

Resurgent Authoritarian Influence: New Machine-Generated, High-Frequency, Cross-National Data^{*}

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1 Introduction

The third wave of democratization in the 1980s and 1990s was accompanied by a spectacular decline in the international influence of authoritarian governments. Culminating with the collapse of the Soviet Union, the ascendancy of advanced democracies resulted in pressure on smaller and poorer countries to liberalize both their economies and their political systems. However, the last 15 years has seen the most powerful non-democracies become more autocratic and more assertive in their foreign policies (Diamond, 2020). Led primarily by China and Russia, this resurgence of authoritarian influence (RAI) has caused concern among policymakers and pro-democracy advocates that powerful authoritarian governments are undermining democracy abroad.

Attempts to investigate the incidence and nature of RAI efforts have been hampered by a lack of data. Assembling data on RAI is extremely difficult due to the sporadic, albeit widespread, nature of RAI efforts and the absence of publicly available administrative data. To date, the most comprehensive data on RAI is annual and focuses on overseas development finance. While useful, such data offers limited insight into neither the rapid pace at which RAI has expanded nor the full breadth of foreign influence activities, which span cultural, political, military, and economic spheres (Malik et al., 2021). We overcome these limitations by scraping more than 60 million daily articles published by Chinese, Russian, international, and domestic online news sources for a sample of 16 countries over 117 months, and using the latest in Natural Language Processing to identify reporting on 22 different foreign influence

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activities. We organize these 22 activities into five broad influence "themes": soft power, hard power, economic power, diplomacy and domestic interference. In doing so, we provide the first source of high-frequency, systematic data on a wide range of RAI activities and initial insights into long-term trends in RAI activities and the strategies that underpin them.

This report has three objectives. First, we briefly discuss extant work on RAI and emphasize the data constraints that have hindered research on it. Second, we introduce our new, high-frequency dataset tracking instances of foreign influence by Russia and China on civic space or civil society in low- and middle-income countries between 2012 and 2021. Third, we use these data to describe trends in RAI since 2012, including the specific tools and tactics that Russia and China use to influence target countries.

Our findings provide new nuance and insights into the foreign activities of Russia and China. The key findings are:

- With few exceptions, RAI activities have been surprisingly consistent within countries over the past 10 years. Thus, perceptions that Russia and China are newly or recently active on the international stage overstate current efforts and/or understate earlier efforts.
- The prevalence of different RAI tools varies significantly across countries.
- There are distinct patterns of RAI activities for different regions of the world and for countries with a history of tension with Russia or China.

In a forthcoming report we examine the impact of these RAI activities on civic space dynamics over time and across countries. We conclude this report with a call for further research into how various RAI tactics correspond with the geopolitical interests of Russia and China around the globe.

2 Previous Research: Resurgent Authoritarian Influence and Civic Spaces

Speculation that RAI is undermining civic space, and with it, democracy itself, has been rampant in foreign policy and international advocacy circles. These voices have often asserted that RAI's attacks on civic space, including direct (e.g. cyber attacks on foreign media) and indirect (e.g. providing material support to autocratizing governments) methods, are partly responsible for democracy's global retrenchment. Beyond the flurry of technical reports and opinion pieces, RAI activities have elicited important policy responses. For example, in 2019, the United States Agency for International Development launched the *Countering Malign Kremlin Influence Development Framework* and the \$300 million *Countering Chinese Influence Fund* and listed both among its key accomplishments for 2020.¹

Nevertheless, quantitative data on RAI and systematic research on its incidents and/or effects are rare. To date, the most comprehensive data on RAI comes from AidData. AidData provides detailed, project-level data on China's foreign aid and state financing to all low- and middle-income countries from 2000-2017 and more recently, annual event data on 10 types of diplomatic events (government visits, Confucius Institutes, exchange students, etc.) in 25

¹'USAID Key Accomplishments,' [USAID](#), January 19, 2021.

in East Asian and Pacific countries (2000-2016) and 13 South and Central Asian countries (2000-2018). Both datasets received major updates in 2021 (Custer et al., 2021).

AidData’s data on foreign aid and state financing comes from an exhaustive human review of official government sources from China and aid/finance receiving countries. For each Project identified during this review of official sources, coders seek to collect information on 70 unique characteristics, including project start and end dates, fees, terms, and implementing organizations. When possible, this includes the specific dates on which projects begin and end. This process is complemented by a systematic search of media content sourced from Factiva, a media monitoring company, to collect information on additional project details. Public diplomacy event data is compiled using a similar methodology. These data are available at the country-year level, meaning that AidData provides the number of times each event occurred in each country in each year.

As a result of data availability, the majority of research on RAI has focused on the impact of Chinese development assistance and foreign direct investment. This nascent literature has often pointed to China’s use of aid and investment as a means of obtaining political support from, and increasing the political stability of, strategically important countries (Dreher et al., 2019; Ma and Teng, 2018). Accordingly, China has pursued these objectives by strengthening incumbents with fungible economic and political resources that can be used to spur development, reward supporters, or suppress opposition (Dreher et al., 2019).

Recent work suggests that these forms of RAI have been successful in their objectives, finding that Chinese aid and investment reduces conflict in recipient countries (Gehring et al., 2019; Strange et al., 2017), increases economic growth (Dreher et al., 2021; Knutsen and Kotsadam, 2020), increases government repression (Gehring et al., 2019; Kishi and Raleigh, 2017), decreases membership in trade unions (Isaksson and Kotsadam, 2018), and undermines citizen support for democracy (Gehring et al., 2019). Yet while aid is an important tool for countries like Russia and China, RAI encompasses a broader set of policy tools that are likely deployed for different objectives, at different times, and in different places.

Beyond aid and FDI, RAI includes a variety of military/security, cultural/social, and foreign policy tools designed to provide support for, or apply pressure to, governments of countries in the developing world. For example, Russia and China (RC) spend heavily on building the security capacity of their partners through the export of military hardware^{2,3}, joint security exercises⁴, formal and informal security cooperation agreements⁵, assistance in the collection of intelligence on political opposition⁶, engaging in cyber attacks against independent sources of news and information⁷, and the transfer of surveillance technology.⁸ Alternatively, RC also deploy similar tactics to pressure target countries, including

²Andy Wrong. ‘Understanding Russia’s Foreign Policy Through International Arms Sales.’ [Wavell Room](#), April 30, 2020.

³‘How Dominant is China in the Global Arms Trade?’, [China Power](#), May 27, 2021.

⁴‘Joint military drills of Russia, Belarus to be held in March.’ [TASS](#), March 6, 2021.

⁵‘The government adopted a bill on cooperation with Russia in the fight against terrorism.’ [Insajder](#), December 17, 2020.

⁶‘Uganda and Zambia rejects Huawei spying allegations.’ [BBC](#), August 16, 2019.

⁷‘Serbia’s Independent N1 Portal Buffeted by Cyber-Attacks.’ [BalkanInsight](#), January 31, 2020.

⁸Stephen Kafeero. ‘Uganda is using Huawei’s facial recognition tech to crack down on dissent after anti-government protests.’ [Quartz Africa](#), November 27, 2020.

surveillance and cyber-attacks^{9,10}, the deployment of troops¹¹, and even the establishment of military presence in new territories.¹²

Similarly, RC promote their interests abroad using diplomatic maneuvers that boost their political allies facing domestic crises, including the issuance of statements and official visits to express support¹³, trade agreements and coordinated sanctions¹⁴, diplomatic mediation and recognition¹⁵, and the provision of emergency aid and disaster relief.¹⁶ Social and political tools are also frequently deployed to strengthen political allies and boost perceptions of authoritarian governance. RC engage in widespread efforts to strengthen ties with partner countries through the establishment of cultural centers¹⁷, social and traditional media campaigns¹⁸, the mobilization of members of their diasporas¹⁹, and interventions in domestic politics and policies.²⁰ These same tools are also used to weaken perceived adversaries or undermine public support for anti-China measures in target countries.²¹

RC use an impressive array of tools to exert influence abroad. For many of these tools, their use is deliberately covert and rarely disclosed in official government records. Furthermore, RAI tools are often deployed sporadically in response to short-term contingencies such as domestic political crises in strategically important countries, rather than on a predictable, ongoing basis.²² These characteristics have made tracking RAI extremely challenging and limited the ability of researchers to identify broader trends in or investigate the impact of these tactics.

3 Collecting and Classifying RAI and Civic Space Events

To generate data on RAI events, we track reporting on such events across a wide variety of online news sources. Specifically, we combine massive webscraping of articles published by dozens of online news sources across multiple languages, recent advances in natural language processing (NLP), and a robust quality control methodology to measure the volume of reporting on RAI events for each country over time. In doing so, we make advances over

⁹Zach Dorfman. ‘China used stolen data to expose CIA operatives in Africa and Europe.’ [Foreign Policy](#), December 21, 2020.

¹⁰Steve Holland, Doina Chiacu. ‘U.S. and allies accuse China of global hacking spree.’ [Reuters](#), July 20, 2021.

¹¹Rajesh Roy. ‘China, India Move Tens of Thousands of Troops to the Border in Largest Buildup.’ [The Wall Street Journal](#), July 2, 2021.

¹²Max Fisher. ‘Everything you need to know about the Ukraine crisis.’ [Vox](#), September 4, 2014.

¹³Maja Zuvela, Aleksandar Vasovic. ‘Beset by protests, Serb leader stages lavish reception for Putin.’ [Reuters](#), January 17, 2019.

¹⁴Yuras Karmanau. ‘Belarus, Russia announce retaliatory sanctions against EU.’ [AP](#), October 2, 2020.

¹⁵Helena Legarda. ‘China as a conflict mediator.’ [MERICS](#), August 22, 2018.

¹⁶Maxim Samorukov. ‘Ventilator Diplomacy in the Balkans.’ [Carnegie Moscow Center](#), July 8, 2020.

¹⁷‘Cultural Cooperation.’ [Embassy of the Russian Federation in the Kingdom of Cambodia](#).

¹⁸Lorne Cook. ‘EU report takes aim at Russia over vaccine fake news.’ [AP](#), April 28, 2021.

¹⁹‘Crimean Tatars not to participate in Russian presidential elections on March 18 - Chubarov.’ [Interfax Ukraine](#), March 12, 2018.

²⁰Krishna Pokharel, Eric Bellman. ‘Nepal Elections Could Set Back China’s Goals.’ [The Wall Street Journal](#), December 23, 2020.

²¹‘US security adviser claims China has taken ‘most active role’ in election meddling.’ [The Guardian](#), September 04, 2020. ‘New Zealand agonises about Chinese meddling.’ [The Economist](#), November 10, 2018. ‘Australia accuses head of Chinese group of foreign meddling.’ [The Hindu](#) November 06, 2020.

²²Siegle, Joseph. ‘Russia in Africa: Undermining Democracy through Elite Capture.’ [Democracy in Africa](#), September 23, 2021.

previous approaches to event data generation on two important fronts.

First, we collect and process larger volumes of news from a more diverse sample of sources. For the 16 countries in this analysis, we utilize data from 87 distinct news sources: 15 international, 20 regional, and 52 national (country-specific). This inclusion of sources from multiple levels is critical, as our own previous work demonstrates that international and national news sources often have very different coverage practices for events within the same country (Adiguzel et al., 2021). The choice of sources is based on two characteristics: the importance of a source in terms of its circulation and readership base, and the reliability of its online coverage over time. The data collected for each source undergoes an iterative, routinized inspection to identify and resolve any gaps in our capture of articles over time, identify and remove duplicates, or resolve errors in the processing of article content (e.g. incorrectly formatted dates) over the full sample period. For more details, please see sections 4.1 and 4.6 in our [Technical Report on the Production of Civic Space and RAI Event Count Data](#) (henceforth, Technical Report).

Second, we classify articles according to a extensive list of RAI-related events and develop models that use recent advances in natural language processing to ensure accurate, context-aware event classifications at scale. To develop this list of RAI events, we reviewed existing research and consulted with partners in civil society, the media, and the United States Agency for International Development to identify a list of 22 distinct events and behaviors that are indicative of attempts by powerful governments to exert influence over foreign countries. Please see the [Dimensions of RAI codebook](#) for a definitions of all 22 RAI event categories.

Our classification approach draws on the recent emergence of general language models based on the Transformer. Transformer models like the Bidirectional Encoder Representations from Transformers (BERT), the Generative Pre-trained Transformer (GPT), and their many variants, represent the state-of-the-art for many NLP tasks such as translation, passage summarization, and text classification (Devlin et al., 2018). These models greatly out-perform the models that are currently standard in most social scientific applications of NLP. Transformer models excel by learning the structure of human language and the context-dependent meaning of words from being trained on enormous corpora of online text. This approach lets researchers train the models on enormous amounts of text data using a semi-supervised approach before fine-tuning the base model for specific tasks. This approach, generally called ‘transfer learning’, drastically decreases the resource demands of model creation while maintaining the high-performance of the original models. We rely on a refinement of the BERT model, known as RoBERTa, by training and fine-tuning it on a corpus of double-blind, human-coded newspaper articles hand built for our purposes. The training data for the RAI models covers 3,400 articles over 22 event types. Out-of-sample accuracy of our classifier is very high, averaging 80% across civic space event categories. For additional details on classification and performance, see Section 4.4 the Technical Report.

4 Describing Russian and Chinese Influence

In this section, we explore the prevalence of RAI events across countries and correlations among RAI events within countries. We measure prevalence by summing RAI events by month and dividing by the total number of articles in a country-month to account for volatility in the overall output of many news sources. Our descriptive analysis here presents evidence about the prevalence of RAI events over time and patterns in the use of different

types of RAI tactics. Figure 1 shows the share of scraped articles reporting on RAI events for each country over time, including the average across all countries. The legend reports the average share of articles reporting on RAI event types across the full sample period for each country and the cross-national average. Interestingly, we see that the average cross-national share of articles reporting on RAI events is relatively stable over time. This is surprising given the increasing salience of RAI in United States policy discussions and suggests that, in many countries, attention to RAI has been persistent over at least the past decade.

Interestingly, we see that Ukraine and Philippines occupy the first and third highest levels of reporting on RAI events, respectively. Both countries are geographically proximate to Russia or China and have a history of tensions with their more powerful and proximate neighbor. Unsurprisingly, the large spike for Ukraine near the beginning of the time series captures reporting on Russia’s invasion of Crimea in 2014. Countries in Eastern Africa make up the remaining four of the top six countries, with countries in the rest of Sub-Saharan Africa, North Africa, Eastern Europe, and Latin America being distributed roughly evenly across the remainder of the list.

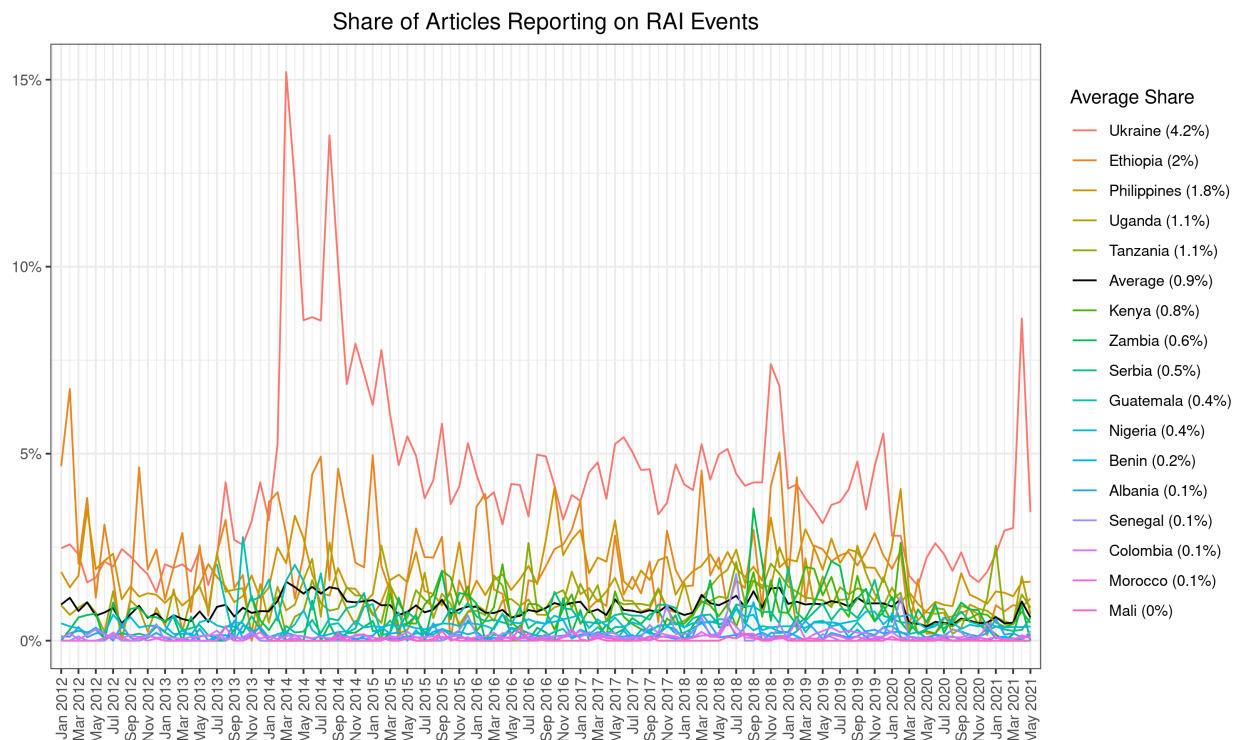


Figure 1: Share of articles reporting on RAI events relative to the total number of scraped articles for each country over time. The legend reports the average share of articles reporting on RAI event types averaging across the full sample period for each country.

To simplify analysis of how RC target different types of influence, we group RAI event categories according to several ‘themes’ that capture related events. Table 1 presents this thematic organization. These themes are designed to capture five distinct groups of tools used by RC to exert foreign influence in target countries. To summarize the variation across these themes, we calculate the share of articles reporting on all of the event categories associated with each (summing across the normalized counts).

Table 1: RAI event theme and category.

Theme	Definition	Category
Soft Power	Attempts to change attitudes or beliefs of publics or influence policy through the mobilization of citizens.	Diaspora Activation Media Campaign Cultural Activity
Hard Power	Attempts to strengthen or weaken the military capacity of or military ties with incumbent regimes.	Security Transfer Security Exercise Security Engagement Security Presence
Economic Power	Attempts to strengthen or weaken the economic capacity of or economic ties with incumbent regimes.	Aid Operation Investment Action Trade Action Trade Agreement
Diplomacy	Attempts to strengthen or weaken the diplomatic standing of or ties with incumbent regimes.	Diplomatic Engagement Diplomatic Relations Diplomatic Action Diplomatic Statement Diplomatic Visit
Domestic Interference	Attempts to directly influence the policies or capacity of incumbent regimes through non-military actions.	Intelligence Operation Policy Intervention Cyber Operation Tech Transfer

Figure 2 plots these measures of reporting on each of these themes for each country and Table 2 presents the average share for each theme across months. Economic Power is the most reported-on event across Eastern Europe (Albania, Serbia, Ukraine), Asia (Philippines), Eastern (Ethiopia, Kenya, Tanzania, Uganda) and Southern Africa (Zambia), Colombia, and Nigeria. Alternatively, Domestic Interference is most reported-on in Guatemala and Soft Power is most reported-on in the Middle East (Mali, Morocco), Benin, and Senegal.

Unsurprisingly, the use of Hard Power is most common in Ukraine, where Russia has occupied Ukrainian territory since 2014, and the Philippines, where China has repeatedly engaged in Naval patrolling of two disputed islands. Furthermore, in both countries, Hard Power and Economic Power, and to a lesser extent Diplomacy, appear to move together. However, these relationships are not constant over time. In Ukraine, where recent governments have been hostile to Russian influence, Hard Power has remained elevated at levels rivaling and often exceeding Economic Power. By contrast, Hard Power in Philippines exceeded Economic Power prior to 2016, but these two tactics reversed in prevalence after the election of Rodrigo Duterte, who has reoriented foreign policy away from cooperation with the United States and toward China.

These data suggest that RC has deployed similar strategies depending on their relationship with target countries. In Ukraine and Philippines, RC have advanced territorial interests using both Hard Power and Economic Power, adjusting the ratio in response to changes in the target country’s policies and leadership. We also see evidence for regionally specific strategies. In Africa, RC rely more exclusively on Economic Power, with Soft Power and Diplomacy also featuring more prominently. Anecdotally, it also appears that some RAI

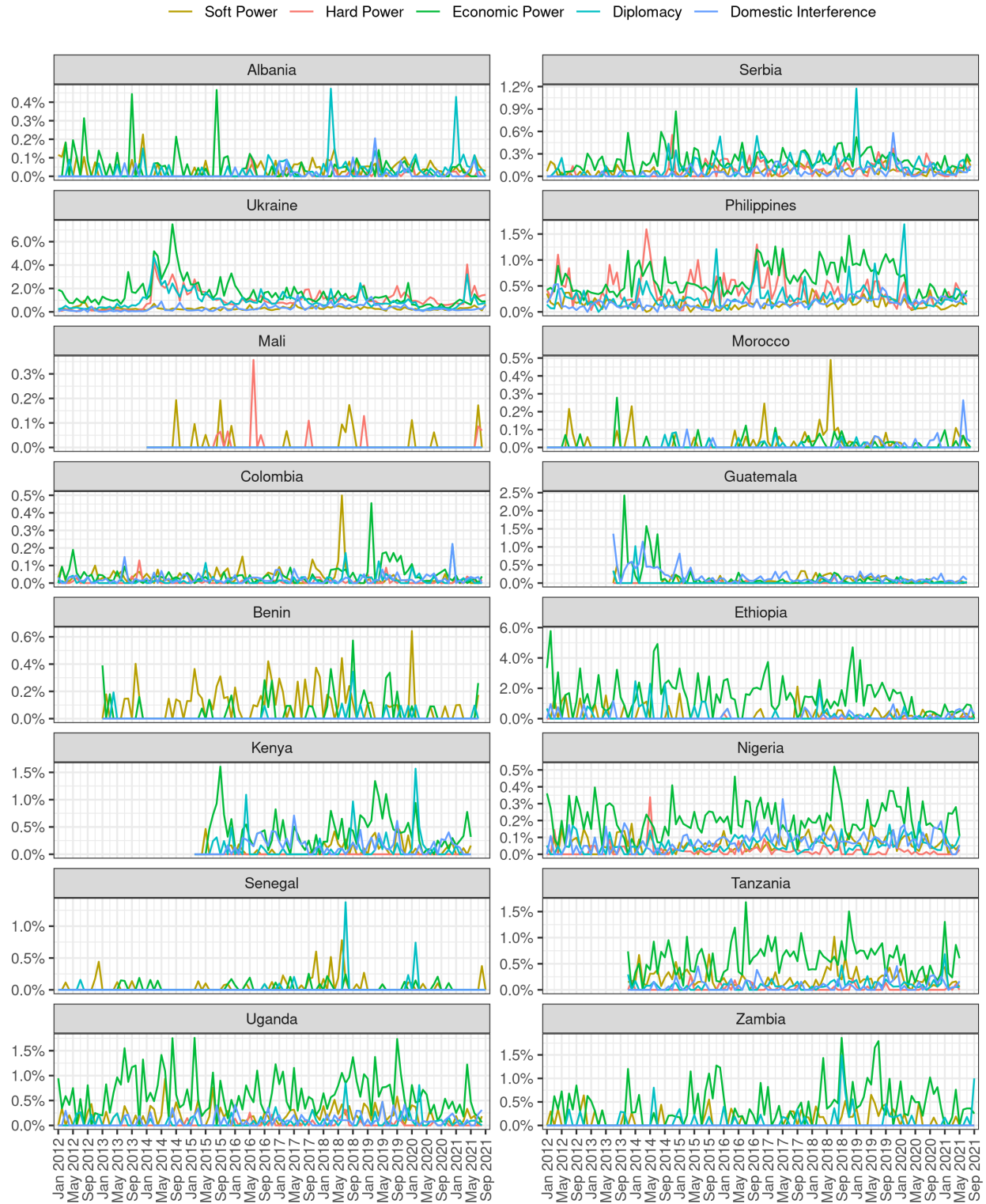


Figure 2: Share of articles reporting on each RAI event summed by theme. We discard country-months through the last month with less than 200 relevant articles due to the low number of articles in each category.

tactics increase or decrease together, suggesting that certain strategies may be seen by RC as complements.

Table 2: Share of Articles Reporting on Each Event Category

	Soft Power	Hard Power	Economic Power	Diplomacy Diplomacy	Domestic Interference
Albania	0.00037	0.00008	0.00045	0.00035	0.00011
Serbia	0.00064	0.00083	0.00208	0.00134	0.00047
Ukraine	0.00297	0.01061	0.01548	0.00974	0.00310
Philippines	0.00156	0.00398	0.00619	0.00289	0.00174
Mali	0.00016	0.00011	0.00000	0.00000	0.00000
Morocco	0.00030	0.00000	0.00018	0.00006	0.00008
Colombia	0.00035	0.00008	0.00043	0.00017	0.00023
Guatemala	0.00075	0.00008	0.00143	0.00023	0.00188
Benin	0.00099	0.00000	0.00050	0.00014	0.00000
Ethiopia	0.00245	0.00014	0.01446	0.00176	0.00116
Kenya	0.00085	0.00000	0.00396	0.00114	0.00144
Nigeria	0.00064	0.00020	0.00206	0.00054	0.00074
Senegal	0.00052	0.00000	0.00029	0.00025	0.00000
Tanzania	0.00209	0.00026	0.00584	0.00084	0.00075
Uganda	0.00181	0.00020	0.00616	0.00079	0.00089
Zambia	0.00106	0.00000	0.00408	0.00091	0.00000

To investigate the timing of these tactics more formally, we use Principal Component Analysis (PCA) to perform dimension reduction. PCA is an unsupervised learning method that linearly transforms the data to a new coordinate system while retaining patterns in the data (Lever et al., 2017). This new coordinate system is a linear combination of the original variables, with the greatest variance in the data captured by the first (principal) component while remaining variation is captured by additional orthogonal components. In addition to capturing the amount of variance in the dataset captured by a single linear component, PCA also returns the strength of each variables contribution to that principal component.²³

Figure 3 displays the proportion of total variance explained by the first component (PC1) for each country (noted in the x-axis labels), as well as each variable’s contribution to PC1. Because PCA is performed separately for each country, variation in the strength of each theme’s contribution captures the correlation of these themes within a country over time. Across nearly all countries, Economic Power and Diplomacy appear to occur simultaneously; this relationship is especially pronounced in Africa. In Ukraine and Philippines, the use of Hard Power is also positively correlated with these two themes. In Latin America, Hard Power and Soft Power are deployed at the same time, but are negatively correlated with the use of Economic Power, Domestic Interference, and Diplomacy.

In summary, we see strong evidence for distinct strategies for different countries. However, we also see interesting patterns in RC’s influence strategies within regions, such as Eastern

²³To account for the arbitrary direction of PCA, we invert PC1 and the factor loadings if PC1 is negatively correlated with the sum of the component variables.

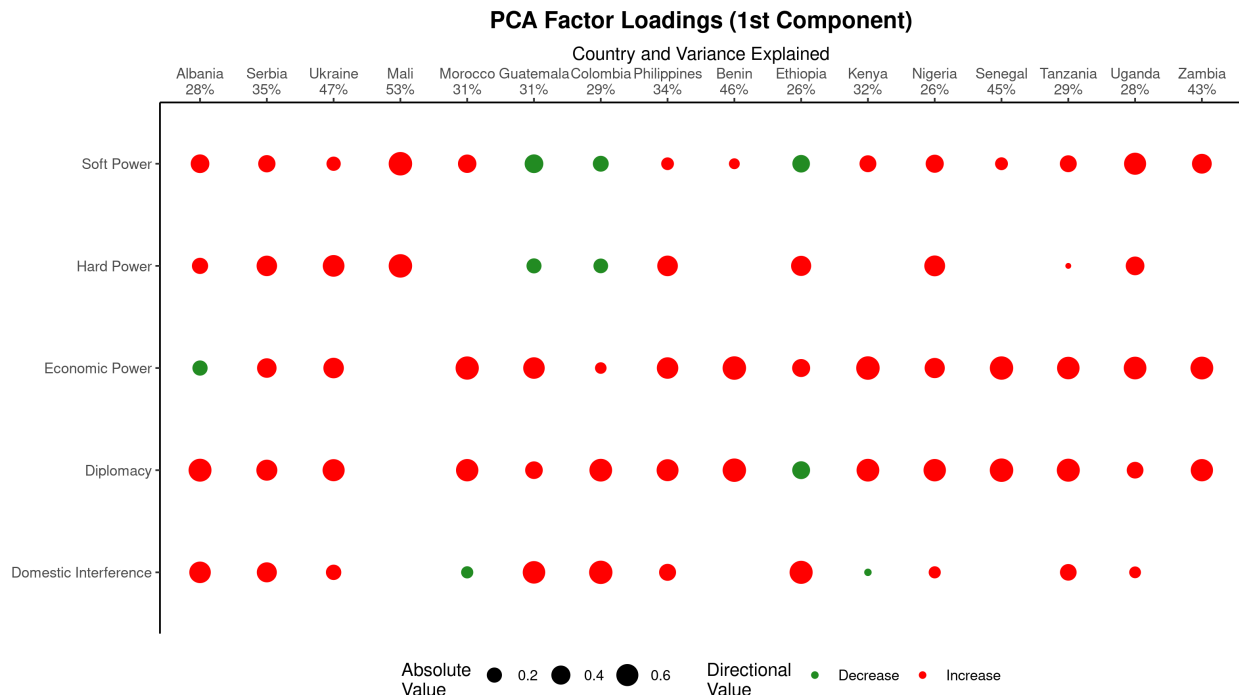


Figure 3: Contribution of each RAI event to the first dimension of Principal Components Analysis (PC1) for each country. Y-axis colors correspond to Event themes from Table 1. X-axis labels contain country names and the proportion of total variance explained by the first component.

Africa, and for neighboring countries with historically antagonistic relationships, such as Ukraine and Philippines.

5 Conclusion

We have provided a brief introduction to a new, high frequency, machine-coded dataset on Russian and Chinese and influence abroad. Our data provides unprecedented substantive and temporal detail on those RAI activities. Our initial review of the data indicates that RAI efforts have been quite consistent over the period from 2012-2021, that they vary considerably across countries, and that there seems to be patterns of foreign influence that are a product of strategic relationships between RC and the countries they seek to influence.

In future research, we will answer some challenging questions: Why do RC pursue the influence strategies they do in the places and times that they do? How do RC respond to dynamic and/or contingent events—such as elections, domestic crises, pandemics and the like—with attempts to influence developing countries? And what is the impact of different RAI strategies on civic space dynamics in countries they seek to influence?

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