

# Political Coalitions and Social Media: Evidence from Pakistan

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Social media is frequently an arena of intense competition among major political actors across the world. We argue that a fruitful way of understanding this competition is as coalitions among key actors and their networks of followers. These coalitions can both advance a shared political message and target mutual rivals. Importantly, coalitions can be tacit or explicit, and they do not necessarily depend on direct state manipulation or repression, although they often do. This makes a coalitional framework particularly valuable for studying complex political environments in which online actors blend cooperation and competition. Empirically, we show the value of this approach with novel data collection and analysis of Twitter and Facebook content from 2018–19 in Pakistan, with a focus on the dynamics leading up to and following the controversial 2018 general election. We map out networks of narrative alignment and conflict on Pakistani social media, providing important insights into the relationships among the major political parties, military, media, and dissidents. Future research can fruitfully explore the causes and effects of powerful social media coalitions.

Social media is an important arena of political competition around the world. Such competition can take a wide variety of forms: political parties battling for votes, governments seeking to silence dissidents, potential rebels and protesters attempting to coordinate against state power, and supporters of all these kinds of actors trying to boost their narratives and drown out others. In some cases, this competition involves censorship and internet shutdowns, but in others there are more subtle efforts to bolster or undermine political positions

on social media involving very complex interactions among actors.

In this article, we argue for a *coalitional approach* to studying politics on social media, which can provide important insight into “real-world” political alignments. We focus on narrative alignments in a social media ecosystem—analyzing who advances similar or opposed messages online—and the networks within which these actors are embedded. Some alignments are organic, resulting from political enthusiasm and allegiances for specific actors and messages. In other cases, online activity is an active and purposeful strategy for managing the public sphere. We can also see both types of activity simultaneously, as a strategy and as an outcome of strategies. Coalitions can advance narratives, muddy and “flood” (Roberts 2018) the social media landscape; push back against counternarratives (Brown and Pearson 2018); and send signals about support across actors (Barberá 2020; Enjolras, Steen-Johnsen, and Wollebaek 2013).

Exploring the alignment or opposition of narratives, followers, and networks on social media has several important benefits. First, it can offer distinctive insight into political contexts in which direct evidence of cooperation or conflict is difficult to observe, especially because of the scale of political activity or when actors are trying to support or attack others in an intentionally murky or tacit way.

Second, a coalitional framework allows us to see how regimes, parts of the state apparatus, media organizations, political parties, dissidents, nonstate armed groups, and

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others relate to one another as a political system. Rather than “silencing” research on disinformation efforts, online campaigning, or government and armed group influence campaigns as distinct topics, they become part of a broader context full of interaction and competition. Actors often try to build coalitions of influence with allies, influencers, friendly media personalities, and bots; therefore, focusing on just one type of actor (for instance, only studying a government or a rebel group) or one set of online activities (for instance, inauthentic coordinated behavior) may miss important strategies that extend beyond individual actors and online actions alone.

Third, this approach can provide real-time evidence of changes in political alignment that can complement other sources of information on coalitions. In political systems in which social media is actively used, shifts in who generates which narratives and in the relationships between various actors can provide insights into the underlying coalitional politics at work. Although all analyses of technology need to be embedded in knowledge of the relevant political context, the tools of social media analysis can be a valuable addition to interpreting how power is allocated and contested within a system.

These benefits of thinking about social media through a coalitional lens can extend to a wide variety of topics, from elections to authoritarian regime preservation to rebel groups’ online efforts to advance their narrative. To show the value of the coalitional approach, in this article we use social media data from a complex and contentious multiactor political environment: Pakistan in 2018 and 2019, with a focus on the run-up to and aftermath of the 2018 general election. Pakistan is variously described as a hybrid regime, “anocracy,” military-influenced democracy, “armored democracy,” and other regime adjectives.<sup>1</sup> Regardless which adjective one favors, contemporary Pakistani politics engages a wide variety of political actors who devote substantial effort to their online activities. The Pakistan Army has long been the dominant institution in the country, and since 2008 it has often operated in tense relationships with political parties. Each of the three major national parties has held office since 2008. There is also a high degree of complexity and opacity in Pakistan’s politics. Although it is widely believed that the army can tilt the political playing field toward the party or parties it prefers, and plausible pieces of evidence point to this strategy, the intentional cultivation of public ambiguity by many of these actors can create important hurdles to social science research. Moreover, there is a wide range of other potentially influential actors on social media, from media outlets to individual “influencers,” who are involved in online dynamics, so studying only the formal institutions of state and party is inadequate to grasping the broader politics at play.

We use data from Twitter and Facebook to explore the narratives and alignments across this diverse range of political actors, including political parties, the military,

antiestablishment dissidents, and their followers. By doing so, we uncover comparative patterns of narrative alignment and opposition within and across the accounts of key political actors and the networks associated with them. We find that the Pakistani military and its associated network tended to align with the Pakistan Tehreek-Insaaf (PTI) party of 2018 election winner Imran Khan and his network, whereas coordinated activity tended to feature PTI-centric rhetoric and criticism of the then-ruling party, the Pakistan Muslim League-Nawaz (PML-N). Patterns of Twitter retweets and analysis of Facebook data provide important evidence of a *de facto* coalition between the networks of the military and PTI, even during an election in which the PML-N was the incumbent ruling party. We further explore patterns of dissident online narratives, showing that they constituted their own distinct cluster but were largely drowned out by the mainstream political parties and military. At the same time, some of the expectations of our coalitional framework are not borne out, and we discuss how these can spur productive future research.

Our analysis illustrates the benefits of using a coalitional framework to understand political alignments in a country’s social media sphere around key events. This approach—focusing on narrative alignment and coordination between actors—helps uncover patterns of competition and cooperation, especially in cases where the nature of political competition is not always public or obvious and where multiple actors are interacting with one another across issues and time. Such conditions are not unique to Pakistan. The Russian invasion of Ukraine, for example, unfolded with a massive social media component—with governments, media outlets, apparent bots, and various activists and online influencers operating on Twitter, Facebook, and YouTube to shape the narratives around the war across numerous countries’ online ecosystems (Collins and Kent 2022; Grossman et al. 2022). Even in the US presidential election of 2020, mainstream domestic political actors, automated accounts, influencers, and foreign agents aligned in diverse and unobvious ways to amplify key political narratives.<sup>2</sup>

We proceed by first outlining our coalitional approach and then introducing the Pakistan case and our data collection and analysis strategy. Using these data, we explore which narratives were advanced by whom on Twitter and Facebook and how they changed over time. We conclude with implications for research on social media politics, arguing that our approach provides an opportunity to integrate several research agendas in the field.

## Conceptualizing Coalitions Online

Research on social media and politics has expanded dramatically in recent years. Scholars have rigorously studied how authoritarian regimes aim to manipulate and control the online sphere, with Saudi Arabia and China being

prominent examples (Gohdes 2020; Hobbs and Roberts 2018; Keremoglu and Weidmann 2020; King, Pan, and Roberts 2013, 2014, 2017; Munger et al. 2019; Pan and Siegel 2020; Roberts 2018). Others have examined the presence of social media “echo chambers” (or the lack thereof) and the spread of misinformation, disinformation, and online polarization (Barberá 2015; Barberá et al. 2015; 2019; Coppock, Guess, and Ternovski 2016; Guess et al. 2019; Munger et al. 2022; Tokita et al. 2021; Tucker et al. 2017). Yet others have focused on “hybrid” or autocratizing political contexts that illustrate the process of protest dynamics and the spread of tolerance or intolerance (Lynch 2011; Siegel and Badaan 2020; Siegel et al. 2021; Steinert-Threlkeld 2017). A new area of work is the study of foreign influence operations in which outside actors attempt to manipulate social media discourse within the domestic politics of other countries (Alizadeh et al. 2020; Courchesne 2021; Martin, Shapiro, and Nedashkovskaya 2019). Violence due to online mobilization is another vibrant area of research, with a focus on how armed groups try to attract recruits and possible government countermeasures (Mitts 2019; Mitts, Phillips, and Walter 2022; Müller and Schwarz 2021).

This is an extraordinarily rich research agenda. We build on it by arguing for a coalitional approach to social media politics that can shed light on how political actors align their narratives with one another, boost the messages of allies, and counter the narratives of rivals on social media platforms. Although some coalitions are explicit, others are tacit or intentionally obscured. Crucially, the content that they push online is not always directly manipulated by the state: it may reflect pro-state or anti-state sentiment or even divisions between parts of the “state.” Political competition is often multisided and multidimensional.

Table 1 presents a new conceptual map of research on social media and politics, differentiated by the nature of the actors and their interactions; it provides a way of structuring the existing literature. The table has two dimensions: elite/mass dynamics and the directionality of the interaction. Elites include public figures, government actors, the media, and other highly influential individuals, whereas the mass relates to citizens and private persons. The interaction between these actors can be uni- or multidirectional: in the former, most of the influence takes place in one direction (for example, from elites to citizens), and in the latter, actors simultaneously influence each other.

The top-left quadrant in Table 1 captures research on the relationship between elite messaging and public rhetoric on social media. It includes, for example, research on how foreign regimes may try to spread disinformation (Aral and Eckles 2019; Martin, Shapiro, and Nedashkovskaya 2019) or how insurgent groups disseminate propaganda to attract potential supporters (Mitts, Phillips, and Walter 2022). The top-right quadrant reflects work examining the multidirectional interaction between elites and citizens; it includes the large body of research on the interaction of politicians’ constituents on social media (Barberá et al. 2019; Barberá and Zeitzoff 2018; Silva and Proksch 2021) and online mobilization efforts, such as those used in mass protest (Larson et al. 2019; Steinert-Threlkeld 2017).

The bottom row focuses on elite–elite interactions on online platforms. The bottom-left cell examines cases in which relationships are unidirectional: for instance, when the state can actively censor its opponents’ political speech, as in China or Saudi Arabia’s online spheres (Hobbs and Roberts 2018; Pan and Siegel 2020). The bottom-right cell captures cases where the interaction between elites is multidirectional: parties, governments, armed groups, dissidents, media outlets, and influencers, among others, try to generate online support and drown out or marginalize their political opponents.

Our focus is on the bottom-right quadrant of Table 1: on online elite-focused competition, as reflected in online coalitions. We understand that the categories in the table are not clear-cut: all involve some mix of elite and mass online behavior. However, the distinctive attribute of the coalition dynamics we examine is that they can help capture competitive elite-driven efforts to spur—or drown out—certain political narratives. This contrasts with “top-down” direct censorship or manipulation by states, which pits a central regime against challengers. In the political world we explore, there are a variety of actors, with varying levels of alignment with both the government (and potentially its factions) and its rivals. Our approach centers less on “mass” users than does research on topics like the disinformation and prejudice that involve elite cues that spread through networks of followers or through more complex blends of leaders and followers. All this research is necessary, but our focus is on the strategic use of social media by a range of political elites who interact online in a competitive and sometimes collusive manner.

**Table 1**  
**Organizing Research on Social Media and Politics**

|                        | Unidirectional   | Multidirectional                   |
|------------------------|------------------|------------------------------------|
| Elite–mass dynamics    | Elite cues       | Leader–follower mutual interaction |
| Elites–elites dynamics | State censorship | Coalitions                         |

Specifically, we examine narrative alignments and opposition among these political players and their networks in an online media ecosystem.<sup>3</sup> Rather than straightforwardly trying to boost their own narratives, they may organically or strategically bolster the narratives of their allies (including tacit allies) while trying to swamp the narratives emerging from opposing actors. None of this media activity requires censorship or state repression (though it can operate in tandem with them); instead, online coalitions can operate in relatively freewheeling digital environments. State apparatuses, political parties, dissidents, and other actors can seek to maneuver for advantage in coalitional contexts. These coalitional politics are likely to be most important in contexts in which online space is not entirely controlled by the state, thereby putting a greater premium on crafting strategies of narrative support and “swamping” that does not rely primarily on tools of direct control.

### ***When a Coalitional Approach to Studying Social Media Is Most Appropriate***

A coalitional approach is obviously only relevant to some parts of the sprawling research agenda on social media; for instance, it is not clear what it can tell us about changes in individual-level measures of tolerance, extremism, or belief in misinformation. Such an approach is also not very useful in contexts where social media does not play a central role in political contestation, when public use of social media is relatively low, or both.

In some cases, such as cabinet and government formation in stable parliamentary democracies, identifying and studying formal coalitions is relatively straightforward. The value-added of a coalitional approach is most likely found in better specifying how these parties and leaders might relate to media outlets, online influencers, and other political actors that are not directly part of formal parliamentary politics.

Thinking about social media as involving elite-led, contending coalitions will be particularly helpful in contexts where coalitional politics are secretive, tacit, or incredibly complicated: in such cases, militaries, state factions, external states, dissidents, politicized media outlets, and insurgents may all be players, in addition to formal political parties. There can be a wide range of political actors that operate across multiple types of political engagement, from elections to assassinations, and whose relationship with one another is not necessarily public or formalized. In the Thai monarchy’s links with military factions; Iraqi party-militias’ alignments with one another, unarmed parties, and foreign states; alleged Russian backing for the 2016 Trump campaign; or the shifting coalitions underpinning tenuous governments in Chad, coalition politics can be opaque and intricate while also being enormously important.

In some of these environments, social media is irrelevant, but in a wide variety of contexts it has become an important political battleground. It is an arena for competition in fragmented political environments that intertwine “normal” electoral politics, regime manipulation and control, and dissident countermobilization, such as contemporary Pakistan, Myanmar, Iran, or Turkey. We can also see important elements of this competition in non-“hybrid” regimes. For example, in India, political parties actively battle on social media, and in the Philippines, the government, journalists, and political parties compete online (Mahtani and Cabato 2019). These are not simple clashes between ruling and opposition parties but may involve a much broader range of actors.

Coalitional dynamics can also extend beyond borders. Foreign influence operations can add to complex political interactions, as foreign actors attempt to piggyback onto existing cleavages or to split and fragment prevailing coalitional alignments (DiResta and Grossman 2021). Influence operations in the 2016 US election are a well-known example. These coalitional conflicts can stretch out across multiple political systems, as we see in the case of pro-Saudi “influencers” in the Middle East (Abrahams and Leber 2021; Barrie and Siegel 2021). Transnational militant groups and other networks can also attempt to shape social media ecosystems across multiple states. Rather than thinking of any of these as distinct strategies or actors unto themselves, we can fold them into a coalitional framework to see how they align or clash with a variety of other actors.

We do not claim that these online coalitional politics straightforwardly map onto the other manifestations of politics; rather, we can gain insights into these politics from how actors and their followers interact online. We often see actors put substantial effort and resources into online competition, whether in formal government efforts to manage and monitor social media, political parties deploying armies of bots and trolls, or dissidents trying to cultivate an internet following. All these situations suggest that politics online is not entirely orthogonal or irrelevant to real-life politics.

### ***Narrative Alignment and Coordination***

In this article, we focus on *narrative alignment* and *coordination* as specific and measurable ways to study online coalitional politics. These alignments are constituted by different combinations of actors, topics, sentiments, and engagement patterns. These four components are central to existing social media analysis, but we suggest that they can be “bundled” in ways that provide interesting new insights. Observing actors and their associated networks of followers advancing similar messages, and in some cases actively boosting the narratives of other actors/networks, can be an important clue into strategies and allegiances in a political system. This analysis is especially useful in cases

where direct evidence of such political alignments is opaque or fluid. Narrative alignment can advance a particular political agenda but can also be used as a kind of “flooding” strategy (Roberts 2018) by a coalition of actors to drown out counternarratives and to distract from controversial issues. It can be used to denounce opposition or dissident actors, employing social media as a tool of harassment to produce something more like targeted “drowning” than broad flooding. A diverse array of actors can also use aligning narratives on social media as a tool to resist regime power by recurrently pushing issues onto the online agenda that are not popular with the ruling power. Often coalitions fall between these extremes, combining state, state-adjacent, and nonstate actors.

We focus on political actors—politicians, parties, state institutions, powerful media figures, and prominent rebels or dissidents—as the central players in online coalitions. This does not mean that they lead unmediated by the preferences of their followers; there is certainly some give-and-take and strategic interaction. But major actors’ online activity can provide more direct and distinctive evidence of elite strategy and high politics than observed in offline behavior of elites. Particularly in high-stakes environments in which public signals of political positioning are closely watched and seen as meaningful, we expect these actors to be the agenda-setters: thus, they occupy our attention. We further examine the networks within which these elite actors are embedded: who they are followed by and interact with provides information on their power and signals of their alignments.

A second component of narrative alignment is the topics that these actors discuss. This alone is insufficient to determine political alignment, because two actors could be discussing the same topic but offer completely different positions on it. Nevertheless, which issues are being emphasized and avoided by which actors provides a first substantive layer for measuring the interactions of narratives. It can be a way of identifying the core dimensions along which actors clash and those that are primarily mobilized by one set of actors and ignored by another. There may be a master cleavage online or a variety of disjointed dimensions that are spoken to by different actors.

Third, narrative alignment can be studied by examining the fine-grained distribution of sentiments across actors: Who aligns with whom over time, and what patterns exist across actors in a social media political ecosystem? We can use various measurements of similarity and difference in the content posted online to get a sense of how different blocs line up in the social media sphere. Although online messages do not necessarily express the “true” political preferences of actors, they do provide insight into their public statements and allow comparisons across actors. Multisided alignments can be observed through sentiment analysis, providing insight into the narrative battles being

waged on social media. This kind of work requires deep contextual knowledge of relevant dimensions and how stances on them are articulated by actors in the system.

The final component we examine are patterns of engagement *across* actors: Who boosts the narratives of others? This directional amplification can be done by the core actors themselves or by their followers. It can be organic, reflecting shared political preferences and goals across actors and their networks: genuine enthusiasm and agreement can drive retweeting or sharing of posts by other actors to advance an aligned political message. Patterns of engagement are valuable as another way of getting a sense of the political preferences of social media users; although obviously not representative of the general population and, in many cases, not even of real users, this kind of engagement data can help us broadly map out how different networks view hot-button political issues.

Such engagement can also be advanced through mass retweeting campaigns by the social media wing of a political actor or the use of automated accounts. These campaigns suggest implementation of an intentional strategy by political actors to bolster both their own narratives and those of their allies. Sometimes such campaigns of coordinated engagement are targeted at other actors, aiming to swamp or discredit their messages as part of online competition. As noted earlier, this kind of activity does not require state control over social media: it is a tool for building and breaking political power even in a relatively free digital space. This does not mean that state manipulation of social media is unimportant—far from it—but it does suggest that there are tactics available for shaping narratives that are not reducible to censorship or information management. Often these tactics involve not only broadcasting one’s message but also boosting or undermining other actors’ narratives.

### *Adaptability across Political Contexts and Implications*

Examining topics, sentiments, and amplification by key political actors and their associated networks can allow us to map out the coalitional alignments—and oppositions—among major political players. In some cases, the analysis of online coalitions may not have much to offer, as when there is a straightforward battle between a repressive state and a unified protest or rebel movement and matters may be grimly straightforward. But when there are multiple actors competing across multiple dimensions, our framework is extremely flexible: in some case, a unified state may face off against a divided set of real and potential rebels, whereas in another, a factionalized security apparatus, a set of contending political parties, and nonstate militias maneuver with and against one another. All of these can be understood as coalitional settings.

We are intentionally agnostic about how a coalitional framework can be applied, given this kind of variation; we

advocate simply that scholars embed their analysis within the relationships among actors that are relevant in a particular context. In the Pakistani case that we discuss in the rest of this article, we see an autonomous military, a ruling political party, a military-backed main challenger party (which was ultimately victorious), multiple other parties, dissidents critical of the military, and journalists and media outlets with diverse political allegiances. A mapping of China or Iran or the United States or Iraq would generate quite different portfolios of actors, networks, and issues, including foreign actors pursuing influence operations, but we could plausibly compare them to one another using this coalitional framework.

This leads to a set of implications for the empirical analysis. First, it is important to focus on the relatively “elite” political actors who drive large networks of followers and to understand how they align and oppose one another. Second, scholars need to be attentive to the range of actors and relationships that can be observed online, including regimes, opposition parties, rebels and dissidents, media outlets, and foreign states: they interact to generate online political ecosystems that can at least broadly map “real-world” politics. Third, existing building blocks of social media analysis, such as retweets, content, and network analysis, can be repurposed to generate bundles of information that provide insight into the macro structure of political allegiance in a political system. Finally, engagement within coalitions can be an important tool for shaping online discourse, which can circumvent the need for direct state control of social media to counter and in some cases overwhelm competing narratives.

### Online Political Parties, Dissidents, and the Military in Pakistan

We empirically focus on Pakistan since 2018 to show the value-added of a coalitional approach. In the country’s July 25, 2018, general election, Imran Khan and his party, Pakistan Tehreek-e-Insaf (PTI), won a victory over the incumbent Pakistan Muslim League-Nawaz (PML-N) and Pakistan’s other major national party, the Pakistan People’s Party (PPP). Khan became prime minister (with the final margin delivered by independents and smaller parties) and led Pakistan from August 2018 until April 2022. Although official campaigning began only about a month before the elections, we explore the longer period in the run-up to the election, during which several dramatic events occurred; we also examine social media after Khan’s victory. We analyze both Twitter and Facebook data and complement our quantitative analysis with a qualitative discussion of the dynamics of both the general political context and the specifics of the election campaign itself.

Pakistan in 2018 can plausibly be identified as a “hybrid regime” (Mufti et al. 2020, 18), with a high level of complexity and (often intentional) lack of transparency about political processes. Although deeply influenced by

the military, it is also the site of sustained competition among political parties, dissidents, and journalists and media outlets of various political views. We seek to show the value of our coalitional approach by examining how a set of major political actors and their associated networks engage in the online sphere.

There is little doubt about two facts in the Pakistani case. The first is that the 2018 election was a hard-fought election in which both the PTI and PML-N invested enormous energies in voter mobilization and political outreach. With promises to end the corruption and hypocrisy of the Pakistani elite, the PTI was able to evoke great enthusiasm from many young Pakistanis while also building links with established local political figures and networks on the ground. The PPP was largely restricted to its core geographic base in Sindh and the PML-N to parts of Punjab, although there it faced major PTI inroads. The second fact is that there were credible allegations that the playing field was tilted against the PML-N by a military with a long-standing distrust of the party; it censored the media, instigated antigovernment events, and nudged independent political candidates to join the PTI.<sup>4</sup>

The EU Election Observation Mission (2019, 5, 10) identified serious issues with manipulation of the media:

Editorial policies were carefully calibrated to downplay issues relating to the army, state security structures and the judiciary. Concerted efforts to stifle the reporting environment were observed, and included intimidating phone calls to senior editors, the disruption and hindrance of the distribution of broadcast and print outlets, and harassment of individual journalists... . Most interlocutors acknowledged a systematic effort to undermine the former ruling party through cases of corruption, contempt of court and terrorist charges against its leaders and candidates.

The EU report reached the following conclusion:

The pre-electoral environment was marred by allegations of influence on the electoral process by the military-led establishment and the active role of the judiciary in political affairs, including through its special *suo moto* jurisdiction. The apparent collusion of interests between the army and the judiciary was particularly instrumental in the dismissal of Nawaz Sharif, and his disqualification for life from holding public office. Numerous reports depicted the armed forces and security agencies pulling strings to persuade candidates of anti-establishment parties to switch allegiance or to run as independents, contributing to splitting the votes and influencing the results. (2019, 11)

In addition, some Pakistani journalists and dissidents focused attention on abuses by the military and judiciary, which they saw as undermining democracy and human rights.

We therefore view the contest as a case in which the military leaned in favor of the opposition party against the incumbent ruling party, even as the opposition and incumbent parties intensely competed with each other, and a small but prominent dissident sphere attempted to raise awareness of human rights abuses and military interventions in politics. It would be inaccurate to view the

2018 election as a sham exercise, but it would also be deeply problematic to view it as a free and fair election. The question becomes whether our coalitional framework can capture these dynamics, complementing the qualitative evidence and interpretations of this election. Ideally, it would add distinctively fine-grained data on both the alignments during the campaign and the shifts following it, contributing to our understanding of when and how Pakistani politics has changed over time.

## Social Media and Politics in Pakistan

Freedom House (2021) codes Pakistan as “Not Free,” with informational and technical tactics used to create “digital election interference.” The government has issued numerous take-down orders to Twitter, troll armies linked to parties and the security establishment are common, and security forces are believed to monitor Twitter activity (Geo.tv 2018).

In 2019, Facebook removed several accounts that were engaging in coordinated inauthentic behavior and were “linked to employees of the ISPR (Inter-Service Public Relations) of the Pakistani military.” Facebook posts and other social media activity have triggered religious violence.

Twitter was an area of serious contestation among the contending actors in 2018. The PTI had a younger, more technology-savvy base and was an “early mover” in using Facebook and Twitter (Mufti et al. 2020, 12); Ahmed and Skoric (2014) note PTI’s innovative use of Twitter in the 2013 elections. In the 2018 election, Mufti and coauthors (2020, 12) observe, “Learning from PTI’s success, other parties sought to emulate these strategies [using social media] in advance of the 2018 election—strategies that were aided by the introduction of 3G and 4G mobile broadband internet in Pakistan.” Both the accounts of PTI and of Imran Khan were active, as were those of a set of other supporters and candidates. The PML-N also engaged on Twitter, followed rather distantly by the PPP.

We identified a core set of political accounts on Twitter and Facebook (see next section for details).<sup>5</sup> Much of our analysis focuses on the PML-N and PTI, given their centrality in the election. Each was surrounded by a web of supporters, both official and unofficial. There were allegations of troll armies being used by these supporters to advance certain narratives and target rivals and enemies (Jahangir 2019, 2020). We view these parties, their sympathizers, and citizens as constituting Pakistan’s online electoral sphere. In 2018, the PML-N was the ruling party, which gave it some advantages, but in contrast to some other contexts, it was not in total control of the state. Pakistan’s divided civil-military relations structurally divide the regime sphere in periods of civilian rule. Even when there is cooperation between a ruling party and the military, it is tenuous.

Pakistan’s military also has a notable social media presence. The director-general of the Inter-Services Public Relations (DG-ISPR) has a huge Twitter following, and the account has been used to release major policy statements. For instance, it was used in 2017 to dramatically “reject” a civilian government directive on a sensitive case, and during the February 2019 crisis with India it extensively presented Pakistan’s side of the situation (Hussain, Shahzad, and Saud 2021). A set of pro-military accounts also exists: some accounts are by retired military officers endorsed by the public relations wing of the army to present their perspective publicly, others are run by pro-military enthusiasts, and yet others are anonymous but claim to be informed by official sources.

In addition to political parties and the military, there are also robust dissident networks, including both Pakistanis in exile and those still in the country. These individuals use Twitter as a space to highlight the military’s intervention in politics and human rights abuses by the state (such as disappearances of activists and journalists), as well as to publish work that has been officially or unofficially censored from Pakistan’s media. They and the pro-military sphere often clash online, with dissidents being prominent targets for trolls (Sahani 2020). As the EU Electoral Monitoring Mission noted (2019, 36) regarding the 2018 election, “Social media served as both a vehicle for a party propaganda and as a platform for news and analysis that opposed the official political discourse.”

Although we currently lack fine-grained data on platform usage, estimates suggest that internet penetration is roughly 36.5%, with nearly 72 million social media users (Datareportal 2022). Twitter appears, impressionistically, to be a comparatively elite platform, with heavy usage of English and extensive attention by journalists, think-tankers, and political strategists. Facebook seems to have a broader mass reach. In a phone-based survey across four provinces in Pakistan, Mir and Siddiqui (2022) found that 56% of the respondents reported using Facebook and 17% reported using Twitter. We know that both platforms have received concerted strategic attention from key political actors but cannot make confident claims about their reach or representativeness at the mass level. Note that our focus is on the use of social media itself, not on its effects on mass political behavior or whether it represents public opinion.

In the following methodology and analysis sections, we pursue three goals. The first is to describe the topics that these actors promoted online so we can map out the online political landscape. The second is to explore how this content is disseminated, with a focus on coordinated activities that may suggest non-organic efforts at amplification: this is our discussion of *coordination*. The third is to assess whether we see narrative alignments between clusters across this social media landscape that can lend insight into the *coalitions* at work.

## Methodology and Results

Our analysis draws on two sources of social media data: Twitter data that we collected in real time from Twitter's Public API between June and August 2018 and historical Facebook data that we obtained from CrowdTangle, a public insights tool owned and operated by Facebook. This includes content produced in Urdu and English by major political actors in Pakistan, as well as their online followers, on both Twitter and Facebook. To obtain the data, we compiled a list of 524 prominent political actors in Pakistan using a Twitter snowballing approach. We began by browsing through the Twitter accounts of Pakistani political leaders and commentators based on knowledge about who the leading actors are in the country. We sought to identify accounts of actors in five broad categories: those affiliated with a political party, military, the media, civil society, and dissidents. We paid special attention to the political party category, seeking to identify high-follower accounts of actors associated with the three leading parties in Pakistan: the PML-N, PTI, and PPP. In the categories of media and civil society, we tried to maximize coverage by including print journalists, TV anchors, private news channels, activists, YouTube influencers, and Twitter influencers, as well as activists and organizers from a range of backgrounds.

Using this list, we then identified the public Facebook pages of these actors. That search yielded 390 pages across our five main categories. After obtaining these lists, we downloaded the content that they produced on Twitter and Facebook before and after the 2018 election.<sup>6</sup> Because Twitter allows the collection of data on network connections, we also obtained information on the followers of these political actors on Twitter and the content that they produced during this time.<sup>7</sup> Overall, we obtained more than 6.5 million Twitter and Facebook posts that were generated before and after the 2018 election.<sup>8</sup>

To analyze social media posts in English and Urdu, we used a dictionary approach, where we coded posts for whether they included keywords associated with a particular actor or topic. We created lists of keywords that were commonly used to describe key political actors and major political issues in Pakistan. We developed our dictionaries by closely reading an initial set of randomly sampled tweets and, based on context knowledge, identified terms that capture each topic. Online appendix table A1 shows the full list of topics, their definitions, and associated keywords.<sup>9</sup>

### Topics and Discourse

To map Pakistan's online political landscape since 2018, we examined actors' discourse on several policy issues that were politically salient during this period. Drawing on our lists of keywords, we calculated the proportion of posts

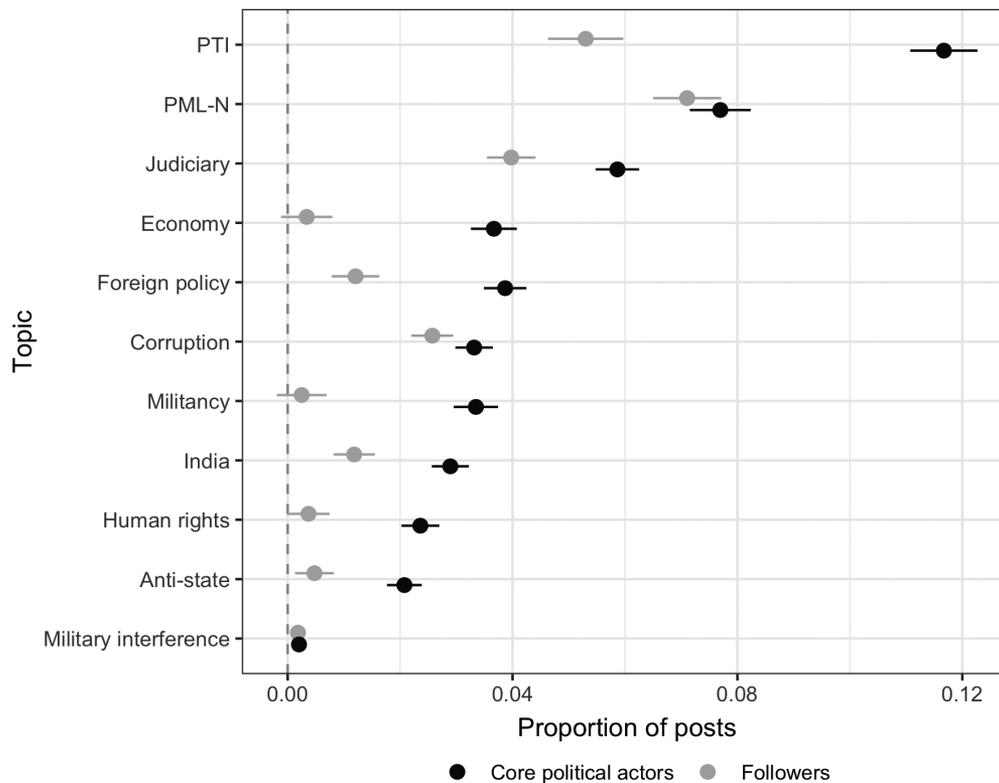
that mentioned each topic and examined how it varied between core political actors and their social media followers. Figure 1 shows that the PTI was by far the most common topic of online discussion on Facebook and Twitter, and that core actors talked about the party more frequently than their followers. Discourse on the PML-N was also relatively common, and it was mentioned at a similar rate by both core accounts and their follower networks. In a sentiment analysis shown in the online appendix, we find that posts sympathizing with the PTI and criticizing the PML-N were highly prevalent during this period—and that both kinds of posts were important for the PTI's mobilization (see figure A1). Interestingly, the Pakistan Army and its interference in the elections were relatively minor topics of conversation among the networks of followers of the actors. We show later that most of the discussion on the army's interference was led by political dissidents who were limited in their ability to advance their narrative because they were being “swamped” by other online coalitions.

We also measured the discourse on issues that were popular in the Pakistani social media sphere during this period. We identified posts that mentioned topics relevant to the Pakistani context: the economy, anti-state and subversive behavior, corruption, human rights concerns and violations, militancy and violence in the country, judicial activism and activity of the courts, foreign policy, security policy and rivalry with India, and foreign relations with countries other than India, such as the United States, China, and Saudi Arabia.<sup>10</sup> Figure 1 shows that issues related to judicial interventions, the economy, foreign policy, and corruption were most salient, whereas content related to human rights and subversion was much less salient in the 2018 election period. We also find differences between the content advanced by core actors (gray) and the online political ecosystems that surround them (black): core accounts talked about political topics more frequently than their followers.

### Content Dissemination and Coordination

Next, we examined dissemination patterns to evaluate the presence of coordination among key political actors. As we argued earlier, there can be indirect ways in which actors can bolster or attack one another by forming formal or informal online coalitions. They can advance similar narratives and focus on the same set of topics. There can also be more than one online coalition. If there is stiff competition among the coalitions, we may see an echo chamber effect: one coalition pushes its own narratives and blocks out narratives of the competitor. But an effective coalition might be able to overwhelm—or swamp—a competing coalition by permeating its rival's bubble and introducing its own narratives.

**Figure 1**  
**Topics Discussed in the 2018 Pakistani Social Media Sphere**



In the Pakistani case, two coalitions were likely before the 2018 election: the military and the opposition PTI would be against the incumbent PML-N, and the PML-N was said to have found common cause with the dissident sphere as the election drew closer (Barker 2018). To examine these patterns, we first analyzed retweet networks that shed light on patterns of amplification between these political actors: Who retweeted whom and how often, and how did content dissemination flow between coalition clusters. Second, we examined the online activity of accounts that exhibit coordinated behavior to explore whether there was evidence of synchronized, rather than organic, amplification of content.

*Retweet Networks.* To examine the networks of political actors in Pakistan, we measured the extent to which they shared each other's content on Twitter. We divided our data into four clusters that were most closely affiliated with each of the major categories of actors: the PTI, PML-N, the army, and dissidents.<sup>11</sup> We then examined the network relationships in each cluster through a directed graph analysis. Table 2 shows the top 10 profiles ranked by the in-degree score and by weighted in-degree centrality.<sup>12</sup> Each panel shows the accounts retweeted the most by each cluster, as indicated by the in-degree score. The data in

panels 2a and 2b suggest that the accounts in the PTI's and army's clusters actively retweeted a very similar set of accounts: those linked to Imran Khan and his PTI party, the high-profile account of the military's spokesman DG-ISPR (OfficialDGISPR), and some PTI-leaning media and civil society personalities, such as TV analyst Irshad Bhatti and Twitter activist Anwar Lodhi. The PML-N's cluster is very different: the top 10 profiles include accounts of the PML-N's leadership, media personalities like famous journalist Umar Cheema, and prominent dissident Gul Bukhari among others (see panel 2c).

We visualize these data with a network graph using the Force Layout 2 algorithm of Gephi, open-source software. In figure 2, the color of the nodes reflects their core account affiliation, their size and labels are scaled by in-degree centrality, and the color of the edges reflects the affiliation of the nodes being retweeted. The results are telling. Much like the ranked accounts in table 2, the network graphs of the PTI and the army converge: followers in both clusters retweet a very similar set of accounts, such as those of the PTI/Imran Khan and official DG-ISPR, as well as sympathetic sections of the media. Although these graphs are agnostic to the topics that were amplified, they suggest that the networks of army and the

**Table 2**  
**Top 10 Accounts Retweeted by Cluster**

| Twitter Handle          | Affiliation   | In-Degree | In-Degree Weighted | Twitter Handle              | Affiliation   | In-Degree | In-Degree Weighted |
|-------------------------|---------------|-----------|--------------------|-----------------------------|---------------|-----------|--------------------|
| <i>a) Army cluster</i>  |               |           |                    | <i>b) PTI cluster</i>       |               |           |                    |
| 1. ImranKhanPTI         | PTI           | 527       | 876                | 1. ImranKhanPTI             | PTI           | 1429      | 2,594              |
| 2. PTIofficial          | PTI           | 309       | 440                | 2. IrshadBhatti336          | Media         | 798       | 1,267              |
| 3. OfficialDGISPR       | Army          | 297       | 435                | 3. PTIofficial              | PTI           | 774       | 1,102              |
| 4. IrshadBhatti336      | Media         | 293       | 445                | 4. siasatpk                 | Media         | 719       | 1,361              |
| 5. mubasherlucman       | Media         | 292       | 352                | 5. AnwarLodhi               | Civil Society | 689       | 1,067              |
| 6. AnwarLodhi           | Civil Society | 291       | 435                | 6. mubasherlucman           | Media         | 608       | 756                |
| 7. siasatpk             | Media         | 248       | 433                | 7. OfficialDGISPR           | Army          | 578       | 792                |
| 8. HamidMirPAK          | Media         | 204       | 237                | 8. HamidMirPAK              | Media         | 484       | 563                |
| 9. iamhamzaabbasi       | Civil Society | 189       | 236                | 9. haroon_natamam           | Media         | 447       | 654                |
| 10. Asad_Umar           | PTI           | 174       | 202                | 10. Asad_Umar               | PTI           | 445       | 556                |
| <i>c) PML-N cluster</i> |               |           |                    | <i>d) Dissident cluster</i> |               |           |                    |
| 1. UmarCheema1          | Media         | 1098      | 1,608              | 1. HamidMirPAK              | Media         | 255       | 302                |
| 2. KhSaad_Rafique       | PML-N         | 946       | 1,433              | 2. UmarCheema1              | Media         | 197       | 280                |
| 3. MaryamNSharif        | PML-N         | 921       | 1,235              | 3. GulBukhari               | Dissident     | 185       | 253                |
| 4. GulBukhari           | Dissident     | 907       | 1,233              | 4. ImranKhanPTI             | PTI           | 176       | 259                |
| 5. pmln_org             | PML-N         | 811       | 1,160              | 5. Xadeejournalist          | Media         | 126       | 146                |
| 6. arshad_Geo           | Media         | 743       | 1,077              | 6. murtazasolangi           | Media         | 119       | 156                |
| 7. CMShehbaz            | PML-N         | 722       | 995                | 7. MJibranNasir             | Civil Society | 115       | 156                |
| 8. KhawajaMasif         | PML-N         | 666       | 803                | 8. omair_quraishi           | Media         | 114       | 144                |
| 9. geonews_urdu         | Media         | 607       | 841                | 9. a_siab                   | Dissident     | 110       | 171                |
| 10. HamidMirPAK         | Media         | 595       | 717                | 10. geonews_urdu            | Media         | 106       | 151                |

PTI coalesced, at least indirectly, in the social media sphere before the 2018 elections.

When examining the links between other clusters, we find that the retweet patterns of the ruling party—the PML-N—looked very different from those of the army and the PTI. Accounts affiliated with the PML-N engaged in very little amplification of content posted by the army or the PTI, and vice versa. Instead, the PML-N’s network tended to retweet mostly the leaders of the PML-N, the accounts of those media that are more critical of the army’s involvement in politics (like Umar Cheema), and some dissident accounts. Based on the prominent set of nodes and their affiliation, the dissidents’ network graph overlaps more with the PML-N than either the PTI or the army. These patterns suggest another, perhaps looser online coalition between dissidents and the PML-N.

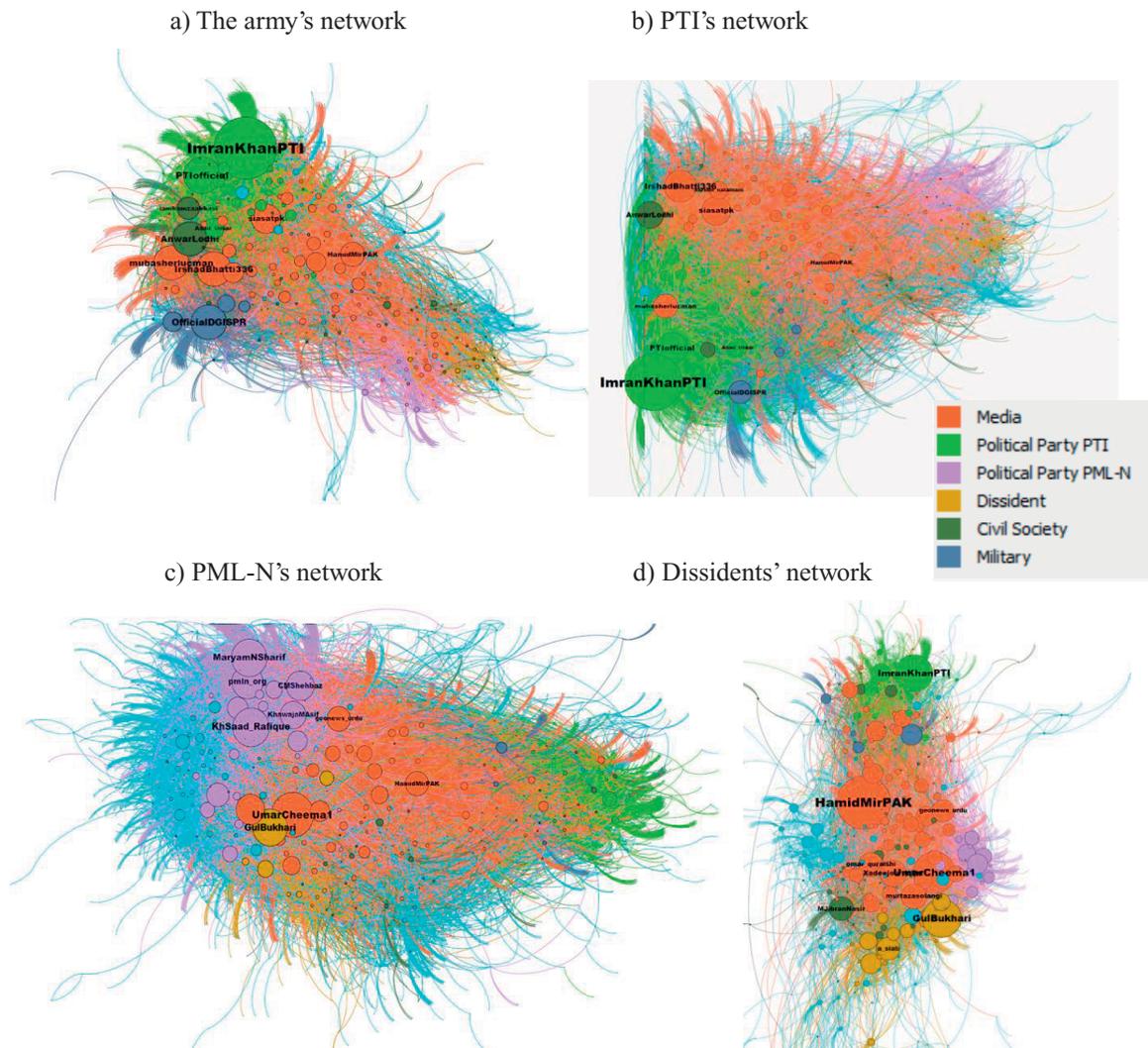
*Coordination.* Because alignment in the retweet networks can stem from organic activity—for example, followers of the PTI and the army may be genuinely excited about the same topics—we examined additional patterns that could suggest more organized coordination. Such coordination in the Pakistani online sphere is achieved by coordinating mass posting of similar content around the same time. This is a distinct form of amplification because it does not rely on direct reposting (“retweets”) of content but on disseminating almost identical text by different social media users. Several examples show that

posting similar content has become a popular strategy in the Pakistani social media (figure 3).

To study this form of coordination, we identified Pakistani Twitter users who systematically posted very similar text and examined their online behavior in the run-up to the 2018 election. Starting with the raw tweet-level data, we created user-level “documents,” in which each document included all the tweets that we had from that user across the full dataset. We pre-processed these documents and preserved 8-grams: phrases of eight consecutive words. We identified users who had seven or more shared 8-grams, which means that they tweeted very similar tweets at some point during the study’s period. Focusing on these users, we pulled their tweets and preserved those that had almost identical word sequences, measured as having high cosine similarity scores, in each three-day window. We then used these tweets to examine the prevalence of this form of coordination.

Figure 4 shows the proportion of tweets linked to coordinated activity by category. Our data show that coordinated tweets were significantly more likely to promote the PTI and express antagonism toward the PML-N. We also found significantly more pro-army tweets than anti-army tweets (panel A). Coordinated tweets pushed content related to India and foreign policy, as well as corruption and the judiciary, which aligns with the policies promoted by the PTI. At the same time, there was almost

**Figure 2**  
**Retweet Networks of Political Actors in Pakistan**



*Note:* The figure presents retweet networks from a directed graph analysis of four major clusters of accounts. The color of the nodes reflects their core account affiliation, their size and labels are scaled by the number of retweets/in-degree centrality, and the color of the edges reflects the affiliation of the nodes being retweeted.

no content related to issues advocated by activists (such as human rights or military interference, for example) in the coordinated tweets that we identified in our data (panel B).

An equally important feature of coordinated activity is its amplification as part of pushing a key narrative. Figure 5, which displays the retweet network of the coordinated accounts, shows that accounts engaging in coordination were much more likely to amplify content posted by the PTI and the army than content posted by other political actors. Although there may be various explanations for this retweeting pattern, the alignment between the content promoted by coordinated accounts and their retweeting activity is consistent with the coalition framework.

### *Narrative Alignment*

Finally, we examined the content posted by political actors to assess whether there is evidence of narrative alignment between clusters (PTI, army, dissident, PML-N). As discussed earlier, political actors who engage in online coordination may choose to promote the same kind of content on social media, either by discussing similar policy issues or being generally aligned in the content that they produce. Alternatively, actors who coalesce online may choose to focus on different topics in a complementary way, which will result in divergence in the policy issues that they promote.

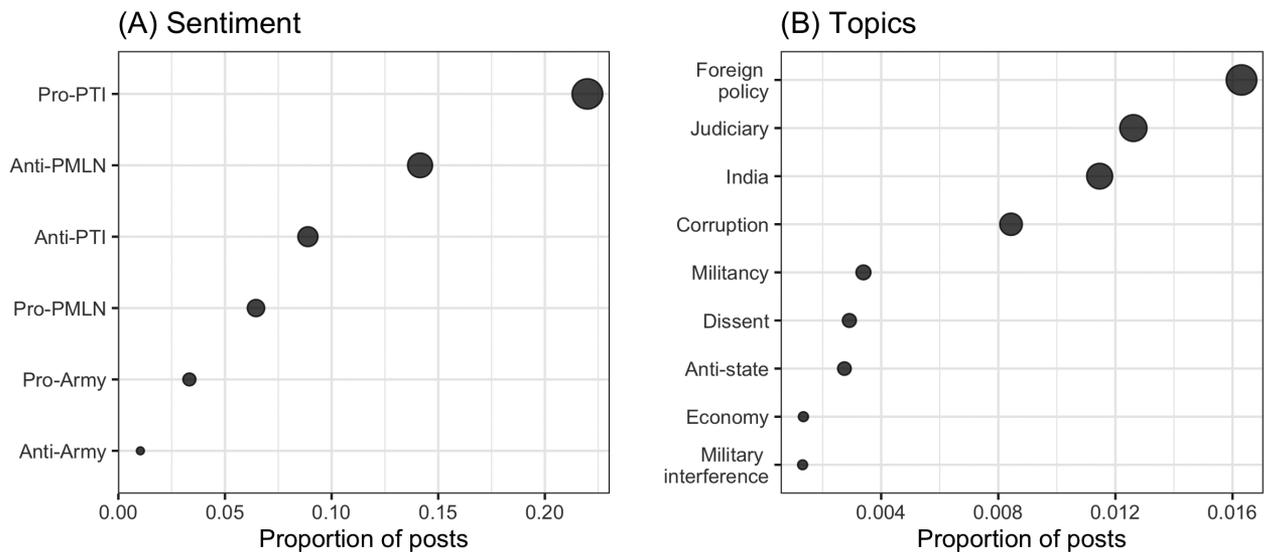
Figure 6 shows the attention that different political actors in Pakistan gave to various policy issues in the Facebook

**Figure 3**  
Example of a Coordinated Activity (Similar Text, not Retweets)



Source: <https://twitter.com/qureshik74/status/1253520049832419329?s=21>.

**Figure 4**  
Sentiment and Topics in Coordinated Posts

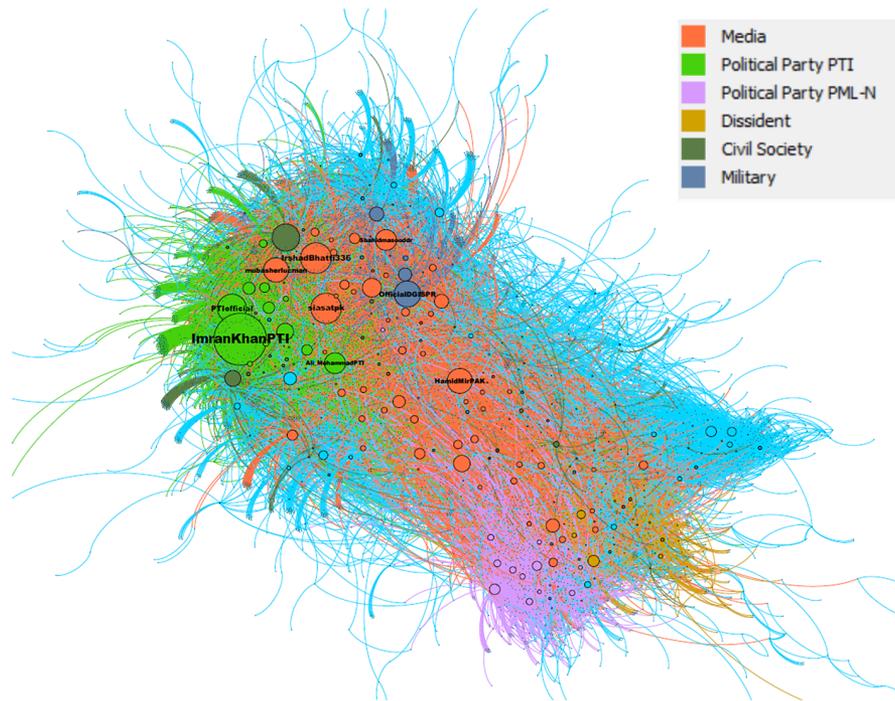


content that they generated in 2018. Each panel presents the proportion of posts on a given policy issue by actor cluster. Interestingly, we did not find that the PTI and the army discussed these issues at similar rates: instead, these actors largely focused on different policy issues. Whereas the army posted mostly about the economy, anti-state and subversive behavior, and militancy and foreign policy, the PTI focused on the judiciary. The figure also shows that

some issues were discussed similarly by almost all the actors in our data—corruption and the economy, for example—whereas others were the exclusive focus of only some actors. For example, political dissidents in Pakistan posted mostly about human rights and military interference, whereas other actors paid almost no attention to these topics.<sup>13</sup>

Because the analysis of topics relies on a relatively limited set of keywords, it might be failing to detect more

**Figure 5**  
**Retweet Network of Coordinated Accounts**



*Note:* The color of the nodes reflects the affiliation of the account being retweeted; their size and labels are scaled by the number of retweets/in-degree centrality.

general patterns of narrative alignment in the data. For this reason, we supplemented our keywords-based coding with a more general analysis of the similarity between the content posted by political actors over time. Using the historical Facebook timelines of the core accounts,<sup>14</sup> we calculated the cosine similarity between content posted by political actors each day since 2018. Cosine similarity scores range between 0 and 1, where 0 reflects completely dissimilar posts and 1 reflects identical posts.<sup>15</sup>

Figure 7 presents the day-by-day similarity in content produced by accounts affiliated with the army, the PTI, the PML-N, the media, civil society, and dissidents since 2018. The y-axis in each panel is the average daily similarity of the posts, and the x-axis presents the time (2018–21). We found that the similarity in content produced by the army and the PTI was higher than between any other pairs of actors and that the alignment between them increased over time. Although some of this alignment may have been expected between the ruling PTI and the army after the 2018 election, it is not obvious, because the Pakistani army is mostly an autonomous institution that does not always align with the ruling party. We also found that the PTI aligned with the media and civil society, but it had very little overlap with the PML-N or dissidents. The figure also shows the similarity between

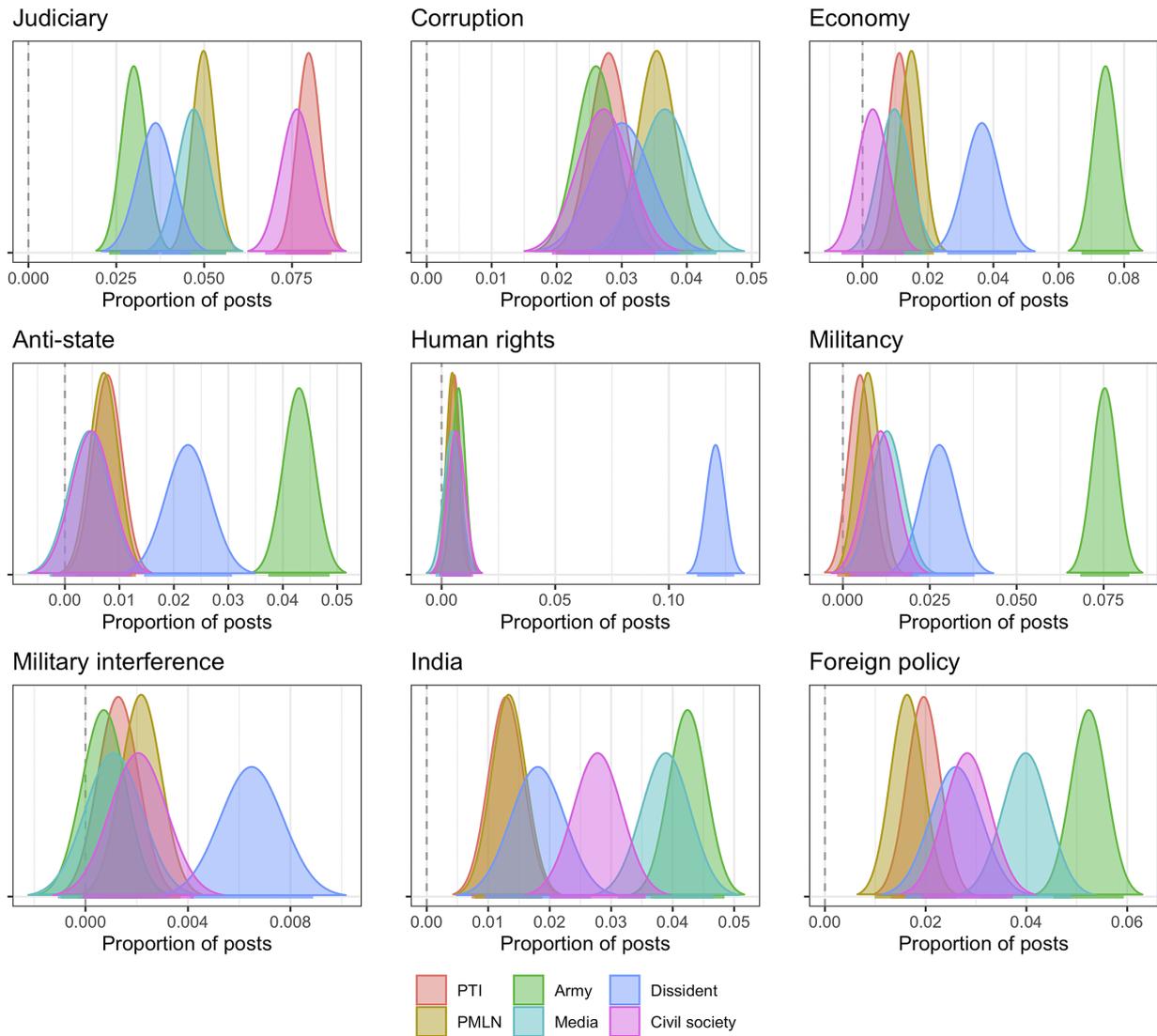
all other pairs of actors. We found some similarity between content posted by the PML-N and the media, as well as between accounts owned by civil society actors and various parties. The dissident cluster in Pakistan largely focused on different content than other political actors.

Taken together, our analysis shows how coalitional dynamics can take place in the online political sphere. Focusing on Pakistani elites' behavior on social media, we find evidence of an alignment between the networks of the military and the PTI that won the 2018 election. Our results show patterns of organic and coordinated amplification of these two actors, as well as alignment in the content that they produced over time. We believe that this approach can help shed light on political coalitions in other contexts as well, especially in countries where these dynamics are less obvious and often more tacit.

## CONCLUSION

Because coalitions are central to political life, including in the online sphere, a coalitional approach to social media politics lets us examine how a variety of actors clash and cooperate. This analytical move allows for greater synthesis and integration of distinct research agendas: scholars can see how governments (both foreign and domestic), insurgents, politicians, media outlets, dissidents, and

**Figure 6**  
**Topics Advanced by Political Actors**



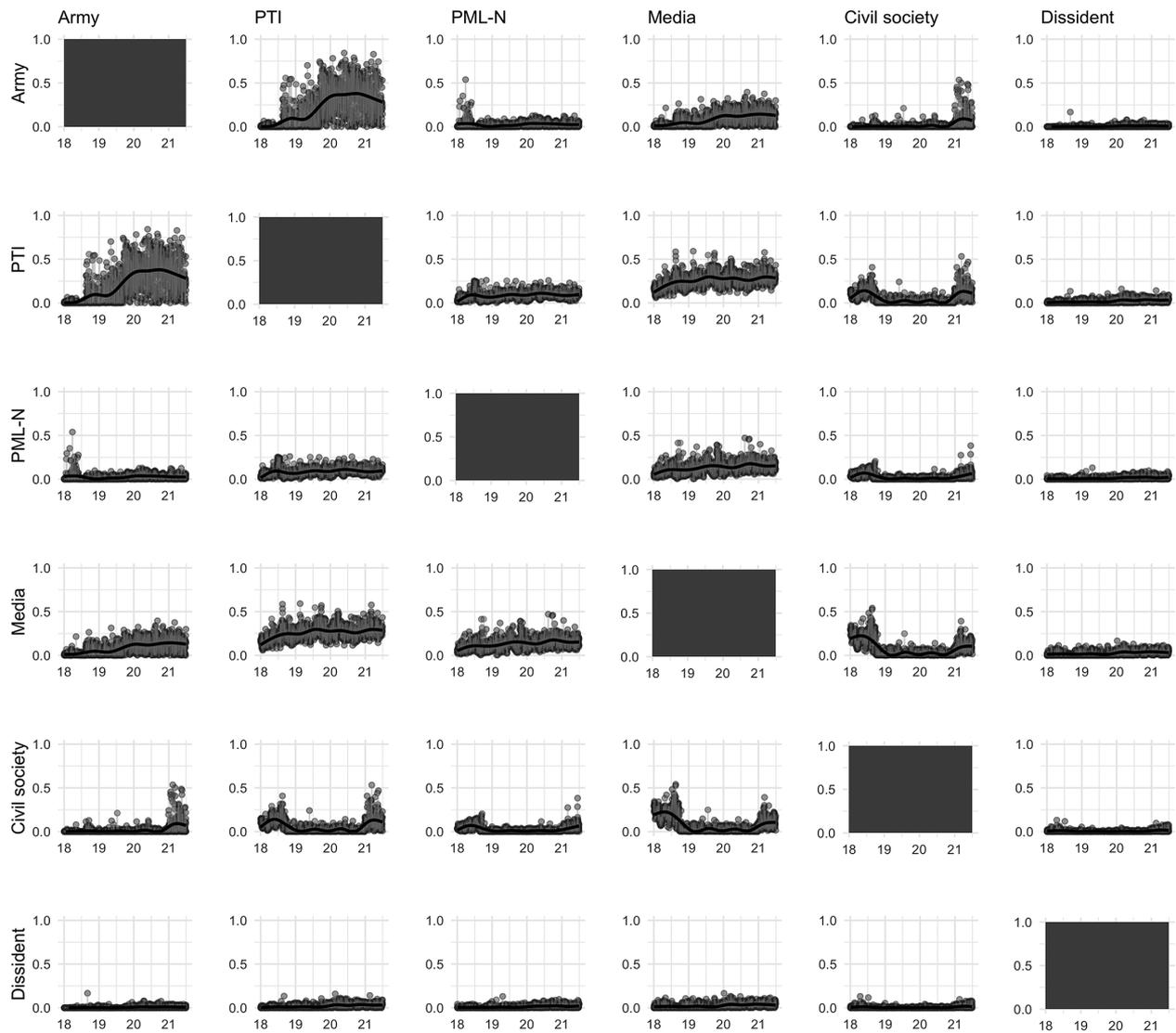
influencers relate to one another; which narratives they advance or contest; and how their networks overlap or diverge. We do not claim that these online coalitions tell us everything we need to know about a particular political context, but this approach can help us better understand cleavages and alliances in the many environments in which political actors invest in social media campaigns and online influence efforts.

Empirically, we show that it is possible to identify the relevant actors, topics, and networks and to disaggregate their relationships with one another in the tumultuous context of 2018–19 Pakistan. We find that the victorious party, the PTI, largely dominated the social media sphere. The narratives pushed by the PTI were further

amplified by networks associated with the military and parts of the media, suggesting a set of narrative alignments in opposition to those associated with the incumbent ruling party, the PML-N. Issues related to dissident activities had some reach but were comparatively very limited, suggesting further skepticism about a straightforward view of social media as a technology of liberation. This finding is a contribution on its own, providing a measure of what narratives are being advanced and picked up in “real time.”

Yet the story does not stop there. We find that those engaging in coordinated activity amplified the PTI and military’s accounts. Although we cannot be certain about the causes of the amplification, the degree of coordinated

**Figure 7**  
**Similarity in Content Posted by Political Actors**



activity suggests an intentional and managed social media strategy by the actors behind the coordination, rather than a purely organic swell of online support. Strikingly, there is evidence that the PTI and military spheres of followers amplified each other's narratives, which were able to overwhelm the narratives of their competitors and to directly shape the online public sphere. This evidence requires important caveats, but it is broadly suggestive of at least a tacit coalition between the networks of the Pakistani military with the PTI, in opposition to the then-ruling PML-N. Given the murkiness and often intentional opacity of Pakistani politics, examining patterns of narrative alignment and contestation online

provides a valuable new empirical lens for measuring political alliances that can be replicated in Pakistan and in other contexts.

We believe that a coalitional framework is potentially valuable in a broad array of cases. India presents a clear case of hard-fought social media coalitional dynamics on a vast scale, involving the ruling party, opposition parties, their social media cells, media outlets and commentators of various political loyalties, and huge networks of followers across numerous platforms. Myanmar's resurgent set of internal conflicts since 2021 has taken on a greater social media presence, providing new opportunities to explore alignments across a wide range of political, civil society,

and armed actors. Foreign influence operations, whether in the United States or elsewhere, are frequently explicit efforts to advance narratives and sentiments that map onto preexisting political cleavages, seeking to shape the “internal” discourse from the outside.

These findings offer two broader directions for the study of social media and politics. First, we provide a new conceptualization of actors and of their alignments that can productively be used in a wide variety of settings and with a range of actors, reducing the silos that currently exist between research areas in the growing body of work on social media and politics. The goal is to plausibly represent the different political forces that are active in a country’s social media ecosystem and examine their relationship with one another, in whatever form it takes. Using this framework will both allow fuller comparisons across political contexts and a richer ability to study alignments even in complex political environments. This approach is complementary to many of the research streams in the literature, with the value-added of encouraging scholars to think carefully about the full spectrum of relations between actors in the context they are studying. For instance, studies of foreign influence operations would do well to explore how these efforts align with or run orthogonal to the preexisting online cleavages and coalitions of the social media ecosystem being targeted.

Second, scholars need to direct their attention to *indirect* ways through which nonelectoral actors can influence politics by taking seriously how their discourses and networks align with other political players and the tactics they use to boost their messages online. We find that dynamics of online coalition building and breaking do not require direct state manipulation of or control over the internet: political actors can shape online discourse in a wide variety of ways, including by providing tacit support, bolstering third-party actors to target a shared rival, and engaging in efforts to drown out or advance particular narratives over others.

There are several more specific questions that we believe are important to answer in future research. First, what are possible *effects* of different strategies and coalitions? Do these dynamics, for instance, influence vote choices or shape the information accessed by voters? Although identifying causal effects in a context like this can be challenging, there may be opportunities to link the narratives, alignments, and coordination strategies we identify to real-world political behavior.

Second, how do coalitional dynamics play out in an era of increasing content moderation of social media platforms? Our analysis relied on publicly available social media data, which likely excluded content that was deleted for violating terms of service. For example, we know that Facebook deleted content posted by pages linked to the Pakistani military that was deemed as inauthentic. Our analysis therefore might have missed certain patterns of

coordination and amplification, either by the same actors or by others. Third, we need more research on the social media platforms that citizens use. We examined content posted on Twitter and Facebook, but it is not clear that this captures how Pakistanis primarily use social media. YouTube, WhatsApp, and a plethora of other platforms may be more popular and yet yield quite different results. This requires more general research on how publics use the internet beyond the currently dominant focus on a small number of platforms.

Third, can we identify systematic variation in how alignments emerge and collapse across cases? Here we offered a new way of thinking about a concept, but a crucial next step is developing richer theory. We can explore whether there are patterns across types of regimes, actors, and issues in the kinds of coalitions that tend to emerge. For instance, do electoral authoritarian or hybrid regimes build specific kinds of coalitions—perhaps relying on state-linked but formally nonstate media—differently than other types of regimes? When do rebel groups try to bolster the narratives of non-insurgent online voices, and when do they seek to marginalize them? How do parties differ in their reliance on social media “influencers” and other media figures as opposed to formal party accounts? There are many rich questions waiting to be answered about how political actors maneuver, clash, and collaborate online.

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## Notes

- 1 For a variety of perspectives on measuring the Pakistan case, see Shah (2014), Jaffrelot (2015), Adeney (2017), and Freedom House (2021).
- 2 On bots and foreign influence agents, see Ferrara et al. (2020). On small-scale influencers, see Goodwin, Joseff, and Woolley (2020).
- 3 Although citizens or the mass followers of political actors are clearly important, our focus is on comparatively elite political actors: parties, politicians, militaries, major media figures, prominent dissidents and intellectuals, and the political ecosystems that they create. This emphasis is not intended to discount work aimed at understanding other questions focusing on

mass attitudes, but we believe that our approach is another way in which social media analysis can speak to important questions about the structure and dynamics of political systems among core political actors.

- 4 Senior members of Pakistan's judiciary charged military's interference in political events and the judicial process leading to Sharif's ouster (e.g., Dawn 2019; Shah 2019).
- 5 We curated this list using a Twitter snowballing approach by browsing through Twitter accounts of leading offline commentators. See the next section for details.
- 6 The full list of actors, along with their Twitter handles and Facebook pages, is available with the replication material in Harvard Dataverse. For Facebook, we have the full historical timelines of these accounts. Our Twitter data are more limited, given rate limits in the Twitter API, which provides access only to the most recent 3,200 posts. We downloaded political actors' historical Twitter timelines in April 2020, and our Twitter data include content produced by these actors since 2019. Most of our Twitter data consist of the follower networks of the core political actors.
- 7 We obtained followers' tweet data by querying the Twitter API for their most recent post each day. Given that there were more than 137 million core account-follower pairs, we obtained the content of followers who followed two or more core accounts. Our followers sample includes accounts that are located both in and outside Pakistan. In our analysis, we consider this sample as part of the Pakistani online political sphere, even though it goes beyond Pakistan's physical borders. To examine how the patterns from the full sample compare to content produced by users within Pakistan, we replicated our analysis for users who have location data in their user profiles and are in Pakistan ( $N = 3, 448$ , about 0.6% of our follower sample). Online appendix figure A4 presents a map with their locations, and figure A5 shows that the patterns are very similar if we restrict to users geolocated in Pakistan.
- 8 The specific numbers are 3,572,456 Facebook posts posted by core political actors and 2,943,086 Urdu tweets posted by users who followed these actors on Twitter.
- 9 We also used supervised machine learning to identify sentiments toward political actors in Urdu posts. Online appendix table A2 shows examples of positive and negative sentiments that we found in our data. Because our models' ability to accurately capture sentiment was more limited, we present the results of our sentiment analysis in the online appendix, noting that the patterns should be interpreted with caution.
- 10 There is an unavoidable degree of arbitrariness in this classification: corruption and the economy, for instance, were tied together in the PTI's messaging, and India and foreign policy obviously can overlap.
- 11 We created clusters by subsetting our data to accounts for which 70% or more of the handles that they followed were accounts in each of our core accounts categories. For example, PTI's cluster consisted of Twitter accounts who 70% or more of the accounts that they followed were PTI's core accounts. We use this information to construct a network of retweets in four major clusters: PTI, Army, PML-N, and dissidents.
- 12 For a directed graph, the in-degree score refers to the number of arcs directed toward a vertex, and the weighted in-degree score refers to the sum of weighted arcs directed toward a vertex. When used in the context of a retweet network, the in-degree score captures the number of accounts retweeting a particular Twitter account. The weighted in-degree score is the number of times an account has been retweeted.
- 13 Figure A2 in the online appendix presents these patterns over time. They suggest strong alignment between PTI and army over India and Economy over time, especially in 2019 and later. Among other notable trends, the dissident circle appears to have generated most discussion on military interference in politics and human rights, which began to ebb in focus in late 2019. The PML-N appears to have focused more on the economy in late 2019, which aligns with the army's relative focus on economic issues at the same time.
- 14 In this analysis, we focus on Facebook data, because it includes more comprehensive historical content than our Twitter data, given the rate limits in the Twitter API.
- 15 The cosine similarity between two vectors  $a$  and  $b$ , each of length  $k \times 1$ , is calculated as follows:  
$$\frac{\sum_{j=1}^k a_j b_j}{\sqrt{\sum_{j=1}^k a_j^2} \sqrt{\sum_{j=1}^k b_j^2}}$$
, where  $a_j$  is the number of times term  $j$  appears in document  $a$  and  $b_j$  is the number of times term  $j$  appears in document  $b$ .

## References

- Abrahams, Alexei, and Andrew Leber. 2021. "Comparative Approaches to Mis/Disinformation: Electronic Armies or Cyber Knights? The Sources of Pro-Authoritarian Discourse on Middle East Twitter." *International Journal of Communication* 15: 1165–72.
- Adeney, Katharine. 2017. "How to Understand Pakistan's Hybrid Regime: The Importance of a Multidimensional Continuum." *Democratization* 24, no. 1: 119–37.

- Ahmed, Saifuddin, and Marko M. Skoric. 2014. "My Name Is Khan: The Use of Twitter in the Campaign for 2013 Pakistan General Election." *2014 47th Hawaii International Conference on System Sciences*, 2242–51. doi: 10.1109/HICSS.2014.282.
- Alizadeh, Meysam, Jacob N. Shapiro, Cody Buntain, and Joshua A. Tucker. 2020. "Content-Based Features Predict Social Media Influence Operations." *Science Advances* 6, no. 30: eabb5824.
- Aral, Sinan, and Dean Eckles. 2019. "Protecting Elections from Social Media Manipulation." *Science* 365, no. 6456: 858–61.
- Barberá, Pablo. 2015. "Birds of the Same Feather Tweet Together: Bayesian Ideal Point Estimation Using Twitter Data." *Political Analysis* 23, no. 1: 76–91.
- Barberá, Pablo. 2020. "Social Media, Echo Chambers, and Political Polarization." In *Social Media and Democracy: The State of the Field, Prospects for Reform*, eds. N. Persily and J. Tucker, 34–55. Cambridge: Cambridge University Press.
- Barberá, Pablo, Andreu Casas, Jonathan Nagler, Patrick J. Egan, Richard Bonneau, John T. Jost, and Joshua A. Tucker. 2019. "Who Leads? Who Follows? Measuring Issue Attention and Agenda Setting by Legislators and the Mass Public Using Social Media Data." *American Political Science Review* 113, no. 4: 883–901.
- Barberá, Pablo, Ning Wang, Richard Bonneau, John T. Jost, Jonathan Nagler, Joshua Tucker, and Sandra González-Bailón. 2015. "The Critical Periphery in the Growth of Social Protests." *PLoS One* 10, no. 11: e0143611.
- Barberá, Pablo, and Thomas Zeitzoff. 2018. "The New Public Address System: Why Do World Leaders Adopt Social Media?" *International Studies Quarterly* 62, no. 1: 121–30.
- Barker, Memphis. 2018. "Imran Khan Near Victory in Pakistan Election But Some Ask if He Is Playing Fair." *The Guardian*, July 21, 2018. <https://www.theguardian.com/world/2018/jul/21/imran-khan-near-victory-in-pakistan-election-but-some-ask-if-he-is-playing-fair>.
- Barrie, Christopher, and Alexandra Siegel. 2021. "Kingdom of Trolls? Influence Operations in the Saudi Twittersphere." *Journal of Quantitative Description: Digital Media* 1 (April). doi:10.51685/jqd.2021.012.
- Brown, Katherine E., and Elizabeth Pearson. 2018. "Social Media, the Online Environment and Terrorism." In *Routledge Handbook of Terrorism and Counterterrorism*, ed. Andrew Silke, 149–64. London: Routledge.
- Collins, Ben, and Jo Ling Kent. 2022. "Facebook, Twitter Remove Disinformation Accounts Targeting Ukrainians." *NBC News*. <https://www.nbcnews.com/tech/internet/facebook-twitter-remove-disinformation-accounts-targeting-ukrainians-rcna17880>.
- Courchesne, Luan, Julia Ilhardt, and Jacob N. Shapiro. 2021. "Review of Social Science Research on the Impact of Countermeasures against Influence Operations." *Harvard Kennedy School Misinformation Review*. <https://misinforeview.hks.harvard.edu/article/review-of-social-science-research-on-the-impact-of-countermeasures-against-influence-operations/>.
- Coppock, Alexander, Andrew Guess, and John Ternovski. 2016. "When Treatments Are Tweets: A Network Mobilization Experiment over Twitter." *Political Behavior* 38, no. 1: 105–28.
- Datareportal. 2022. "Digital 2022: Pakistan." <https://datareportal.com/reports/digital-2022-pakistan>.
- Dawn.com. 2019. "10 Major Takeaways from SC's Faizabad Sit-In Judgement." February 19, 2019. <https://www.dawn.com/news/1462177>.
- DiResta, Renee, and Grossman, Shelby. 2021. "Fronts & Friends: An Investigation into Two Twitter Networks Linked to Russian Actors." *Stanford Internet Observatory*. February 23, 2021. <https://cyber.fsi.stanford.edu/io/publication/fronts-friends-investigation-two-twitter-networks-linked-russian-actors-takedown>.
- Enjolras, Bernard, Kari Steen-Johnsen, and Dag Wollebaek. 2013. "Social Media and Mobilization to Offline Demonstrations: Transcending Participatory Divides?" *New Media & Society* 15, no. 6: 890–908.
- European Union Election Observation Mission. 2019. "Final Report: European Union Election Observation Mission, Islamic Republic of Pakistan." *European Union*. [http://www.eods.eu/library/final\\_report\\_pakistan\\_2018\\_english.pdf](http://www.eods.eu/library/final_report_pakistan_2018_english.pdf).
- Facebook. 2019. "Removing Coordinated Inauthentic Behavior and Spam from India and Pakistan." <https://about.fb.com/news/2019/04/cib-and-spam-from-india-pakistan/>.
- Ferrara, Emilio, Herbert Chang, Emily Chen, Goran Muric, and Jaimin Patel. 2020. "Characterizing Social Media Manipulation in the 2020 U.S. Presidential Election." *First Monday*, 25(11). doi:10.5210/fm.v25i11.11431.
- Freedom House. 2021. Pakistan. *Freedom in the World*. <https://freedomhouse.org/country/pakistan/freedom-world/2021>.
- Geo.TV. 2018. "Social Media Being Used against Pakistan, Institutions: DG ISPR." *Geo News*. June 4, 2018. <https://www.geo.tv/latest/197971-dg-ispr-briefs-media-on-ceasefire-violations-by-india>.
- Gohdes, Anita R. 2020. "Repression Technology: Internet Accessibility and State Violence." *American Journal of Political Science* 64, no. 3: 488–503.
- Goodwin, Anastasia, Katie Joseff, and Samuel Woolley. 2020. *Social Media Influencers and the 2020 U.S. Election: Paying 'Regular People' for Digital Campaign Communication*. Center for Media

- Engagement, University of Texas, Austin. <https://mediaengagement.org/research/social-media-influencers-and-the-2020-election/>.
- Grossman, Shelby, Catarina Buchatskiy, Benjamin B.-B., Kate D., Renee DiResta, Christina H., and Julia Steinberg. 2022. "Full-Spectrum Pro-Kremlin Online Propaganda about Ukraine." *Stanford Internet Observatory Cyber Policy Center*. <https://cyber.fsi.stanford.edu/io/news/full-spectrum-propaganda-ukraine/>
- Guess, Andrew, Jonathan Nagler, and Joshua Tucker. 2019. "Less than You Think: Prevalence and Predictors of Fake News Dissemination on Facebook." *Science Advances* 5, no. 1: eaau4586.
- Hobbs, William R., and Margaret E. Roberts. 2018. "How Sudden Censorship Can Increase Access to Information." *American Political Science Review* 112, no. 3: 621–36.
- Hussain, Shabir, Shahzad, Farrukh and Saud, Adam. 2021. "Analyzing the State of Digital Information Warfare Between India and Pakistan on Twittersphere." *SAGE Open* 11, no. 3: 1–11.
- Jahangir, Ramsha. 2019. "How Social Media Has Become a War Zone for Competing Narratives." *Herald*, January 2, 2019. <https://herald.dawn.com/news/1398759>.
- Jahangir, Ramsha. 2020. "While Twitter Trends May Be Artificial, Hashtag Merchants Are Real People." *Dawn*. January 14, 2020. <https://www.dawn.com/news/1518967>.
- Jaffrelot, Christophe. 2015. *The Pakistan Paradox: Instability and Resilience*. Oxford: Oxford University Press.
- Keremoglu, Eda, and Nils B. Weidmann. 2020. "How Dictators Control the Internet: A Review Essay." *Comparative Political Studies* 53, no. 10–11: 1690–1703.
- King, Gary, Jennifer Pan, and Margaret E. Roberts. 2013. "How Censorship in China Allows Government Criticism but Silences Collective Expression." *American Political Science Review* 107, no. 2: 326–43.
- King, Gary, Jennifer Pan, and Margaret E. Roberts. 2014. "Reverse-Engineering Censorship in China: Randomized Experimentation and Participant Observation." *Science* 345, no. 6199: 1251722.
- King, Gary, Jennifer Pan, and Margaret E. Roberts. 2017. "How the Chinese Government Fabricates Social Media Posts for Strategic Distraction, Not Engaged Argument." *American Political Science Review* 111, no. 3: 484–501.
- Larson, Jennifer M., Jonathan Nagler, Jonathan Ronen, and Joshua A. Tucker. 2019. "Social Networks and Protest Participation: Evidence from 130 Million Twitter Users." *American Journal of Political Science* 63, no. 3: 690–705.
- Lynch, M., 2011. "After Egypt: The Limits and Promise of Online Challenges to the Authoritarian Arab State." *Perspectives on Politics* 9, no. 2: 301–10.
- Mahtani, Shibani, and Regine Cabato. 2019. "Why Crafty Internet Trolls in the Philippines May Be Coming to a Website Near You." *Washington Post*. [https://www.washingtonpost.com/world/asia\\_pacific/why-crafty-internet-trolls-in-the-philippines-may-be-coming-to-a-website-near-you/2019/07/25/c5d42ee2-5c53-11e9-98d4-844088d135f2\\_story.html](https://www.washingtonpost.com/world/asia_pacific/why-crafty-internet-trolls-in-the-philippines-may-be-coming-to-a-website-near-you/2019/07/25/c5d42ee2-5c53-11e9-98d4-844088d135f2_story.html).
- Martin, Diego A., Jacob N. Shapiro, and Michelle Nedashkovskaya. 2019. "Recent Trends in Online Foreign Influence Efforts." *Journal of Information Warfare* 18, no. 3: 15–48.
- Mir, Asfandyar, and Niloufer Siddiqui. 2022. "Airing a Nation's Dirty Laundry: Nationalism and Conspiracy Theories in Pakistan." *Paper presented at International Studies Association Annual Meeting*, Nashville, March 30, 2022.
- Mitts, Tamar. 2019. "From Isolation to Radicalization: Anti-Muslim Hostility and Support for ISIS in the West." *American Political Science Review* 113, no. 1: 173–94.
- Mitts, Tamar, Gregoire Phillips, and Barbara F. Walter. 2022. "Studying the Impact of ISIS Propaganda Campaigns." *Journal of Politics* 84, no. 2: 1220–25.
- Mufti, Mariam, Sahar Shafqat, and Niloufer Siddiqui. 2020. "Introduction: Pakistan's Political Parties in an Era of Transition." In *Political Parties: Surviving between Dictatorship and Democracy*, eds. Mariam Mufti, Sahar Shafqat, and Niloufer Siddiqui, 1–19. Washington, DC: Georgetown University Press.
- Müller, Karsten, and Carlo Schwarz. 2021. "Fanning the Flames of Hate: Social Media and Hate Crimes." *Journal of the European Economic Association* 19, no. 4: 2131–67.
- Munger, Kevin, Richard Bonneau, Jonathan Nagler, and Joshua A. Tucker. 2019. "Elites Tweet to Get Feet off the Streets: Measuring Regime Social Media Strategies during Protest." *Political Science Research and Methods* 7, no. 4: 815–34.
- Munger, Kevin, Patrick J. Egan, Jonathan Nagler, Jonathan Ronen, and Joshua Tucker. 2022. "Political Knowledge and Misinformation in the Era of Social Media: Evidence from the 2015 UK Election." *British Journal of Political Science* 52, no. 1: 107–27.
- Pan, Jennifer, and Alexandra A. Siegel. 2020. "How Saudi Crackdowns Fail to Silence Online Dissent." *American Political Science Review* 114, no. 1: 109–25.
- Roberts, Margaret E. 2018. *Censored: Distraction and Diversion inside China's Great Firewall*. Princeton, NJ: Princeton University Press.

- Sahani, Shumail. 2020. "Controlling Dissent." *The News Sunday*, February 9, 2020.
- Shah, Aqil. 2014. *The Army and Democracy: Military Politics in Pakistan*. Cambridge, MA: Harvard University Press.
- Shah, Aqil. 2019. "Pakistan: Voting under Military Tutelage." *Journal of Democracy* 30, no. 1: 128–42.
- Siegel, Alexandra A., and Vivienne Badaan. 2020. "#No2Sectarianism: Experimental Approaches to Reducing Sectarian Hate Speech Online." *American Political Science Review* 114, no. 3: 837–55.
- Siegel, Alexandra A., Jonathan Nagler, Richard Bonneau, and Joshua A. Tucker. 2021. "Tweeting beyond Tahrir: Ideological Diversity and Political Intolerance in Egyptian Twitter Networks." *World Politics* 73, no. 2: 243–74.
- Silva, Bruno Castanho, and Sven-Oliver Proksch. 2021. "Fake It 'til You Make It: A Natural Experiment to Identify European Politicians' Benefit from Twitter Bots." *American Political Science Review* 115, no. 1: 316–22.
- Steinert-Threlkeld, Zachary C. 2017. "Spontaneous Collective Action: Peripheral Mobilization during the Arab Spring." *American Political Science Review* 111, no. 2: 379–403.
- Tokita, Christopher K., Andrew M. Guess, and Corina E. Tarnita. 2021. "Polarized Information Ecosystems Can Reorganize Social Networks via Information Cascades." *Proceedings of the National Academy of Sciences* 118, no. 50: e2102147118.
- Tucker, Joshua A., Yannis Theocharis, Margaret E. Roberts, and Pablo Barberá. 2017. "From Liberation to Turmoil: Social Media and Democracy." *Journal of Democracy* 28, no. 4: 46–59.