Discussion of the events of early 2011 in Tunisia and Egypt in Western publics has been largely unstructured and characterized by an undue preoccupation with new media. In light of this, the aim of this paper is twofold: to learn from these regime-changing processes in order to understand them, and to inform a nascent model of political communication in contemporary Arab societies more generally. We start by proposing some critical steps for giving structure to present and coming attempts at understanding the course of events, focusing on those in Egypt. They involve giving greater attention to three heretofore neglected components of a prospective communication model of the Egyptian regime change: the media ecologies, communication culture, and temporal-spatial unfolding of events. After a brief discussion of these, we offer several personal on-the-ground observations from the starting days of the revolutionary movement in Cairo to give flesh to the analytical structure we propose, and provide starting points for coming inquiries into the role of communication for anti-authoritarian movements in the Arab world.

By any possible standard, the political events of January and February 2011 in Tunisia and Egypt are standing out. As they represent a heretofore unseen process in the Arab world, it is clear that they provide an unheard-of opportunity for learning on multiple levels. In fact, at the very time of this writing, such learning is tangible in the continued political repercussions that are shaking places like Libya, Bahrain, and even Syria. In this essay, we aim to initiate a process of learning from Tunisia and particularly Egypt in the realm of scholarly occupation with political movements and communication in the Muslim world. We propose three components of an analytical model that is informed by the events in Egypt as much as it is supposed to promote an adequate understanding of them.

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The starting point for our discussion is the observation of a largely unstructured discussion of the events in Tunisia and Egypt in the Western public spheres as they were happening and immediately afterward. In light of this lack of structure, what we want to do in this text is (a) to propose some steps we consider critical in giving structure to present and coming attempts at understanding the course of events, focusing on those in Egypt, and (b) to offer several on-the-ground observations from the starting days of the revolutionary movement in Cairo to give flesh to the analytical structure we propose.

Three Components of a Communication Model

Without a doubt, there are countless aspects of the recent revolutions in North Africa that deserve intensive consideration and will be part and parcel of our future historiography of these events. However, we wish to address three specific aspects that, we think, have to be centerpieces of any useful empirical model of the concrete course of events, and more generally, of the role of communication and communication technologies in anti-authoritarian social protest in the Arab world. These centerpieces are (a) the media ecologies of the anti-authoritarian uprising—that is, the availabilities of different forms of communication to different actors involved in the revolutionary processes at different points in time; (b) the cultural specificities of the Arab world with regard to what and how communication is socially acceptable, conducted and furnished for social change; and (c) the dynamics of how the anti-authoritarian movement unfolded over time and across distances within the nucleus of protest—the capital—and beyond.

Media Ecologies of Protest

The various connections of media ecologies of protest to political change—including regime change—are well-known. Several scholars have explained the role of interlocking political discourses for destabilizing and delegitimating authoritarian power structures theoretically (e.g., Habermas, 1989; Tarrow, 1998), as well as empirically (e.g., Howard, 2010; Richter, 2010). In the immediate public reactions to the events in Tunisia and Egypt, we witnessed, by and large, a preoccupation of commentators with "new" media, particularly the two online services Facebook and Twitter. Clearly, most any public discussion of communication issues surrounding the Tunisian and Egyptian movements was focusing on this pair of communication options. In so doing, journalists and other commentators have been picking up a thread that evolved during the Iranian post-election protests of 2009, at the latest. And however important and novel the ramifications of these technologies for the organization and repression of anti-authoritarian social protest are, we think that this close-to-exclusive focus represents an undue restriction in our thinking about the role of communication for such events. What we are in need of, instead, is a holistic conception of anti-authoritarian protests, one that will not only lead to a richer understanding of the totality of communication processes driving them, but also to a more nuanced perspective on the role of new media as it interacts with that of "old" media and face-to-face forms of communication. If, as communication scholars, we are to reconstruct the role of communication in the development of the Egyptian revolution and similar events, we have to include the entire media ecology of the revolution in our empirical models. Once we ask which communication technologies were at the disposal of the different actors involved in the protests, from the protest entrepreneurs to government agencies, we become more aware of the multiple functions a single medium and different media may have.
at different points in time during the regime-changing process for different groups of actors—and of how these functions are peculiar to the cultural contexts of North Africa and the Middle East region.

**Communication Culture**

Civic culture plays a preeminent role in any bottom-up enactment of political change—again, including regime change. Part of why the specificities of communication culture were important for the Egyptian regime change is that civic culture develops in, and depends on, broader sociocultural settings. This also means that everyday uses and appropriations of available media vary between cultural contexts (Dahlgren, 2009). As important as media technologies are in and of themselves, a preoccupation with them also runs the obvious risk of neglecting the cultural forces that make possible and restrict their use. The latent technological determinism observable in Western discussions of Tunisia and Egypt is problematic in itself (given the vast literature that runs counter to the tenets of media determinists like Harold Innis and Marshall McLuhan). But it becomes all the more troublesome as it is based on—and to some immeasurable extent, is the outcome of—a lack of knowledge about the cultural environments in which these revolutions were enacted. There is, of course, variation between and even within Arab nations regarding communication cultures and the availability of media technologies to different parts of society. However, for analytical purposes, we may state that the communication cultures of the Arab world generally differ from those of the Western world in some notable ways (see Basyouni, 2001; Hall, 1990). These differences are consequential for the uses and misuses of communication and communication technology by all players involved in the course of the anti-authoritarian challenge of power. One case in point is the passed-down importance of oral communication in this part of the world (Ayish, 2008). Oral communication, more so than in the Western world, has a striking advantage in creating the resource of trust, and thus it was indispensable in the creation of a protest movement that was based to a large extent on one-to-one mobilization. The culturally specific functions of oral modes of communication necessarily interact with the two other components of an empirical communication model of the Egyptian Revolution. For one, these overarching communication norms and values result in peculiar appropriations of media that are at the disposal of citizens. Whereas mass media and many-to-many forms of communication might be relatively important means for organizing political dissent in contemporary Western societies, communication technologies like e-mail, phone calls, and even directly distributed handouts play a more central role in such a context, as has been in evidence in different ways during the days of the Egyptian Revolution. The culturally distinct forms of communication also entail specific patterns in which political protest unfolds in time and space. The "need for orality" during the early stages of protest formation, for example, tends to lead to locally entrenched pockets of an initial resistance where an identity and organization for the movement is developed and spread, especially under authoritarian rule. Similar examples of such a cultural specificity are the local concentration of political communication among citizens in the Friday Mosque and the consequences of Friday being the traditional day of public political protest for the temporal dynamics of the revolutionary movement.

**Temporal-Spatial Unfolding**

Communication culture, as the second component of the communication model, is closely linked to the processes related to anti-authoritarian regime change. We witnessed in Egypt that culture-specific
forms of media appropriation in autocratic environments can lead to the development of alternative forms of political activity where traditional forms of participation known from Western contexts would not be effective. Such processes of mediated civic engagement and identity-building that allow for a circumvention of the strictures imposed by the power structures in authoritarian regimes are inherently bound by time and space. And while we have, as yet, little empirical evidence of such processes in Middle Eastern and North African societies, it will be important for future research to trace them in order to understand the development of anti-regime movements. The third component of a useful model of social protest in the Arab world we want to point to is, thus, the importance of interpreting the Tunisian, Egyptian, and similar movements as processes that are fundamentally characterized by temporal, as well as spatial, dynamics. Public discourse of the movement has focused on prominent individual events taking place within a narrow spatial and temporal frame (e.g., discussion of the buildup of a million-strong crowd on Tahrir Square and the intrusion of oppositional pro-government forces into the square). However important or even crucial such individual events are, if we want to understand the processes of protest mobilization and organization that lead to them and happen alongside them, we have to take a step back and engage in process tracing that does not focus on seemingly separate individual events, but runs, instead, from the earliest of counter-regime activities to the final outcome of the movement. Taking this perspective will allow researchers to develop persuasive explanations of the emergence of such movements, their endurance and stability (or lack thereof), and their ultimate effectiveness in achieving their cause. A variety of methods may be used for such research, from narrative interviews with individuals involved in the movement and ethnographic observational methods to longitudinal analyses of mass media content. The important point is that such a perspective will allow scholars to explain the movement as a process by focusing on communication’s role as the process that drives it. It sensitizes us to the different roles different media technologies play for anti-regime protests in the Arab world at different points in time. For example, the role of Al Jazeera regarding the events in Egypt becomes clearer when we take this perspective and realize that it was not before a critical mass of visible protest had developed that the network chimed in on events and promulgated support for the protesters. The presence of this medium thus interacted with the development of the movement in bringing about social change—which refers us back to our first point. At the same time, the effectiveness of Al Jazeera as an Arab network is likely contingent to some extent on the presence of pan-Arab motives in Egyptian collective identities—which refers us back to our second point.

In the final analysis, we conclude that viable reconstructions of the revolutionary events in Egypt and Tunisia, as well as constructions of more general empirical models of the role of communication and communication technology in anti-authoritarian movements in the Arab world, need to account for the interplay of the media available to different actors, the cultural contexts of protest communications, and the different stages of the lifetimes of such movements. To be sure, these points alone do not make for a satisfactory model, but we single them out here because, in our experience, they tend to be the most neglected in discussions of the events in Tunisia and Egypt, especially given their empirical importance. With them in mind, we devote the remainder of this essay to providing some first-hand observations from Cairo during the days of the Egyptian Revolution. It is our hope that these accounts are useful vantage points for constructing a communication model of the Egyptian Revolution. At the very least, these recollections should highlight some aspects of the events that we think are important to understanding the different roles communication and communication technologies played in them.
Observing Communication in the Egyptian Uprising

Given the observable focus in current discourse on social media tools, such as Facebook and Twitter, we start by discussing online communication tools in the pre-protest period.

Contrary to other Arab countries, such as Tunisia or Saudi Arabia, Egypt is known for its relatively liberal policies on online content, and for its vibrant blogosphere (Etling et al., 2009). Before the protests erupted, there was no formal filtering of websites, but the sizable security forces, instead, constantly harassed online activists and even sent them to prison (Isherwood, 2008). In fact, a relatively huge and active online community of political bloggers had emerged in Egypt since 2005, due to the lack of control and online censorship of content.

Over the last years, Egypt has faced a major increase in Internet usage, with around 17% of the population connected, according to official numbers (International Telecommunication Union, 2009). Also, thanks to the innumerable Internet cafes, the unofficial tally is slightly higher. Social network sites are popular among young Egyptians for connecting with each other and using the online space as an opportunity to circumvent gender separation in the “real” social world. Facebook is one of the most popular social networks, with almost 5 million registered users (Ghannam, 2011) that constitute about 22% of all Facebook users in the Arab region (Salem & Mourtada, 2011). The increasing popularity and the more censored traditional mass media space, along with the liberal Internet control policies, enlarged the virtual space for a critical public sphere before the revolutionary movement gained momentum. It also established a virtual place to both express dissenting voices and flourish counter-hegemonic discourses. Although this expanded public realm is mostly occupied by social elites, online discussions helped to create an awareness of possible political change within a previously apolitical youth that helped in transferring the virtual uproar to the streets and the traditional mass-mediated public sphere.

In the pre-protest period, Egyptian Internet activists used Facebook predominantly as a platform for knowledge seeking and sharing. They established transnational networks between activists in Arab and non-Arab countries in order to exchange information about strategies for successful political resistance and protest. Highly frequented Facebook sites during the protest movements included We are all Khaled Said [Kullina Khaled Said] and 6th of April Youth Movement [Haraka shabab 6 april]. Both sites refer to non-virtual political incidents: Khaled Said, a 28-year-old Egyptian blogger, was tortured to death at the hands of two policemen in 2010 after he had published a video showing the corruption among police officers in Egypt. The name of the 6th of April Youth Movement goes back to a nationwide general strike in the industrial city of Mahalla on April 6, 2008. To promote the strike, some activists set up a Facebook site, which became a communication hub for the recent protests. Both sites were aimed at mobilizing the Egyptian youth, especially in the days and weeks before the open protests broke out. In their postings, they called for demonstrations on the 25th of January (the national “Police Day”). One key function of theirs was to visualize the reasons for the demonstrations, such as corruption, poverty, and torture. They also spread information about the times and venues of demonstrations. Caricatures, photos, and videos with highly emotional messages from persons confirming their attendance were added in order to encourage people to follow the call. During the days of protests, Facebook and Twitter became important information tools for Egyptians, as well as for international journalists. Activists produced a constant
stream of news, as well as videos showing the violent clashes between protesters and government supporters. On the first day of protest, January 25, 2011, we found almost 130 postings on the Facebook wall of the 6th of April Youth Movement alone, and these were widely commented on by other Facebook users. The number of comments increased drastically after a few days of protest—reaching up to 5,000 comments per thread within two hours at the We are all Kahled Said site. These numbers document the significance of Facebook as a platform for information and exchange beyond mere mobilization efforts. Online services such as Facebook, Twitter, and video blogs gained further importance for the movement when journalists were prevented from entering Tahrir Square, the local epicenter of the protests. Those sites served as a surrogate, funneling out information to a wider public, and therefore they were an important information source in an otherwise severely restricted mass media environment. Within six weeks, the number of people following the site We are all Khaled Said increased from 357,000 to 1,026,000. But even with the importance of Web 2.0 for the movement being obvious, the spillover from the virtual spaces to the Egyptian streets would not have been possible without other communication technologies, such as mobile phones, e-mail, and satellite television channels.

Being part of the Egyptian regime change’s media ecology, social network services like Facebook were related to both the cultural and temporal-spatial dimensions of the events. With regard to the latter, while the Internet was a means of mobilization and information during the first days of protest, it was also used widely to raise political awareness and call for civic engagement in the run-up to the protests. In the pre-protest period, activists used the social online media to publish anti-governmental criticism not seen in “old” media, and to cooperate transnationally with political activists. With regard to the role of culture in the regime-changing events, increasing access to digital information technologies likely had an impact on Egyptians’ civic identities and proclivity for political activism (Howard, 2010). As anywhere else, the Internet in the Arab world is, of course, mainly used for entertainment (Braune, 2008)—but also for connecting with Arab diasporas. The Internet has long been a major resource for young Muslims seeking advice in reconciling their modern lifestyles with religious practices. A youth culture infused with novel Islamic identities has been fostered by Web-based communication that has challenged traditional authorities. An illustrative example of this politically relevant cultural dimension of new digital media in Egypt is the online consultation of unauthorized but close-to-daily-life preachers like Yusuf Al-Qaradawi and Amr Khaled that has become a common practice among young Egyptians (Graf & Skovgaard-Petersen, 2009).

Sensitive information about demonstration venues or guidelines describing proper behavior in dealing with security forces in order to keep the protests peaceful were spread via more targeted communication channels, like email and short message services (SMS). Communication through these technologies draws more on personal networks services and therefore, it allowed for both a more flexible spread of semi-public information services and a mobilization of people who were not connected to social network sites. People were also asked to print out protest guidelines and distribute them among their friends and colleagues. Mediated networks were used to reach a wide range of multipliers who transported the message into their personal networks. Personal networks, based on mutual trust, are more effective in mobilizing people than more anonymous, fluid, and dispersed online social networks like Facebook. The protest organizers also used SMS to spread the call for support of the protests in various forms: either physically, by joining the demonstrators on the streets, or symbolically, by just waving the Egyptian flag.
from balconies. This likely was an effective approach to reaching a large number of people. One important reason for that is the fact that, according to Ghannam (2011), 72% of the Egyptian population uses mobile phones.

In the Arab society, personal networks of trust are an important element of community life, and concepts such as family solidarity [Nasab] and brotherhood among the Muslim community [Umma] are pivotal to maintaining the social system (Ayish, 2008, p. 64). These partly pre-Islamic traditions are emphasized due to the lack of a welfare state and the low standard of living in many Arab countries. Personal health care, for example, is often maintained via the collective coverage of costs in tight-knit personal networks. Communication within such networks most often is one-to-one communication, either face-to-face or in its mediated varieties, using mobile phones and SMS. Surely, the density of personal networks in Egyptian community life contributed to the continued mobilization of protesters after the online networks were no longer accessible (Bayat, 2009).

The traditional and still central space for orally transmitted political communication in Egypt and the rest of the Arab world is the mosque, particularly the Friday prayer. The Friday sermon is the formal occasion for public preaching in which the preacher addresses not only religious topics, but also current political discourse, and gives interpretations of current events. However, since the protest movement was more secular than religious in character, the Friday sermon served as an ancillary mobilizing ground in this case. The political activists announced Friday, January 28, as the first Day of Anger, knowing that many Egyptian men follow the Friday sermon in the streets, and would thus be relatively easy to mobilize for participation in the protests. Activists also systematically canvassed low-SES (socioeconomic status) districts and tried to convince and activate people through face-to-face communication and sharing pamphlets. By using diverse communication channels, the protest organizers successfully activated very different segments of the Egyptian population: the computer-literate young, as well as more traditionally oriented Egyptians. That is why the outpouring of new demonstrators did not stop even after the shutdown of almost all electronic communication devices after three days of protest.

Another important factor within the media ecology of the Egyptian uprising is television broadcasting: Due in part to high illiteracy rates and a cultural preference for orality, television is a highly popular medium in the Egyptian public sphere. We can differentiate between three kinds of TV networks: national state-run channels, national private satellite channels, and transnational satellite channels like Al Jazeera and Al Arabiya. The coverage of the state-owned channels under the Mubarak regime was devoid of criticism toward the political elites, and interviews or talk programs were carefully orchestrated and supervised by the information ministry. This type of reporting also characterized coverage of the political protests, and therefore, it stood in sharp contrast to the transnational channels, which showed hundreds of Egyptians demanding their civil rights. State television promoted a dishonest version of events and broadcast calm scenes of Cairene street traffic or aired patriotic songs in favor of the established regime.

All of this happened against the backdrop of a recent top-down liberalization of the Egyptian media system during the last years, through which the Egyptian government had reacted to the development of media globalization, and which had led to a more pluralistic media environment dominated by private satellite channels and more independent newspapers (Khamis, 2008). These developments
were generally regarded as having resulted in an expanded critical public sphere. However, the narrow confines of the political liberalization of the Egyptian media system became obvious during the events of January and February 2011: From the beginning of the protests, the privately owned channels demonized the demonstrators in the streets as Westernized and drug addicted youths. In the face of an overt manipulation of national coverage of the events, some journalists resigned in disgust. At the time of this writing (March 2011), the information ministry is not yet abolished, but most channels and newspapers have discarded its point of view and now offer a cautiously positive, and certainly more reflected, view of the popular uprising.

The role of transnational media outlets was yet another important element during the revolutionary process in Egypt. Contrary to the national TV stations, Al Jazeera played a key role in the popular spreading of the uprisings. Al Jazeera, running with the slogan “The opinion and the other opinion,” was launched in 1997 in Doha, Qatar, funded by the Emir of Qatar. The Emir decided to dismantle the information ministry as the main censorship tool, and thus opened the way for uncensored news coverage, critical reporting on political events in the region, and highly critical live talk shows. Therefore, Al Jazeera has been perceived as backbone of a newly evolving critical Arab public sphere and seen by some optimistic scholars as an agent of a revolutionized political culture, or at least as a voice of a popular reform movement (Ayish, 2008; El-Nawawy & Gher, 2003; El Oifi, 2005; Hahn, 2007; Lynch, 2006; Zayani, 2005). In fact, Al Jazeera was at first reluctant to pay full attention to the events in Cairo. On the first day of protest, Al Jazeera aired an episode of its most famous political talk show, The Opposite Direction, that dealt with the secret cooperation of Palestinian and Israeli authorities. The major news headline of that day was also dedicated to this issue. This negligence did not last long, however, as from the second day of the protests onward, Al Jazeera’s coverage consisted of constant live broadcasting of the Egyptian uprising until Mubarak finally resigned.

Since the Arab world is a region that is closely connected and geoculturally and linguistically integrated as a region in which people share the same media language (Modern Standard Arabic), it can be characterized as a common mass communication space. In contrast to Europeans, for example, Arabs do not have to overcome a language barrier to a transnational public sphere, which likely was a significant factor leading to the popular spread of protest across country borders to Libya, Bahrain, and Syria, to name just the most visible examples. The borders of the pan-Arab public sphere transcend the confines of national state power, and thus, those of the national information ministries. Hence, it was impossible for the Egyptian authorities to impose direct restrictions on what could be shown on the transnational news channels such as Al Jazeera. Due to their autonomy from direct state interference outside their host countries, the lesson from Egypt is that transnational news channels in the Arab region can be an important relay station for disseminating the idea of anti-authoritarian protest and renewing the idea of pan-Arabism in the struggle for freedom. The Egyptian government tried to impede the network’s broadcasting ability by stopping operations of the government-run satellite transmission company, Nilesat. The company broke its contract and stopped transmitting the signal of Al-Jazeera on Friday, January 28, just before the start of the Friday sermon. The channel managed to broadcast from a different frequency, which was offered to Al Jazeera by other Arab TV channels. When the public protests became more massive and no longer negligible, the Egyptian government reacted by shutting down various communication channels—particularly access to the Internet and mobile phone networks. This, combined
with the continuous airing of state propaganda via the national channels, made Al Jazeera become the most important information source inside Egypt for those several days. At this point, Al Jazeera started to invite bloggers and protesters to send video and other contributions to the channel. The collaboration of Al Jazeera journalists and Internet activists increased at the height of the protests, when journalists were attacked by Mubarak supporters and detained to keep them from joining and covering the protesters at Tahrir Square. Al Jazeera staff tried to offer eye witnesses of the events opportunities to speak out, either through their own services (such as the Al Jazeera blog used by citizen journalists) or by giving information about possibilities to go public in their news ticker (such as information about the speak-to-tweet service offered by Google to tweet messages that were received by phone calls during the Libyan uprising).

Television in Egypt does not just figure prominently in the private space of the living room, but also in the public realm of coffee shops, stores, and anterooms. The contradictory accounts of the protests and protesters in the national state-run and transnational TV channels left many people confused about the events going on at Tahrir square. As a consequence, many Egyptians headed for Tahrir Square to get their own idea of the protest and finally joined in. While Egyptian communication culture had changed insofar as to feature increasingly critical news coverage and heated political discussions on television screens in the years preceding the protests, the broadcasting—even the nonbroadcasting on state TV—of the unprecedented events at Tahrir facilitated the unfolding of the protest across different parts of Egyptian society and across time.

The last point we would like to comment on is the counter media strategy of the Egyptian government, which, again, highlights the significance of communication technologies for the development of political protest in authoritarian societies. The media strategy adopted by the Egyptian authorities was twofold. On the one hand, they aimed at undermining the communicative foundations of the protest movement through the successive shutdown of all conceivable communication technologies after three days of continued demonstrations. On the other, the authorities’ reaction was to attempt to influence the national audience’s perception of the events that developed in Cairo. The discontinuation of communication channels started with social network sites, such as Facebook, and SMS in the urban centers of Egypt only, where the protest movement was growing rapidly. In a next step, 90% of the Internet access was cut off (apparently with the exception of the data network that provides services to the Egyptian stock exchange). Further state-inflicted dropouts affected Al Jazeera, as well as all mobile phone networks. At the same time, certain Friday mosques closed to prevent public prayers. At the cusp of the communication shutdown, only landlines were available to connect with people. Another counter-revolutionary communication strategy of the state was to gain more control over the coverage and perception of the protests. As mentioned before, state authorities detained journalists and confiscated their equipment in an obvious attempt to prevent them from broadcasting live the violent actions provoked by regime supporters, and thus, to prevent them from providing a counter-narrative to the pro-regime propaganda run on national TV channels. In terms of new social media, regime supporters—instructed or not—interfered systematically with online discussions about the outcome of the protests in an apparent attempt to create an atmosphere of insecurity and anxiety that seemingly was supposed to lead people to support the long-time regime in face of impending “anarchy” in the wake of a political revolution. Examples of the means used to induce insecurity in citizens included the spreading of rumors.
about pillages and the use of text messages to Egyptian mobile users that instructed them to stay home and defend their families and property, rather than go out into the streets to demonstrate. These messages occurred when nobody was able to use the mobile networks—with the obvious exception of the authorities. The media strategy of the old regime—shutting down communication devices and physically preventing journalists from reporting—is tailored to a world without the possibilities of new media. It indicates an understanding of media as a one-way information channel, and not as an integral part of everyday practices. Egyptians were already involved in collective action based on newfound civic identities which could not be neutralized by cutting off communication devices. In fact, the harsh state reaction regarding media and communication services worked to drive more people away from their computers and television screens, into the streets of Egypt.

What Now?

The suggestions we have made for a refined communication model of democratic change in the Arab world, as well as the above observations from Egypt, show that communication technologies are not beneficial to processes of democratization, per se, but that the technologies’ role in them depends heavily on who is using them and for what purpose. The trajectory of the political protests in Egypt also points to the need to keep track of the entirety of the media environment and the prevailing communication culture within a society to understand the role of communication in anti-authoritarian movements. Different media serve different functions that are constrained by the more or less favorable opportunity structures in which relevant actors are situated, as well as by the process character of communication. For example, it is not a far stretch to state that the liberal Internet policies in Egypt before the protests arose played a role in creating an opportunity structure that was favorable to democratic change. In this situation, social network sites and blogs were used to raise political awareness, to develop and circulate ideas of change, and to facilitate the transnational cooperation of activists. The liberalization of the Egyptian media system, as well as the existence of transnational news networks such as Al Jazeera, who traversed Egyptian borders but whose production processes were beyond the control of local authorities, amplified public interest in the protests and helped to attract non-Internet-savvy populations. These on-the-ground observations speak to each of the three components of a holistic communication model of anti-authoritarian public protest we discussed. Figure 1 provides an exemplary summary for those three parts of the media ecology of the Egyptian protests we touched upon here. The blue box in the bottom row of column one indicates the possibility for an application of the model to further components of Arab media ecologies. We have focused here on three particularly salient and often-discussed parts of theirs. To analyze additional communication structures that are significant to social and political change in the Arab world is another enterprise for future scholarship.
We hope that, together, the analytic distinctions proposed and our empirical observations provide vantage points for thinking further about the role of communication in Egypt, Tunisia, and beyond. Many questions remain to be answered by future research: How exactly did the loose network structures established by social media support popular mass mobilization? Which media strategies were used by different activist groups to attract mass engagement in a high-risk event? Who was mobilized by which communication channel at which point in the process, and who was attracted by which aspect of the activists’ campaign? The overarching question to which these sub-questions are related is that of how mediated participation turned into political participation across different segments of the Egyptian people. Explaining the events of Egypt and Tunisia will be a complex task for researchers. Communication scholars will have much to say in this conversation. We hope to have provided some observations and considerations that can contribute to it.

**Figure 1. Three Components of a Communication Model of the 2011 Egyptian Uprising.**

<table>
<thead>
<tr>
<th>Media ecologies of protest</th>
<th>Temporal-spatial unfolding</th>
<th>Communication culture</th>
</tr>
</thead>
</table>
| Social network sites, Twitter, blogs | **Pre-protest period**  
  - Mobilization, knowledge sharing  
  - Raised political awareness  
  **During the protest**  
  - Cooperation with TV channels | **Facilitated pan-Arab identity**  
  **Circumvention of restricted traditional mass media space** |
| Transnational TV channels | **Pre-protest period**  
  - Renewed Arab journalism practices  
  **During the protest**  
  - Popular spread of protest | **Engagement with transnational public sphere**  
  **Circumvention of national mass media coverage**  
  **Popularity of TV as an oral medium** |
| Email, SMS, mobile phones | **During the protest**  
  - Information, mobilization | **Preference for oral communication and personal networks** |

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References


