How Exiles Mobilize Domestic Dissent

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Abstract

Can exiles mobilize dissent back home, and if so, how? We argue that internet communication technologies (ICTs) enable exiles to play an instigator role in domestic contentious politics. Analyzing the behavior of three types of social media users – influencers, amplifiers, and consumers – we explore how Egyptian exiles participated in a cascade of online dissent that culminated in sizable anti-regime protests in September 2019. Analyses of large-scale digital trace data from Facebook, Google, Twitter, and YouTube demonstrate that exiles were central to the introduction and amplification of oppositional content, facilitating its circulation among a domestic audience that then localized the content by linking it with place-based calls for protest. Our findings suggest that content produced and amplified by exiles facilitates coordination among domestic opposition and challenges the supporting role typically ascribed to opposition abroad.

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Introduction

Exile[1] is an important tool in authoritarian regimes' repressive arsenals. The goal of exile is to demobilize and fracture opposition through the act of physical dislocation, with the ultimate objective of rendering anti-regime actions ineffective (Esberg 2021; Miller and Peters 2020; Hassan, Mattingly and Nugent 2022; Esberg and Siegel 2023). In recent history, Burmese, Cuban, Iranian, Iraqi, Kurdish, Libyan, Tamil, Russian, Rwandan, Venezuelan and Zimbabwean opposition has been subjected to exile. Many continue to mobilize in myriad ways against domestic authoritarian regimes from abroad (Betts and Jones 2016; Esberg and Siegel 2023), organizing the diaspora to participate in elections, demonstrating in solidarity with events back home, providing financial and logistical support for domestic activists, and lobbying host governments for foreign intervention (Betts and Jones 2016; Moss 2016; Wellman 2021; Abdelaaty and Hamlin 2022; Vanderbush 2009).

While these undertakings are consequential, existing literature suggests that exiles typically do not instigate contentious politics from abroad. Instead, they play a supporting and symbolic role in anti-regime movements and are less likely than their domestic counterparts to call for collective action due to distance from organizers and populations on the ground (Esberg and Siegel 2023; Brinkerhoff 2011, 2016; Henry and Plantan 2021; Koinova 2021*a*). However, the recent rapid growth in use and sophistication of internet-based information and communication technologies (ICTs) has reduced the space between politics in exile and politics at home. ICTs permit exiles to remain connected in real time with domestic politics (Nedelcu 2019). Exiles communicate regularly and instantaneously with like-minded activists and citizens, learn about political developments like protests and repression as they happen, and amplify messages from domestic audiences to international ones. In altering the extent to which physical dislocation renders exiled opposition ineffective, ICTs may also empower exiles to play an instigator role.

In an effort to understand whether and how exiles mobilize domestic dissent, this paper conceptualizes two important and understudied phenomena at the center of exile involvement in domestic

[1] We define exile as emigration punitively coerced by a regime for past or anticipated political behavior. For more details on our conceptualization of exile, see Section "Exile and the Internet."

politics in the digital age: how exiles spread information over the internet, and how this information is adapted by domestic actors. We differentiate between three types of online actors – influencers (who produce original content), amplifiers (who spread that content), and consumers (who digest that content) – that serve as links in the chain through which content spreads (Pintak, Bowe and Albright 2021). Exiles are likely to be particularly important in oppositional content creation and cascades[2] because of their relative impunity due to physical distance from the regime and a related heightened ability to introduce and amplify content that is critical of the regime. Drawing on models of individual protest mobilization from the contentious politics literature, we then assess how this content is adapted by local actors. When domestic actors appropriate an online cascade of opposition by connecting it with local logistical information, it serves as a coordination device for collective action by providing an important focal point for dissent (Schelling 1980; Mehta, Starmer and Sugden 1994; Ruijgrok 2017; Truex 2019).

We describe these phenomena in Egypt, where in September 2019 an anti-regime online content cascade culminated in sizeable domestic protests. The event was noteworthy because the anti-regime content – videos that initially alleged major corruption by current president Abdel Fattah el-Sisi and his regime and that later called for protests on this basis – was introduced to the internet by an Egyptian exile located in Spain. To understand how these videos ultimately inspired domestic dissent, we analyze millions of records of digital trace data from Facebook, Google, Twitter, and YouTube. We find that exiles successfully amplified and spread anti-regime content, creating a cascade and propelling the content into the domestic Egyptian internet sphere. Exiles were not only more influential in amplifying anti-regime content than domestic users, but also amplified this content early on, at a pivotal moment in the mobilization process. In this way, social media users outside of Egypt played a key role in making the content and related calls for protest cascade, or "go viral." We also document subnational variation in how domestic actors consumed this content as well as how they adapted the content to call for local protests.

The goal of our paper is descriptive inference: to document when, how, and in what ways exiles

[2] A cascade is defined as the posting of similar content by different users in a short time span (Goode et al. 2015).

mobilize dissent online as well as how this dissent is consumed and appropriated by domestic audiences. By systematically documenting how exiled activists spread content online to mobilize citizens at home, the paper contributes to our understanding of how transnational actors influence domestic politics in the digital age. It also highlights conditions under which exiles may be instigating actors in domestic contentious politics. Moreover, by leveraging four different sources of social media data, we improve upon existing studies that typically rely on a single data source to map online mobilization across platforms and comprehensively capture how an opposition content campaign started and spread. This paper therefore also contributes to a growing body of literature on transnational online mobilization by non-state actors (Siegel and Tucker 2018; Hall 2022; Hussen and Shefer 2023) as well as the role of online influencers in social movements (Yarwood 2016; Brünker et al. 2020; Duvall and Heckemeyer 2018).

In the sections that follow, we first discuss how the internet permits exiles to participate in domestic politics and we draw on models of protest participation from the contentious politics literature to theorize how online content cascades and consumption shape domestic mobilization. We then outline a general framework for understanding the process through which exiles contribute to mobilization over the internet by differentiating types of social media users. Next, we provide an overview of Egypt's 2019 online content cascade and protests. We then introduce our data and descriptive methodological approach, and present our results. Finally, we offer conclusions and opportunities for future research.

Exile and the Internet

We define exile as a state resulting from emigration punitively coerced by a regime in response to past or anticipated political behavior. Emigration signifies leaving national territory[3]; coerced means that emigration is an act taken under duress; and "punitive and in response to past or anticipated political behavior" signifies that exile is a component of regimes' repressive arsenal. Regimes impose exile on opposition, composed of known individuals and groups mobilized against the regime, actively working

[3] This does not imply any finality to the displacement (i.e., permanent resettlement abroad), just simply residence outside of national territory, whether temporary or perpetual. The length of that emigration depends on the longevity of the regime that imposes exile, and whether it implements liberalizing reforms that permit return.

to either reform the system, hold it accountable for grievances, or abolish it completely. We conceptualize opposition as activists who are mobilized in seeking an alternative to the regime (Nugent 2020, 9). Regimes use exile with the same intention of other forms of repression: to demobilize activists and fracture the opposition, ultimately rendering anti-regime actions ineffective—in this case through physical removal from national territory (Esberg and Siegel 2023). While exile is analytically distinct from other kinds of emigration, exiled emigrants constitute a subset of diasporas,[4] which may also contain economic migrants [5] and refugees,[6], though we note the complex motivations individuals have for migrating as well as the politics involved in using these labels (Abdelaaty and Hamlin 2022).

While those who are displaced by exile may have some agency over the specific timing of their departure or their final destination, the relocation is ultimately not fully their choice. Instead, the regime creates a situation in which a political actor remaining in the territory is untenable because of the direct or indirect threat of violence. Exile arrives in many different forms, varying along at least two spectra: explicitly and formally, implicitly and informally. In more explicit and formal exile, a regime issues an official government travel ban, revokes citizenship, or uses other legal measures to prevent an activist's travel to the country or to force their departure. In the case of implicit and informal exile, a government makes it known to an individual that they are no longer a protected citizen through the threat or delivery of physi-

[4] Diasporas are defined as "communities that are transnationally dispersed, resist assimilation, and have an ongoing homeland orientation;" what differentiates diasporas from other migrants from national communities located outside of national territory is its "inherently political stance; it is to have political business with the homeland" (Betts and Jones 2016, 3). In contrast, non-diasporic emigrant communities abroad may reorient their political behavior towards the host community or remain apolitical (Lyons and Mandaville 2010, 126). The literature overwhelmingly agrees that diasporas are constructed; diasporas develop as their members come to identify themselves as a national community abroad, which in turn shapes their political commitment to the national community and politics back home, and dictates their political behavior. Diasporas *become* politically active through the development and mobilization of a national community situated outside of national territory; they were not necessarily political at the time of their dispersal and may have emigrated voluntarily or non-politically punitive reasons. In addition, it is not an automatic result of migration that national communities abroad develop politically-relevant identities and become politically active (Sökefeld 2006). However, we note that in the case of exiles, they were politically active *before* their departure; indeed, it is the cause of their dispersal. Exiles are diasporic in that they have "political business with the homeland" and remain oriented towards it. But not all diasporas contain exiles.

[5] We understand economic migrants to be individuals who leave their country of origin to improve their financial standard of living.

[6] The United Nations defines a refugee as an individual who flees their country because of persecution, war or violence. We take this to mean that while refugees' departure from national territory can be caused by a political event, it does not imply their involvement or participation in said events in any way.

cal repression through agents of its coercive apparatus. Once exiles arrive in host states, they hold a variety of immigration statuses, depending on what can be documented and "proven" to the standard of the law. While the vast majority are granted asylum or refugee status, others hold temporary work, student, and travel visas, and still others hold second passports or gain nationality through family or marriage.

How exile differs from other forms of migration is perhaps most clear when using Hirschman's paradigmatic framework of exit, voice, and loyalty. Hirschman (1978) argues that when the quality of a product or service declines, an individual can exit and withdraw from a relationship of economic or political importance, or they can voice dissatisfaction in an attempt to repair or improve the relationship. Loyalty serves as a third option, in which one both does not exit and does not voice dissatisfaction.[7] Exile differs from other forms of migration in the extent to which exit (emigration) is a choice, whether exit is a trade off with voice, and the causal relationship between voice and exit. Economic migrants have chosen exit over voice or loyalty; they leave to seek better conditions rather than protest poor economic conditions (voice) or bear them (loyalty). For members of a diaspora, they develop their voice after exit. However, for individuals subjected to exile, exit is a forced choice under actual or implied threat of violence from the state *because* of voice. And exiles, who feel forced to exit, refuse to give up their voice when they exit. While economic migrants can and do influence politics back home, this is more often than not incidental rather than purposeful[8] and economic migrants turn their efforts to the politics of the host country as they assimilate (Dancygier and Saunders 2006). More than other types of migrants, exiles do not "renounce their voice" or even "redirect their voice to the country of residence" after exit, except in the service of directly claiming "participation in the polity they migrated from" (Hoffman 2008).

By keeping their voice, exiles continue to fight against regimes back home through acts such as mobilizing the diaspora to participate in elections through voting, demonstrating in solidarity with

[7] Within political science, the relative costs and individual motivations behind exit, voice, and loyalty have been applied to understand political behavior. In all applications, individuals are presented with an active *choice* between these options, even if different temporal and situational contexts make certain options more (less) costly and less (more) likely. In most applications, exit and voice are conceptualized as inversely related if not mutually exclusive; in exiting, one's voice loses influence and if exit is a prevalent and easy choice, the need for voice decreases significantly.

[8] For example, by providing financial remittances (Germano 2013) or social remittances (Levitt 2001) that then condition relatives' political behavior in the domestic sphere.

events back home, and providing financial and logistical support for domestic activists (Betts and Jones 2016; Moss 2016; Wellman 2021). Other activities include influencing public opinion in the host country about political events back home and to provide alternative sources of information on politics for the home community (Müller-Funk 2018). Exiles can also advocate top-down regime-change by lobbying host governments for different kinds of foreign intervention, as demonstrated by the advocacy of Cuban and Iraqi exile communities in the United States (Vanderbush 2009). Exiles tend to play a supporting and symbolic role in anti-regime movements, and may even be less likely to call for domestic collective action due to their distance from events and organizers on the ground (Esberg and Siegel 2023; Brinkerhoff 2011, 2016; Henry and Plantan 2021; Koinova 2021*a*). Past research suggests that exiles are particularly likely to serve as "bridge figures" (Zuckerman 2013) between the host and home country, broadcasting messages between previously disconnected actors in their home and host countries (Andén-Papadopoulos and Pantti 2013; Koinova 2021*b*; Moss 2021; Shain 1999).

However, the role of exiles in leading dissent may be changing in the contemporary period. Internet-based information and communication technologies (ICTs) serve as influential channels through which exiles and transnational opposition continue to participate in politics back home and influence its development. Social media in particular allows exiles to maintain and perhaps even deepen ties with others in their country of origin. Internet technologies "heighten the agency capability of members of the diasporas who can act transnationally in real time," granting them the opportunity to be "transnational agents of change in the homeland" by creating a "de-territorialized transnational public sphere in which diasporic groups can voice their claims, mobilizing transnationally and effect political change" (Nedelcu 2019, 242-246). As such, the internet serves as a way for those punished with exile for their politics to remain involved in politics back home. While many regimes continue to engage activists beyond the country's borders through acts of repression, legitimation, and cooptation (Moss 2016; Tsourapas 2021), opposition abroad undoubtedly faces lower levels of threat from the regime's physical repression, and often have higher levels of freedom of expression when located in certain locations (Shen and Truex 2021). Moreover, exiles may be energized or radicalized by their experience of exile (Esberg and Siegel 2023),

pushed towards stronger opposition to the regime. Indeed, exiles are aware that their return to the homeland hinges on the demise of the current regime, and as such they have a particularly strong motivation to work to overturn it. As such, the internet may permit exiles to remain involved in home politics in real time, as mobilizers rather than followers.

How Exiles Mobilize Domestic Dissent Online

Beyond linking exiles with the domestic political sphere, ICTs play a key role in generating anti-regime dissent, particularly in authoritarian contexts. In highly repressive, "closed" authoritarian regimes, where public space is highly regulated, the internet often remains comparatively less controlled and is thus the most likely space for criticism of the regime and the dissemination of oppositional content (Lynch 2006; Makowsky and Rubin 2013). By oppositional content, we mean any content that is negative from the perspective of the regime, whether it is critical of the regime's policies and behavior or suggests support for an alternative to the regime. ICTs can facilitate the spread of oppositional content quickly and widely, not only among trusted networks of friend and acquaintances (Filippov, Yureskul and Petrov 2020) but across the broader public. A cascade is defined as the posting of similar content by different users in a short time span, colloquially, this phenomenon is known as "going viral" (Goode et al. 2015). ICTs permit users to quickly and easily share or engage with content, and mass sharing and engagement results in a content cascade.

A cascade of oppositional content solves the collective action problem central to undertaking costly political behavior. First, it reduces the cost of individual opposition. Models of individual decision-making with regards to voicing dissent and protest participation indicate that people weigh the potential benefits from open opposition against potential risks (Granovetter 1973; Siegel 2009; Campbell 2013). Evidence that indicates others support an opposition position, and thus are likely to participate in protests or support dissent in other ways, increases an individual's propensity to participate in dissent (Kuran 1991). The way in which users publicly engage with oppositional content on the internet reveals information about their preferences by signaling support or endorsement of it to others. In democratic regimes,

there is significant debate about whether online political behavior, which is relatively costless, translates into offline political behavior, or is a form of "slacktivism" (McCaughey and Ayers 2003; Vaccari 2013; Dennis, Dennis and Finotello 2019). However, online political behavior is much costlier in authoritarian contexts. Engaging with oppositional content online can and does result in real-world punishments like arrest, harassment and censure by authorities (Pan and Siegel 2020). In an authoritarian context, an oppositional content cascade on the internet publicly indicates that many agree with that content and an oppositional stance, revealing the extent to which opposition is widespread and lowering the individual costs of collection action.

In addition, a cascade of oppositional content serves a more practical function, as a focal point around which aggrieved individuals can mobilize together. Focal points are circumstances that serve as natural conduits for coordination of opposition into collective action (Schelling 1980; Mehta, Starmer and Sugden 1994) and are important for understanding when and where protests occur. Focal points can take on the form of a predictable calendar, like holidays, elections, or other regularly scheduled events, around which activists can focus their efforts and mobilize collectively (Truex 2019). Other focal points around which coordination and collective action occur arise on less regular and predictable schedules. The internet can organically create focal points around content cascade campaigns that serve as coordination devices for opposition and collective action (Ruijgrok 2017) ; indeed, the internet has been documented to have solved important informational issues and facilitated logistical coordination for opposition during the years days of the uprising in Egypt (Clarke and Kocak 2020), the case under study here.[9] In an authoritarian context, an oppositional content cascade may lower the perceived costs of collection action by revealing the prevalence of anti-regime attitudes, as outlined above, but more importantly it reveals to disparate individuals and communities that wish to pursue collective action when and where to protest.

To unpack whether and how exiles contribute to the mobilization of domestic dissent, we are

[9] For broader discussions of the role of on and offline social networks in facilitating political mobilization, see Parkinson (2013); Larson et al. (2019); Barberá et al. (2015); Norris (2012)

interested in the process through which the oppositional content is introduced, amplified, spread, and consumed over the internet. We follow Benkler, Faris and Roberts (2018, 45) in seeking an understanding of the "entire ecosystem" through which oppositional content travels: "the outlets and influencers who form networks, the structure of the networks, and the flow of information in networks." Within this ecosystem, the communications literature differentiates between three main types of social media users that contribute to the flow of content within a network of users. First, *influencers* are those users who "'seed' the content that then cascades... as it is shared by other users" (Pintak, Bowe and Albright 2021, 5). Influencers create original content such as ideas, members, or hashtags and have been referred to as "idea starters" (Tinati et al. 2012). This type of user tends to be centered in a network and is highly active in introducing new, original content. Second, *amplifiers* are those users who "perform the main work of dissemination" (Pintak, Bowe and Albright 2021, 5); Tinati et al. (2012) call these users the "firehose of knowledge." Amplifiers engage with the content created by influencers at a high rate. They do this in several ways: "retweeting or replying to others who mention or reply to a candidate's accounts," "tagging or adding a candidate's handle to threads on which they were not included," and "replying to or retweeting the candidates themselves" (Pintak, Bowe and Albright 2021, 5). This type of user is measured by a high level of engagement with content; they tend to retweet a large amount of content and replace to a large number of conversations in addition to beginning conversations by tagging other users. Third and finally, *consumers* are those users who observe online content. Many of these users may be considered "lurkers;" they read or watch content without publicly engaging with it (Sun, Rau and Ma 2014). Some may like content but do not formally engage beyond that. The important role that consumers play is in viewing the content created by influencers and then spread by amplifiers.

Exiles are uniquely situated to play the role of influencers. Due to the controlling and repressive nature of authoritarian regimes that tend to exile activists, often "the only viable space for opposition politics may be outside the territory and jurisdiction of that state" (Betts and Jones 2016, 1). As a result, those located abroad can act with relatively more impunity beyond the borders of their country (Moss 2016; Tsourapas 2021; Dukalskis et al. 2022) and have greater freedom than domestic users to produce and

spread the kind of content that is critical of the regime and central to opposition mobilization (Shen and Truex 2021). Exiles may also behave as amplifiers, spreading content through their networks and perhaps serving as a link between international and domestic networks. While exiles may also be consumers of oppositional content, domestic users are the most important consumers for the translation of online oppositional content into domestic dissent and protest mobilization through the mobilization of real-world networks (Pierskalla 2010; Hussain and Howard 2013; Nugent and Berman 2018).

Case Context and Timeline

In this section, we provide important background information about relevant political developments in Egypt between its 2011 uprising and 2019, as well as an overview of the key actors, development, and timeline of dissent in Egypt in September 2019.

Politics in Egypt (2011-2019)

In January 2011, Egypt witnessed unprecedented mass mobilization as part of the wave of Arab Spring uprisings. Demonstrations began in Egypt on January 25, 2011; the uprising would later be remembered as the January 25 Revolution. Inspired by the recent success of activists in Tunisia, activists reclaimed National Police Day, intended to commemorate the role of the police in maintaining Egypt's security and stability, to protest against police brutality, the near-constant state-of-emergency law, economic corruption, and the lack of civil liberties and freedoms of speech. The successful event was followed by 18 days of sustained and growing protest by people from all ages, classes, walks of life, and political persuasions (Beissinger, Jamal and Mazur 2015). On February 11, president Hosni Mubarak resigned after nearly 30 years in office.

Mubarak's resignation ushered in a flurry of democratic political activity, resulting in an elected and civilian-led government for the first time in Egypt's history. Elections were held between November 2011 and January 2012 for the National Constituent Assembly. The Muslim Brotherhood-affiliated Freedom and Justice Party led the Democratic Alliance to victory with 37.5 percent of the vote. In June 2012, Mohamed Morsi, a former member of the Muslim Brotherhood's Guidance Bureau and a parliamentar-

ian under Mubarak, defeated former Prime Minister and Air Force commander Ahmed Shafiq with 51.7 percent of the vote in a run-off, and was inaugurated as Egypt's first democratically-elected civilian president. However, polarization between political elites, shaped by legacies of repression and competition under Mubarak, quickly resurfaced and deepened (Nugent 2020). The Brotherhood was exclusionary and heavy-handed in its rule, while secular and leftist politicians were uncooperative.

On the one-year anniversary of Morsi's inauguration, the youth group *Tamarod* (Arabic for "Rebellion") organized massive anti-Morsi protests with financial and logistical support from elements of Egypt's security apparatus. On July 3, 2013, the military announced Morsi's removal from power, suspended the constitution, and installed an interim government. Presidential elections were held in late 2014 and retired military officer Abdel Fattah al-Sisi won with 97 percent of the vote. He was reelected in 2018 with a similar percentage in elections marred by low turnout, vote buying, and voter intimidation as well as a state media campaign to support al-Sisi's candidacy. After reaching the constitutional limit of two four-year terms, al-Sisi pushed through amendments in a tightly controlled April 2019 referendum that permit him to remain in power through at least 2030. Additional amendments undermined the independence of the judiciary and legalized the military's role in civilian governance.

Since coming to power in 2014, the Sisi regime has put its full weight behind decimating Egypt's once vibrant domestic activist community, obeying "few boundaries on its untamed repression of all forms of dissent" (Human Rights Watch 2018). The regime has jailed well over 100,000 people, the vast majority for political and social activism, in 22 newly constructed prisons. Countless others have been disappeared, their fates unknown to their families and lawyers (Ziada and Eid 2016). The Sisi regime has simultaneously forced a significant number of Egyptian activists into exile in Europe, North America, Asia, and elsewhere in the Middle East. Prior to 2011, claims of political asylum by Egyptians were very rare as previous regimes tended to use coerced migration sparingly and in line with domestic repression, targeting opposition that were perceived as the most threatening (Nugent 2020, 2024). However, according to international migration data, the number of Egyptians permanently relocating abroad for reasons of political persecution has grown exponentially under Sisi and has been dominated by activists

from various backgrounds who fought for political democracy and social liberalization before and after the uprising (Dunne and Hamzawy 2019). Immediately following the 2013 coup, Brotherhood leaders, members, and supporters who avoided capture, arrest, and death left the country due to fears for their life for their political affiliation with the Muslim Brotherhood. This group has left in large numbers since 2014, when domestic repression under Sisi shifted from targeting the Brotherhood to indiscriminately affecting all opposition. The current moment of exile stands in contrast to historical ones in the intensity (i.e., the large number of individuals affected) and scope (i.e., the number of opposition groups affected). Egyptian exiles primarily point to factors such as being named in politically-motivated court cases and actual or threatened violence from the security apparatus against them, their family or friends as the impetus for their departure from the country (Nugent 2024).

Dissent in Egypt (September 2019)

The primary influencer behind the protests was Mohamed Ali, a recent Egyptian exile living in Spain. Ali had worked as a construction contractor on Egyptian army contracts for fifteen years and also worked as an actor in Egyptian cinema. In early September 2019, Ali recorded and published a series of videos on his YouTube channel detailing economic mismanagement of the Sisi regime, which he claimed to have witnessed firsthand. He accused al-Sisi of corruption in government contracts and wasting billions of dollars on vanity real estate projects. Ali also called out Major Generals Kamel al-Wazir and Essam al-Kholy by name; both had held leadership positions in the Armed Forces' Engineering Authority, which oversees major national construction projects. Ali publicized the videos by posting links to a newly-created Twitter account (@MohamedSecrets) and using a series of anti-Sisi hashtags on Twitter and Facebook.

After the first week of videos, President al-Sisi responded directly to Ali on September 15 at the Eighth National Young Conference, rumored to have been hastily organized as a platform for the president to respond to the accusations (Mada Masr 2019*b*). Al-Sisi refuted the accusations of corruption, relying on well-worn talking points about threats to national security and the sacrifices necessary for building

a strong Egyptian state to justify costly expenditures. In the hours after the conference, Ali released additional videos and expanded his accusations to "more of an open political confrontation:" there was a shift in tone and topic, from "the personal account of a contractor who worked with the government to that of a political opponent speaking his mind to an audience" (Said and Mamdouh 2019). Other activists soon joined. After Ali posted a video criticizing the effectiveness and human rights abuses caused by the state's counterinsurgency campaign in North Sinai, he then posted two videos from Mosaad Abu Fagr, a longtime Sinai activist, who expanded on the accusations. Ali also posted a video from Ahmed Sarhan, a former army officer and lawyer, asking for the release of lawyer Mohamed Hamdy Younes, who had been arrested after announcing he would request the public prosecutor to investigate Ali's now viral claims. A flood of unverified videos, featuring both masked and unmasked individuals claiming to be former army and intelligent officers, substantiated many of Ali's claims, and he reposted them to his social media accounts.

After al-Sisi's response, Ali began including calls for protest and instructions for coordination and mobilization in his videos. The first protests began on Friday, September 20 (Mada Masr 2019*a*). They were described as "scattered" but were reported in at least 8 Egyptian cities. The largest protests occurred in Cairo, Alexandria, and Suez. The police responded by beating and tear gassing protesters, and arrested at least 274 people. Larger protests continued on September 21. The following Friday September 27 saw the largest protests. Ali had called for a million man march on this date, labeling the day "Salvation Friday" (*Guma'at al-Khalas*).

The regime responded to protests in two ways. First, the regime punished those who participated in protests by arresting 4,321 individuals in connection with the protests, as documented by the Egyptian Commission for Rights and Freedoms.[10] The state also flooded major squares with police following the much larger September 27 "Salvation Friday" protests. Second, the regime punished the instigators by exploiting Twitter's reporting mechanism to lock and suspend the accounts of those who were

[10] Available in Arabic at `https://docs.google.com/spreadsheets/d/1UTE2iQN8sXdXTZMikgfk5NoAL_W9VszPFt74g45p4-I/edit#gid=182794428`.

critical of the Egyptian government and who publicized content introduced by Ali. Up to 150 accounts owned by Egyptians and the Egyptian diaspora were suspended, and an investigative report documented that many of these suspensions were without cause per the terms of Twitter's user agreement (Eskandar 2019). While Twitter later reinstated most of these accounts and apologized, these online voices were temporarily silenced. As for Ali, his late September videos voiced fears and accusations of being targeted by Egyptian agents in Spain. His account was suspended a number of times but eventually reinstated, and he also created an additional account (@moaliofficial_) in November 2019. It appears that the highly repressive response from the regime undermined Ali's influence; in January 2020, he announced that he would be stepping back from politics after his calls for major protests on the ninth anniversary of the 2011 uprising failed to materialize (Al Jazeera 2020), though he remains involved in exile circles and publicly critical of the regime.

Methods and Data

To describe how oppositional content is introduced and amplified by exiles, as well as how domestic actors engage with this content, we conduct a number of complementary analyses of large scale digital trace data. We begin by documenting the introduction of anti-regime content from an exile influencer abroad and the key role of exiles in amplifying this content through online networks. We then document how domestic actors consume, engage with, and adapt this content initially produced and amplified by exiles.

We rely on several sources of data to document the 2019 events in Egypt. Our online data sources include data from public Facebook pages as well from Google Trends, Twitter, and YouTube. These data enable us to measure cross-platform online mobilization in real-time, and to document how a content cascade happens simultaneously across multiple platforms. Google Trends and YouTube data provide us with private measures of interest in Ali's content, while Facebook and Twitter data provide metrics of public interactions with the content as well as public criticisms of the regime and discussions of protest. For the purposes of our analysis, we limit the online data from September 2019 to November 2019, one

month before and after the protest period of interest. A summary of the datasets we use in our primary analyses is presented in Table 1 and described in more detail below.

Table 1: Summary of Online Data Sources

Platform	Collection	Dates	Data	N
Facebook	Crowdtangle	Sept-Nov 2019	All public Arabic language posts referencing Mohamed Ali Secrets	42K posts
Twitter	Streaming API	Oct 2016-Nov 2019	Real-time collection of tweets referencing Egypt and Egyptian politics	130M tweets
Twitter	Academic API	Sept-Nov 2019	Historical collection of tweets mentioning Ali's account	337K tweets
Youtube	Youtube API	Sept-Nov 2019	All Mohamed Ali Secrets Videos and associated metadata	592 videos
Google Trends	gtrendsR	Sept-Nov 2019	Global and Egypt-specific search data for Mohamed Ali Secrets (in Arabic)	daily relative measures

Facebook Data

Facebook is the most popular social media platform in Egypt with 90% of Egyptian Internet users using the platform as of 2019 (Dennis et al. 2019). Actors across Egypt's political spectrum have public Facebook pages and groups, including liberal activists, media outlets, military generals, popular clerics, and prominent members of the Muslim Brotherhood. Facebook data therefore allows us to compare how everyday Egyptian Facebook users engage with political content over time. We use the CrowdTangle API to collect public Facebook page data from all Arabic language Facebook posts that referenced Mohamed Ali Secrets between September 1, 2019 and November 1, 2019. CrowdTangle is a social media analytics platform owned by Meta that tracks public posts on Facebook made by public accounts or groups as well as public interactions to posts (likes, reactions, comments, shares, upvotes) and private views of video content. CrowdTangle tracks 99% of public posts from pages with over 100,000 likes, as well as a large number of pages with smaller followings. This makes it ideal for measuring views of videos and engagement with posts from popular public pages and groups. [11]

Google Trends Data

Google is the most popular search engine in Egypt, with 97% of Internet searches conducted using Google.[12] Because individuals conducting Google searches are generally alone, and there is no obvi-

[11] See `https://help.crowdtangle.com/en/articles/1140930-what-is-crowdtangle-tracking` for an overview of what data is included through the API.

[12] See `https://gs.statcounter.com/search-engine-market-share/all/egypt`.

ous record of their activity, they are more likely to express socially and politically taboo thoughts in their searches than they might in more public forums (Conti and Sobiesk 2007; Stephens-Davidowitz 2014, 2017). This makes Google search data an informative measure of private interest in sensitive online activity. We use the Google Trends API and the *gtrends* R package to collect Arabic language search data for Mohamed Ali Secrets. We collected global search data for the term between September 1, 2019 and November 1, 2019 in order to compare private interest in Ali inside and outside of Egypt, as well as local domestic variation.

Twitter Data

Twitter is a popular social media website and communication channel in Egypt; on average, Egyptian Twitter users produce 151 million tweets each month (Salem 2017). Although Facebook and Whatsapp are more popular than Twitter in Egypt (Mourtada 2016), Twitter is particularly conducive to political discussions because users follow accounts based on particular topics and tend to focus on sharing content of mutual interest, rather than reciprocal social interaction (Halpern, Valenzuela and Katz 2017; Smith, Fischer and Yongjian 2012). Twitter has facilitated the creation of flexible networks of political communication outside of traditional civil society and media centers (Jensen and Jorba 2012; Tufekci and Wilson 2012). In Egypt, it evolved from a tool initially used by educated youth and activists to a platform for diverse individuals representative of Egyptian society (El-Khalili 2013). We collect two different types of Twitter data. We begin with a dataset of approximately 130 million tweets related to Egyptian politics containing the Arabic keywords "Egypt," "Sisi," "Morsi," "Muslim Brotherhood,", "coup," "protest," "revolution," and "military rule," collected in real-time (i.e., as they were produced) using the Streaming API. The advantage of this approach to data collection is that tweets that may subsequently have been deleted are included in our dataset. However, this dataset may not include all engagement with Ali if those tweets did not happen to contain the keywords used to collect our real-time collection. We therefore also collect a dataset of all tweets mentioning or retweeting Ali between September 1, 2019 and November 1, 2019 using the Academic Twitter API. This dataset contains 377,311 tweets in total. These Twitter datasets together enable us to measure both the network structure and content of user interactions over time.

YouTube Data

YouTube is an extremely popular platform in Egypt, with 40% of all Egyptians and 77% of Egyptian millennials watching YouTube every day in Egypt (Hamdan and Hundal 2019; Google Impact Report 2019). We used YouTube's API and the *tuber* R package to collect all 47 videos posted to Ali's Arabic-language YouTube channel *Mohamed Ali Secrets* (*Asrar Mohamed Ali* in Arabic) [13] between September 1 and November 1 2019. This gave us access to view counts, a form of private engagement with the video, as well as likes and dislikes, a form of public engagement.

Results

In this section, we present our descriptive results in two parts. First, we describe they key role that exiles played as influencers (introducing oppositional and mobilizational content), and amplifiers (spreading oppositional and mobilizational content) which was then consumed by both international and domestic audiences. Second, we document how content initially produced and amplified by exiles was adapted by domestic actors to call for local protest mobilization.

How Content Cascades: From Exile to Egypt

Influencers

We begin with our main influencer, Mohamed Ali. In this case, we know which individual, and which account, is responsible with introducing oppositional content. He posted his first Youtube video on September 9th, and then published between 1 and 7 videos per day for a total of 47 videos for the period under study, demonstrated in the top panel of Figure 1. Ali publicized the videos he posted by tweeting links on the Twitter account (@MohamedSecrets) he created the same day as his first video. The middle panel of Figure 1 demonstrates that Ali began the period with very few tweets but by November 1, he had produced nearly 6,000 tweets including original content, reposting of others' content, and exchanges with other users. Twitter data also demonstrates that Ali's influencer status increased over time

[13] Ali's YouTube Channel is available at `https://www.youtube.com/channel/UC3gAvye86mrC9YzNYhQ3gAw`.

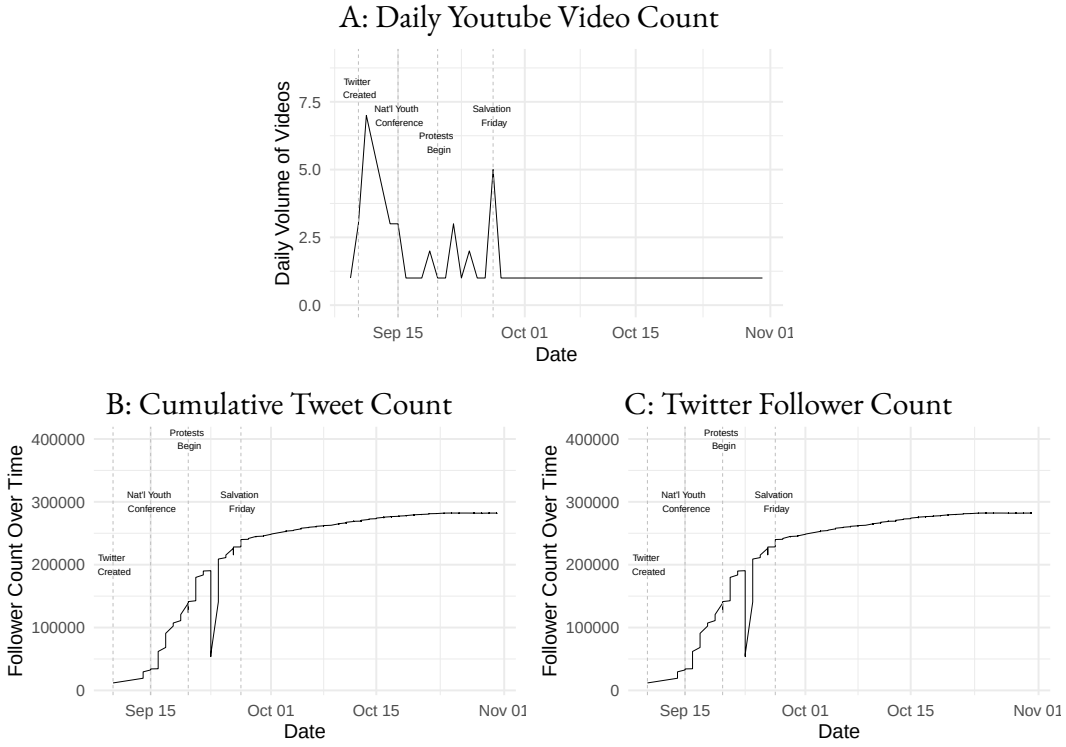

Figure 1: **Daily Count of Youtube Videos, Cumulative Tweets, and Twitter Followers (Sept-Nov 2019)** Youtube data includes all videos from the Mohamed Ali Secrets account collected using the Youtube API. Cumulative tweets and Twitter follower counts come from a dataset of real-time tweets produced by the @MohammedSecrets account, filtered from a dataset of 130 million Egypt-related tweets collected using Twitter's Streaming API.

as the content he produced went viral online. As a new Twitter account, he began the period under study with relatively few followers. By September 27, the day of Salvation Friday protests, he had roughly 250,000 followers, demonstrated in the bottom panel of Figure 1. Ali's account was briefly suspended on September 23, 2019 following the first outbreak of protests. This caused the drop in followers displayed in the lower right panel. Despite his brief suspension, Ali's general rise in followers cemented his influencer status.

In addition to the volume of Ali's videos, we also document how their content changed over time. We worked native Egyptian Arabic speakers to watch each video and code transcripts of the videos to indicate whether they contained general oppositional information (anti-regime criticism), or coordi-

nation information (logistical content intended to mobilize protests).[14] Figure 2 shows the daily volume of these videos disaggregated by opposition and coordination content over time. Ali's initial videos contained purely oppositional content criticising the Sisi regime. Recall that after President al-Sisi refuted Ali's claims at the National Youth Conference on September 15, 2019, Ali began including calls for protest and instructions for coordination and mobilization in his videos. These calls for protest and coordination continued through the beginning of the protest period and ramped up around Salvation Friday, the largest protests of the period.

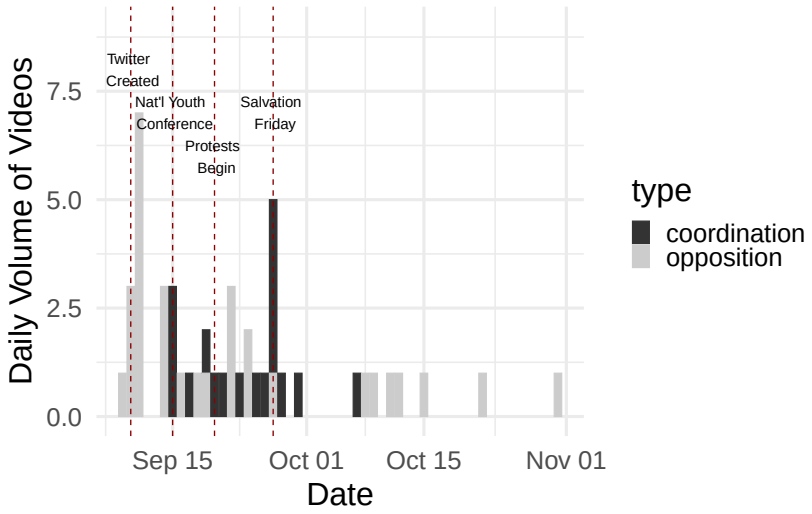

Figure 2: **Content of Youtube Videos (September-November 2019)** Youtube data includes all videos from the Mohamed Ali Secrets account collected using the Youtube API. Videos were manually coded according to whether contained oppositional information (including anti-regime criticism) or coordination and logistical information (content designed to mobilize protests). Coding decisions can be found in the Appendix.

Amplifiers

To identify the types of individuals who were influential in amplifying Ali's tweets, we first analyze daily engagement with Ali on Twitter. Our dataset of all tweets mentioning or retweeting the @mohamedsecrets Twitter account enables us to capture the behavior of amplifiers through public engagement with Ali over time.[15] To understand who is influential in amplifying Ali's content on Twitter

[14] See Appendix for a detailed description of coding decisions.
[15] Recall that engagement refers to interacting with online content, and on Twitter includes retweeting or replying to it.

both inside and outside of Egypt, we build an engagement network[16] with the @mohamedsecrets Twitter account, displayed in Figure 3. These network graphs show the top 100 Twitter accounts that most frequently amplified Ali's tweets through retweets and mentions.

We manually coded these top 100 accounts by qualitatively identifying account location, user nationality, and user type. Nodes are sized by how often they receive a mention or retweet in the network. A number of interesting trends emerge from disaggregating Ali's top amplifiers. Figure 3 shows that the majority of the accounts that most frequently amplify Ali are located outside of Egypt. We also see in Figure A2that the majority of these Twitter users are Egyptian. Most of these Egyptians who reside outside of Egypt live in Turkey, Qatar, and the United Kingdom, known locations of concentrated Egyptian exile populations (Dunne and Hamzawy 2019). Turning to actor types (Figure A2, we see that many of the accounts that frequently engage Ali's content are media outlets, including several independent Egyptian opposition news sources now operating out of Turkey, followed by members of the entertainment industry including actors and directors, then copycat accounts (accounts with similar names to @mohamedsecrets that are not Ali's official account). Given that Ali also had a career as an actor, it is perhaps unsurprising that he received a great deal of engagement from colleagues in the entertainment industry. Other top amplifiers include activists, politicians, and academics, largely living in exile. Taken together, the data suggests that the majority of users that were most active in amplifying Ali are likely exiles.

In addition to the users who most frequently engaged with Ali, we identify the users who were most influential in amplifying his tweets. To do so, we first identify users at the "core" of the Twitter network mentioning Ali – those who are most connected to other users in the network – using k-core decomposition. The k-core of a network is the maximal subnetwork in which every node has at least degree k, where degree indicates the number of mentions made or received. The k-core decomposition is a recursive approach that progressively trims the least connected nodes in a network (i.e. those with lower degree) in order to identify the most central ones (Barberá et al. 2015). Figure 4 presents the results of this

[16] Here nodes are Twitter accounts and edges are retweets or replies to Ali. A node in social network analysis is a vertex or point and an edge is the line that connects the nodes.

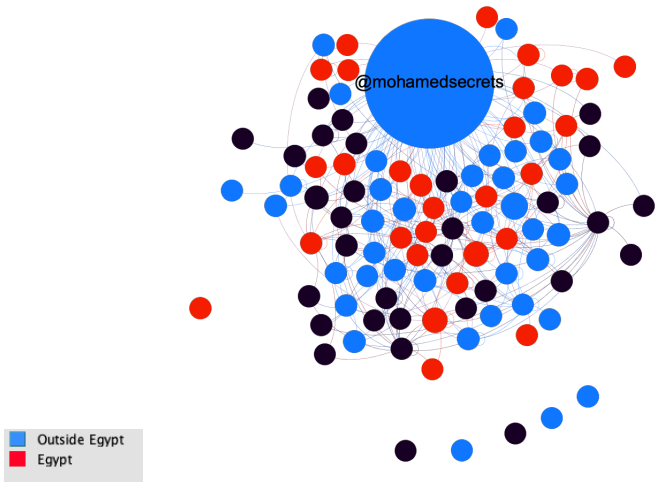

Figure 3: **Most Frequent Twitter Engagers of Ali's Content (September-November 2019)**. Each network graph shows the top 100 users that most often retweeted or mentioned the @MohamedSecrets account. Nodes are Twitter accounts and edges are retweets or replies to Ali. Nodes are sized by frequency of engagement. Users are then manually coded according to whether they are inside or outside of Egypt. Black nodes lacked sufficient information to classify.

analysis, with the most connected or influential amplifiers located in core 18, and the least connected or peripheral amplifiers located in core 1. We find a higher proportion[17] of amplifiers located outside of Egypt in the core of the network (core 18), suggesting that users outside of Egypt were more influential in amplifying Ali's content than domestic users. Additionally, a higher proportion of amplifiers located inside of Egypt were in the periphery of the network (core 1), suggesting that users inside of Egypt were less influential. This analysis further highlights the central role that actors located outside of Egypt played in amplifying Ali's tweets. Beyond measuring users' position in the network, we can also evaluate their reach by accounting for how many followers they had at the time they were amplifying Ali. Notably, comparing users at the core of the network to users at the periphery, we see that users located outside of Egypt had slightly larger reach at the core and much larger reach at the periphery, reaching twice as many Twitter users as domestic users in total.

[17] This is measured as users located within Egypt in Core 18 / total users located inside Egypt. It is useful to look at the proportion of users in each core, rather than just the volume, as there are more users located outside of Egypt in total as displayed in Figure A3.

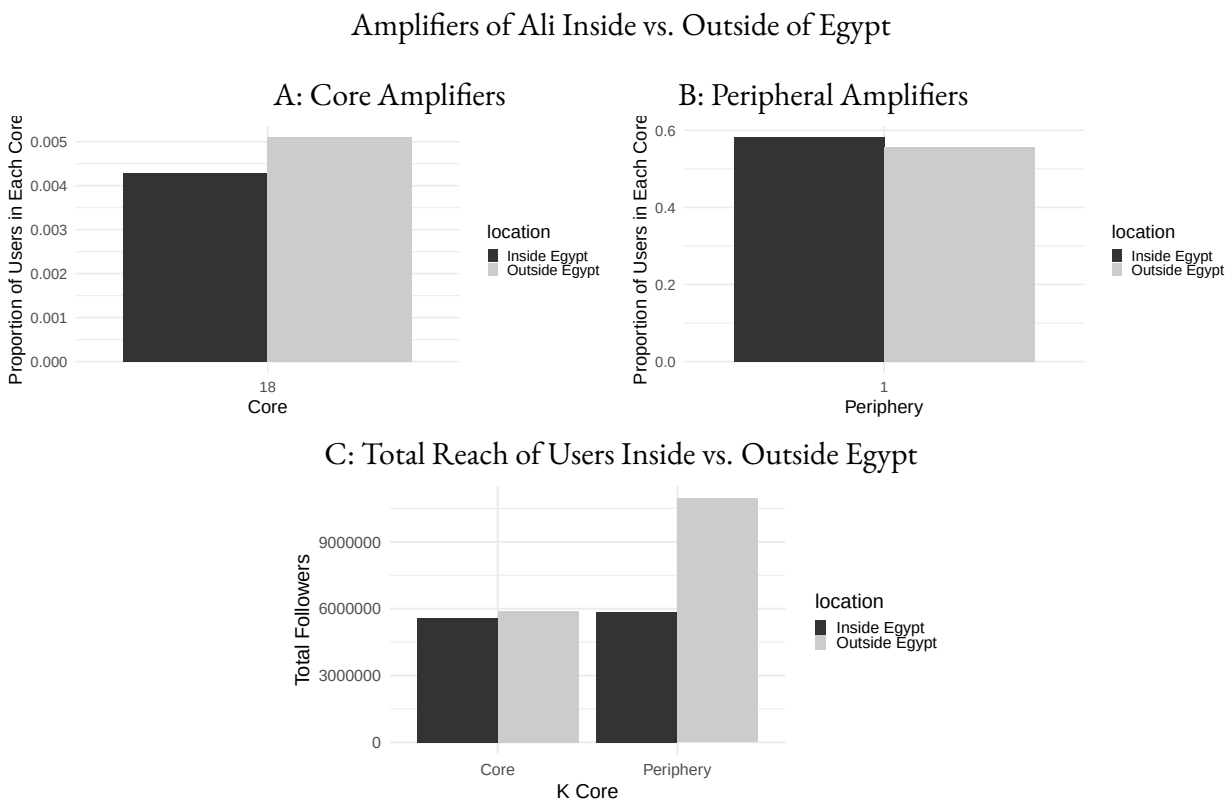

Figure 4: **Core vs. Peripheral Amplifiers of Ali** The top plot displays the proportion of users inside vs. outside of Egypt at the core of the network (most influential users) and at the periphery of the network (least influential users). Cores are calculated using K-core decomposition, with core 1 representing the most peripheral users and core 18 representing the most connected users within the network. A plot displaying the proportions for all 18 cores can be found in the Appendix Figure A3 The bottom plot shows the reach (number of followers) of core and peripheral users inside vs. outside of Egypt.

K-core decomposition also enables us to describe the users that were at the core of the network. For the purposes of not identifying particular activists or individuals who might be vulnerable to regime repression, we do not reference these accounts by name but rather refer to their affiliations more generally, with the exception of well-known individuals in exile who publicly identify themselves. Examining the 42 users at the core of the network who had over 10,000 followers, the most influential amplifiers in terms of both connectedness and reach, we see that 30 of them were exiles and 12 were located inside of Egypt. 14 of these 42 most influential actors were Muslim Brotherhood supporters or affiliates in exile. 10 of the top 42 most influential accounts were affiliated with January 25 revolution activists and accounts, and 8 were journalists, largely in exile.

Exploring the timing of these influential actors' tweets provides further insight into their influence. The first influential accounts to amplify Ali on September 9 included 3 exiled Muslim Brothers and 3 January 25 activists. From September 10 to September 13, in the "pre-viral" period, Egyptian journalists from Qatari-based news outlet *Al-Jazeera* as well as the independent, Turkish-based opposition media company *El-Sharq* amplified Ali. On September 14 and 15, as engagement with Ali began to grow, he was amplified by the main account of *El-Sharq TV*, a Brotherhood cleric in exile, and some January 25 revolution activist accounts. Ali's tweets began to go viral on September 16 following the National Youth conference. At this time, Ayman Nour, former Egyptian presidential candidate, current head of *El-Sharq TV*, and an exiled member of the opposition known for cooperation with a number of groups across the political spectrum, first amplified Ali. These accounts, joined by other influential activist accounts, continued to tweet in the pre-protest period and throughout the protests. Identifying early influential amplifiers provides important insight into how exiled Muslim Brothers, January 25 revolutionary activists, and those working in media helped amplify Ali's messages and Youtube videos.

Turning to our dataset of tweets about Egyptian politics collected in real-time, we examine the degree to which online calls for protest and mobilization of anti-regime sentiment amplifying Ali's message were produced inside and outside of Egypt. We measure anti-regime online mobilization as any mention of Ali, the hashtags he created, and related calls for protest, as a percentage of total number of

tweets in a day. We do so because expert human validation of a random sample of 1,000 of these tweets demonstrate that 84% of tweets containing these keywords express explicitly anti-regime sentiment, 9.4% contained neutral references or reporting on Ali and the protests, 6% of the tweets expressed pro-regime sentiment, opposing Ali protests, and .06% of tweets in our sample were irrelevant.[18] Figure 5 displays the daily proportion tweets containing anti-regime mobilization content produced by Twitter users inside and outside of Egypt. It demonstrates that Twitter users both inside and outside Egypt mobilized at similar times, with actors outside of Egypt producing just over 50% of all oppositional content. We see upticks in anti-regime mobilization content in the leadup to the National Youth conference, and then again in the lead-up to the first protests on September 20 and 21, peaking right before Salvation Friday, the day of largest protests. Taken together, our analyses of amplifiers demonstrates that exiles were not only particularly influential in spreading Ali's messages, but also produced over half of all oppositional content during the period under study.

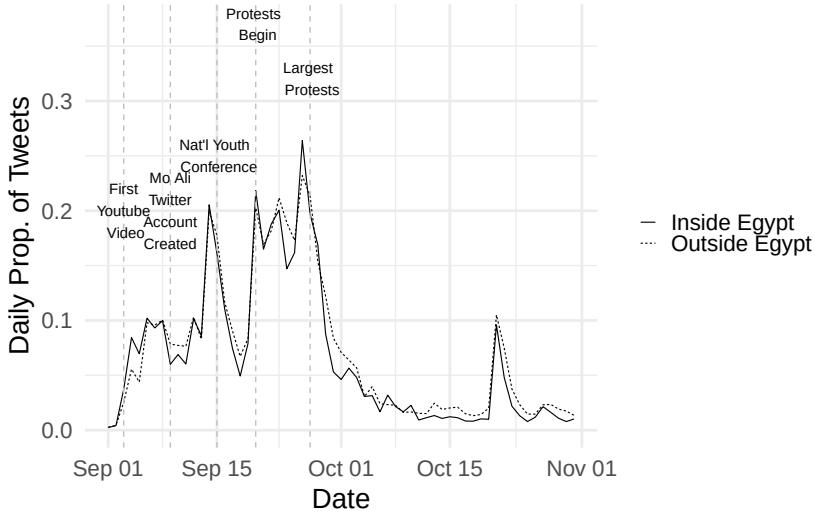

Figure 5: **Daily Proportion of Tweets Referencing Dissent (September-November 2019)**. This plot displays the daily proportion of tweets containing anti-regime mobilization hashtags or referencing Mo Ali produced by users inside and outside of Egypt. These Twitter data were collected in realtime using the Streaming API.

[18] See Figure A1. Both authors also manually coded 100 of these tweets, with intercoder reliability between the authors and our native Arabic speaking RAs at 87%. We include English translations of representative pro- and anti-regime tweets in the appendix.

We also replicate this analysis using public Facebook data in Figure A5 , which demonstrates that Facebook page administrators located outside of Egypt produced 62 percent of oppositional content from September to November 2019, and were particularly active in the lead up and during protest periods, relative to domestic users.

Consumers

We now turn to the behavior of online content consumers. We demonstrate how content produced by Ali and amplified by exiles was consumed by international and domestic audiences. Our results highlight that while public engagement with oppositional content was higher outside of Egypt, private consumption was higher among domestic users.

We begin by analyzing daily engagement with Ali's Youtube videos, displayed in Figure 6. Ali's 47 videos received 3,387,835 total views between September 1 and November 1, 2019, sometimes reaching as many as 500,000 views in one day. Ali's videos received 128,128 likes and just 6,398 dislikes in this period. This provides suggestive evidence that viewers of these videos were more likely to express support of Ali's content than to express disagreement with it. Engagement with the videos increases in the lead-up to and during protest activities on September 20, 21, and 27. We also observe a spike in engagement with the videos in mid-October after the protests have died down, when Ali released a video entitled "The second part of my response to the wizards that led Egypt in a cunning manner," issuing broad encouragement to Egyptians to continue to protest and mobilize against the Egyptian regime. Due to the nature of the YouTube data, we are unable to disentangle whether these viewers were inside or outside of Egypt.

Data from public Facebook pages provides additional insights into consumption of online content, by offering engagement metadata as well as video views data. This enables us to measure how frequently content referencing Mo Ali that was produced by page managers located inside or outside of Egypt was interacted with or viewed. Most public engagement with posts referencing Ali came from content produced by page managers outside of Egypt across the entire time period. Turning to private views, we see content produced by page managers inside of Egypt sometimes received more engagement

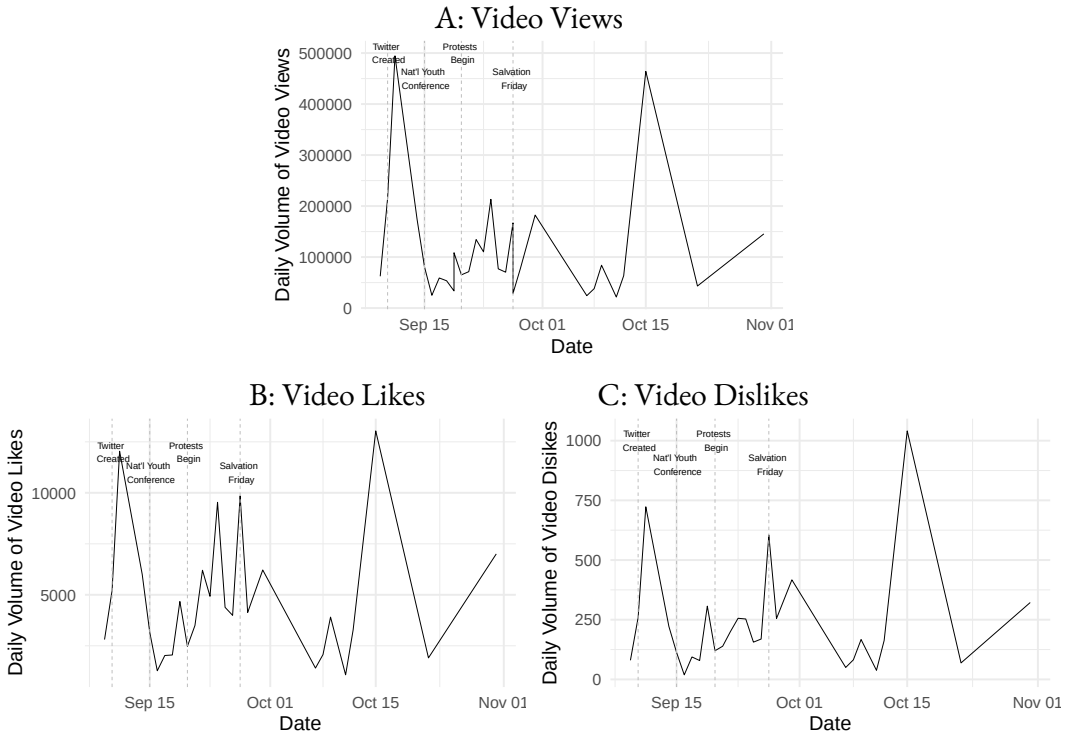

Figure 6: **Daily Volume of Engagement with YouTube Videos (September-November 2019)** Youtube data includes all videos from the Mohamed Ali Secrets account collected using the Youtube API.

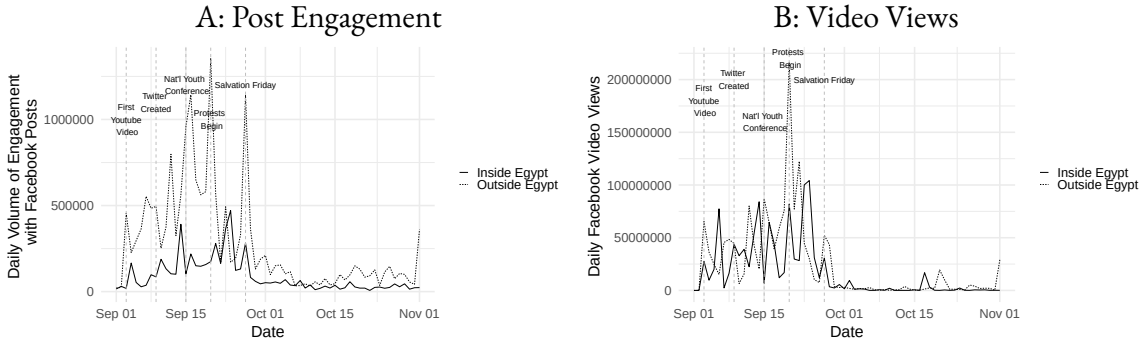

Figure 7: **Daily Volume of Engagement and Views of Facebook Posts (September-November 2019)**. Data was collected using the CrowdTangle API and includes public Facebook page data from all Arabic language Facebook posts that referenced Mohamed Ali Secrets. Views data (B) is only available for video content.

than that produced outside of Egypt. At the start of protests, content produced by actors outside of Egypt received particularly high numbers of views. Together this highlights how actors outside of Egypt made content that was consistently consumed at high rates both publicly and privately.

Next, we turn to Google search data which enables us to develop a comprehensive measure of private interest in Ali and consumption of the content he produced throughout the period under study – and examine more geographically granular variation in domestic consumption. Figure 8 displays the relative search volume for Mohamed Ali Secrets from September 1 to November 1, 2019 within Egypt. First we observe that search interest inside Egypt begins to gain traction after Ali released his first video, rises in the lead-up to the first major protests on September 20, and peaking shortly after. Turning to an analysis of location metadata within Egypt by city and governorate, Table A1 shows that the greatest relative interest in Ali was in governorates that ultimately experienced protests including Beheira, Gharbiyya, Port Said, Alexandria, Cairo, Dakhaliya, Ismailia, and Qalyubiya. [19]

Adapting Exile Content for Local Mobilization

After demonstrating the key role that exiles played in mobilizing online domestic dissent through introducing, amplifying, and publicly engaging with content, we next evaluate how domestic actors

[19] For a table of protest volume by governorate, see Table A2.

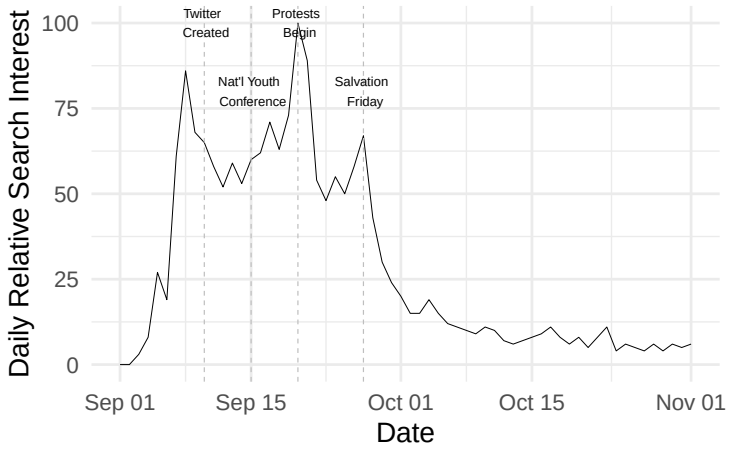

Figure 8: **Daily Relative Search Interest within Egypt** (September-November 2019). Google trends data was collected using the Google Trends API. Trends data offers a relative measure of salience, ranging from 0-100, which 100 representing the top salience in a given time period.

adapted exile messages to mobilize locally. In particular, we explore the degree to which online oppositional content was adapted into local calls for anti-regime mobilization. To measure local online mobilization, we subset our data to tweets that both contain anti-regime mobilization discourse and mention an Egyptian governorate. These tweets primarily link protest hashtags initially produced by Ali with new information that calls for lcal protest activity, for example, "The people of Suez say #Enough_Sisi, #Going_Friday_to_the_square." As Table A3 demonstrates, we find the highest volume of local online mobilization in Suez, Quena, Cairo, Damietta, and Port Said, all locations that ultimately experienced protests on the ground.

Examining these local calls for protest over time, Figure 9 demonstrates that they first peak right as the first wave of protests begin (first dotted line) in Suez, Qena, Cairo, Damietta, Port Said, Giza, Matruh, and Alexandria. We also see an uptick in volume right before the largest protests (second dotted line) in Cairo, Qena, Sohag, Giza, Luxor, and Alexandria. Together these results highlight how social media users within Egypt adapted discourse that was initially produced and amplified by exiles to make local calls for protest. While connecting this online behavior to offline action is beyond the scope of this paper, notably 8 of the top 10 governorates with the most calls for local mobilization ultimately expe-

rienced protests on the ground, offering suggestive evidence of the link between this online and offline collective action.

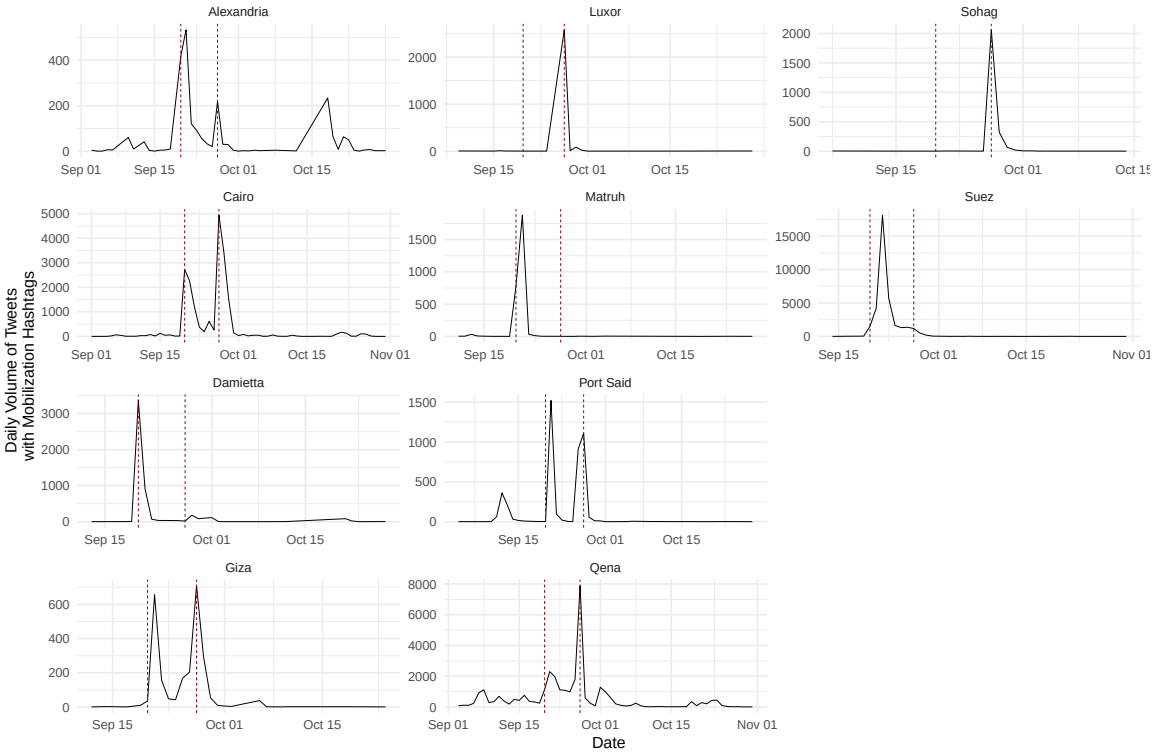

Figure 9: Daily Volume of Tweets Calling for Local Mobilization by Governorate This plot displays the daily volume of tweets containing anti-regime mobilization hashtags that reference a local governorate in Egypt. Dotted lines represent the start of protests (Sept. 20) and the largest protest period (Sept 27).These Twitter data were collected in realtime using the Streaming API.

Discussion

Our results describe how oppositional and mobilizational content was introduced and amplified by influential exiles and then consumed domestically and adapted into local calls for mobilization. In this section, we discuss these results and their generalizability. We argue that Ali is not an unusual exile and highlight characteristics that made him a particularly effective influencer. Next, we discuss how certain characteristics of the amplifiers in our study may also have contributed to the rapid and vast spread of Ali's content, and how these characteristics helped overcome collective action problems related to dis-

sent. Finally, we describe the nature of the Egyptian exile community to further probe the conditions under which exiles can mobilize domestic dissent. While the combination of the specific characteristics of Ali, his amplifiers, and the broader nature of the Egyptian exile community may have been particularly effective in mobilizing dissent in this instance, these charactersistics are not unique.

First, Ali was in a particularly advantageous position to introduce content that went viral and mobilized local dissent in a political space as contentious and polarized as that of Egypt's. His work as a military contractor meant that his messages were detailed, specific, and personal. As such, Ali appeared as an expert who could credibly make corruption accusations of the Sisi regime, or perhaps even as an indication that there was a split within the military given how recently he had worked within the regime. As a result, the content he introduced may have been more influential than had he been less personally exposed to corruption and not witnessed it first hand, or had less direct and personal connection with the armed forces (Druckman and Lupia 2000; Gilens and Murakawa 2002). In addition, Ali was not clearly identifiable as a partisan of any of the major political groups in Egypt, such as the Muslim Brotherhood or non-Islamist opposition parties. Ali was similarly uninvolved in any of the revolutionary and pre-revolutionary youth movements. In one video, Ali said of himself, "I'm not a liberal, I'm not Brotherhood, I'm not a secularist. I'm a working-class guy." In other videos, he told stories of working in his family's shop that emphasized his humble background. Media coverage similarly described him as "blue collar" (Arman 2019). As we noted above, Ali had also previously worked as an actor in Egyptian cinema in addition to his work as a military contractor. He is charismatic and speaks comfortably on camera. One news article described how"he uses his acting skills to endow the scene with an adequate level of suspense and excitement" in his videos. People are generally uninterested in politics, and Ali's ability to create content that felt more like entertainment may have been more palatable to consumers (Kim 2021). The perception of reliable content delivered by a credible and trustworthy messenger is important to whether individuals undertake costly behaviors in response to it. In sum, the combination of credibility, lack of a partisan affiliation, blue-collar background, and semi-celebrity status rendered Ali a highly effective influencer.

While there would be no content to spread or consume without the initial influencer, amplifiers are hugely important in creating the cascade of content necessary for protest mobilization and expanding the conversation around that content. Once again, Ali's status as a member of the entertainment industry may help explain how quickly his content went viral as a function of the composition of his immediate online network. In our network analyses above (Figure 3), we found that the accounts that were highly engaged with Ali were likely to be owned by individuals in the media or entertainment industries, a specific type of elite user. More specifically, many of these accounts self-identified as part of the independent and largely anti-Sisi media industry in exile centered in Istanbul, Turkey. In the communications literature, this kind of user is labeled an "icon." Icons in the media and entertainment industries concentrate public interest around online conversation and "serve as a bridge between the network and the broader social conversation" (Pintak, Bowe and Albright 2021, 6). Previous research has found that tweets from icons tend to be perceived by consumers as more authoritative, trustworthy, and competent, making them particularly effective in bringing additional users into the conversation (Jin and Phua 2014). The credibility of online influencers is likely particularly important in an era of low trust in online information and the proliferation of misinformation and disinformation (Tucker et al. 2018). That fact that so many icons amplified Ali's content may have helped it to spread faster and further.

Importantly, our analyses suggest that Ali and the exiles who amplified his content created a cascade of oppositional information that that acted as a coordination device that mobilized domestic dissent; over time, more of the content contained messages designed to coordinate protests. In addition, this cascade remobilized previously mobilized populations. The majority of social media users who amplified his messages had participated in previous waves of online anti-regime mobilization. We find that 79% of individuals who frequently amplified calls for protest on Twitter in September 2019 had also called for protests previously between October 2016 and August 2019.[20] This suggests that the most active participants in online opposition during the September 2019 protests were being re-mobilized, rather than mobilizing for the first time in response to Ali's videos. Individuals who were re-mobilized also had ap-

[20] Our real-time collection of tweets referencing Egyptian political topics began in October 2016.

proximately 7 times as many followers as individuals who participated in protest discourse for the first time in September 2019. This indicates that Ali's oppositional content was primarily amplified by individuals who had previous online protest experience and were relatively more influential on Twitter. Additionally, we documented above that these messages were then adapted to call for protests in local communities, and these calls for action were particularly common in governorates that had experienced previous waves of protests. Turning to offline protest data, we see that the 2019 protests and call for them were most likely to occur in governorates that had witnessed high rates of protest since the 2011 uprising.[21] In our case, exiles appear to have been mobilized dissent among those who were previously engaged in such behavior before, and future research should disentangle whether and how exiles might mobilize new domestic populations against regimes.

Finally, the case under study involves the transnational community of Egyptian exiles. In this instance, Egyptian exiles are focused on mobilizing domestic opposition rather than mobilizing opposition among international audiences, Egyptians abroad, or the populations of their host communities. The literature cited in the motivation of the paper suggests that exiles' behavior is largely driven by dynamics back home and they tend to play the role of supporter rather than instigator of domestic dissent. However, instances of exiles leading and mobilizing dissent are not uncommon in the empirical record. Out of 345 revolutionary situations (defined as the emergence of multiple centers of sovereignty) identified by Beissinger (2022) between 1900 and 2014, 103 (nearly 30 percent) were led by exiled challengers who had been displaced outside of national territory prior to the onset of the revolutionary situations (DeSisto and Nugent 2023).[22] In a number of prominent cases, including the Arab (Iraqi, Libyan, and Syrian) diasporas (Moss 2022, 2018), the Iranian diaspora (Ghorashi and Boersma 2009), and the Cuban diaspora (Eckstein and Berg 2015), exile activism goes through phases, with periods focused on domestic mobilization alternating with others focused on international mobilization among prominent. Though more research is needed to understand these patterns, taking these cases together suggest that what Koinova

[21] See "Offline Protests" section of the Appendix for details.

[22] Over 50 percent of revolution situations end in displacement external to national territory. The identity of the (incumbent or challenger) correlates with which party ultimately triumphs in the contest).

(2014) calls "diaspora positionality" is important. Whether exiles work to mobilize domestic populations depends on a number of actors such as the time horizons of the exiled population (i.e., how long ago did the exiles depart the home land? How unstable do exiles believe the regime to be and thus how long do they believe it will be until they are able to return?) and the relationship between opposition in exile and domestic opposition. Shain (2010) suggests that these factors may be determined by a set of variables including "the [exile] organization's own character, the host state's policies towards the exiles' activities, and the home regime's counteractivities to discourage dissent among the national community abroad," all of which change over time and shifting international and domestic circumstances. Finally, state capacity for transnational repression is likely an important factor determining how much impunity exiles feel to mobilize against the regime from abroad (Shen and Truex 2021; Esberg and Siegel 2023). These remaining questions demonstrate a crucial need for more systematic cross-sectional and cross-national research to unpack the dynamics of exile activism.

Conclusion

This paper describes how exiles, who are typically assumed to play a supporting role in domestic anti-regime mobilization (Brinkenhoff 2009; Koinova 2021*b*), both initiated and amplified a viral online protest campaign against the Egyptian regime that was followed by sizable domestic protests. Drawing on large-scale cross-platform social media data we demonstrate that exiles not only were particularly influential in amplifying the initial anti-regime content produced by Ali, but were ultimately responsible for producing over half of online oppositional content. This increased the visibility of anti-regime messages and calls for collective action among domestic social media users, who then adapted this content to call for local protests. Our analyses also suggest that exile online mobilization served as a coordination device, re-engaging social media users who had participated in past waves of online protest.

We highlight two main advantages to our empirical approach, using cross-platform data, text, and network analysis. First, the data clearly demonstrates that the content cascade preceding the Septem-

ber 2019 protests happened at the same time and in complementary ways across multiple platforms. Second, different platforms give us different types of data and measurements of the dynamics of content cascade. In our current analyses, YouTube, Google Trends, and Facebook video views allow us to measure private interaction with Ali's content, while Twitter, YouTube, and Facebook demonstrate public engagement with it. Twitter captures Ali's growth in popularity over time as he becomes more central to exile and domestic online networks, and allows us to conduct network analysis to measure Ali's influence. By only analyzing data from one platform, we would have missed key parts this process. Future research should continue to use cross-platform approaches to describe online behavior and its relationship to offline events. We encourage scholars studying online politics to think creatively about which online platforms are relevant for the question under analysis and to combine data sources to understand whether processes of online politics are complementary or substitutes.

Despite these advantages, this work has several limitations. First, we note that our Facebook data, Youtube data, and one of our Twitter datasets was collected historically, meaning that some data may be missing due to intentional deletion or content moderation. That being said, both our Twitter dataset collected with the Streaming API and our Google Trends data are not subject to these limitations, and our cross-platform approach increases our confidence in our results. Second, given our data, we are only able to document the mobilization of online dissent in this particular instance, rather than comparing our case to a specific or theoretical counterfactual scenario in which exiles did not initiate or become involved in online mobilization. Additionally, exploring the causal relationship between online mobilization and offline collective action is beyond the scope of our paper. That being said, it is worth mentioning that all of the governorates that experienced high levels of online mobilization (Table **??**) also saw offline protests in September of 2019.[23] While we believe that our "mere description" (Gerring 2012) is a crucial first step toward developing and testing theories of exile involvement in domestic politics, we hope that future work will build upon our findings to test some of these causal relationships.

[23] See Appendix Figure 9 for overtime plots of domestic calls for protest in each governorate and Table A3 for offline protests and tweets for each governorate.

By systematically describing the process through which exiled activists can use online tools to mobilize citizens at home, we seek to contribute to the collective understanding of dissent in the digital age. As we noted in our discussion section, our analysis of this important case outlines a number of plausible mechanisms and actors characteristics that should be explored in future research. While we have focused on describing the process through which the production, amplification, and consumption of online oppositional content contributed to domestic online mobilization, future work should also analyze the behavior of the regime. As noted above, the president himself responded directly to some of Ali's claims at a national conference before protests commenced. In addition, the regime reacted to Ali's online campaign by using Twitter's reporting mechanism to suspend his account (represented by the sharp vertical lines in his follower count in Figure 1) as well as the accounts of at least 150 influential Egyptian activists. The regime also clamped down on real-world protests by arresting thousands and heavily policing public spaces. Similarly, internet disruption data from NetBlocks, a global internet monitor working at the intersection of digital rights, cyber-security and internet governance,[24] documents a decline in Twitter reachability beginning late in the day on September 22 and continuing through September 23rd (recall that this is before the largest protests on September 27, Salvation Friday). This corresponds with documented restricted access to a variety of social media platforms and news websites including Facebook messenger, social media servers in Egypt by leading providers, and the Arabic versions of *BBC Arabic* and *Al-Hurra* in this period (Al Monitor 2019). By acknowledging Ali, repressing protests, and limiting internet access, it is possible the regime legitimated Ali's claims and amplified both the spread of content through a backlash mechanism (Roberts 2020; LeBas and Young 2021), while forcing online users to be innovative in their responses (Lutscher and Ketchley 2023).

While there is a high prevalence of exile involvement in domestic politics when we explicitly look for it (Geddes, Wright and Frantz 2014), it remains under-documented and under-theorized. By conceptualzing exiles as opposition actors that are distinct from other migrant populations and providing systematic descriptive evidence of how exiles interact with domestic actors online, our work repre-

[24] See `https://netblocks.org/about`.

sents an important step toward building theory and developing testable hypotheses that will ultimately enable future research to assess the causal effects and mechanisms by which exiles shape domestic politics. Our hope is that future research will put our results into comparative perspective with other exiled communities to develop a broader framework for the conditions under which exiles engage in domestic mobilization.

Not all exiles remain focused on the domestic sphere as a fruitful avenue for change. For example, Esberg and Siegel (2023) find that Venezuelan exiles turned their activism outward; when exiled, they internationalize their social media audiences, are significantly more likely to call for foreign intervention to change politics at home, and significantly less likely to discuss protest mobilization after exile. In contrast, Egyptian exiles explicitly produce content on domestic issues and direct it at individuals back home, facilitated by the significantly less constraining internet environment outside of Egypt. Additional comparative inquiry into what differentiates Egyptian exiles from others – such as variation in expectations about the likelihood of regime change, time horizons for return, or the extent to which their online and real-world networks remain rooted in the domestic sphere – might help to explain why some exiles focus their online activity on domestic politics and mobilization and others do not. We hope that future research will build on our work to address these questions and continue to improve our understanding of the relationship between exile and dissent in the digital age.

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Appendix

Coding of Digital Content

Coding Rules for Twitter Account Identification

We conducted a multi-step process to identify the nationality, location, and type of the most engaged Twitter accounts (n=100). For nationality, we combed through users' biographies and posts to see if and how they identified themselves as Egyptian, regularly posted information about Egypt, and used Egyptian dialect. For location, we manually collected the top 500 most common self-reported locations in our dataset. This includes people writing "Egypt" in English or Arabic, writing more specific locations like "Alexandria" in English or Arabic, or using the Egyptian flag in their location field. We then used this list to populate the location of users. We also created one large "Not Egypt" category for any user that mentioned a location other than this list. This process produced the location info for about 40% of users who produced tweets mentioning Ali, which is comparable to other datasets of Twitter users as many people provide no or uninterpretable location information (Ajao, Hong and Liu 2015). For type, we similarly combed through users' biographies and posts to see if and how they identified themselves – i.e., as private citizens, revolutionaries, affiliated with the Muslim Brotherhood, employed by or representative of a media company.

Coding Rules for Video Transcripts

For each video, please write a brief paragraph 3-4 sentences summarizing the content of the video in English. Pay particular attention to whether the video contains oppositional information (criticizes Sisi or the Egyptian government); coordination information (describes where/when/how to protest); or both. If the video contains oppositional or coordination information, please highlight the sections of the transcript that express this information and mark them with a comment that says "opposition", "coordination", or "both opposition and coordination." Also please mark in the spreadsheet in the "information" column "opposition" if the video contains opposition information, "coordination" if the video contains coordination information, or "both" if it contains both.

Expert Human Validation of Twitter Content

A native Egyptian Arabic speaker coded a random sample of 1000 tweets containing references to Ali, his hashtags, or protest discourse. 84% of the tweets in our sample expressed anti-regime sentiment, 9.4% contained neutral references or reporting on Ali and the protests, 6% of the tweets expressed pro-regime sentiment, opposing Ali protests, and .06% of tweets in our sample were irrelevant.

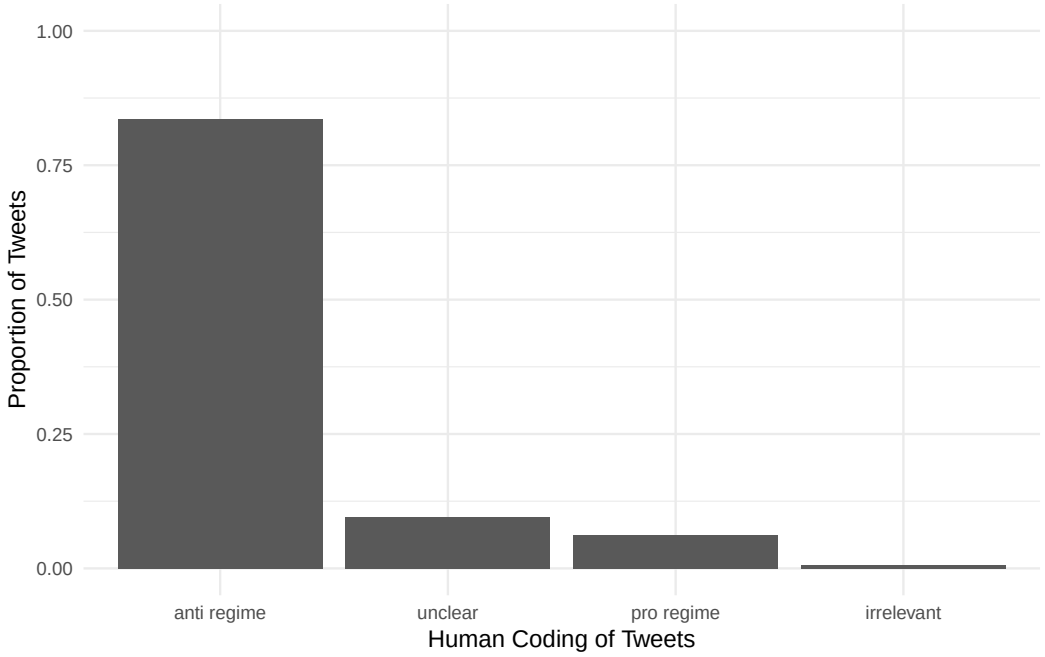


Figure A1: Proportion of Validated Tweets Expressing Anti-Regime Sentiment

Anti-Regime Translated Tweet Examples

- #Enough_Sisi We hope that the second spark of the Egyptian revolution will spark and triumph. Democracy must be achieved even if the journey takes a long time. #Mohamed_Ali
- #Leave_O_Sisi, a demonstration against #Sisi #Military_rule #Leave_Sisi #Enough_Sisi #Going_Friday_to_the_square #Tahrir_Square #Sisi_Nakba [Catastrophe]_Egypt #Go_down_you_are_for_one [protest hashtag]
- O God, #Mohammad_Ali will be the next president of #Egypt #Enough_Sisi

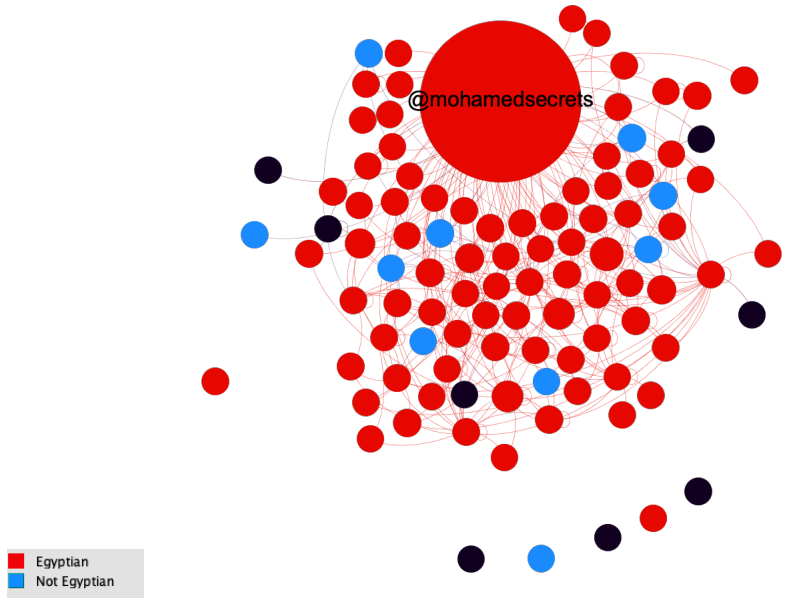
English Translations of Representative Pro- and Anti-Regime Tweets

Pro-Regime Translated Tweet Examples

- #Thank_You_Egyptian_Intelligence_Services #Mo_Ali_Is_A_Traitor_To_His_Homeland #Long_Live_Egypt [pro-Sisi hashtag]
- Campaign to boycott the Mohamed Ali hashtags and Brotherhood pages. It is forbidden to respond to any Brotherhood page. It is forbidden to post a hashtag against the country. Any tweet you write, write the hashtag to support Egypt, and unify the hashtags
- #We're_all_with_Sisi #Thank_God_for_safety_O_President #Our_mandate_to_Sisi_again # We're_with_you_President #No_to_chaos #Thanks_Egyptian_people_army_police #Mo_Ali_Is_A_Traitor_To_His_Homeland

Network Visualizations

A. Nationality



B. Actor Type

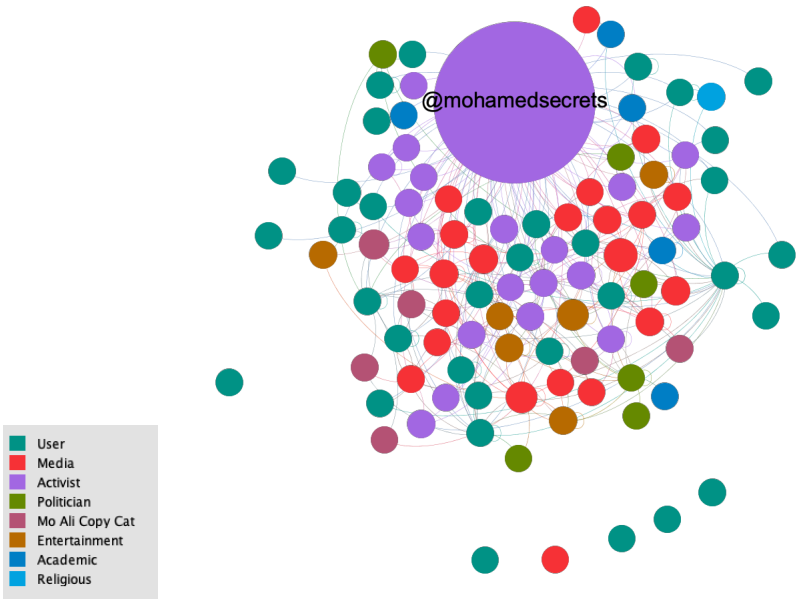


Figure A2: **Most Frequent Twitter Engagers of Ali's Content (September-November 2019)**. Each network graph shows the top 100 users that most often retweeted or mentioned the @MohamedSecrets account. Nodes are Twitter accounts and edges are retweets or replies to Ali. Nodes are sized by frequency of engagement. Users are then manually coded according to whether they Egyptian or not (A), as well as by actor type (B). Black nodes lacked sufficient information to classify.

K-Core Decomposition

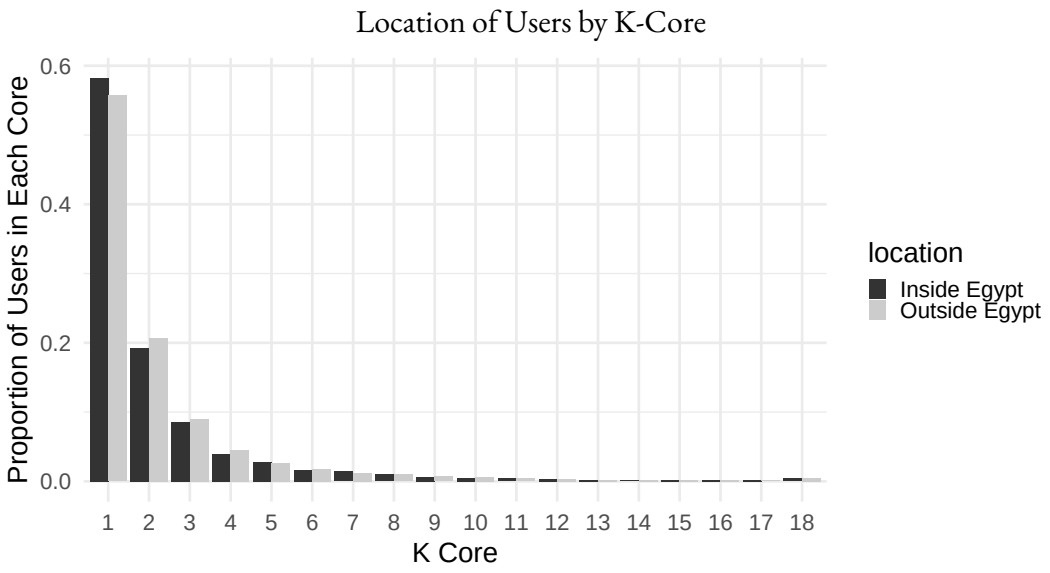


Figure A3: **Core vs. Peripheral Amplifiers of Ali** This plot displays the proportion of users inside vs. outside of Egypt at the core of the network (most influential users) and at the periphery of the network (least influential users). Cores are calculated using K-core decomposition, with core 1 representing the most peripheral users and core 18 representing the most connected users within the network.

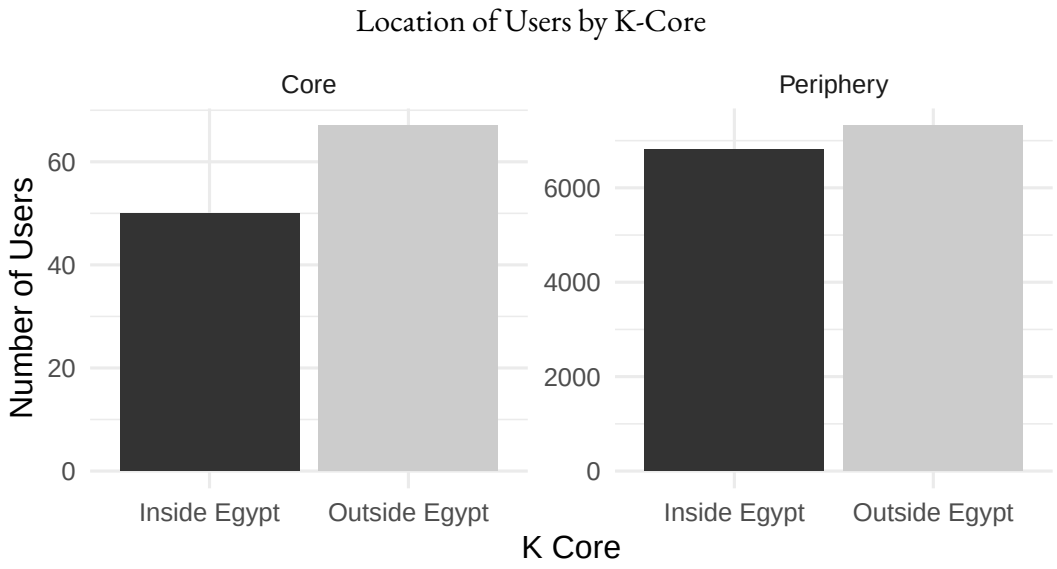


Figure A4: **Core vs. Peripheral Amplifiers of Ali** This plot displays the number of users inside vs. outside of Egypt at the core of the network (most influential users) and at the periphery of the network (least influential users). Cores are calculated using K-core decomposition, with core 1 representing the most peripheral users and core 18 representing the most connected users within the network.

Facebook Content Analysis

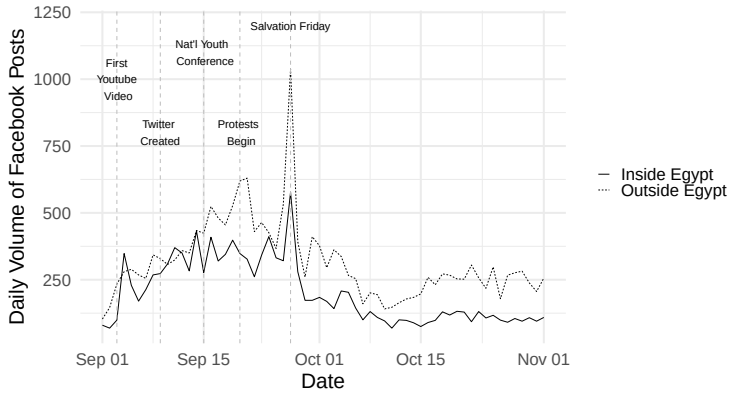


Figure A5: **Daily Volume of Posts Referencing Dissent (September-November 2019)**. This plot displays the daily volume of posts containing a reference to Mo Ali or anti-regime mobilization hashtags produced by page administrators inside and outside of Egypt. These public Facebook data were collected using the Crowdtangle API.

Google Search Interest within Egypt

Table A1: **Daily Relative Search Interest by City** Google trends data was collected using the Google Trends API. Trends data offers a relative measure of salience, ranging from 0-100, which 100 representing the top salience by city.

	city	governorate	relative search interest
1	Damanhour	Beheira Governorate	100
2	Tanta	Gharbiyya Governorate	94
3	Port Said	Port Said Governorate	87
4	Alexandria	Alexandria Governorate	86
5	6th of October City	Giza Governorate	86
6	Giza	Giza Governorate	79
7	Mansoura	Dakahlia Governorate	76
8	Ismailia	Ismailia Governorate	75
9	Cairo	Cairo Governorate	74
10	New Cairo City	Cairo Governorate	73
11	El Obour City	Qalyubia Governorate	69

Offline Protest

While establishing a causal link between exiles' online mobilization and domestic offline protest is beyond the scope of this paper, an examination of offline protest demonstrates how anti-regime mobilization re-mobilized previously aggrieved populations.

To assess whether online domestic mobilization was occurring in areas where protests had previously been mobilized, we rely on protest data from Daftar Ahwal, a Cairo-based open-source data collection institute.[25] Recent research suggests that in-country and in-language protest data sources are much more accurate for the MENA region than those compiled using English-language sources (Clarke 2021). The data documents daily protests by protest type.

Daftar Ahwal data measuring political protests between 2011 and 2020 demonstrate that governorates in which protests were recorded between September and November 2019 (n=15) were more likely to have previously witnessed protest than those governorates in which protests were not recorded between September and November 2019 (n=12), demonstrated in Figure A6. While there are certainly previous protests recorded in governorates without protest between September and November 2019, it is at a much lower frequency than in districts in which protests did occur in late 2019. Thus, districts with protests in 2019 are protest hotspots, where significant opposition to the regime was previously mobilized.

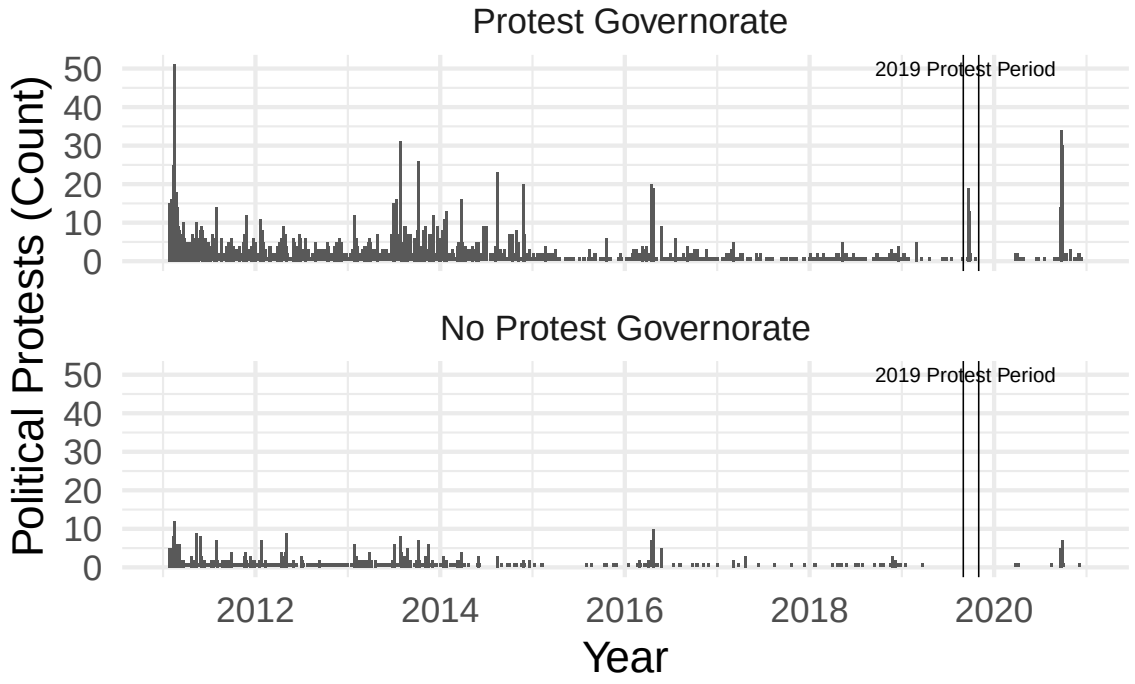


Figure A6: Previous Protest in Districts With and Without Protest in September 2019

Between September 1 and November 1, 2019, there was significant sub-national variation in the number of political protests that occurred, according to contentious event data from Daftar Ahwal. A

[25] See `https://daftarahwal.com/`.

number of governorates saw no protests. The highest number of protests were recorded in Cairo (10), followed by Giza (5), and Suez (4).

Table A2: Political Protests by Governorate (September-November 2019)

Governorate	Number of Political Protests
Cairo	10
Giza	5
Suez	4
Alexandria	3
Damietta	3
Gharbiyya	3
Luxor	2
Port Said	2
Qena	2
Beheira	1
Dakahlia	1
Kafr El-Sheikh	1
Menoufia	1
Minya	1
Sharqiyya	1
Assiut	0
Aswan	0
Beni Suef	0
Fayoum	0
Ismailia	0
Marsa Matrouh	0
New Valley	0
North Sinai	0
Qalyubia	0
Red Sea	0
Sohag	0
South Sinai	0

Mobilizational Tweets by Governorate

Table A3: Number of Local Mobilization Tweets by Governorate

Governorate	Number of Mobilization Tweets
Suez	36015
Qena	32157
Cairo	19271
Damietta	5096
Port Said	4474
Matruh	2781
Luxor	2729
Sohag	2500
Giza	2451
Alexandria	2186
Gharbiyya	1307
Qalyubiyya	1297
Monufiyya	1285
Aswan	605
Beheira	486
Minya	290
Sharqiyya	170
Fayoum	66
Assuit	58
Ismailia	33
Dakahlia	6
Beni Suef	1