



BLOGS AND BULLETS IV

HOW SOCIAL MEDIA UNDERMINES TRANSITIONS TO DEMOCRACY

Marc Lynch, Deen Freelon, and Sean Aday



PEACETECH LAB

ABOUT THE REPORT

As part of its ongoing Blogs and Bullets project, PeaceTech Lab analyzed the role of social media in Egypt's failed attempt to transform an effective uprising into a successful democratic transition. The study drew from unique Twitter and Facebook datasets to determine how social media was used with different effects during and following Egypt's intense periods of protest. This report primarily focuses on how three key mechanisms of social media operated in Egypt's transitional environment: *clustering*, *fear*, and *translation*. The Blogs and Bullets project is conducted in partnership with George Washington University's Institute for Public Diplomacy and Global Communication.

ABOUT THE AUTHORS

Marc Lynch is a professor of political science and international affairs at George Washington University, director of the Project on Middle East Political Science, and nonresident senior associate at the Carnegie Endowment for International Peace. Deen Freelon is an associate professor of communication at American University. Sean Aday is an associate professor of media and public affairs and international affairs at George Washington University and director of the Institute for Public Diplomacy and Global Communication.

Cover photo: A woman attending a demonstration during the Egyptian uprising in Tahrir Square, Cairo, Egypt, takes a picture with her smartphone, January 2011. (Getty Images/Marco Vacca, Contributor)

The views expressed in this report are those of the author(s) alone. They do not necessarily reflect the views of the PeaceTech Lab.

PeaceTech Lab
2301 Constitution Ave., NW
Washington, DC 20037

Phone: 202-429-7800
E-mail: info@peacetechnlab.org
Web: www.peacetechnlab.org

First published 2016.

ISBN: 978-1-60127-626-1

© 2016 by PeaceTech Lab

CONTENTS



SEPTEMBER 2016

Introduction ...	5
The Blogs and Bullets Framework ...	6
Egypt's Transition ...	12
Social Media and the Transition ...	13
Conclusions ...	28
Appendix: Methodology ...	31

[The role of social media was just as central to Egypt's transitional failure as it was to its revolution. Social media has become a key part of the political information environment, which affects all forms of politics, whether uprisings against autocracy or conventional democratic discourse.]

Summary

- Social media use appears to have different effects during transitional periods than during protest or normal political periods.
- During protest or normal periods, social media can have a propensity to bring together and organize people to achieve a common goal, but during transitional moments—often defined by heightened institutional uncertainty—it can have an equally negative propensity to create polarized communities and fuel rumors and fear.
- When individuals retreat into like-minded groups, they tend to be exposed disproportionately to messages tailored to their own prejudices.
- The intensity and speed with which messages and images flow through online social networks produce emotional responses that trigger in-group solidarity and the demonization of others.
- In contrast to the more optimistic views of social media's role in political protest and conflict—which posit that these media might be useful in tamping down irrational groupthink—there is evidence that within ideologically homophilous communities, social media has often fanned the flames of paranoia and mistrust.
- Social media may have played an important role in the success of the Egypt uprising of January 25, 2011, but evidence suggests that it played an equally significant role in the country's failed attempt to transition to a consolidated democracy.
- Statistical measures of Twitter and Facebook use show that, over time, Egypt's online public became segregated, clusters of like-minded individuals increasingly expressed fear, and the English translator community systematically underrepresented key perspectives in its translation of Egyptian politics for the West.
- Future research on the influence of digital media needs to fully account for the various stages of a protest movement and transition to democracy.
- Research should also consider regime type and stability of the state, which are important variables that likely influence social media use. For example, regimes with vast resources have the ability to utilize digital technologies for surveillance, manipulation, and oppression.

Introduction

Millions of Egyptians took to the streets on January 25, 2011, demanding the overthrow of Hosni Mubarak's regime. Eighteen days later, Mubarak was removed from office by the Supreme Council of the Armed Forces. The Egyptian revolution sparked a massive wave of protests across the Arab world and established a template for revolutionary practice that inspired activists globally.¹ Social media—such as Facebook, Twitter, and YouTube—played an important role in the mobilization, organization, framing, and global publicizing of the Egyptian uprising.

The uprising has become a paradigmatic case in popular and academic literature on the impact of social media on contentious politics. Scholars have investigated the use of social media by activists before and during the uprising.² Activists from Bahrain and Turkey to the Ukraine and St. Louis learned and applied Egyptian protest tactics such as setting up encampments in public space, resisting police attacks, organizing protest locations and times using Facebook groups, and rapidly disseminating videos and images of protests to mass media.

But Egypt failed to achieve a transition to democracy. Consolidating a new democratic system proved more challenging than toppling an entrenched ruler. During the two and a half years following the fall of Mubarak, the activists who led the uprising struggled to convert protests or social media prominence into desired political outcomes. Over a series of elections, controversial institutional gambits, and episodic eruptions of contentious street politics, Egyptian society and politics became deeply polarized and increasingly violent.

On June 24, 2012, Mohamed Morsi of the Muslim Brotherhood won a tightly contested presidential election. He was also unable to achieve a consolidated democracy. Instead, Morsi presided over a series of crises and growing societal discontent. On June 30, 2013, millions of Egyptians took to the streets once more to demand the departure of Morsi; and on July 3, the military stepped in to remove him from office. Morsi's supporters continued to protest the coup, until on August 14, more than one thousand people were massacred during the evacuation of protest encampments in Cairo. The subsequent repression extended beyond the Muslim Brotherhood. Many leading activists were imprisoned for violating laws against protests.

The role of social media was just as central to Egypt's transitional failure as it was to its revolution. Social media has become a key part of the political information environment, which affects all forms of politics, whether uprisings against autocracy or conventional democratic discourse. As one recent report concluded, "It is almost impossible to think of a major political protest or upheaval occurring without social media being part of both the incident and the ensuing narrative."³ The same is true for any attempted democratic transition in today's heavily socially mediated world. Countries attempting to transition to democracy will need to understand the impact of social media on politics *after* the protest movement succeeds.⁴

This understanding can come from examining the role of social media during postuprising transitions to democracy. For example, what were the political effects of social media during Egypt's attempted transition after the 2011 uprising? How did social media contribute to the failure of the transition? Did the same features of social media that allowed Egyptian activists to challenge the authoritarian regime of Mubarak contribute to the disruption and failure of the post-Mubarak transition? Or did different mechanisms matter during the transitional moment than during the revolutionary moment?

To help answer these questions, the PeaceTech Lab applied its Blogs and Bullets analytical framework and reviewed recent writings and research focusing on Egypt, as well as other

The role of social media was just as central to Egypt's transitional failure as it was to its revolution. Social media has become a key part of the political information environment, which affects all forms of politics, whether uprisings against autocracy or conventional democratic discourse.

prominent examples of recent protest movements.⁵ The initiative took the study of social media and contentious politics beyond institutionalized democracies, challenges to stable autocracies, and activist moments. The team first identified the key ways in which social media mattered in other contexts, including the Iranian uprising of 2009, the Egyptian and other Arab uprisings of 2011, and the Syrian civil war. Then, two original Twitter and Facebook datasets (see appendix) were used to identify specific effects such as reduced transaction costs, polarization and informational clustering, and the megaphone effect of publicity outside the country.

Overall findings from the analysis demonstrate that social media mechanisms impact the political environment differently during transitional moments versus normal or revolutionary moments. The impact also differs depending on the institutional context. Further, the effects are likely to be most powerful and destructive during transitions where the rules are uncertain and individuals fear for their immediate future. It is therefore imperative to explore how social media can be used to encourage rather than inhibit a robust public sphere during transitional moments and improve the prospects for democratic consolidation.

The findings are not conclusive, but they are highly suggestive of the challenges that social media will pose to any democratic transition. Though every country has its own distinctive historical, institutional, and political contexts, the dynamics of polarization are general, not specific. When the institutional context and political environment create the right conditions, divisions can emerge around almost any chasm, not only sectarian or ethnic. That is why the identity, discursive, and political dynamics of the clash between Islamists and their adversaries in Egypt looks similar to the ethnic and sectarian conflict seen in other divided countries.

The Blogs and Bullets Framework

Each Blogs and Bullets study has employed an analytical framework built around five “lenses” through which social media’s impact on politics might be observed. The framework was designed to help sidestep unproductive debates between “cyber-pessimists” and “cyber-optimists” and to avoid overly generalized arguments that social media generically causes democratization or radicalization or anything else. The causal impact of social media may be best observed through the empirical tracing of specific effects.⁶

The framework’s five lenses of analysis include (1) individual attitudes and competencies, (2) collective action, (3) intergroup dynamics, (4) the power and reach of the state, and (5) external attitudes. Social media might, for example, radically change how individual users understand politics and relate to each other even if there is no observable impact on state power or protest activity.

One key implication of this framework is that context matters for how more universal mechanisms operate. Social media has some innate characteristics, but its effects are always filtered through historically specific institutions and the political terrain. Its impact should be characterized not as creating wholly new politics but as accelerating, intensifying, or tilting the balance of power toward particular social actors. The role of new media during the Green Movement protests in Iran in mid-2009 could not be understood without recognizing that many of the social media platforms were far more relevant outside Iran than inside it, and the regime was in many ways far better able to use those same platforms for surveillance and oppression than protesters were for mobilization; ultimately, the movement failed to overturn the results of the election. It would be a mistake to conclude new media were completely ineffectual and irrelevant to protest movements, however. Iran’s robust political movements and potent civil society may have challenged the election manipulation under any circumstances.

But without social media, the world might not have become aware of the Green Movement, and the protests might have fizzled out far earlier.⁷

The Arab Spring protests in late 2010 and early 2011 brought a new wave of research into the effects of internet communication technologies, especially social media platforms like Twitter and Facebook, as well as renewed claims of their potential democratizing power. The study *New Media and Conflict After the Arab Spring* analyzed Twitter data from four countries: Bahrain, Egypt, Libya, and Tunisia. It found that social media's influence on the protest movements was felt on the margins, accelerating and intensifying protests and helping to link together otherwise different national struggles into a single collective narrative. Especially noteworthy was evidence of the intersection of new and traditional media and of a "megaphone" effect that brought the story of peaceful protests and the often brutal regime responses to the outside world.

The study *Syria's Socially Mediated Civil War* used Twitter and YouTube data to trace the descent from peaceful protest to civil war. The Syrian online space showed multiple "Twitter-verses" representing the various regional and sectarian constituencies invested in the outcome of the Syrian civil war. As the war became a proxy for regional powers, Twitter began to reflect that fragmentation, with less and less interaction between Twitter-verses. Each of these increasingly homophilous information bubbles became echo chambers, with their own uncontested set of facts and interpretations. English-language journalists gradually occupied a Twitterverse separate and distinct from any of the Arabic-language spheres, raising profound questions about the kind of information Western audiences and political leaders were receiving.

From these studies and comparative contexts, the following claims could be made about the effects of social media—which could also, in principle, be relevant to democratic transitions:

1. **Individual competencies:** Social media exposure and/or usage could develop the ability of individual citizens to engage effectively in politics. To the extent that this exposure affects users and nonusers of social media differently, the distribution of political competencies could change in consequential ways: empowering youth activists over traditional civil society organizations or less wired factory workers, for instance.
2. **Collective action:** Social media could reduce the transaction costs of organizing protests, facilitate connections between like-minded individuals across physical and social space, and create focal points for a diverse coalition to coordinate their political activities. The mechanisms that facilitate the organization of protests continue to operate during transitions, making ongoing protest more likely and complicating the routinization of institutional and electoral politics.
3. **Intensification and acceleration:** Social media's ability to share emotionally impactful or politically relevant information extremely quickly through social networks may speed up political processes, increase the incentive for action over reflection, and highlight more extreme over more moderate voices. Social media has the ability to rapidly spread viscerally disturbing and highly mobilizing images, which can foster panic, anger, and fear.
4. **Polarization:** Social media's tendencies to encourage the clustering of the like-minded into polarized communities makes information flow unevenly across political groupings, preventing a common understanding of the stakes and terms of a political struggle.
5. **State interventions:** Social media may give the state or antidemocratic forces new opportunities for surveillance, manipulation, and strategic intervention into the political realm.

The Arab Spring protests in late 2010 and early 2011 brought a new wave of research into the effects of internet communication technologies, especially social media platforms like Twitter and Facebook, as well as renewed claims of their potential democratizing power.

6. **Biased translators:** If English-language social media users are politically different from Arabic-language social media users, they may present an inaccurate picture of local debates and politics that misinforms the outside world and prompts inappropriate policy responses. The biases of key translators can distort the understanding of what is happening, leading to counterproductive policies.

Transitional Environments

How do each of these effects manifest in transitional environments, as opposed to the more studied effects in stable democracies, autocracies, or revolutionary episodes?

The most distinctive institutional feature of any transition is the increased level of political uncertainty.⁸ Settled institutional environments structure the expectations and strategies of both ruling elites and would-be challengers. In democracies, elections and public opinion polls guide political strategies (from outreach to organization). In autocracies, protests take place within well-understood redlines, with even seasoned activists generally believing that their efforts will expand the zone of potential contention rather than actually bring down regimes. Either way, these settled rules of the game provide predictability, which in turn allows for the rational formation of strategy and the creation of political parties and civil society organizations.

All transitional environments are (almost by definition) characterized by uncertainty about the future distribution of power and rules of the game. All actors therefore must formulate their identities, attitudes, and ideas with an eye toward multiple possible trajectories. Egypt's transitional period was shaped by profound institutional uncertainty and existential battles over the identity of the state. Efforts to draft a constitution were deeply contentious, marred by flawed procedures and perceived Islamist efforts to dominate the proceedings. Parliamentary and presidential elections went forward without a new constitution in place, meaning that voters did not even know the powers or limits of the new executive or legislative branches. Parties had to prepare for parliamentary elections without knowing the details of the electoral system or districts, and the results were repeatedly invalidated over legal challenges to their rules. The judiciary's frequent interventions undermined confidence in the integrity of institutions. Judicial actions such as the disqualification of numerous presidential candidates and the dissolution of the Islamist-dominated parliament just before the presidential election left an institutional void and profound doubts about the neutrality of the courts.

Uncertainty does not always play a negative role in transitions. In fact, uncertainty over outcomes is an essential quality of democracy. What makes uncertainty dangerous is the introduction of existential fear among key actors that the transition threatens their vital interests or even survival.⁹ This could be physical fear (e.g., when rising sectarian or ethnic incitement leads a targeted minority to fear genocidal violence). It could also be political fear (e.g., when losers fear that the winners of a current political battle will establish rules that permanently prevent them from returning to power). When social media magnifies these fears, uncertainty can have a particularly negative impact on transitions.

In Egypt's case, the uncertainty over institutions' viability was compounded by economic, social, and political uncertainty. The economic impact of the revolution and the collapse of tourism was compounded by frequent power outages and the degradation of state services. Finally, the perception of rising violence, whether street crime or political attacks, exacerbated the growing feelings of fear and accelerated polarization into hostile camps. By late fall 2011, growing violence shaped political attitudes and expectations. A brutal attack on Christians

What makes uncertainty dangerous is the introduction of existential fear among key actors that the transition threatens their vital interests or even survival.

When social media magnifies these fears, uncertainty can have a particularly negative impact on transitions.

marching outside the Maspero Egyptian television complex drove sectarian rage and horrified many Egyptians.

All transitions destabilize expectations of a new, stabilized political order. What is new about the contemporary scene, however, is the pervasiveness of social media, the nature of information that flows through them, and the type of networks they form.¹⁰ Social media often contributes to the spread of rumors and fear and the dehumanization of rivals. This is why it is so essential to study social media effects within the unique context of transitional environments.

The effects described earlier each offer plausible ways in which social media could drive fear. Polarization would tend to heighten in-group solidarity and the dehumanization of rival groups. The speed, emotional intensity, and echo chamber qualities of social media content could make those exposed to it experience more extreme reactions. Social media appears particularly suited to worsening political and social polarization because of its ability to quickly spread violent images and frightening rumors through relatively closed communities of the like-minded.

The effects could be driven by the intentional strategies of self-interested political groups who perceive some benefit in spreading fear or uncertainty. Elites affiliated with the old regime, unhappy with their removal from the commanding heights of power, might see every reason to spread discontent with the new rulers. Ethnic or sectarian politicians could find it to their electoral advantage to polarize society around identity grievances. Social media might offer opportunities to such political entrepreneurs but not itself be the driver of conflict—and solutions aimed at increasing peace and democracy that are focused on social media would have little effect on the outcomes. Authoritarian states learned a great deal during the Arab uprisings about the threat posed by social media and more broadly by contentious collective action. There is now substantial literature on how states have adapted to meet these new challenges. States, during transitional moments, may also have developed new methods for exploiting, countering, or mobilizing social media to advance their interests. States that once ignored or tried to censor social media might now adopt active surveillance programs to monitor for potential protest activity, or they may flood online spaces with pro-state accounts to help shape the online conversations.¹¹

More troubling is that polarization and a failed transition could be the unintended outcomes of the typical operation of social networks during periods of profound uncertainty. If polarization and the spread of fear are endogenous to socially mediated environments, then it would tend to prevent consolidation of democratic change even if politicians mean well.

During revolutionary moments, the energy social media creates around a focal point, such as the demand for Mubarak's removal, rarely carries forward into the transitional period. Typically, the unity generated across partisan, ethnic, class, or ideological lines is superficial. In transitional moments, the unity or shared vision gives away to competition for power, security, and values among the factions that had come together during the mobilizing period. Moreover, social media activists elevated to political positions who command little actual popular support have no incentive to push for elections.

Social media continued to create opportunities for mobilization after the fall of Mubarak. The mechanisms by which activists could use social media to overcome collective action problems and mobilize protests continued to operate. The identities and narratives forged through political battles retained their hold over activists in the postuprising period. The political context was crucially different, however. The mobilization against Mubarak sought to destabilize

an authoritarian regime and succeeded. The mobilization after Mubarak was also destabilizing, with turbulence making democratic consolidation more difficult.

The collapse of revolutionary unity is a common story around the world. However, scholars disagree over whether social media accelerates and intensifies polarization or simply reflects political changes driven by other factors. There is considerable disagreement over the extent to which individuals in social media clusters are exposed to other sources of information and over how much this matters for shaping their political attitudes.¹²

Social media is part of a broader public sphere in which individuals share their thoughts with their fellow citizens. In some contexts, for example when there is limited political opportunity, social media might serve as an alternative public sphere where small groups develop their identities, interests, and political ideas in relative isolation. In other contexts, social media might be deeply interwoven with mass media and be part of a highly integrated political information structure. Regardless, social media should be viewed as part of a complex media ecosystem through which information flows, rather than as discrete platforms.¹³ This could take different forms in different countries. Social media might be an alternative public sphere, with different content and norms than state-controlled broadcast media, as was the case in pre-revolutionary Tunisia.

In transition-era Egypt, social media and the mass media were interwoven and mutually reinforcing. Long before the 2011 uprising, Egypt had a contentious press and a vibrant, if small, online activist community that seamlessly integrated online engagement with political activism.¹⁴ Over the course of the 2000s, Egyptians were at the forefront of the Arab blogging trend, writing incisively about local politics in both Arabic and English. Egyptian bloggers could be found across the political spectrum—from left-wing revolutionaries to secular right-leaning elitists to young Muslim Brothers. Significant online and offline political mobilization occurred in this period. Blogs and online portals formed the skeleton of the *Kefaya* movement, a loosely organized activist coalition that pushed for political change. In 2008, Facebook activism rose to the fore with the successful protests in Al-Mahalla al-Kubra, which in turn launched the April 6 movement. Online activists also played a key role in the 2010 presidential campaign of opposition leader Mohamed ElBaradei and in the “We Are All Khaled Said” protest movement that served as an antecedent to January 25. And then, of course, online activists played a key, frequently documented role in the organization of the January 25 uprising.

Following the revolution, however, these activists found that their success as vanguard protest organizers did not translate smoothly into political influence in a democratic transition. Activists struggled to find a mode of political action that would sustain their political influence and connection to society. Their protest tactics lost luster over time, while the better-organized Muslim Brotherhood effectively navigated the new democratic terrain to win commanding majorities in parliamentary elections and to elect one of its own as president.

This is not because the underlying mechanisms linking social media to political outcomes stopped operating, but rather there was a change in the political and institutional context. There is little reason to expect a significant change in the mechanisms following the shift from an uprising to transition. There is unlikely to be any significant loss in the competencies developed during the pre-uprising or uprising periods. If anything, one would expect more people to have been exposed to social media and to have learned things about using it for political action during the uprising. Nor should there be any significant change in the ways social media facilitates collective action through reduced transaction costs or in the efforts by states to control, surveil, or manipulate online spaces. Thus, these underlying mechanisms can conceivably be held constant.

The following three key mechanisms could work *differently* during an uncertain transitional environment:

Clustering: During the heady days of revolution, social media seemed to provide unification across disparate ideological trends. This unifying around a limited, shared goal over a discrete period of time does not seem to endure over time in most cases. As time goes on, social media seems to encourage political society to self-segregate into communities of the like-minded, intensifying connections among members of the same group while increasing the distance between different groups.

The uneven spread of provocative information through communities and social networks drives clustering, leading to divergent understandings of the situation at critical junctures. Members of one group will be inundated with intense messages of an urgent crisis demanding solidarity and action, while members of another group may be unaware of the crisis or view the first group as villains rather than heroes. Social media clustering lends itself alarmingly well to the dehumanization of the other by reinforcing both in-group solidarity and out-group demonization.

Actions taken on the basis of this information—whether communicative acts such as speeches or tweets or physical acts such as attacks on some groups—then reinforce the trend toward polarization. Attitudes may intensify within these clusters as a result of the removal of competing perspectives, accelerating polarization, and a reduction of the prospects for ameliorating conflict.

Intensifying and accelerating fear: Social media is often credited in the Arab cases, at least, for breaking through the wall of fear that long governed Arab political culture.¹⁵ Unhappy citizens who had long since learned to live with their misery out of fear of police abuse, political repression, and the surveillance state suddenly found safety in numbers. During mobilizational moments, this overcoming of fear has been seen as an accelerant to collective action, whether through emotional catharsis or through the rational calculation of the increased odds of safety in numbers.

During transitional moments, however, fear tends to be reinforced rather than broken. The level of uncertainty found in transitions is much higher than in typical political conflict. In the absence of settled institutions or constitutions, individuals and groups might fear for their political future. In the absence of public order, they may fear for their safety and even survival. When social media transmits frightening images, videos, or information, they will travel quickly through trusted social networks in ways that could reduce the response time and frustrate would-be moderates.

Translating: The role of external actors in shaping transitional outcomes has typically been underemphasized in comparative politics literature. The Arab uprisings involved a large degree of external involvement, which proved decisive at key moments. Social media plays an important role in shaping international perceptions of local conflicts, thus framing the issues and expectations that drive interventions or attitudes. Social media information is rarely neutral, though, and can lead to dangerously distorted perceptions of political reality. Testing this mechanism would require showing that influential accounts translating from one sphere to another (in this case, from Egyptian Arabic-language debates to the Western English-speaking media) are systematically biased or nonrepresentative.¹⁶

As time goes on, social media seems to encourage political society to self-segregate into communities of the like-minded, intensifying connections among members of the same group while increasing the distance between different groups.

The PeaceTech Lab's study used Facebook and Twitter datasets to test all three mechanisms: clustering, intensifying and accelerating fear, and translating. The content shared over time through these social media platforms was examined for evidence that information flowed through increasingly clustered communities, that such images and information intensified fear and mutual hostility, and that these networks shared information with English-speaking audiences outside of Egypt in systematically unrepresentative ways. The evidence presented here offers important insights into how to best anticipate and mitigate social media's destabilizing effects on future transitions.

Egypt's Transition

On June 24, 2012, eighteen months after the fall of Mubarak, Mohamed Morsi of the Muslim Brotherhood won a closely contested presidential election. While Egypt was sharply divided over the presidential election—as demonstrated by Morsi's narrow margin of victory over the former prime minister Ahmed Shafik (52 percent of the vote compared to 48 percent)—the election itself was a moment of remarkable national unity. That unity rapidly gave way to intense polarization, political stalemate, countermobilization, and ultimately a military coup.

The seating of a new president who generated intense suspicion across many sectors of society and within the state came at an unsettled time—a new constitution had not yet been drafted and the recently elected parliament had been dissolved. The first few months of Morsi's government were ineffectual. Morsi struggled to establish his authority over a recalcitrant state bureaucracy and maintained an uneasy relationship with the military. By fall, however, Morsi began to exercise more power, shuffling the leadership of the Supreme Council of the Armed Forces (SCAF), handling foreign policy crises effectively, and moving to finalize a controversial constitutional draft. However, these advances only accelerated political opposition, which increasingly manifested in street clashes and incendiary public political rhetoric. Real violence and governance failures fueled sensationalism in the media to produce widespread fear and fury, with narratives rapidly hardening and dialogue across ideological lines becoming rare.

Real violence and governance failures fueled sensationalism in the media to produce widespread fear and fury, with narratives rapidly hardening and dialogue across ideological lines becoming rare.

Key Moments in Egypt's Failed Transition

June 24, 2012 Morsi is elected
 August 2, 2012 Morsi names first government under prime minister Hashim Qandil
 August 12, 2012 Morsi shuffles senior national security leadership
 September 11, 2012 Protests occur at the U.S. Embassy over "Innocence of Muslims"
 October 12, 2012 Small clashes occur between activists and Muslim Brotherhood in Tahrir
 November 22, 2012 Morsi declares sweeping presidential powers
 November 24, 2012 National Salvation Front is announced
 December 5, 2012 Violent clashes occur outside Ittihadiya presidential palace
 December 26, 2012 New constitution goes into effect
 January 27, 2013 State of emergency declared after violent protests
 March 22, 2013 Attack occurs on Muslim Brotherhood headquarters
 April 28, 2013 Tamarod movement is announced
 June 30, 2013 Tamarod protest occurs
 July 3, 2013 Military coup occurs

The constitution—the primary vehicle by which any political system resolves uncertainty—became the central focus of political contention. Critics of the Muslim Brotherhood complained bitterly over what they viewed as its effort to dominate the drafting process. A

major turning point came with Morsi's November 22, 2012, effort to push through a long-delayed new constitution. Critics seized upon several clauses in the new text to accuse him of seeking an Islamic state, with intense public arguments swirling about language surrounding the Islamic identity of the Egyptian state. Morsi then took the extremely controversial step of issuing a presidential decree granting himself absolute power, without judicial review, for the period needed to pass the constitution. This power grab sparked violent protests. On November 24, 2012, less than six months after Morsi's inauguration, a broad opposition coalition was announced, demanding that the president step down and allow early elections.

In the absence of a parliament or constitution, there were few institutional avenues for this political contestation. The uncertainty created by unsettled political institutions was intensified by recurrent and escalating violence between Morsi and the opposition. A decisive moment came on December 5, when anti-Morsi protestors outside the presidential palace at Ittihadiyya were attacked viciously by Muslim Brotherhood supporters. In late January, the deaths of nearly fifty people at a football match in Port Said led to nationwide rioting. On January 27, Morsi declared a state of emergency. Over the next few months, repeated clashes took place between Islamists and their opponents. On March 22, hundreds of protestors attacked the Muslim Brotherhood's headquarters, injuring hundreds. In this super-heated political environment, violence rapidly escalated, with the media on both sides fanning the flames.

As violence escalated and identity lines hardened, Egyptian politics became intensely polarized and a zero-sum game.¹⁷ In late November, following the constitutional crisis and Ittihadiyya clashes, a coalition of opposition politicians came together as the National Salvation Front to demand that Morsi step down. In spring, a group of previously little-known activists started the "Tamarod" (revolt) petition campaign, seeking millions of signatures in support of a demand for early presidential elections.¹⁸ Confident in his own public support and electoral legitimacy, Morsi refused to make serious concessions to the opposition. On June 30, however, huge numbers of Egyptians came out into the streets. General Abdel Fattah el-Sisi, head of the SCAF, demanded that Morsi hold early elections. He refused, and four days later, the Egyptian military seized power, arresting Morsi and suspending the constitution.

The Muslim Brotherhood and its supporters responded by establishing their own social media-fueled protest encampments, demanding Morsi's restoration. In August, the encampment at Rabaa al-Adawiya was violently cleared. In the ensuing years, Egypt has become fiercely repressive, not only toward the Muslim Brotherhood but also toward independent activists and journalists. In 2014, Sisi won a presidential election against token opposition, and his supporters dominated the 2015 parliamentary elections. Egyptians fundamentally disagree over whether the military saved the revolution by removing the Brotherhood or ended it by seizing executive power. Whatever the case, there is little dispute that the military's intervention marked the failure of the post-2011 transitional process.

Social Media and the Transition

The failure of those lobbying for democratization in early 2011 to maintain the movement's momentum is due to many factors, but just as digital media played an important role in the heady days of the Arab Spring, so might it have been a key factor in the transition back to authoritarianism. Yet, far less has been written about this period. How did social media affect this process? Did Egyptian online clustering increase over the course of the transition? Did social media-induced fear spike before, during, or after violent events? Does information flow differently to the different clusters?

The segregation of Egypt's online public into mutually hostile clusters following the momentary unity of Tahrir Square played a central role in the failure of Egypt's political transition.

Twitter

Did Egyptians Cluster?

The segregation of Egypt's online public into mutually hostile clusters following the momentary unity of Tahrir Square played a central role in the failure of Egypt's political transition.¹⁹ The mapping of Egyptian Twitter use during more than two years of a failed transition offers some of the first robust empirical support for this statement.²⁰

Using a combination of qualitative and quantitative methods, persistent clusters of Twitter users were identified through their retweeting patterns. Users within a single cluster retweet one another much more frequently than they do outsiders. This methodology assesses actual online behavior at the aggregate level, rather than making assumptions about the identity, ideology, or beliefs of users. Put simply, these clusters represent who actually retweeted each other during each time period of the sample. Similarities in those clusters from period to period allow us to track their composition and content over time.

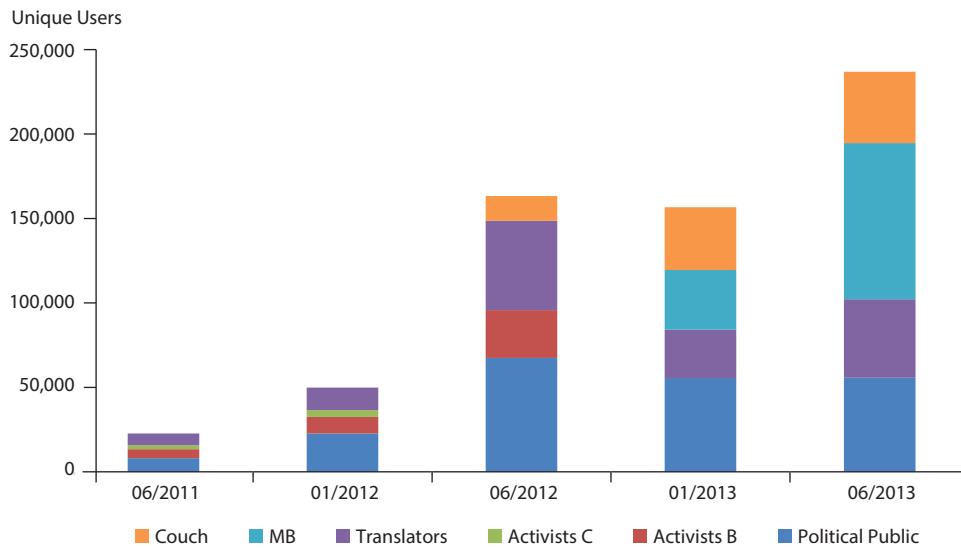
This retweet analysis identified five persistent clusters:

Political Public: This cluster, which behaved fairly consistently across each fortnight covered in the study, includes the core group of political commentators, activists, newspapers, and media outlets at the center of the Egyptian public sphere. It was typically the largest cluster. It often formed a "supercluster" (defined as distinct clusters sharing at least 20 percent of their content) with the Activist clusters described below, with dense network connections linking them into a common community with two or three discrete, centralized hubs. This cluster included most of the major Egyptian national media outlets.

Activists: Several different persistent clusters of activists manifested at different points in Egypt's transitional experience. One Activist cluster included prominent revolutionary figures such as @yosrifouda and @hamzawyamr, the television station @ontveg, and Islamists like Freedom and Justice Party leader @essamalerian. This cluster persisted from early 2011 until August 2012 when it disintegrated. A second Activist cluster appeared consistently for the first year of the transition (March 2011–January 2012) and then dissolved. A third cohered for several months toward the end (December 2012–March 2013). These clusters were typically anchored by one or more of a rotating roster of prominent activists, such as @galalamer, @elbaradei, @belalfadl, and @ahmedfouad_negm. The superclusters typically involved close connections between these Activist clusters and the Political Public cluster.

Couch Party: This important cluster is mostly nonpolitical, discussing topics such as music, parties, jokes, and viral images. It would likely be missed by methods focused on prominent individuals or hashtags, given its usual topical focus. But that does not mean that this large, persistent cluster was politically unimportant. The political comedian Bassem Youssef (@drbassemoussef) was especially popular with these otherwise less politically minded individuals. Other prominent political figures popular with the Couch Party include individuals from the Ahmed Shafik campaign and others who would become associated with the June 30, 2013, protest. It is a plausible cluster to observe the politicization of an apolitical public and its turn against the Brotherhood ahead of the coup.

Muslim Brotherhood: The Muslim Brotherhood cluster, often anchored by President @muhammadmorsi, did not appear before fall 2012. Prior to this point, the accounts of Broth-

Figure 1. Distribution of Clusters by Number of Unique Users per Cluster

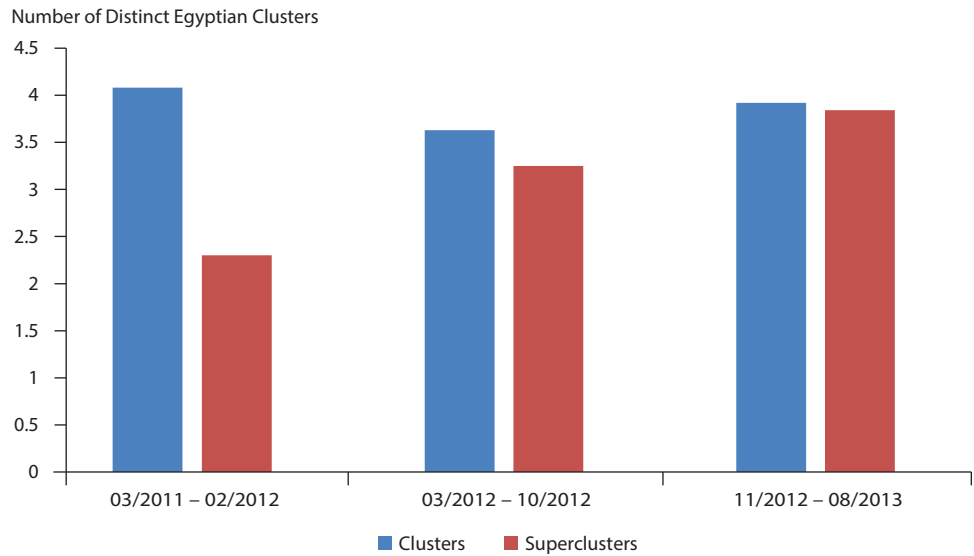
erhood members and public figures typically were mixed in with either the Activist or Political Public clusters. The timing and nature of the crystallization of a distinct Brotherhood cluster is an important part of the narrative on online clustering and polarization. It is also notable that this cluster often had a transnational component, with a heavy presence for Gulf-based Islamists and Turkish leader Recep Tayyip Erdogan.

English Translators: This was a robust cluster of English-language commentators on Egypt. Some were Egyptians writing in English (@sandmonkey, @hahellyer, @daliaezzatt), some were Western Egypt-watchers (@mwhanna1, @stevenacook, @arabist), and some were journalists on the ground.²¹ They were a key link between Egyptian politics and the outside world, translating the Arabic debates and events on the ground for an English-speaking audience while also arguing among themselves.

The relative size of these clusters may surprise casual observers of Egyptian politics. The Political Public is almost always the largest single cluster, especially if related Activist clusters are added as part of a supercluster. More surprisingly, perhaps, the Couch Party is comparable in size to the Political Public and sometimes larger.

Figure 1 shows how the cluster sizes changed over time. More specifically, it shows two things: (1) the changes in *absolute size* (i.e., the number of users associated with each cluster); and (2) changes in the *relative size* of the clusters vis-à-vis one another.

June 2011 shows a large number of small clusters, most of which shared the same basic ideological orientation in favor of the revolution. January 2012 shows the consolidation of these related clusters into larger political clusters, none of which is affiliated with the Muslim Brotherhood. In other words, the smaller clusters of particular types of activists consolidated into a single larger cluster, which could be interpreted as either a loss of diversity as polarization sets in, or, more positively, as growing dialogue/diversity within clusters even as distance across clusters grows. By January 2013, the network had sorted itself into four clusters of roughly equal size (depending on the month): the Muslim Brotherhood, the Political Public, the Couch Party, and the English Translators. In June 2013, on the eve of the coup, those four

Figure 2. Polarity

clusters remained roughly stable, but with a larger Muslim Brotherhood cluster and a significantly reduced Activist cluster as smaller activist clusters merged into a supercluster with the Political Public.

The interaction among these different clusters changed over time in significant ways. Four indicators were used to explore the clustering dynamics of the Egyptian online public: (1) polarity, (2) insularity, (3) proximity, and (4) churn. Each contributes to our understanding of exactly what happened to the Egyptian public in this pivotal year of transition failure and why. Most indicators were analyzed not on the monthly samples of the full thirty-two month dataset but on the biweekly sample in the critical year between June 30, 2012, and June 29, 2013. This was done to track the patterns of clustering at a finer level of granularity.

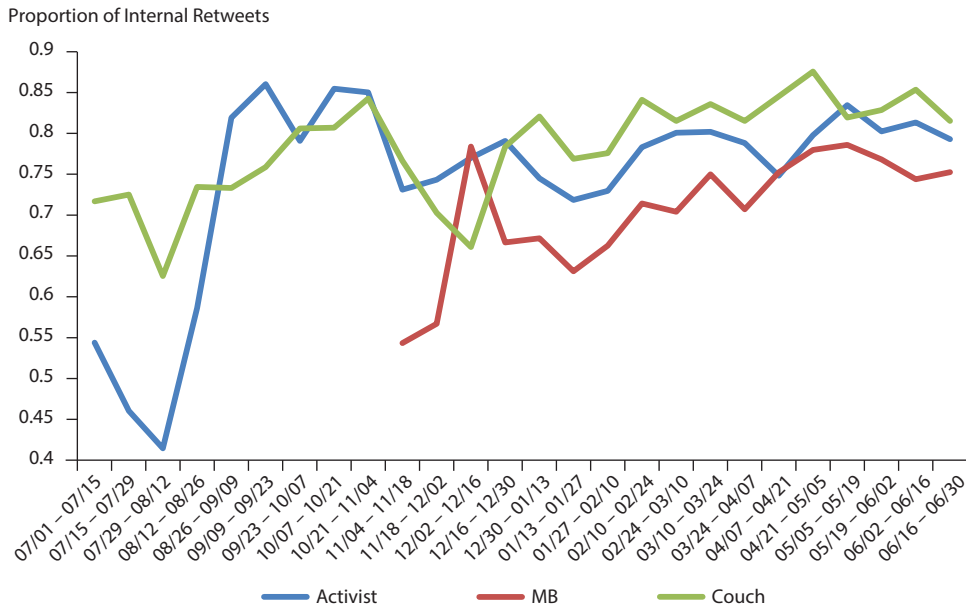
Polarity: This indicator measured the number of distinct Egyptian national clusters, primarily composed of participants inside rather than outside Egypt. As figure 2 shows, the average number of Egyptian national clusters remained fairly constant—4.08 clusters in the first thirteen months, 3.63 in the next eight months, and 3.93 in the final thirteen months (the time periods roughly corresponding with the key political stages in the transition).

What changed, however, was the relationship between clusters and superclusters.

Over time, the gap closed between clusters and superclusters, meaning that the discrete but related clusters were increasingly merging together into large and more monolithic groupings. For instance, this might represent leftists and liberals who once retained discrete networks merging together into a single oppositional cluster over time, or Muslim Brothers and Salafists doing the same. From March 2011 to March 2012, every month in the dataset except one included at least one supercluster. Superclusters also appeared in July and August 2012—the moment of relative unity following the presidential election. After that, not a single supercluster appears.

This increase in the presence of superclusters is a significant change in the makeup of the online space. Ideologically similar but politically distant groups sorted themselves out over time: multiple Islamist clusters became a single Islamist cluster, multiple activist clusters became a single activist cluster, and so on. In less polarized periods, clearly distinct clusters have

Over time, the gap closed between clusters and superclusters, meaning that the discrete but related clusters were increasingly merging together into large and more monolithic groupings.

Figure 3. Insularity

emerged among, say, activists for and against participating in parliamentary elections, while in more polarized periods, those subgroups collapse into a single cluster.

Insularity: This indicator measured how many retweets were internal to the cluster versus shared with other clusters. More insular clusters tend to engage more with each other, while less insular clusters retweet more content from other clusters. Figure 3 shows a general overall increase in insularity across the three major clusters over time. (Recall that the activist clusters have merged at this point with the Political Public into one supercluster.) On average, insularity of the Egyptian clusters rose from approximately 0.6 (July 2012) to 0.7 (November 2012–January 2013) to 0.8 (April–June 2013).

Proximity: This indicator gauged the degree of sharing between clusters as measured by the percentage of retweets in one cluster found in a second cluster. It was used to capture the specific *relationships* between clusters rather than only measure the coherence of a single cluster. Less sharing would indicate more polarization. Figure 4 shows the trends in proximity among three major clusters: the Political Public, the Couch Party, and the Muslim Brotherhood, which is present in eighteen of the twenty-six fortnights.

The results are striking. The proximity between the Muslim Brotherhood and the Political Public steadily declines over the period. The Couch Party and the Muslim Brotherhood regularly retweeted content from the Political Public cluster and, more precisely, the mainstream media located in that cluster, but almost never retweeted each other. On average, 13.1 percent of the tweets in the Couch Party cluster and 15.8 percent of the tweets in the Muslim Brotherhood cluster were retweeted from the Activist cluster. In comparison, only 1.7 percent of the Couch Party tweets were retweeted in the Muslim Brotherhood cluster and only 3.6 percent vice versa. Meanwhile, the Activist cluster largely ignored content from both the Couch Party (5.9 percent) and the Muslim Brotherhood (5.8 percent).

Churn: This indicator measured the number of individuals who moved from one cluster to another. Jaccard coefficients of shared users between different clusters from one time period to another were calculated. The lower the Jaccard, the less similar the two clusters were and

Figure 4. Proximity

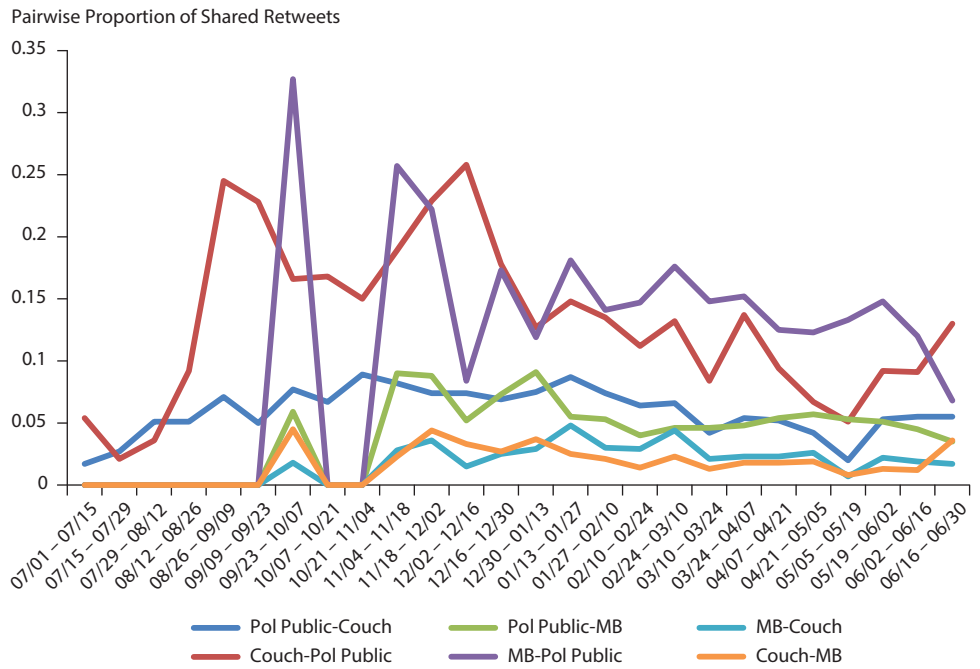
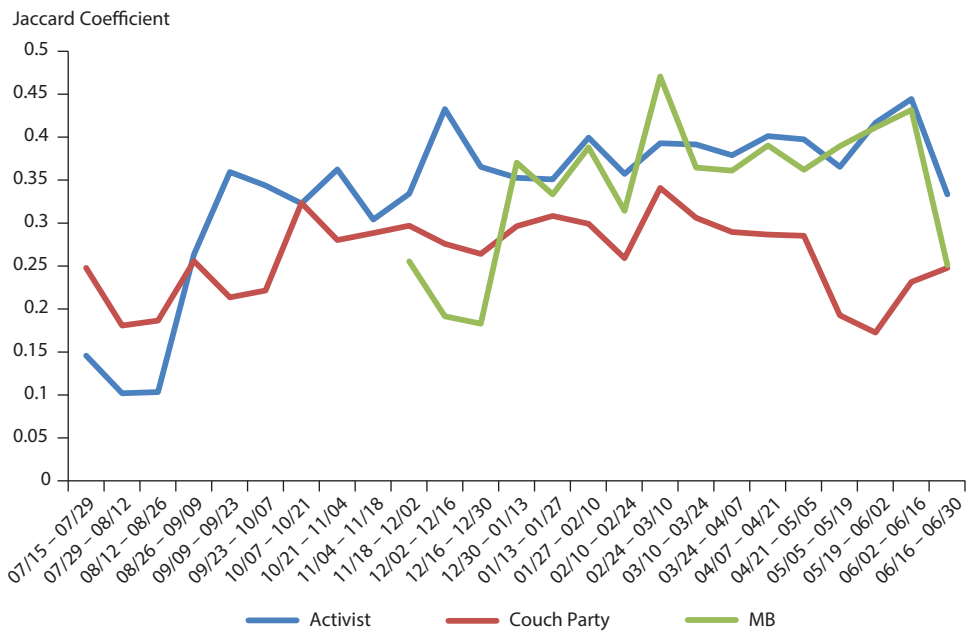


Figure 5. Churn



therefore the more turnover there had been between fortnights. High Jaccards for matched clusters indicated relatively stable membership over time, while low values indicated membership instability. The higher the Jaccard, the less churn—and the greater polarization.

Most strikingly, the Activist and Muslim Brotherhood clusters exhibited very similar trends in terms of their continuity (see figure 5). While the Couch Party’s continuity declined starting around March 2013, the other clusters showed generally rising continuity. The greater

churn in the Couch Party cluster might be expected given it is a less politicized, formalized, or ideologically coherent grouping.

While the degree of movement between clusters generally decreased over time in line with the expectations of the clustering thesis, particularly for the Muslim Brotherhood and Activist clusters, it is notable how much movement still occurred. At its peak moment of cluster cohesion, the Muslim Brotherhood cluster never exceeds a Jaccard coefficient of 0.5 (i.e., half of the users in the cluster are different from one fortnight to the next). What this means in practice is not so much that core Muslim Brotherhood or Activist users swapped clusters, but rather that more casual users joined in conversations of interest at particular times. For example, when the Muslim Brotherhood cluster's continuity plummeted from 0.43 to 0.25 in the final fortnight, the number of users in the cluster spiked from 7,285 to 20,527—indicating an enormous number of new users entering that cluster's conversation rather than large numbers of defections by core users to different clusters.

The four metrics show that Egypt's Twitter public became more clustered over time. In the months following the revolution, multiple smaller, relatively fluid clusters coalesced into single clusters. Those clusters became more insular, with less sharing of tweets and less movement between clusters. While the evidence of the increased insularity and declining proximity of these clusters may not surprise casual observers of Egyptian politics, the evidence of network polarization allows for a finer-grained understanding of precisely how the Egyptian online network changed over time.

The answer to the first question, then, is a clear yes: the clustering behavior during the transition was different than during the revolution.

Did Fear Flow Differently?

Considerable evidence suggests that fear and insecurity heavily influenced Egyptians' perceptions of the democratic transition. Several well-regarded surveys recorded widespread feelings of insecurity following the revolution. Surveys by the Pew Research Center (fielded April–May 2012 and April–May 2013) found that the number of Egyptians “very satisfied with the way things are going in the country” dropped from 53 percent to 30 percent and dissatisfaction rose from 41 percent to 62 percent.²² “Law and order” was named by 97 percent of Egyptians as a very or somewhat important issue, ranking ahead of even politics or the economy as a public concern. In May 2013, 44 percent of survey respondents indicated that law and order was getting worse, while only 26 percent indicated it was getting better.

Even more evidence can be found in other surveys. Monthly surveys by the Egyptian polling firm, Baseera, found that the president's approval rating dropped from 77 percent in August 2012 to 32 percent in June 2013. For the purposes of this report, the most intriguing results relate to the perception of security. In the August 2012 survey, 58 percent said that security had improved—a figure that increased to 75 percent in September and 73 percent in October. But in December 2012, this figure dropped more than 20 points to only 51 percent reporting improved security, signifying the first spike in fear. While Baseera did not report findings on this question for the first half of 2013, in August 2013 (shortly after the coup), 73 percent said they did not feel safe. Finally, the Gallup Foundation, polling in mid-June 2013, two weeks before the coup, found that only 29 percent expressed confidence in the government, compared to 57 percent in November 2012.

It is analytically important to distinguish between fear and actual violence when considering the effects of social media. Social media could drive feelings of insecurity in the absence

While the evidence of the increased insularity and declining proximity of these clusters may not surprise casual observers of Egyptian politics, the evidence of network polarization allows for a finer-grained understanding of precisely how the Egyptian online network changed over time.

of violence on the ground, or intensify and accelerate the response to actual violence, or shape the postviolence narrative about the meaning of the violence. In the first causal pathway, activists could pave the way toward conflict with exaggerated reporting of alarming information or warnings about impending catastrophe. In the second, real time uploading of videos and tweets about clashes or outrages could quickly bring local events to a national (and international) public. Videos and images could quickly go viral, sparking anger, rage, and fear. In the third, violent events could be memorialized as part of an identity narrative binding together a group by shared experience and the celebration of martyrs to the cause, as demonstrated by the activist narrative of the December 2012 Ittihadiya and November 2011 Mohamed Mahmoud violence or by the Muslim Brotherhood's narrative surrounding the August 2014 Rabaa massacre.

What is known about social media clustering helps to understand the spread of fear and its role in undermining confidence in the transition. This study used a lexicon-based approach to construct a “fear basket” of five key terms in Arabic associated with fear: fear (*kbouf*), chaos/anarchy (*foudha*), civil strife (*fitna*), violence (*'unf*), disaster (*karitha*). Each use was weighted by the number of times the tweet was retweeted.

Examples of “fear basket” tweets (translated from Arabic)

@alaasadek—we are at the brink of the worst *anarchy* in the history of Egypt as the hypocrites and old regime return to trash Egypt with no goal other than to overthrow Morsi and the Brotherhood

@sama7ti—what is happening in Egypt is the *civil strife* which we feared

@naderbakkar—we will not turn Egypt into the *anarchy* that was foretold by the departed (Mubarak)

@elbaradei—Egypt is moving from *chaos* to total *chaos*

@nabilawadhy—huge money is being sent to individuals in Egypt from abroad to inflame *anarchy* and destroy its institutions

@essamz—it appears that President Morsi has managed to stop the spreading of *civil war* in Egypt, thanks be to God, there is no honor in those who want Egypt to descend into *civil war* and *anarchy*

@gucciah—Morsi must step down now before Egypt burns because of the *chaos* of the Muslim Brotherhood to which he belongs

@khaledsalehfans—Egypt must not surrender to *chaos* and barbarism

@jamalrayyan—most of the Egyptian media is an instrument for incitement to the *anarchy* in which Egypt is living today

@mustafahosny—whoever calls for *chaos* and incites it will be the first to burn in its fire...god protect Egypt and its people from the evil of *chaos*

The way Egyptians used these terms changed over time. In the weeks following the election, most of the tweets citing fear basket terms carried a *positive* implication, praising Egypt's ability to “shatter the fear barrier” (@dimakhatib) and overcome “all the attempts to sow chaos” (@aa10s). This offers some support for the “breaking the wall of fear” argument. This was in many ways a high point for efforts that were resisting clustering and sectarian tension, as reflected in tweets such as “you will not be able to inflame sectarian fitna in Egypt...muslim, christian, ikhwani, are one hand” (@samehwagdy). Few tweets in those first postelection weeks referenced instability or fear within Egypt itself—other than to reject incitement or to preach steadfastness in the commitment to democratic change.

However, as the transition proceeded, the fear basket terms began to have a *negative* implication, reinforcing the logic of polarization. Long before violence began to manifest, activists were demanding that “the SCAF must move against this constitutional coup. Egypt will

not be ruled by the office of the Guide of the Muslim Brotherhood” [@mohamedabuhamed, July 8.] By late July, well before the first violent clashes on October 12, ominous tweets began to warn frequently of impending disaster. These early warnings preceded any significant violence or instability on the ground.

But some important voices still clearly hoped to avoid conflict: “Is this the Egypt we want? Violence and counter-violence?” asked the liberal @amrhamzawy plaintively. The April 6 Youth Movement (@shabab6april) called the October 12 clashes “a black day in the history of the Egyptian revolution.”

The narratives of this violence diverged dramatically across clusters as time went on, and the space for cooperation shrank. In December 2012, political conflict peaked with the violent clashes outside the presidential palace at Ittihadiya and the forced passage of a new constitution. To illustrate this divergence, consider the most frequently retweeted tweets in the major Egyptian clusters. The most retweeted tweets in the Activist cluster included the following:

@elbaradei to dr morsi—in light of the clear and dangerous division of Egypt into two camps, do you not see the need to be the president of all Egypt

@elbaradei—vicious attack vs peaceful protesters in front of presidential palace w/o police protection. regime leading Egypt into violence

@hamdykandil ikhwan—militias are attacking protestors and [Vice President] Mahmoud Mekki says it is not his concern

@ibrahimeissa87—the next few hours will be the end of the ikhwan phenomenon in Egypt forever

In the Muslim Brotherhood cluster, by contrast, these were the leading tweets:

@awadalqarni—in the last two weeks secularists have burned down 23 Islamist party headquarters and Islamists haven’t responded once

@awadalqarni—the goal of the secularists in Egypt is to overturn the will of the people and to regain control of the state by any means and to return the Islamists to prisons

@nabilalawadhy—huge money is being sent to individuals in Egypt from abroad to inflame anarchy and destroy its institutions

@essamz—it appears that President Morsi has managed to stop the spreading of fitna in Egypt, thanks be to God, there is no honor in those who want Egypt to descend into civic strife and anarchy

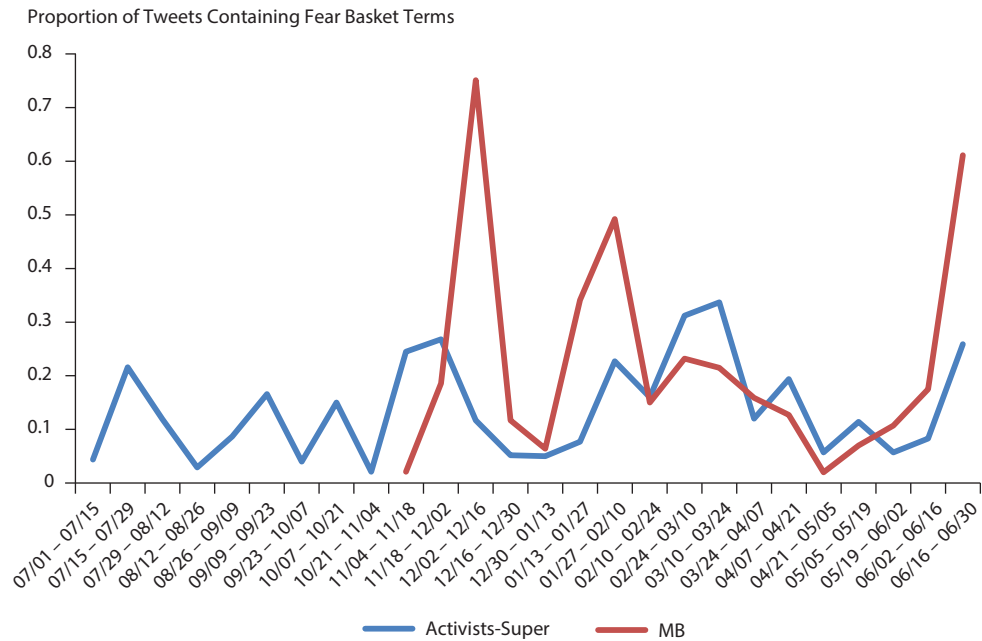
Polarization at this point was not complete, however. A smaller Activist cluster—including moderate Islamists aligned with activist communities such as the former presidential candidate Abd el-Moneim Abu al-Fotouh—tried to bridge the widening gap:

@drabolfotoh—I see the youth of Egypt being victim to the ambitions of their leaders and sacrificed to party interests

@moezmasoud—the solution is not in the hands of the religious extremists or the non-religious extremists. Nothing will save Egypt except moderation

@tamimbarghouti—revolution without consensus is civil war. In Egypt there are political forces happy to have peace with Israel but not to have peace with each other

The rapid spread of rumors inflamed the situation, fueling hostility and violence on the ground. For instance, on March 22, 2013, a group of protestors laid siege to the Muslim Brotherhood headquarters. In the midst of this extremely tense situation, anti-Brotherhood activists began furiously tweeting and retweeting a quote attributed to the Brotherhood leader Mohamed Beltafy threatening to “turn Egypt into Syria in 24 hours” in retaliation. While some influential online figures in the Political Public cluster tried to correct the misinformation, the rumor was retweeted hundreds of times in a single day, often with furious calls to action attached.

Figure 6. Fear Basket, Weighted by Cluster

The mobilization of fear was concentrated more in the politically activist communities than in the broader public. The most striking finding in the statistical analysis was the extremely low incidence of fear basket terms in the Couch Party cluster. The apolitical group was *not* consumed by fear or at least not talking about it on Twitter. Instead, fear basket terms were more often found within the two most politicized clusters: the Activists and the Muslim Brotherhood. However, frequency of the terms spiked at different levels and times: The spike in the Activist and Muslim Brotherhood clusters occurred in the key December 2012 period but was not as intense as the spike in the Muslim Brotherhood cluster. However, between March and May 2013, while the Activist cluster tweeted frequently about fear, the Muslim Brotherhood cluster remained relatively calm.

Figure 6 shows the incidence of fear basket terms as a percentage of the overall number of tweets in a cluster. This gives a sense of how central such expressions of fear were to the conversations within each cluster. In December 2012, late January 2013, and immediately before the June 30 Tamarod protest, the Muslim Brotherhood cluster was disproportionately consumed by fear and discussion of anarchy and chaos compared with the other major clusters. From February through May 2013, however, the Political Public and Activist supercluster was proportionately more likely to invoke such fears. Meanwhile, the Couch Party (not shown in the figure because it essentially flatlined near zero) seemed unconcerned—raising questions about the extent to which fear drove the decisions of the relatively nonpolitical Egyptian sector, compared with its overwhelming presence in the discourse of the Political Public and Muslim Brotherhood.

This analysis, while suggestive, does not tell us definitively whether social media was uniquely affecting attitudes or whether our evidence simply reflects existing opinion. The timing, magnitude, and uneven distribution of tweeted expressions of fear and insecurity offers useful and important evidence about a vitally important trend within Egyptian public opinion. Much more work remains to be done to disentangle the drivers of fear and anger. Fear may

The timing, magnitude, and uneven distribution of tweeted expressions of fear and insecurity offers useful and important evidence about a vitally important trend within Egyptian public opinion.

have been spread by social media because it was manufactured by the regime, activists, or market-share seeking mass media. However, the Egyptian case does support claims that social media accelerated and intensified these dynamics and helped to drive the different communities further apart as narratives of hostility and menace consolidated.

Did Translation Distort?

A key finding in the PeaceTech Lab's 2014 report on Syria was the marked isolation of English-language Twitter participants from the broader Arabic discourse.²³ The cluster analysis of tweets in Arabic and English showed that, over time, the English-language Twittersphere, where most Western journalists (and, by extension, their audiences) trafficked, became separate and distinct from its Arabic counterparts in terms of topics discussed and who participated. The result was that those relying on English-language Twitter saw a very different story than those that used Arabic Twitter.

This isolation allowed a small number of “bridges”—predominantly activists affiliated with the opposition—to shape media coverage and the political debate around intervention. This gave disproportionate power over Western opinion to a small number of individuals whose views were not necessarily representative of broader trends.

In Egypt, activists often complained about the English-language @ikhwanweb account, which they believed offered a sugar-coated and inaccurate portrayal of the Muslim Brotherhood, which said very different things in Arabic. This charge actually reflected a far more endemic problem—one in which the activist bridges were similarly implicated.

The role of English-language bridges between the Egyptian public and the Western media was different than in Syria because of the much larger number of English-speaking Egyptian and non-Egyptian commentators present on the ground. Egypt had a far more robust and developed domestic media sector than did Syria. The influential accounts in the English Translator cluster in Egypt provided the crucial connection between Egyptian politics and the English-speaking world of journalism, analysis, policy, and punditry.

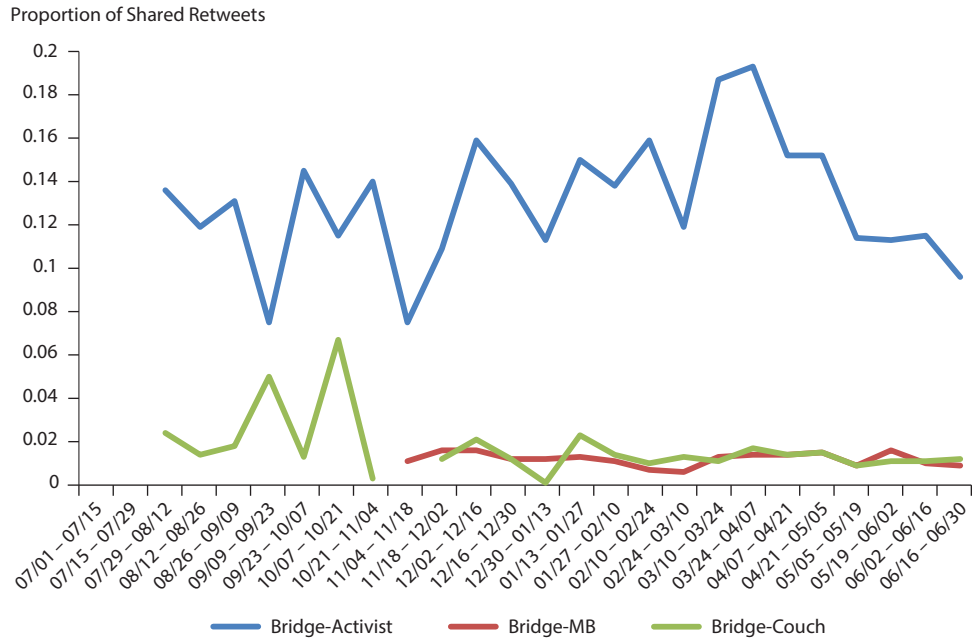
But the density of social media accounts and mass media in Egypt did not correct the underlying problem of translation. Many bridges were part of the Egyptian political fray and naturally used their privileged place within the international public sphere to advance distinct interpretations of Egyptian politics. Their experiences, regardless of political intent, skewed heavily toward intense interest in politics and events inside Cairo. Egyptian English-language Twitter would often explode with high-apocalyptic reports of clashes and violence in the Tahrir area, creating a sense for international observers of chaos even as the rest of the city remained utterly normal.

Retweeting patterns (see figure 7) suggest the extent to which bridges skewed the international understanding of Egyptian politics in significant ways.²⁴ The English Translator cluster consistently translated and bridged content from the dominant Egyptian cluster of political commentators and media, with typically more than 10 percent of its retweets coming from the Egyptian Political Public cluster. But it virtually ignored the other two major clusters, rarely retweeting more than 1 percent of tweets from the Muslim Brotherhood cluster or the Couch Party. Thus, this suggests that the Muslim Brotherhood's perspectives and narratives were largely absent, and there was a lack of shared concern between the Egyptian political class and English bridges and the relatively apolitical ordinary Egyptians online.

In Syria, the international media was almost completely reliant on bridging sources because of the lack of physical access to the country. In Egypt, the brigade of journalists present in

The influential accounts in the English Translator cluster in Egypt provided the crucial connection between Egyptian politics and the English-speaking world of journalism, analysis, policy, and punditry.

Figure 7. English Translator (Bridge) Retweet Sharing



the country allowed for at least some check on the potentially skewed outlook of the English bridge accounts. This corrective effect was itself somewhat offset, however, by the embedding of English-language journalists within the social and political networks of the bridge activist accounts. The existence of relatively professional English-language newspapers in Egypt (e.g., such as Al-Masry al-Youm English, the Egypt Independent, Al-Ahram Online, and Mada Masr) also represented a significant difference from the Syrian case.

Still, the dominance of activist voices within the English Translator cluster introduced significant bias into the presentation of Egyptian politics to a Western audience. While a few Islamist accounts were actively tweeting in English, such as the @ikhwanweb account, the preponderance of voices in English were aligned with anti-Brotherhood trends. Many analysts were sharing valuable perspectives, but the aggregate effect of their preponderance was evident in the framing of the overarching narrative. Issues of great concern to Islamists, such as attacks on Brotherhood political party offices or the circulation of false quotes attributed to Brotherhood leaders, were often completely absent from the English Translator cluster. Activist political priorities or protest events that had little resonance with the Couch Party were disproportionately represented in the English Translator accounts. Those primarily following English-language Twitter for information about Egypt thus received only a partial and misleading impression of the country’s politics.

Facebook

Facebook presents researchers interested in looking at big data a number of challenges, ranging from the company’s lack of openness with its data to privacy concerns. As a result, this study shares certain limitations with other work looking at Facebook in similar contexts. Yet, despite these challenges, and especially with an eye toward expanding the scope of work in the Blogs and Bullets series, comparing the two datasets is important for several reasons. First, Facebook

is more important than Twitter as a site of political argument and network formation in Egypt. According to Gallup (2013), more than 95 percent of online Egyptians use Facebook compared to approximately 25 percent who use Twitter. (This does not mean that Twitter is unimportant, however. The relatively small number of Twitter users tend to be disproportionately influential in politics and can act as a bridge between political movements and the national and international media.)

Second, most previous studies have focused on a single platform, which does not allow for data comparison and thus has its own risks. Patterns that appear to be typical of social media might in fact be driven by the structure or algorithm of a specific site: Polarization might be strongly encouraged by Twitter’s design, for instance, rather than something intrinsic to all social media. Facebook’s real-name policy, semi-privacy, unlimited text, and algorithmically shaped timeline structure could produce different dynamics compared with Twitter’s publicity, 140 character limit, retweeting function, and chronological timeline. The multiplatform analysis discussed in this report helps to address some of these methodological concerns and adds to the collective understanding of the complex dynamics of digital media in political transitions, even if it is impossible to analyze Facebook data on the same scale as one can with Twitter.

However, researching Facebook raises serious ethical concerns over privacy. Twitter is by nature a public platform, whereas personal Facebook pages are typically understood by their users (perhaps incorrectly) as having some degree of privacy, with access limited to those authorized as friends. Therefore, it is arguably unethical for researchers to access or analyze private Facebook pages without consent, even when they gain access via accepted friend requests or through agreements with the company for access to anonymized data. Content posted to public Facebook pages and groups, however, is clearly intended to reach mass audiences rather than networks of friends and is a much less problematic data source.

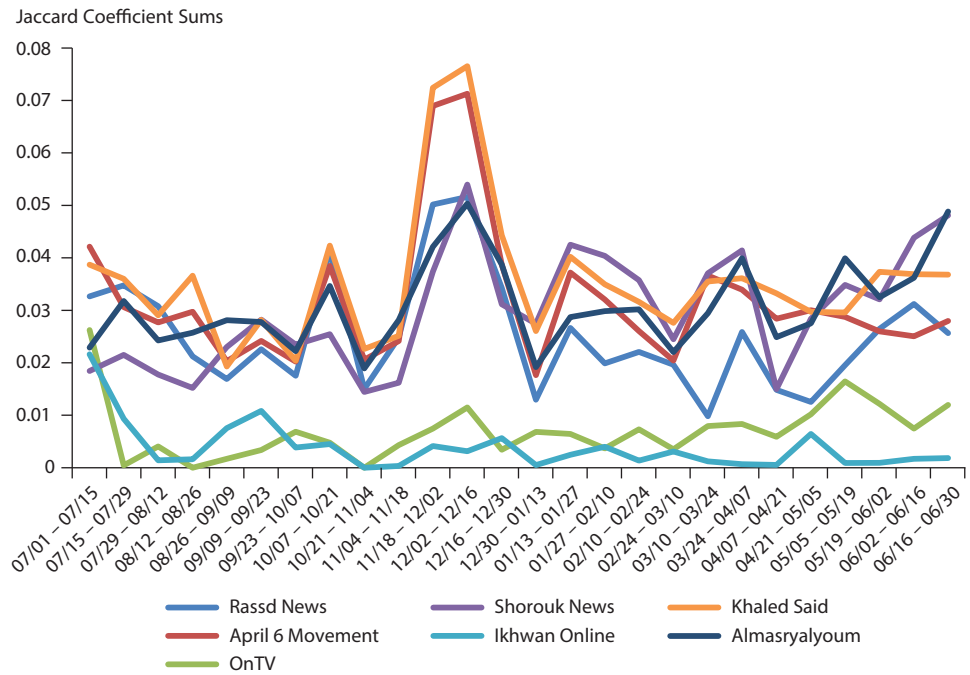
Thus, this study examined one thousand posts on each of seven popular, public Facebook pages (see table 1) to find individuals who posted comments on more than one page in each two week timeframe. Although we find evidence of polarization on Facebook, here the cross-engagement story is slightly different than it was with Twitter. These seven Facebook pages, each with at least one million members, represented different sectors of Egyptian political society. The seven pages included two centrist newspapers (Al-Shorouk and Al-Masry al-Youm); two major activist groups (We Are All Khaled Said, April 6 Youth Movement); the official page of the Muslim Brotherhood (Ikhwan Online); an online news portal tied to the Muslim Brotherhood (Rassd News Network); and a television station that began as pro-revolution but became increasingly tied to the anti-Muslim Brotherhood movement (OnTV).²⁵

The multiplatform analysis discussed in this report helps to address some of these methodological concerns and adds to the collective understanding of the complex dynamics of digital media in political transitions, even if it is impossible to analyze Facebook data on the same scale as one can with Twitter.

Table 1. Study Sample of Facebook Pages

Page	Fans (8/15)	Description
Rassd News Network	8461921	Activist, Muslim Brotherhood-leaning
Almasryalyoum	5798585	Centrist newspaper
Shorouk News	3607034	Centrist newspaper
We Are All Khaled Said	3824763	Activist movement
OnTV	2499217	TV, anti-MB
Ikhwan Online	1141204	Muslim Brotherhood
April 6 Movement	1101327	Activist movement

Figure 8. Facebook Cross-Commenting



The study revealed far lower rates of interaction than observed on Twitter, which makes sense given the different nature of the platforms. More interesting was the differences over time and among pages. Figure 8 shows the aggregate cross-posting for all seven pages over the year. Y-axis values represent sums of Jaccard coefficients calculated between each page and every other page. Higher values indicate more user cross-posting.

The most intriguing finding is that the cross-posting on Facebook, unlike Twitter, spiked during moments of the most political tension. While Twitter saw polarization increase during these crisis periods, Facebook users were more likely to weigh in on other sites. This does not signify greater comity, since most comments were presumably hostile in nature, but it does suggest that Facebook users were more likely to continue to follow and engage with sites associated with their adversaries than were Twitter users.

One key measure of distance, or segmentation, is the percentage of “empty cells,” where no cross-commenting between two pages occurred at all (see figure 9). By this measure, Ikhwan Online was by far the most isolated, with 56 percent of cells empty (i.e., the study sample did not include a single shared commenter between the two pages). OnTV was the next most isolated at 43 percent. None of the other five sites had more than 20 percent empty cells, suggesting a greater degree of cross-engagement outside of particular ideological clusters. This leaves a different impression than did Twitter’s highly clustered trajectory. In the Facebook sample, the most ideological pages were isolated, while the activist and mainstream media sites retained some degree of interactivity.

The Facebook data on cross-commenting are not a perfect corollary for churn, of course, but there are still some interesting comparisons to be found. For instance, We Are All Khaled Said, the premier activist page, had a lot of shared commenters with another major activist page, April 6 Movement, and with Rassd News (see figure 10). That share goes up in key fortnights. However, We Are All Khaled Said had little interaction with OnTV or Ikhwan Online, with events making little difference in the patterns of cross-engagement.

Figure 9. Facebook Cross-Commenting Empty Cells

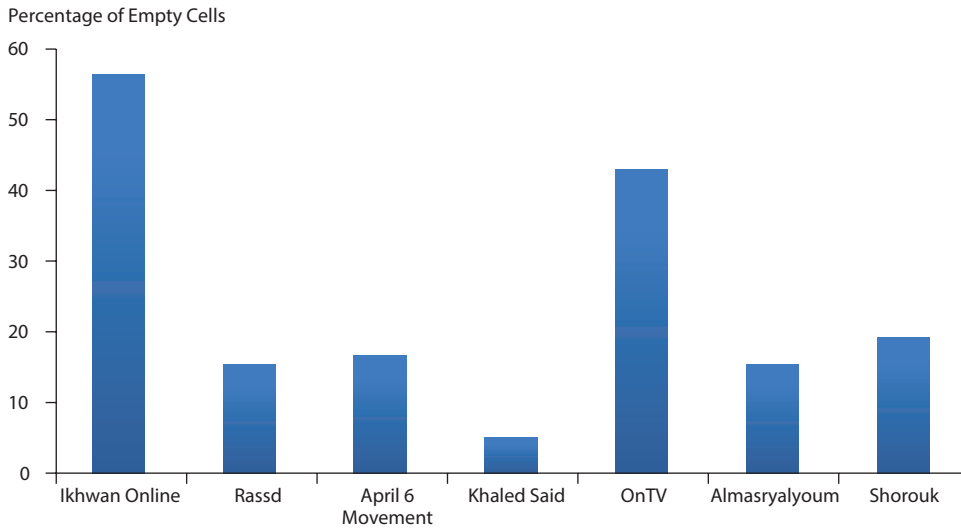
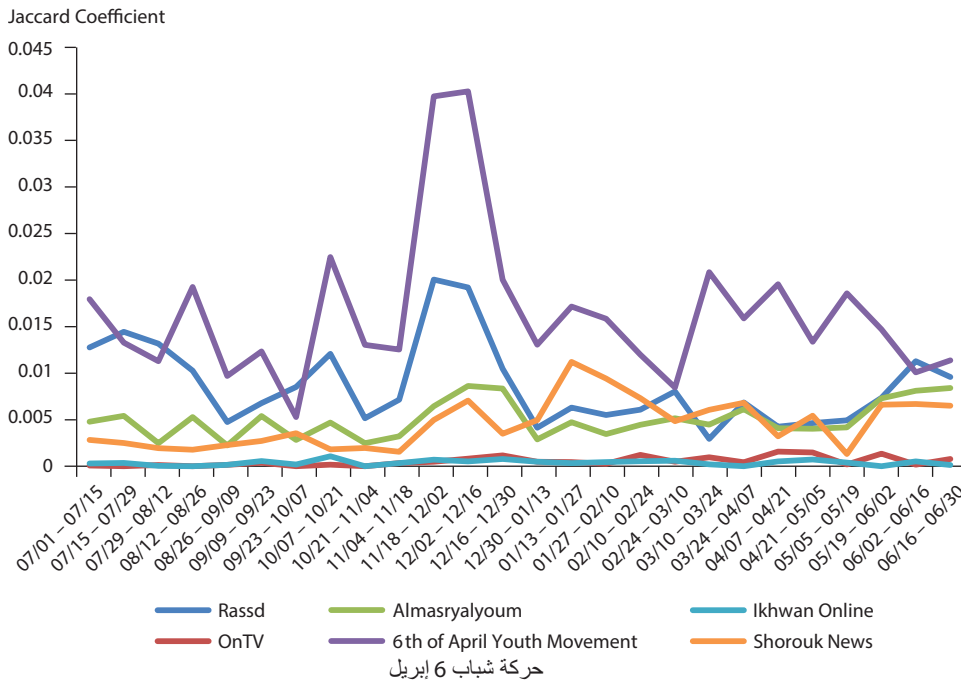
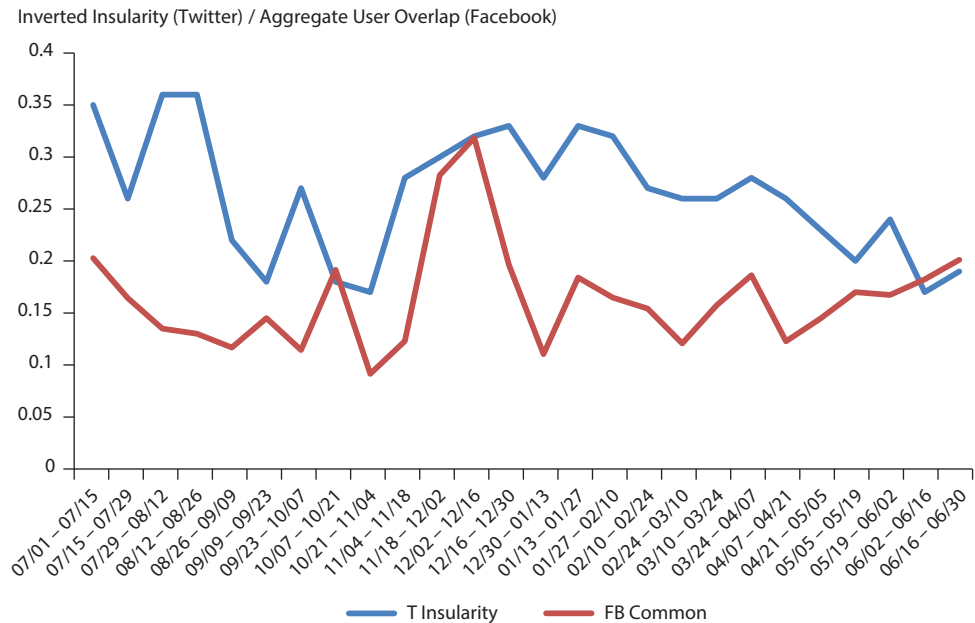


Figure 10. Cross-Commenting, We Are All Khaled Said



The official Muslim Brotherhood page, Ikhwan Online, is isolated throughout, especially from OnTV. It does show some interaction with the April 6 Movement and We Are All Khaled Said and with mainstream newspapers Shorouk and Al-Masry al-Youm.

How comparable are the findings from Facebook and Twitter? Figure 11 shows the results of a partial test. It requires a little more explanation than the other charts because it combines metrics from the two different platforms. The red line is an aggregate index of user overlap for the seven Facebook pages, which represents the sum of all the per-fortnight values from figure 8. The blue line is an inversion of the Twitter aggregate insularity index (i.e., an index

Figure 11. Twitter Insularity and Facebook Cross-Commenting

in previous figures of 0.79 retweets internal to a cluster becomes 0.21 of retweets external to a cluster). We inverted the Twitter index so that for both platforms, higher values would mean more external engagement. Figure 11's y-axis thus represents two distinct normalized measures that happen to fall within similar numerical ranges.

The roughly symmetrical, but not identical, trends reflected in the Twitter insularity and Facebook cross-commenting data reveal an intriguing direction for future research on platform effects investigating whether these distinct digital media platforms function similarly.

Conclusions

Social media offers a unique perspective on the failure of Egypt's democratic transition. The evidence provided here shows that Egypt's online public polarized over time, with distinctive clusters becoming more insular and closed as the transition proceeded. It also shows intriguing patterns in the expression of fear and perceptions of instability, with more politicized communities revealing far more discourse than the less political public. Finally, it shows significant gaps in the translation of Egyptian politics from Arabic into English.

The analysis suggests four major findings. First, **social media complicates transitions**. The effects of social media are different during transitional periods than during periods of protest or normal political discourse. The distinctive characteristics of social media may be as ill-suited to the demands of transitions from autocratic rule as they are well-suited to the mobilization of protest activity. The uncertainty of an extended transition allows ample time for rumors to spread, fear to mount, and the distance between social groups to grow. All countries attempting democratic transitions will have to grapple with the demands of social media and the implications of cluster dynamics.

The effects of social media are also influenced by regime type and stability of the state. For instance, although segmentation and polarization were found in the Egyptian media space, what was found in the Syrian media space looked qualitatively different. In part, this may be

because Egypt, for all its faults, is basically a stable society with a diverse media ecosystem and a political system that recently has lurched from fledgling democracy to autocracy, whereas Syria is more of a failed state at this point. Institutionalized democracies, on the other hand, have more stable institutions, including opposition parties and bureaucracies, that presumably alter the equation.

Future research on social media needs to account for each stage of a protest movement's life cycle. Examples ranging from Turkey to Ukraine to Venezuela show how revolutionary fervor can morph into more complex, often disturbing periods of infighting, retrenchment, or worse. Indeed, a long-noted variable to be considered in assessing social media's impact and role is the ability of regimes to use their often vastly superior resources to utilize digital technologies for surveillance, manipulation, and oppression.

Second, **social media clustering is a major challenge during transitions.** When individuals retreat into communities of the like-minded, they tend to be exposed disproportionately to messages tailored to their own prejudices. The intensity and speed with which messages flow through online social networks produces emotional responses that trigger in-group solidarity and the demonization of others. In Egypt, social media tended to reinforce stereotypes among many non-Islamists that Muslim brothers were nothing but mindless sheep incapable of independent thought, brainwashed members of a totalitarian cult, or inherently non-Egyptian aliens. It also tended to reinforce Muslim Brotherhood stereotyping of their adversaries as Christians or apostates serving the interests of the foreign masters, whether in Israel, the United States, or the United Arab Emirates.

There is strong evidence from our Twitter data and supportive findings from Facebook that during the transitional period following the Tahrir Square protests that led to the ouster of Mubarak in early 2011, social media use became increasingly insular. In other words, in contrast to revolutionary or protest periods in, for example, Cairo and Kiev, when social media evidently served to rally, inform, and organize people from diverse backgrounds and geographical locations, during the transitional period in Egypt, most people on social media began clustering into like-minded, polarized communities. Further, during such times of crisis, the frequency of fear-laden messaging spiked.

This implies that social media platforms can be both bridging tools that bring together and inform people as well as divisive instruments that fuel fear, rumors, mistrust, and ideological reinforcement and discord, especially after the initial impetus for change disappears. This means not treating social media and protest with a broad brush, but rather being sensitive to the life cycle of a revolutionary movement and subsequent transition.

For policymakers, it also implies a responsibility to avoid inciting and misleading rhetoric because misinformation and hate can quickly go viral, as seen with the ISIS (Islamic State of Iraq and the Levant) social media strategy, among other examples. But it also means that policymakers have an opportunity to reach out to targeted, politically engaged communities by becoming a part of these socially mediated conversations. This is what, for instance, the West has tried to do as part of its strategy for countering violent extremism. Whether this is effective is another question. For activists, social media can have positive implications for preaching to and mobilizing one's choir. But it may be less effective in persuading those who disagree or reaching those who are less politically engaged. At a minimum, it suggests activists need to be especially careful about avoiding divisive, fearful, and misleading messaging within these virtual communities.

Third, social media shows **striking differences between politicized communities and the broader public.** Big data analysis helps shed more light on the fears, concerns, and hopes of nonactivist populations that constitute the bulk of society. Instead of only following high-

Social media platforms can be both bridging tools that bring together and inform people as well as divisive instruments that fuel fear, rumors, mistrust, and ideological reinforcement and discord, especially after the initial impetus for change disappears.

The dysfunctional polarization that gripped activists on all sides of the Egyptian political equation occurred at different levels. The online behavior of the Activist and Muslim Brotherhood clusters resembled each other more than they did the less politicized clusters.

profile accounts of political leaders, this study assessed how messages are resonating across multiple constituencies.

The dysfunctional polarization that gripped activists on all sides of the Egyptian political equation occurred at different levels. The online behavior of the Activist and Muslim Brotherhood clusters resembled each other more than they did the less politicized clusters. During protest moments, many people who are not normally politically active or engaged get swept up in revolutionary fervor. In this way, protest moments are like presidential elections on steroids. Yet, after the initial intensity dies down, those who lack a predisposition to being politically involved often revert to their usual disinterested selves, much the way many people in the United States do not vote in or pay much attention to midterm or municipal elections. In most if not all societies, these low-involvement individuals constitute a sizeable portion of the populace, usually a majority. They still vote, and as seen during protest periods, are capable of being energized and activated politically. Moreover, research from other domains shows that for these individuals, a lot of political learning still takes place in these types of venues.

In the Egypt case, after Mubarak's ouster, many people stopped engaging with politics on social media. These Couch Party members still occasionally discussed politics on Twitter and Facebook, but in a passive, almost incidental way. Judging by their tweets, they loved the mockery of Morsi by the comedian Bassem Youssef but had little patience with the hysterical political appeals of either side of the great political wars. They definitely form a persistent cluster distinct from the more political clusters. They are less engaged with partisan or ideological political debates and less likely to engage in fear-laden rhetoric than their more politically active brethren. Yet, they were likely well-represented in the massive protest of June 30, 2013, which led to the overthrow of Morsi.

Fourth, **the English Translator community needs to be approached with caution.** Egypt's English-language Twitterverse appears to be largely separated from the Arabic virtual conversation. In addition, to the extent that those in the English-language sphere do echo conversations in other domains, the information is skewed in a way that seriously underrepresents certain important communities, especially the Muslim Brotherhood and Couch Party.

These are critical, and potentially disturbing, findings. For one thing, they suggest that many Western journalists and their audiences (including presumably opinion leaders and other elites in the West) are getting a distorted and unrepresentative portrait of events on the ground. In addition, given that the politically active clusters in the Egyptian Twitterverse and on Facebook were more polarized and prone to fearful rhetoric, it can also be presumed that Western media and elites are having events framed for them through a similarly conflict-oriented, yet not necessarily representative, prism. With certain groups being underrepresented, the English-language virtual space is missing a large part of the story in Egypt—a story that includes most notably the Muslim Brotherhood but also everyday Egyptians who may not be as engaged but still have opinions and needs and who can be activated in the future should those needs not be adequately met.

To correct for these systemic biases, social media users should consistently be aware of the limitations and orientations of their interlocutors, seek out multiple perspectives, and look for reality checks from the ground. Independent media should also be encouraged to provide objective journalism and contextualize the views of activist social media. For policymakers in the international community, this study's results indicate the importance of being skeptical

of information generated through social media, correcting for bias in collecting information, and recognizing that key advocates who bridge virtual communities often skew information to their ends.

Appendix: Methodology

Twitter

The study's primary Twitter dataset consisted of every public tweet containing the case-insensitive term "Egypt" and/or "مصر" (the Arabic word for Egypt) between January 2011 and August 2013. This included nearly sixty-two million tweets by more than seven million unique users. The dataset was purchased from Topsy, a former vendor of social media data. This report primarily focuses on a subset of this dataset—the one-year period between July 1, 2012, and June 30, 2013, which includes just under twenty-five million tweets.

This dataset differs from those used in other important recent studies of Twitter. Many of these studies built their datasets from hashtags, which offer an inductively attractive way to home in on the debates and issues actually being discussed.²⁶ However, hashtags can sometimes introduce selection bias if they are typically identified with one or another political trend. Other studies began by identifying the high-profile users and building out ideological profiles based on those seeds.²⁷ While this is a plausible and intriguing approach, it again introduces potential bias into the selection of accounts—particularly when it comes to the potential marginalization of voices outside the mainstream, whose low profile to the analysts and limited interaction with the seed accounts might be an important part of the story.

This study analyzed the Twitter dataset by partitioning all retweets into network clusters using the Louvain method of community detection on a biweekly basis.²⁸ This resulted in twenty-six network partitions covering the twelve-month period between Morsi's June 30, 2012, election and the June 30, 2013, protest that heralded the military coup four days later. For each time period, the ten largest clusters by node count were identified for each time period. Some of these clusters were found to be closely related to other clusters, sometimes sharing almost as many retweets with a second cluster as with itself. Thus, a "supercluster" was defined as two (or more) clusters that share more than 20 percent of retweets.

Clusters were defined using an innovative combination of qualitative and statistical matching techniques. The statistical technique involved comparing each pair of adjacent biweekly networks for common accounts to discover how distinct clusters evolved over time. A measure called the Jaccard coefficient was calculated between every pair of clusters for every pair of adjacent fortnights. The coefficient measured the degree of overlap between two sets: a Jaccard of 0 indicated that two clusters had no members in common; a value of 1 meant they are identical in membership. To connect clusters across months, a minimum Jaccard threshold of 0.1 was set and then the pair of clusters with the highest Jaccard that exceeded it was selected as the best match. If the best match for a given cluster in the first fortnight did not meet or exceed the 0.1 threshold, this was interpreted as a cluster "dissolution."²⁹

Qualitatively, each cluster tended to be anchored by distinctive, high-profile users, such as television stations or newspapers, prominent political or media personalities, or less well-known but network-central individuals. These anchors offered clues into the ideological makeup of the cluster and provided a first cut into their identification. However, in addition to identifying high-profile users for cluster definition—in order to assess the participation of tens

of thousands of Egyptians engaged in these debates—the fifteen most retweeted tweets for each cluster were extracted and qualitatively analyzed.

Use of this combination of statistical and qualitative methods represents a significant improvement over quantitative network analysis alone. It prevents confusion over something like an episode in which a tweet from a prominent activist figure such as @elbaradei headlines a Muslim Brotherhood-dominated cluster, which might fool a method focused solely on individual high-profile accounts. The qualitative inspection allowed for the analysis of some initially puzzling quantitative matches, while allowing for some seemingly relevant clusters to be dismissed: For example, one transient cluster was composed almost entirely of Google Earth images, while a recurrent cluster was exclusively focused on FIFA football.

Facebook

A unique dataset was also constructed based on seven public Facebook pages. The study involved randomly sampling one thousand posts on each page over the one-year period between Morsi's election and the coup, dividing them into twenty-six fortnights, and then extracting all comments (593,428 in total). These data were then used both for statistical analysis and for qualitative content analysis.

Notes

1. Marc Lynch, *The Arab Uprising: The Unfinished Revolutions of the New Middle East* (New York: Public Affairs, 2012).
2. For examples of research on social media and the Egyptian revolution, see David Faris, *Dissent and Revolution in a Digital Age: Social Media, Blogging and Activism in Egypt* (New York: Palgrave, 2013); Samar Khamis and Katherine Vaughn, "We Are All Khaled Said: The Potentials and Limitations of Cyberactivism in Triggering Public Mobilization and Promoting Political Change," *Journal of Arab & Muslim Media Research* 4 (2012): 145–63; Merylna Lim, "Clicks, Cabs and Coffee Houses: Social Media and Oppositional Movements in Egypt, 2004–2011," *Journal of Communication* 62, no. 2 (2012): 231–48; and Zeynep Tufekci and Christopher Wilson, "Social Media and the Decision to Participate in Political Protest: Observations from Tahrir Square," *Journal of Communication* 6, no. 2 (2012): 363–79.
3. Joshua Tucker, Megan Metzger, Duncan Penfold-Brown, Richard Bonneau, John Jost, and Jonathan Nagler, "Protest in the Age of Social Media," *Carnegie Reporter* 7, no. 4 (2014).
4. Zeynep Tufekci, "Social Movements and Governments in the Digital Age: Evaluating a Complex Landscape," *Journal of International Affairs* 68, no. 1 (2014): 1–18.
5. The Blogs and Bullets analytical framework is explained in detail in the first report of the series: Sean Aday, Henry Farrell, Marc Lynch, John Sides, John Kelly, and Ethan Zuckerman, "Blogs and Bullets: New Media in Contentious Politics," *Peaceworks* 65 (Washington, DC: U.S. Institute of Peace, 2010).
6. Henry Farrell, "The Effects of the Internet on Politics," *Annual Review of Political Science* 15 (2012): 35–52.
7. Negar Mottahedeh, *#Iranelection: Hashtag Solidarity and the Transformation of Online Life* (Stanford University Press, 2015).
8. Andreas Schedler, *The Politics of Uncertainty: Sustaining and Subverting Electoral Authoritarianism* (New York: Oxford University Press, 2013); Noam Lupu and Rachel B. Riedl, "Political Parties and Uncertainty in Developing Democracies," *Comparative Political Studies* 46, no. 11 (2013): 1339–65.
9. David Lake and Donald Rothchild, "Containing Fear: The Origins and Management of Ethnic Conflict," *International Security* 21, no. 2 (1996): 41–75; Andreas Schedler, "The Mobilization of Distrust," *Journal of Democracy* 18, no. 1 (2007): 88–102.
10. Nils Weidmann, "Communication, Technology and Political Conflict: Introduction to the Special Issue," *Journal of Peace Research* 52, no. 3 (2015): 263–68.
11. See, for example, Evgeny Morozov, *The Net Delusion: The Dark Side of Internet Freedom* (New York: PublicAffairs, 2012); Navid Hassanpour, "Media Disruption and Revolutionary Unrest: Evidence From Mubarak's Quasi-Experiment," *Political Communication* 31, no. 1 (2014): 1–24; Gary King, Jennifer Pan, and Margaret E. Roberts, "How Censorship in China Allows Government Criticism but Silences Collective Expression," *American Political Science Review* 107, no. 2 (2013): 326–43.
12. Kevin Arceneaux and Martin Johnson, *Changing Minds or Changing Channels? Partisan News in an Age of Choice* (Chicago, IL: University of Chicago Press, 2013); Matthew Gentzkow and Jesse Shapiro, "Ideological Segregation Online and Offline," *Quarterly Journal of Economics* 126, no. 3 (2010): 1799–839; Pablo Barbera, John Tost, Jonathan Nagler, Joshua Tucker, and Richard Bonneau, "Tweeting From Left to Right: Is Online Political Communication More than an Echo Chamber?" *Psychological Science* 26, no. 10 (2015): 1531–42; Matthew Baum and Tim Groeling, "New Media and the Polarization of American Political Discourse," *Political Communication* 25 (2008): 345–65.
13. Maximillian Hänska Ahy, "Networked Communication and the Arab Spring: Linking Broadcast and Social Media," *New Media & Society* (2014); Alexa Robertson, "Connecting in Crisis: The Old and New Media in the Arab Spring," *International Journal of Press/Politics* 18, no. 3 (2013): 325–41; Mohamed Nanabhay and Roxanne Farmanfarmaian, "From Spectacle to Spectacular: How Physical Space, Social Media and Mainstream Broadcast Amplified the Public Sphere in Egypt's 'Revolution,'" *The Journal of North African Studies* 16, no. 4 (2011): 573–605.
14. Ed Webb, *Media in Egypt and Tunisia: From Control to Transition* (New York: Palgrave, 2015); Naomi Sakr, *Transformations in Egyptian Journalism* (London: I.B. Tauris, 2014).
15. Wendy Pearlman, "Emotions and the Microfoundations of the Arab Uprisings," *Perspectives on Politics* 11, no. 2 (2013): 387–409; Anne Alexander and Miriyam Aouragh, "Arab Revolutions: Breaking Fear," *International Journal of Communication* 8 (2014); Talal Asad, "Fear and the Ruptured State: Egypt After Mubarak," *Social Research* 79, no. 2 (2012): 271–300.
16. Axel Bruns, Tim Highfield, and Jean Burgess, "The Arab Spring and Social Media Audiences: English and Arabic Twitter Users and Their Networks," *American Behavioral Scientist* 57, no. 7 (2013): 871–98.
17. Kai Hafez, "Radically Polarized Publics and the Demise of Media Freedom in Egypt," *Egypte/Monde Arabe* 12 (2015), available at <http://ema.revues.org/3397>.
18. For competing interpretations of Tamarod, see Adel Iskandar, "Tamarod: Egypt's Revolution Hones its Skills," *Jadaliyya*, June 30, 2013; Ben Hubbard and David D. Kirkpatrick, "Sudden Improvements in Egypt

- Suggest a Campaign to Undermine Morsi,” *New York Times*, July 10, 2013; Shira Frenkel and Mohammed Atef, “How Egypt’s Rebel Movement Helped Pave the Way for a Sisi Presidency,” BuzzFeed, April 15, 2014.
19. For more details on the data and findings, see Marc Lynch, Deen Freelon, and Sean Aday, “After Tahrir: Online Polarization in Egypt’s Failed Transition,” presented to the Annual Meeting of the American Political Science Association, September 2015.
 20. Alexandra Siegel, “Tweeting Beyond Tahrir: Ideological Diversity and Political Tolerance in Egyptian Twitter Networks” (unpublished working paper, New York University, 2014).
 21. And one (@abuaardvark) was an author of this study.
 22. “Egyptians Increasingly Glum,” Pew Research Center, May 16, 2013.
 23. Marc Lynch, Deen Freelon, and Sean Aday, “Blogs and Bullets III: Syria’s Socially Mediated Civil War,” Peaceworks 91 (Washington, DC: U.S. Institute of Peace, 2014).
 24. The Political Public cluster is not shown in the figure because it was virtually nonexistent in this case.
 25. Due to ethical considerations, only public profiles were analyzed for this report.
 26. Sharon Meraz and Zizi Papacharissi, “Networked Gatekeeping and Networked Framing on #Egypt,” *International Journal of Press/Politics* 18, no. 2 (2013): 138–66; Zeynep Tufekci, “Social Movements and Governments in the Digital Age: Evaluating a Complex Landscape,” *Journal of International Affairs* 68, no. 1 (2014): 1.
 27. Paolo Barbera, John Tost, Jonathan Nagler, Joshua Tucker, and Richard Bonneau, “Tweeting From Left to Right: Is Online Political Communication More than an Echo Chamber?” *Psychological Science* (Online First Version, 2015).
 28. Vincent D. Blondel, Jean-Loup Guillaume, Renaud Lambiotte, and Etienne Lefebvre, “Fast Unfolding of Communities in Large Networks,” *Journal of Statistical Mechanics* 10 (2008): 10,008–10,020.
 29. For details on this method, see Deen Freelon, Marc Lynch, and Sean Aday, “Online Fragmentation in Wartime: A Longitudinal Network Analysis of Tweets About Syria, 2011–2013,” *Annals of the American Academy of Political and Social Sciences* 659 (2015): 166–79.



The Egyptian uprising of January 25, 2011, quickly became synonymous with the successful use of social media to overthrow an entrenched authoritarian regime. However, in examining Twitter and Facebook use between July 2012 and June 2013, it becomes equally apparent that social media contributed to Egypt's failed attempt to transition to democracy. This report reveals how, during transitional moments, social media has the propensity to encourage self-segregation into communities of the like-minded, rapidly transmit intense images and alarming information within these closed social networks, and intensify both in-group solidarity and out-group dehumanization. The uncertainty surrounding an extended transition, in particular, allows ample time for rumors to spread, fear to mount, and the distance between social groups to grow. All countries attempting a democratic transition will need to grapple with the different dynamics and implications of social media at various stages of the process.

About Peace Tech Lab

PeaceTech Lab works for individuals and communities affected by conflict, using technology, media, and data to accelerate local peacebuilding efforts. An independent non-profit organization, the Lab's mission is to amplify the power of peacetech to save lives through earlier warnings and smarter responses to violence. The Lab's programs emphasize a data-driven, cross-sector approach, engaging everyone from student engineers and citizen journalists to Fortune 500 companies in scaling the impact of peacetech.

