

The textual dynamics of international policymaking: A new corpus of UN resolutions, 1946-2018

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Abstract

We introduce a new dataset of all United Nations Security Council (UNSC) and United Nations General Assembly (UNGA) resolutions passed from 1946-2018, as well as machine-learning based measures of their references to other resolutions, textual alignment, and topics. We suggest applications of this data for a variety of questions in international relations from the development of international law to the influence of state power in international organizations. We illustrate the utility of this dataset by investigating why policymakers employ references in the drafting of legal documents, and how the inclusion of these references affect political outcomes. We draw on theories of international law-making to argue that these references, by signaling ideological consistency with a states' foreign policy goals, serves as a strategy to obtain support for resolutions. We find that the inclusion of references does increase political support for resolutions, using our measure of textual alignment to hold resolution text constant while isolating variation in the inclusion of references. We find that even accounting for foreign aid flows as a canonical alternative explanation of vote choice, reference dynamics are an important predictor of state support for resolutions.

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Introduction

To shed light onto the dynamics of policymaking and politics in multilateral legislative settings, we construct a novel dataset of all 17,324 resolutions adopted by the United Nations General Assembly (UNGA) and the United Nations Security Council (UNSC) from 1946-2018. While individual resolution texts are available for public access, we process these texts to create a functional corpus that allows researchers to access all resolutions at once. In addition to constructing this corpus, we extract several key features—references, topics, and similarity—that researchers can use to address important questions in international policymaking and cooperation. From the resolution corpus, we extract 132,881 references to UN resolutions, construct measures of textual similarity between resolutions, and identify resolutions by topic areas.

By examining features of legal texts in the multi-issue context of the UN and leveraging differences between sub-institutional units, scholars can examine the effects of these features on the development and adoption of law and expand, as well as how political dynamics of multilateral negotiations between state actors affect policymaking. Our data contribution will enable future scholars to address a variety of questions about legislative practices in international organizations (IOs) and intervene into important debates in the field, such as how the design of international law affects compliance (e.g. [Johns 2015](#)), how power influences the creation of law (e.g. [Krasner 1991](#)), and how rational actors design international law (e.g. [Rosendorff and Milner 2001](#)).

While we suggest that insights drawn from this corpus can illuminate dynamics in international policymaking and negotiation dynamics generally, our data collection focuses on the the UN. We contend that the this UN-specific data is an important contribution for several reasons, all of which facilitate robust empirical tests of theoretical questions in international relations and international law. First, the UN is a robust data source, allowing for fine-grained empirical analysis. States engage in repeated interaction year after year in the same institutional environment, which creates opportunities for the analysis of changes in legislative practices and protocols. Further, the UN is a multi-issue forum, which provides an opportunity to examine variation in such legislative practices

across issue areas.

Second, the matters that the UN addresses in its resolutions are of substantive importance. The UNSC is unique among IOs in its ability to compel state action through hard law, and to authorize the use of force. The UNSC develops international law through its declarative, interpretive, promotive, and enforcement functions (von Einsiedel, Malone, and Ugarte 2015). While resolutions adopted by the UNGA do not constitute hard law, they recognize international norms, call for the development of legally binding treaties, allocate development aid, set institutional priorities across a variety of topics. Resolutions of both the UNSC and UNGA are influential in other institutional contexts (e.g., Öberg 2005). States, therefore, have substantial incentives to invest time and political capital in negotiating both types of resolutions.

Third, insights drawn from studies of UN politics and policymaking are expected to be generalizable to other contexts of interest to scholars of international relations. The UN, as one of the most prominent IOs, is likely to be a source of diffusion for other IOs through socialization, emulation, networks of bureaucrats, and learning (e.g., Lenz 2012; Johnson 2013; Sommerer and Tallberg 2019). Other data drawn from the UN context—including voting records (Bailey, Strezhnev, and Voeten 2017) and diplomatic speeches (Baturu, Dasandi, and Mikhaylov 2017)—have been widely and fruitfully applied to a variety of research questions in international relations. This dataset substantially extends the time period covered by previous studies of UN resolution texts, allows for the first comparison of UNGA and UNSC activity, and makes the text and its key features available for large scale analysis.

To illustrate the utility of the resolutions corpus, we probe the question of why negotiators in IOs employ references when drafting legal texts. Previous scholarship has examined the impact of citations in a variety of international judicial settings (e.g. Voeten 2010; Charlotin 2017). Yet, multilateral legislative institutions are a vastly different context. Unlike international judges, diplomatic negotiators must cultivate direct political support—i.e., sponsorship and votes—for their proposals. Does the inclusion of references matter for political outcomes? External political considerations alone are not sufficient

to explain variation in states' likelihood of supporting resolutions: we must also account for differences in the substantive content and legal design of resolutions.

We argue that references are a political tool used by negotiators in the UN to develop support for resolution proposals. Using our measure of textual similarity, we can compare resolution texts that are otherwise identical to isolate the effects of the inclusion of additional references. We show systematically that across resolutions that are otherwise substantively identical, countries are more likely to sponsor and vote in favor of a resolution if it cites one or more resolutions sponsored by that country or by its allies, even after accounting for an important alternative explanation: foreign aid allocation. These findings have implications for the role of power in the politics of IOs, demonstrating that legal tools—such as strategic use of references—can gain support for policies even after accounting for external political considerations like foreign aid payments.

UN resolution corpus

The quantitative analysis of legal texts in previous work has primarily relied on manual hand-coding. Though studies based on hand-coding have produced valuable insights, such methods are labor-intensive. Relying on manual coding limits the number of agreements that can be examined by researchers, or forces the researcher to simplify their measure to one that can be more objectively and quickly evaluated. The development of text-as-data methodologies and their increasing popularity in political science applications presents an opportunity to broaden the horizon of quantitative analysis of legal instruments (Alschner 2019; Allee and Elsig 2019). We apply these methodologies to examine variation in legislative practices on a large scale at the UN.

Data collection

We constructed an original corpus consisting of all UNGA and UNSC resolutions passed since the establishment of the UN. These data are summarized in Table 1. Our data collection work proceeded as follows. First, we scraped all UNGA and UNSC res-

olutions posted on their respective official websites.¹ These resolutions—one of the key legislative outputs of the UN—are negotiated principally by state representatives at the UN, in consultation with officials in state capitals and the UN Secretariat (Smith 2006). The negotiation process encompasses both formal meetings of all member states and informal meetings, which are often based on regional groupings.

Second, since older resolutions are posted as scanned images, we then used optical character recognition (OCR) software to convert each document into a plain-text format. As shown in Figure 1, resolution formats changed substantially over time, ranging from single-column formats with one document per page, to multi-column formats with multiple documents per page, to multi-column formats with parallel French/English text. To address this challenge, we used a series of period-specific regular expressions to remove extraneous text and isolate the actual resolution from the image on each page.² This process yielded a corpus consisting of 14,993 UNGA resolutions and 2,331 UNSC resolutions, spanning the time period from 1946-2018.

Feature extraction

To study patterns of resolution drafting strategies in this corpus, we extracted three types of features from each document: references, topics, and textual similarity. We discuss our methodology for extracting each feature type, as well as their relevance for studies of international cooperation and policymaking.

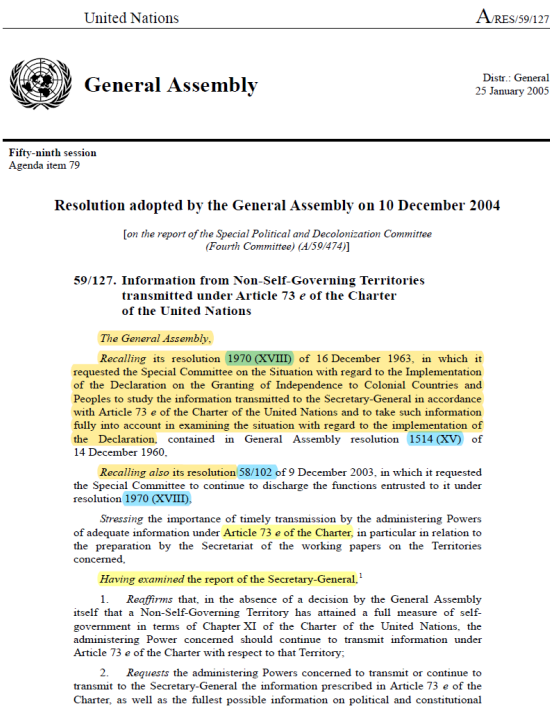
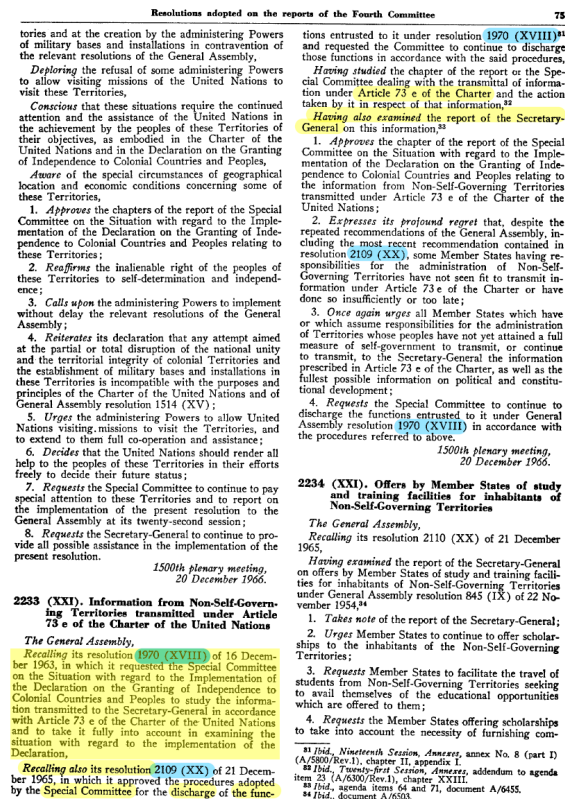
References

First, we extracted all *references* to other UNGA and UNSC resolutions from each text. These references are analogous to citations—explicit invocations of previous decisions or legal texts. Citation networks have been studied to reveal institutional practices in the World Trade Organization (e.g., Charlotin 2017), the courts of the European Union

¹See the [UNGA](#) and [UNSC](#) indices for details. We are only able to observe the final resolution texts—not earlier draft versions.

²For example, headers and footers, parallel translation text, or trailing language from other documents.

Figure 1: Examples of changing resolution formats in the UNGA.



¹ A/59/71.

Note: Sample resolutions from the UNGA, from 1966 and 2005. Alightments are highlighted in yellow/light shading, while references are highlighted in blue/dark shading.

(e.g., [Lupu and Voeten 2012](#)), and the International Court of Justice (e.g., [Alschner and Charlotin 2018](#)). Compared to international courts, though, references in international policymaking organizations like the UN are somewhat distinct. While references and citations may both serve to enhance the legitimacy of the document, illustrating its relationship to previously adopted texts, references in international policy documents do not invoke the legal weight of precedent, as do citations in international courts. We return to this distinction in our subsequent analysis of the political utility of references in UN resolutions.

References to other resolutions follow a prescribed style, invoking the title of the relevant document (e.g., “A/RES/62/215,” which refers to the 215th resolution adopted by the General Assembly in its 62nd session). Because the references follow a systematic pattern, we can employ automatic procedures to identify them, using regular expressions to extract references from each text. This process allows us to capture variations in reference formats over time (including such varied formats as “1970 (XVIII)” and “S-RES-479”). References are highlighted in blue in [Figure 1](#). We then cross-referenced this list of extracted references against a master database of resolutions for each point in time to validate the results. We also removed all self-reference, that is, occasions when the reference refers to the current resolution. This process left us with a database of 114,943 references from the UNGA and 17,938 references from the UNSC.

Topics

Second, using a structural topic model ([Roberts et al. 2014](#)), we extracted *topic proportion vectors* for each document in our corpus. Unfortunately, the UN does not provide consistent content labels for resolutions across time. As a result, we fit a topic model to the combined resolution corpus to summarize the broad themes present in our dataset.³ To label the topics produced by our model, we read the top ten highest-

³After testing several specifications to maximize semantic coherence and exclusivity, as well as manually evaluating the performance of the different models, we select a specification with 50 topics. We employ a spectral initialization and a 10 iteration burn-in period. Prevalence and content of topics are allowed

probability words and the top twenty documents with the largest proportion of their content assigned to that topic and inductively constructed topic labels. We then extracted the topic label associated with the highest-probability topic for each document, which we used as the primary content label for each document in our corpus. We normalize the number of references in each topic area by the number of resolutions in the topic area to better capture the *rate* of referencing within resolutions independent of the number of resolutions adopted.

Textual similarity

Finally, we identified instances of *textual alignment* in our corpus. Text alignment provides us a quantitative measure of how similar two resolutions are to each other. Following Linder et al. (2020), we use the topic proportion vectors we extracted previously to calculate pairwise Hellinger similarity values between the topic proportion vectors for each unique pair of documents. For each document, we identified the documents with the top 500 similarity values, and extracted maximally-aligned sequences of text—and corresponding alignment scores—using the Smith-Waterman alignment (SWAlign) algorithm.⁴ SWAlign is a sequence alignment algorithm that allows users to identify sequences of shared elements in an ordered list, with user-defined tolerances for gaps or mismatches.⁵ Finally, we weight each alignment score by the distinctiveness of the tokens contained in each alignment, to downweight common, “boilerplate” recycling (Wilkerson, Smith, and Stramp 2015). Figure 1 highlights aligned text in yellow. Alignment scores by each chamber can be seen in Table 1, and topic level alignment scores are in the Appendix, which also includes additional descriptive details about references and topics.

to vary nonlinearly over time, which is critical given that topics on the UN agenda change in prevalence over time (for example, climate change gains in prevalence over time, while colonial conflicts decline).

⁴SWAlign is preferred to standard plagiarism detection approaches because of its scalability and its ability to implement adaptively-sized editing differences between texts.

⁵Specifically, we find the optimal local alignment for each document, with alignment parameter set to 2 and mismatch/gap parameters set to -1.

Descriptive patterns

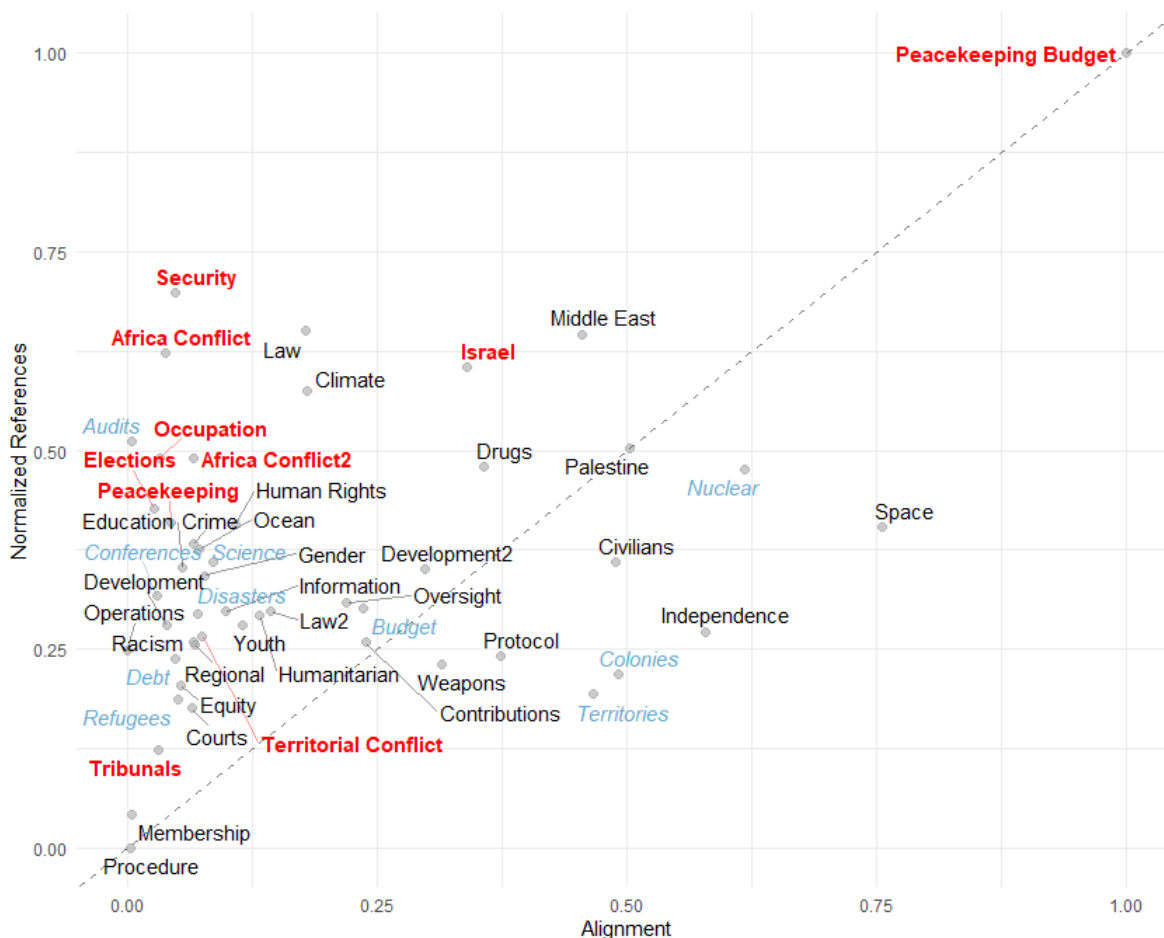
Utilizing all three of our document-level features, Figure 2 shows the rate of referencing and alignment grouped by the topic area of the more recent resolution. As this plot suggests, rates of referencing vary substantially by topic area. Specifically, we can see that topics on security-related matters—including matters such as ‘Occupation,’ ‘Conflict Africa1,’ ‘Israel,’ ‘Peacekeeping,’ and post-conflict ‘Elections’—tend to be characterized by higher rates of referencing than other topic areas. Procedural matters, including topics such as ‘Courts,’ ‘Membership,’ ‘Tribunals,’ and ‘Procedure,’ tend to be lowest in references. This finding hints at the utility of our reference measure: patterns in legislative practice may be obscured by examination of counts of resolutions alone, which are passed with roughly constant frequency across different issue areas over time.

Our topic labels also allow us to characterize agenda dynamics more broadly across the main bodies of the UN. For each chamber and each topic, we counted the number of resolutions from that chamber whose highest-probability topic label matched the given topic. We then calculated a normalized informational entropy value for these values, a standard measure of dispersion which ranges from 0 (least dispersed) to 1 (most dispersed), and then use the “effective topics” transformation, which represents the number of equiprobable topics needed to produce a given entropy value (Shaffer 2017).⁶ For the UNGA, this transformation returns a value of 41.1, indicating that UNGA resolutions are almost equally split across all topics. By contrast, UNSC resolutions contain 18.8 effective topics, indicating that a topic proportion vector containing approximately half the number of equiprobable topics would produce an equivalent entropy value to the one observed. This pattern aligns with the institutional missions of the two chambers, which mandate the UNSC to focus on a narrower set of security-related topics compared with

⁶Normalized informational entropy is defined as $H(X) = -\frac{1}{\ln(n)} \sum_{i=1}^n X_i \log(X_i)$. We observe an informational entropy value of 0.95 for UNGA resolutions, compared with an informational entropy value of 0.75 for UNSC resolutions. The “effective topics” for a topic proportion vector of length n with entropy η is $k = n^\eta$.

the UNGA’s broader orientation, and suggests that our topic labels are correctly picking up on these different agenda dynamics.

Figure 2: Alignment and references by topic area



Note: Topics indicated in red/bold are the ten topics on which the UNSC passes the most resolutions, while those indicated in blue/italics are the ten topics on which the UNGA passes the most resolutions. Normalized references and alignment at the 99th percentile are both rescaled to range 0-1.

Table 1: Key findings by chamber

	Number Resolutions	Number references	Alignment (97.5 Percentile)
Overall	17324	132881	—
UNGA	14993	114943	139.61
UNSC	2331	17938	60.57

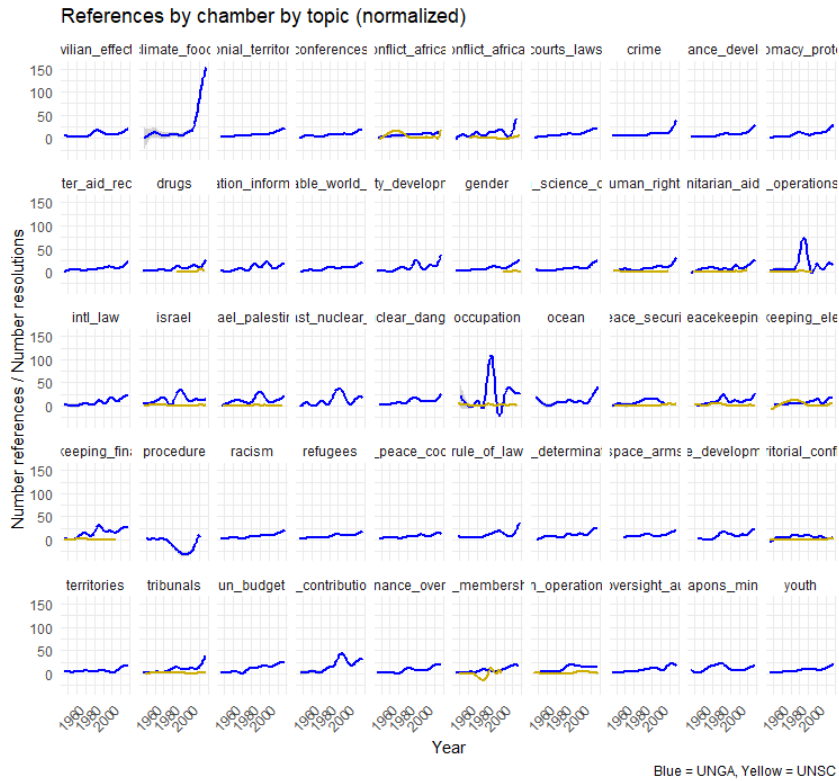
We also find that the chambers are distinct in their referencing patterns, which suggests that distinctive drafting strategies are employed depending on the topic at hand. We find that security-related topics are generally the topics with the highest rate of referencing. These topics tend to be ‘owned’ by the UNSC, by which we mean that they fall within the institutional remit of the UNSC, and are the topics on which the UNSC produces the majority of resolutions. The UNGA and the UNSC differ not only in the topical remits, but also on many other dimensions such as membership composition, norms, and voting rules. Bearing these differences in mind, we do find that while the UNSC does not employ references more than the UNGA, either in raw counts or at a per-resolution level (Table 1), the UNSC has employed more *references per resolution* consistently since 2001.

In addition to employing different referencing behaviors, we also observe that the UNGA and the UNSC are highly siloed institutions based on their legislative practices, suggesting the development of distinctive norms and patterns of behavior across chambers, following from their differences in size, rules, and agenda scope. We find that almost all referencing occurs within chamber. We calculate a ratio of in-chamber to out-chamber references, where 1 represents exclusive in-chamber referencing and -1 represents exclusive out-chamber referencing. For the UNGA, the reference ratio is 0.86, and for the UNSC is 0.98. On average, 95% of a resolution’s references are within-chamber. Noting the overall tendency towards within-chamber referencing, there is substantial variation in cross-chamber referencing and alignment across topic area. For example, on the topic of “israel”, just 70% of the average resolution’s references are within-chamber. While most topics are clearly ‘owned’ by one of the chambers, on some topics, ‘ownership’ is passed back and forth between the UNGA and the UNSC over time (Figure 3).

Illustrative example: References and political support for resolutions

Does the negotiating process of resolution writing affect countries’ support for the final product? To illustrate a use case of the resolutions corpus, we compare the impact

Figure 3: Chamber-level references on different topics over time



of references to an important alternative explanation—foreign aid. We contend that to explain state support for UN resolutions, factors such as foreign aid matter, but the qualitative element of a resolution’s content must also be taken into account. We suggest that references function as *strategic incentives for political support*. References highlight the decisions that have influenced the contemporary decision-making process, and indicate commitment to a consistent underlying ideology (Voeten 2010; Charlotin 2017, 284). For an individual state, these references can demonstrate consistency with their own foreign policy in the past. As a result, adding new references to a document signals ideological alignment with the document (and its authors) being invoked.

Referencing is not costless and not random, as scholars of international courts have noted (Lupu and Voeten 2012; Lupu and Fowler 2013; Charlotin 2017). Even in the context of the UNGA, where there are not specific legal ramifications of their inclusion, the inclusion of references requires research and argumentation, and specifically in the case of multilateral fora, convincing other parties that its inclusion is justified. Given that diplomatic negotiators are constrained by limited time and personnel resources (e.g.

Allee and Elsig 2019), references are a valuable heuristic for signaling this ideological consistency. This logic suggest that if a resolution cites resolutions that a country has previously supported, that country is more likely to support the resolution currently under consideration. These expectations also hold—although to a lesser magnitude—if the reference is to a prior resolution supported by one of that country’s allies, signaling broader ideological congruence. This implies that references not ‘cheap talk’—their inclusion is meaningful, and constrained by the effort that must be undertaken to justify their inclusion.

To isolate the effects of referencing from other potential negotiation tactics, our empirical strategy will hold constant all other features of the text, allowing us to isolate—to the extent possible—cases where identical resolutions vary *only* in the inclusion of references. This approach allows us to hold the institutional context and language of the resolution constant while we vary the number of references included in the text. For example, in December 2007, the UNGA adopted [Resolution 62/215](#) on “Oceans and the law of the sea.” The next year, it adopted a nearly identical [resolution](#), differing only in the included references. Despite the substantive similarity of the texts, the 2008 resolution obtained 9 additional votes in favor. While external negotiations or other outside factors may have contributed to the increased level of state support, we expect that such negotiations would be unlikely to influence voting through other channels, given that no other textual changes were rendered. Though imperfect, this methodology hones in to a high degree on the specific impact of references on political support.

We measure support with voting For a resolution to pass, a majority of states must vote in support, thus, there is a clear incentive for countries who seek to pass a measure to obtain additional votes in favor. As in most legislative contexts, voting decisions in the UN are strategic. These choices require countries to expend effort evaluating resolution content and consequences, and can represent a costly position-taking signal to peer nations (e.g. [Charnysh, Lloyd, and Simmons 2015](#)). We also show in the appendix that our results are robust to an alternative measure of support—sponsorship, which is another important way in which states can signal support for a resolution.

To test our theoretical expectations, we compare the relationship between references and voting among UNGA resolutions with similar content. Specifically, we first collect all pairs of resolutions with Smith-Waterman scores above a pre-specified cutoff.⁷ Because references are included in both the preambulatory and operative clauses of resolutions, we retain both in our analysis. We then calculate a difference in the *number of references* and *proportion of yes votes* among pair members. We then regress our reference difference measure on our voting measure, with fixed effects for the year of each resolution in the dataset, which controls for the number of UN members in a given year, which varies over time as membership was enlarged.

As shown in Figure 5, our results support our expectations. For document pairs with similarity values of approximately 0.8-0.9—or in other words, resolutions that are highly similar in their substantive content—documents with more references are significantly more likely to receive additional positive votes. Document pairs with similarity scores above 0.9 are rarer, which limits explanatory power. However, coefficient estimates at essentially all similarity cutoffs are positive, and coefficient estimates above 0.95—where we are most able to hold the text of the resolutions in question constant—are positive and substantively significant. In this range, we estimate that adding an additional reference to a document in the modern UN would yield approximately one additional “yes” vote.⁸

While we have demonstrated the validity of our claim that referencing affects support for resolutions generally, we seek to specifically demonstrate that a country should be expected to be more likely to vote in favor of resolutions that reference resolutions it—or its allies—have previously supported. We calculate the following statistic:

⁷The maximum Smith-Waterman alignment score for documents A and B and per-token match score of 2 is $2 * len(A) * len(B)$. For all document pairs, we normalize all documents by this maximum score, and retain documents that are above the pre-specified cutoff. We vary this cutoff in Figure 5 for robustness.

⁸We show in the Appendix that these results do not depend on the number of total references in the resolution pairs.

$$S_t = \frac{1}{n_t} \sum_i^{n_t} \frac{N_{(i,t)}(\text{vote}, \text{reference})}{N_{(i,t)}(\text{vote})} - \frac{N_{(i,t)}(\sim \text{vote}, \text{reference})}{N_{(i,t)}(\sim \text{vote})} \quad (1)$$

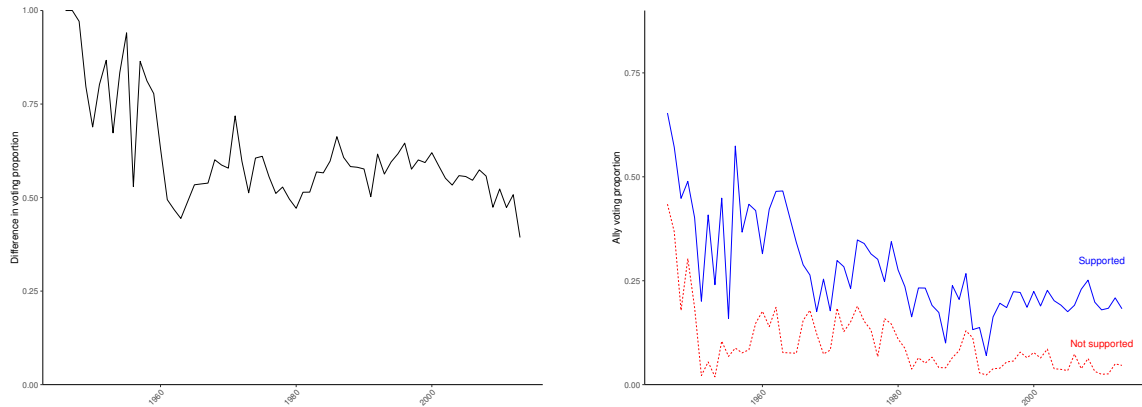
$$= \frac{1}{n_t} \sum_i^{n_t} S_{(i,t)} \quad (2)$$

$S_{(i,t)}$ represents the average difference in country i 's voting rate in year t for resolutions that reference resolutions that country previously voted for compared with those that do not. We then average this statistic average across countries and years. This statistic therefore represents the difference in country i 's referencing rate for resolutions that i voted for versus those it did not, averaged across year t . Our results align with our expectations: countries are approximately 50-75 percentage points more likely to vote for resolutions that reference resolutions that country had previously voted for, compared with those that do not (see Figure 4, left panel). We conduct a similar comparison of ally referencing and voting patterns, and find that resolutions a country votes for are more likely to reference resolutions favored by a higher proportion of that country's allies compared with those resolutions that a country does not vote for (Figure 4 (right panel)).

One prominent alternative explanation for vote choice in the UNGA is aid receipt (e.g., Carter and Stone 2015; Dreher and Sturm 2012).⁹ Plausibly, smaller states may sell their votes in exchange for material rewards from larger states, expressed through foreign aid flows. Under this scenario, we would expect states to vote in alignment with large donors. To test this possibility, we focus on the case of US foreign aid Dreher, Nunnenkamp, and Thiele (2008). In particular, we focus on resolutions on which the US voted *yes*, and our dependent variable is the percentage of resolutions on which a given country voted yes in a given year. This comparison is equivalent the percentage of cases on which a given country voted in the same way as the US in a given year.

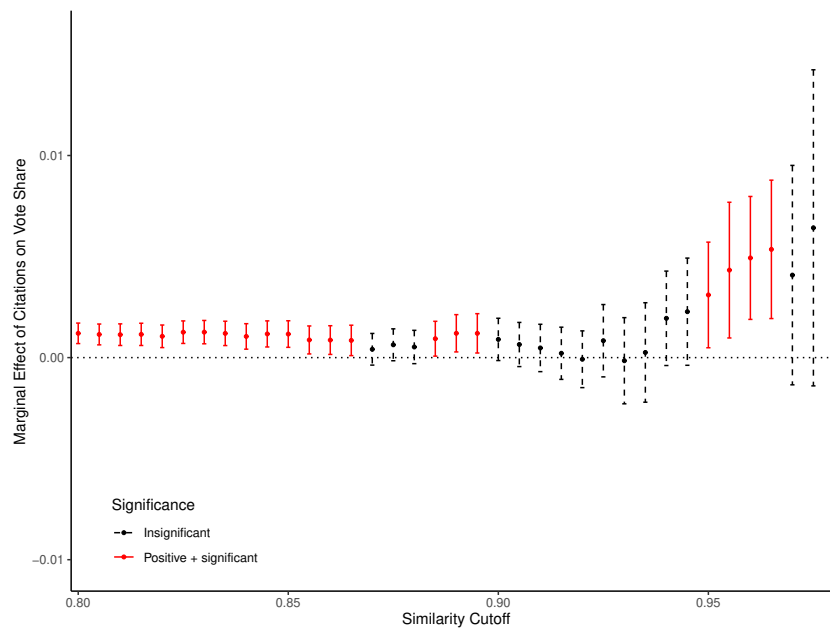
⁹Other sources of political influence, including formal alliances, military aid, regional, and developmental groups are also found to be predictors of voting similarity (e.g., Kim and Russett 1996; Voeten 2000), but given that foreign aid has been most widely examined by the literature and the exploratory nature of our proposed comparison, we limit our scope to this conventional explanation for strategies to gain resolution support.

Figure 4: Political dynamics of referencing and resolution support



Note: Difference in voting proportions among resolutions where the state is referenced vs. not-referenced (left panel) and differences in ally voting proportions, among resolutions that the state votes for ('supported') vs. does not vote for ('non-supported') (right panel)

Figure 5: Increased references increases vote share among similar resolution pairs



Note: OLS linear regression model. The dependent variable is the difference in proportion of yes votes between pairs of highly-aligned resolutions. The key predictor variable is the difference in the number of references for each resolution. Each point represents a model fit with all pairs with similarity scores above a given cutoff. Fixed effects included for the year of each resolution in the pair.

Our key predictor variable is the proportion of resolutions in the same year that reference another resolution (from any prior year) on which a given country voted yes. This variable captures the extent to which the relevant set of resolutions reference other resolutions that the country under consideration has previously supported. Our key alternative variable is the amount of foreign aid provided by the US to a given country in a given year. To model the relationship between these variables, we employ an OLS linear model, with country- and year-fixed effects included to control for unobserved time- and country-constant factors.

Table 2: Aid and vote comparison

	<i>Dependent variable:</i>
	yes
Reference Proportion	1.000* (0.010)
Aid	0.00003* (0.00001)
Constant	-0.003 (0.020)
Observations	7,612
R ²	0.761
Adjusted R ²	0.753
Residual Std. Error	0.110 (df = 7381)
F Statistic	102.032*** (df = 230; 7381)
<i>Note:</i>	*p<0.05

As shown in Table 2, both explanations are supported. However, the association between references and vote choice is particularly potent. In a year in which 100% of the resolutions under consideration referenced a resolution on which a country had previously voted yes, we would predict that a country would vote in the affirmative on *all* of those resolutions, even if that country received no foreign aid from the United States. As a result, though both aid and references likely affect vote choice, alignment with resolutions that a country previously supported appears to be a particularly important determinant

of vote choice in the UNGA. This finding suggests that while power does matter in UN politics, it does not determine outcomes. While only large, wealthy states have the capacity to use foreign aid as a source of leverage in obtaining support for their favored resolutions, any state regardless of size has the capacity to pursue a strategic referencing strategy. While this is far from an exhaustive test of alternative explanations for state support of UN resolutions, it does illustrate that even when considering the a prominent alternative found in existing literature, the inclusion of references is still a meaningful predictor of resolution support.

Conclusion

Our novel data contribution of resolution references and alignments in the UN offer insights that simple resolution counts cannot show. To illustrate an application of the data, we develop and test a theoretical argument about the strategic use of references to achieve political support for UN resolutions. We show that the inclusion of references in resolutions corresponds to increased levels of political support, even when the text of the resolution is held constant. Further, we demonstrate and that countries are specifically more likely to support resolutions that reference resolutions previously endorsed by themselves and their allies. Finally, we compare our theoretical logic to the conventional explanation that foreign aid flows shape UN voting behaviors, demonstrating that while foreign aid is related to voting outcomes, even controlling for this measure, the inclusion of references matters to a large degree in explaining vote choice. We show that legal strategies matter in the success of resolutions, even compared to power-based strategies like foreign aid payouts.

By applying a machine learning approach to an extensive body of international law, researchers can examine macro-level trends in legislative practice unexplored by previous work. Future work can probe a variety of questions using this data, for example, assessing whether references to resolutions sponsored by a country's neighbors or former colonial ties increases its likelihood of supporting a resolution; examining the relationships between power, geographical proximity, and patterns of drafting strategies;

and understanding the relationships between different drafting strategies—e.g. references, delegation, and dispute settlement mechanisms. These data could also shed light on other political outcomes including compliance, conflict resolution, and funding allocations.

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