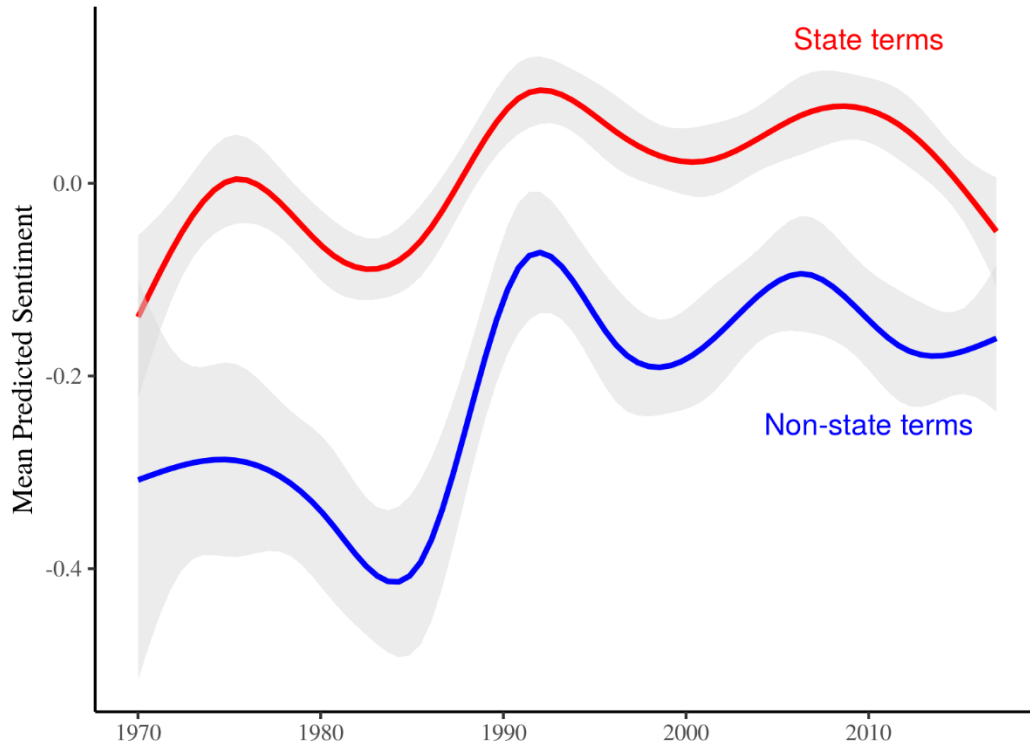


Figure 12: **Model-predicted sentiment**, comparing pseudoparagraphs containing state-related terms and border-related terms (see Figure 13 and in-text for a full term list).

## VII. Conclusions

Important changes are taking place in perceptions associated with the peaceful maintenance of territorial sovereignty. Borders are not only in the very recent news; they constitute a growing priority for Security Council action and for discussion in the General Assembly of the United Nations. Over the past several decades, a growing and diverse set of states have increasingly devoted floor time on the world stage to discuss international borders. These are not merely abstract references to “inviolable borders” or other general principles; they signify obsession with specific and concrete policy problems with very clear geospatial referents. This finding alone is important: the so-called age of globalization has demonstrably been accompanied by a discourse of border security.

The evidence suggests that concerns have shifted from the epic interstate conflicts and rivalries of the Cold War to the more local and widespread problems sovereign states face living with porous jurisdictional perimeters. The promise of the UN Charter – that peace and security can be realized through states’ mutual recognition of sovereign and inviolable territorial jurisdiction – has not put anxieties fully to rest. Even though states have agreed to formal treaties for some 90% of their shared borders, mentions of borders are on the rise, and sentiments have recently trended negative. An analysis of the content of official discourse points to a fairly clear reason: while the salience of interstate border threats appear to wane, challenges from a host of non-state agents and forces are believed to be on the rise. These perceptions help explain why the Security Council’s business is less and less concerned with “legitimate borders” and has recently

– for the first time – obligated sovereign members states to secure, control and manage their borders under Chapter VII of the Charter; that is, in the name of international peace and security.

These findings should prod a reorientation in border research among scholars of international relations. We suggest a research agenda that complements and moves beyond the comforting symbols of security – territorial settlement, conclusion of formal border treaties, legalized interstate arbitration (Huth, et al. 2011, Owsiak 2012, Schultz 2014) – to the no less contentious and complex problems of *policing* (Andreas 2003) and *management* (Andrijasevic and Walters 2010). This is a complex and ongoing problem that will clearly engage domestic as well as international audiences. We need to develop new approaches to research that embraces the range of concerns states and societies attached to international borders. International relations research should develop mid-range theories for the complex threats to sovereignty and security that are increasingly being voiced in the uncertain post-Cold War climate. As economies have integrated and humanity has become far more mobile (often involuntarily), interstate relations will increasingly be about the control of non-state actors and activities. For while it is clear that borders delineate states, they also create incentives and opportunities for nonstate actors to challenge state authority. These challenges are now firmly nearing the top of the security agenda for much of the international society of states.

This focus on global official discourse is meant to stimulate thinking about states' publicly expressed priorities and concerns. By no means have we exhausted the possibilities for exposing these concerns, but at least we have mined a corpus representing the broadest possible range of views. Once every year, state representative have a right to speak to the rest of the world about their priorities, concerns and aspirations. The record of these speeches is a trove of data on global sentiments ready for researchers to analyze. Features like location mentions, sentiment, and content all point to policy relevant attitudes. Examining patterns within these features offers insights into state anxieties about their security environment. Clearly, this research strategy should be complemented with a variety of data using different tools and approaches. But we believe that systematic textual discourse of positions taken on the world stage offers a promising direction. International relations research should redouble its effort to address evolving anxieties of states and societies in this complex and uncertain global environment.

## Appendix A: Mechanical Turk Sentiment Model

As mentioned in-text, we use a supervised machine learning approach to predict sentiment values for each document in our dataset. In this Appendix, we provide details on feature engineering, feature selection, and modeling choices used in this model.

### *Feature extraction*

We use two types of features in our models. First, for each document, we extract unsupervised sentiment values using four off-the-shelf methods:

- [\*Google AI sentiment predictor\*](#). The Google AI API provides a pre-trained sentiment classifier. Given a document, the API returns a “sentiment” score and a “magnitude” score. Roughly, the “sentiment” score corresponds to the average sentiment of a given document, while the “magnitude” score corresponds to the frequency of “emotional” content in the document.
- [\*Bing, Loughran, and NRC sentiment dictionaries\*](#). Like most sentiment dictionaries, each of these dictionaries contains an expert-compiled list of words coded as “positive” or “negative” sentiment. For each dictionary, we counted all terms coded by that dictionary as positive or negative. We then combined these scores into a single value by calculating a normalized difference in counts, defined as  $diff = \frac{pos - neg}{pos + neg}$ .

As mentioned in-text, because of the challenges involved in analyzing diplomatic language, we do not expect existing sentiment dictionaries and prediction algorithms to perform well in our application. However, we do expect these features to be at least somewhat related to our sentiment conceptualization. As a result, these features offer a reasonable starting place in the feature extraction process.

Second, we created an aggregated word embedding vector for each document. As mentioned in-text, an embedding model is essentially an unsupervised dimensionality reduction tool, which converts a given word into a high-dimensional vector representation designed to represent the semantics of that word. For example, a particular element of an embedding vector might correspond to the “gender” of a word (e.g. “king” vs “queen”), or the “emotional” content of that word (e.g. “enraged” versus “concerned”). To capture a wide variety of semantic dimensions, embedding vectors are usually high-dimensional (50+ elements). However, when aggregated to the document level, high-dimensional word embedding methods are substantially lower-dimensional and denser than word-count matrices or other feature engineering methods designed to represent document content. Since we have a relatively small training set ( $n = 589$ ), these latter two features are particularly attractive during model fitting.

To generate an embedding vector for each individual token, we draw on pre-trained 50-dimensional [\*GloVe embeddings\*](#), trained using the Wikipedia 2014 and Gigaword 5 corpora. For each word in each document, we extracted an embedding vector, and averaged the vectors pre-trained for each individual word in a given document. This process provided us with a 50-dimensional embedding vector for each document, which we used as an additional set of features in our downstream prediction model.

### *Model selection*

Using these feature sets, we experimented with five modeling approaches: namely, a simple linear regression, a lasso-, ridge-, and elastic net-penalized linear model,<sup>30</sup> and a random forest.<sup>31</sup> For each approach, we trained model versions with dictionary features only, and both dictionary and embedding features, leaving us with a total of ten candidate models. For each modeling variant, we assessed out-of-sample RMSE and correlation via ten-fold cross-validation.

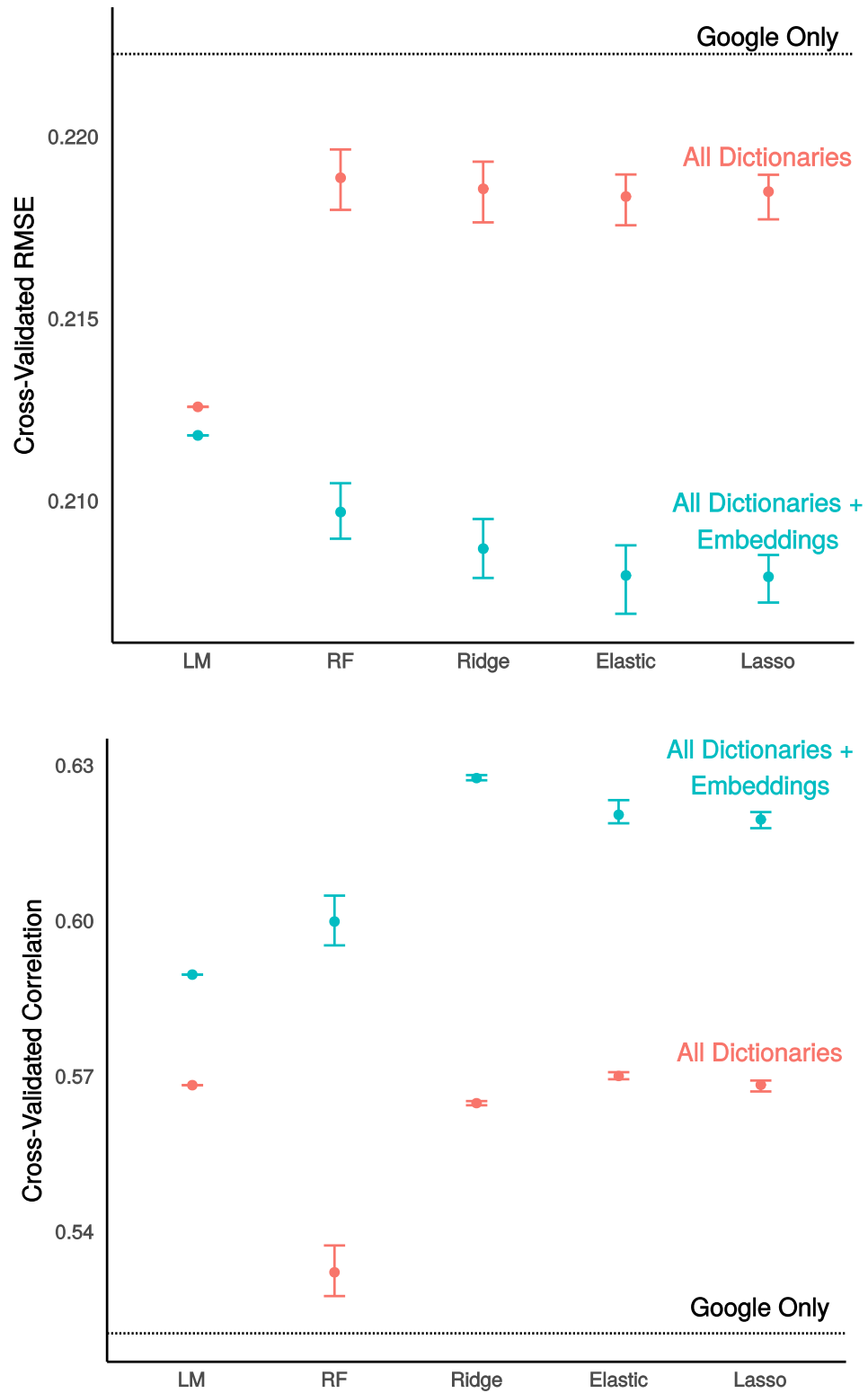
The results of this process are given in Figure A1. All approaches out-perform a baseline generated using the Google AI sentiment score, which was the best-performing of the unsupervised methods we examined. Models trained using both dictionary and embedding features performed best, suggesting that both feature sets indeed added to predictive performance. By contrast, choice of model mattered less, with the three penalized models slightly out-performing the linear model and random forest.

Based on these findings, for our analyses in-text we opted to use scores generated using the ridge-penalized linear model, with both dictionary and embedding features included. This approach offers a noticeable – though modest - performance gain over the unsupervised baseline, with approximately a 10% reduction in out-of-sample RMSE and an increase from approximately 0.51 to 0.63 out-of-sample correlation moving from the unsupervised Google AI sentiment scores to ridge-penalized model.

---

<sup>30</sup> With mixing parameter equal to 0.5 and lambda selected by cross-validation.

<sup>31</sup> With 500 trees and the number of candidate variables at each split selected by cross-validation within the training set.



**Figure A1: Cross-validated RMSE and correlation.** Dots represent average cross-validated performance over 20 iterations, while lines represent 2.5<sup>th</sup> and 97.5<sup>th</sup> percentiles. Baseline is the Google AI sentiment algorithm.



## Works Cited:

- Abramson, Scott F, and David B Carter. 2016. "The Historical Origins of Territorial Disputes." *American Political Science Review* 110:(4): 675-98.
- Adamson, Fiona B. 2006. "Crossing Borders: International Migration and National Security." *International Security* 31:(1): 165-99.
- Agnew, John A, and Joanne R Sharp. 2016. "America, Frontier Nation: From Abstract Space to Worldly Place." In *American Space/American Place*: Routledge. 91-119.
- Andreas, Peter. 2003. "Redrawing the Line: Borders and Security in the Twenty-First Century." *International Security* 28:(2): 78-111.
- Andreas, Peter, and Thomas J Biersteker. 2014. *The Rebordering of North America: Integration and Exclusion in a New Security Context*: Routledge.
- Andrijasevic, Rutvica, and William Walters. 2010. "The International Organization for Migration and the International Government of Borders." *Environment and Planning D: Society and Space* 28:(6): 977-99.
- Atzili, Boaz. 2012. *Good Fences, Bad Neighbors : Border Fixity and International Conflict*. Chicago: University of Chicago Press.
- Atzili, Boaz, and Burak Kadercan. 2017. "Territorial Designs and International Politics: The Diverging Constitution of Space and Boundaries." *Territory, Politics, Governance* 5:(2): 115-30.
- Baturo, Alexander, Niheer Dasandi, and Slava J Mikhaylov. 2017. "Understanding State Preferences with Text as Data: Introducing the Un General Debate Corpus." *Research & Politics* 4:(2): 2053168017712821.
- Bearce, David H, and Stacy Bondanella. 2007. "Intergovernmental Organizations, Socialization, and Member-State Interest Convergence." *International Organization* 61:(4): 703-33.
- Binder, Martin, and Monika Heupel. 2015. "The Legitimacy of the Un Security Council: Evidence from Recent General Assembly Debates." *International Studies Quarterly* 59:(2): 238-50.
- Brown, Wendy. 2010. *Walled States, Waning Sovereignty*. New York : Cambridge, Mass.: New York : Zone Books.
- Buhaug, Halvard, and Scott Gates. 2002. "The Geography of Civil War." *Journal of Peace Research* 39:(4): 417-33.
- Burhanudeen, Hafriza. 2006. "Diplomatic Language: An Insight from Speeches Used in International Diplomacy." *Akademika* 67:(1).
- Carlson, David, and Jacob M Montgomery. 2017. "A Pairwise Comparison Framework for Fast, Flexible, and Reliable Human Coding of Political Texts." *American Political Science Review* 111:(4): 835-43.
- Carter, David B., and H. E. Goemans. 2011. "The Making of the Territorial Order: New Borders and the Emergence of Interstate Conflict." *International Organization* 65:(02): 275-309.
- Chelotti, Nicola, Niheer Dasandi, and Slava Jankin Mikhaylov. 2018. "Do Intergovernmental Organizations Have a Socialization Effect on Member State Preferences? Evidence from the Un General Debate." *SocArXiv*. November 1.
- Claude, Inis L. 1966. "Collective Legitimization as a Political Function of the United Nations." *International Organization* 20:(3): 367-79.
- Clay, K. Chad , and Andrew P Owsiak. 2016. "The Diffusion of International Border Agreements." *The Journal of Politics* 78:(2): 427-42.
- Colantone, Italo, and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science* 62:(4): 936-53.

- De Boef, Suzanna, and Paul M Kellstedt. 2004. "The Political (and Economic) Origins of Consumer Confidence." *American Journal of Political Science* 48:(4): 633-49.
- Fasulo, Linda M. 2015. *An Insider's Guide to the Un*: Yale University Press.
- Fearon, James D. 2017. "Civil War & the Current International System." *Dædalus* 146:(4): 18-32.
- Frederick, Bryan A, Paul R Hensel, and Christopher Macaulay. 2017. "The Issue Correlates of War Territorial Claims Data, 1816–20011." *Journal of Peace Research* 54:(1): 99-108.
- Friedberg, Aaron L. 1993. "Ripe for Rivalry: Prospects for Peace in a Multipolar Asia." *International Security* 18:(3): 5-33.
- Gleditsch, Kristian Skrede, Idean Salehyan, and Kenneth Schultz. 2008. "Fighting at Home, Fighting Abroad: How Civil Wars Lead to International Disputes." *Journal of Conflict Resolution* 52:(4): 479-506.
- Gurciullo, Stefano, and Slava Mikhaylov. 2017a. "Topology Analysis of International Networks Based on Debates in the United Nations." *arXiv preprint arXiv:1707.09491*.
- Gurciullo, Stefano, and Slava J Mikhaylov. 2017b. "Detecting Policy Preferences and Dynamics in the Un General Debate with Neural Word Embeddings." Paper presented at the 2017 International Conference on the Frontiers and Advances in Data Science (FADS).
- Häge, Frank, and Simon Hug. 2016. "Consensus Decisions and Similarity Measures in International Organizations." *International Interactions* 42:(3): 503-29.
- Hearst, Marti A. 1997. "Texttiling: Segmenting Text into Multi-Paragraph Subtopic Passages." *Computational linguistics* 23:(1): 33-64.
- Hecht, Catherine. 2016. "The Shifting Saliency of Democratic Governance: Evidence from the United Nations General Assembly General Debates." *Review of International Studies* 42:(5): 915-38.
- Hurrell, Andrew. 2003. "International Law and the Making and Unmaking of Boundaries." In *States, Nations and Borders: The Ethics of Making Boundaries*, eds. Allen Buchanan and Margaret Moore. Cambridge: Cambridge University Press. 275-97.
- Huth, Paul K, Sarah E Croco, and Benjamin J Appel. 2011. "Does International Law Promote the Peaceful Settlement of International Disputes? Evidence from the Study of Territorial Conflicts since 1945." *American Political Science Review* 105:(02): 415-36.
- Huysmans, Jef. 2006. *The Politics of Insecurity: Fear, Migration and Asylum in the Eu*: Routledge.
- Ikenberry, G. John. 2011. *Liberal Leviathan : The Origins, Crisis, and Transformation of the American World Order*, Princeton Studies in International History and Politics. Princeton, N.J.: Princeton University Press.
- Jönsson, Christer, and Karin Aggestam. 1999. "Trends in Diplomatic Signalling." In *Innovation in Diplomatic Practice*: Springer. 151-70.
- Kentikelenis, Alexander, and Erik Voeten. 2018. "Exit, Voice, and Loyalty Towards Liberal International Institutions: Evidence from United Nations Speeches 1970-2017."
- Kinnvall, Catarina, and Ted Svensson, eds. 2015. *Governing Borders and Security : The Politics of Connectivity and Dispersal*: Routledge.
- Krauthammer, Charles. 1990. "The Unipolar Moment." *Foreign Aff.* 7023.
- Lee, Hoon, and Sara McLaughlin Mitchell. 2012. "Foreign Direct Investment and Territorial Disputes." *Journal of Conflict Resolution* 56:(4): 675-703.
- Leeds, Ashley Brett. 2003. "Alliance Reliability in Times of War: Explaining State Decisions to Violate Treaties." *International Organization* 57:(4): 801-27.
- Li, Jiwei, and Eduard Hovy. 2017. "Reflections on Sentiment/Opinion Analysis." In *A Practical Guide to Sentiment Analysis*: Springer. 41-59.
- Luard, Evan. 1994. *The United Nations: How It Works and What It Does*. New York: St: Martin's Press.
- Mearsheimer, John J. 1990. "Back to the Future: Instability in Europe after the Cold War." *International Security* 15:(1): 5-56.

- Nicholas, Herbert George. 1971. *The United Nations as a Political Institution*. Vol. 105: Oxford University Press.
- Owsiak, Andrew P. 2012. "Signing up for Peace: International Boundary Agreements, Democracy, and Militarized Interstate Conflict1." *International Studies Quarterly* 56:(1): 51-66.
- Owsiak, Andrew P., Allison K. Cuttner, and Brent Buck. 2018. "The International Border Agreements Dataset." *Conflict Management and Peace Science* 35:(5): 559-76.
- Pomeroy, Caleb, Niheer Dasandi, and Slava Jankin Mikhaylov. 2018. "Multiplex Communities and the Emergence of International Conflict." *arXiv preprint arXiv:1806.00615*.
- Posen, Barry R. 2017. "Civil Wars & the Structure of World Power." *Dædalus* 146:(4): 167-79.
- Prorok, Alyssa K, and Paul K Huth. 2014. "International Law and the Consolidation of Peace Following Territorial Changes." *The Journal of Politics* 77:(1): 161-74.
- Salehyan, Idean. 2009. *Rebels without Borders: Transnational Insurgencies in World Politics*: Cornell University Press.
- Satow, Ernest Mason. 2009. *Satow's Diplomatic Practice*: Oxford University Press, USA.
- Schultz, Kenneth A. 2015. "Borders, Conflict, and Trade." *Annual Review of Political Science* 18:125-45.
- . 2014. "What's in a Claim? De Jure Versus De Facto Borders in Interstate Territorial Disputes." *Journal of Conflict Resolution* 58:(6): 1059-84.
- Simmons, Beth A. 2019. "Border Rules." *International Studies Review* 21:(2): 256-83.
- Simmons, Beth A, and Michael Kenwick. 2019. "Border Orientation in a Globalizing World: Concept and Measurement." Paper presented at the Conference on International Borders in a Globalizing World, University of Pennsylvania.
- Simmons, Beth A, Paulette Lloyd, and Brandon M Stewart. 2018. "The Global Diffusion of Law: Transnational Crime and the Case of Human Trafficking." *International Organization* 72:(spring): 249–81.
- Simmons, Beth A. 2005. "Rules over Real Estate: Trade, Territorial Conflict, and International Borders as Institutions." *Journal of Conflict Resolution* 49:(6): 823-48.
- Stumpf, Juliet. 2006. "The the Crimmigration Crisis: Immigrants, Crime, and Sovereign Power." *Am. UL Rev.* 56:367.
- Taninchev, Stacy Bondanella. 2015. "Intergovernmental Organizations, Interaction, and Member State Interest Convergence." *International Interactions* 41:(1): 133-57.
- Vallet, Élisabeth, and Charles-Philippe David. 2012. "Introduction: The (Re)Building of the Wall in International Relations." *Journal of Borderlands Studies* 27:(2): 111-19.
- van Neuss, Leif. 2018. "Globalization and Deindustrialization in Advanced Countries." *Structural Change and Economic Dynamics* 45:49-63.
- Van Schendel, Willem, and Itty Abraham. 2005. *Illicit Flows and Criminal Things: States, Borders, and the Other Side of Globalization*: Indiana University Press.
- Wilson, Thomas M., and Hastings Donnan, eds. 1998. *Border Identities : Nation and State at International Frontiers*. Cambridge: Cambridge University Press.
- Young, Lori, and Stuart Soroka. 2012. "Affective News: The Automated Coding of Sentiment in Political Texts." *Political Communication* 29:(2): 205-31.
- Zacher, Mark. 2001. "The Territorial Integrity Norm: International Boundaries and the Use of Force." *International Organization* 55:(2): 215-50.