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Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt

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This study traces the rhythms of news storytelling on Twitter via the #egypt hashtag. Using computational discourse analysis, we examine news values and the form of news exhibited in #egypt from January 25 to February 25, 2011, pre- and post-resignation of Hosni Mubarak. Results point to a hybridity of old and newer news values, with emphasis on the drama of instantaneity, the crowdsourcing of elites, solidarity, and ambience. The resulting stream of news combines news, opinion, and emotion to the point where discerning one from the other is difficult and doing so misses the point. We offer a theory of affective news to explain the distinctive character of content produced by networked publics in times of political crisis.

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Blogs and microblogs rise to prominence as news disseminators when access to mainstream news and/or other communication media is restricted or blocked (Howard, 2011; Papacharissi, 2010). The Egyptian protests that led to the resignation of President Hosni Mubarak were organized through a complex network that combined heavy Twitter and Facebook use with other forms of interpersonal communication. During this period, access to mainstream media was variably blocked, foreign and native journalists were intimidated, and access to the Internet was controlled and eventually shut down. Twitter, however, provided a continuous stream of events in real time throughout the crisis. This study explores the use of Twitter as a news reporting mechanism during the Egyptian uprising. This research is relevant to contemporary directions in communication for a variety of reasons. First, at a time when most news networks are forced to shut down foreign bureaus due to financial constraints, news feeds produced by citizens committing acts of journalism complement or substitute mainstream media reporting. Studying the shape news takes as it is broadcast through collaboratively generated news streams could help us understand evolving paradigms in journalism. Second, these news feeds become of central importance to both producers and consumers of news, especially when other

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channels of information are restricted or controlled. As these collectively produced feeds to rise in prominence, it is essential to comprehend the form of news they support. Finally, by emphasizing certain aspects of an event while downplaying others, news values determine if and how shape news events are transformed into a news stories. The news values that characterize Twitter feeds combine news updates of 140 characters or less, resulting in the collaborative construction of events out of atomized stories and stories out of subjectively experienced events. Simultaneously challenging and reproducing news reporting traditions, the rhythms of news storytelling on Twitter reveal emerging hybrid forms of journalism.

This study examines Twitter archives spanning the time period ranging from 25 January to 25 February, for the #egypt hashtag, used most prominently during the uprising. A computerized content computer-mediated text analysis is employed to identify volume and content patterns, topics, and prominent frames in the Twitter posts included. The computer-mediated text analysis is conducted concurrently with a more focused discourse analysis, which examines both the patterns plotted by the content analysis and the archives themselves to understand the form and the content of news that is communicated via Twitter. Drawing on prior research emphasizing the form of news and its relevance to news values and sociocultural context (Barnhurst & Nerone, 2002; Semetko, Blumler, Gurevitch, & Weaver, 1991), this study seeks to describe, map, and explain the evolving rhythms of news storytelling on Twitter through the events of the 2011 Egyptian uprisings.

Twitter as a news reporting mechanism

Twitter news feeds of news organizations and journalists are typically modeled after the news values and practices of parent organizations and reflect ambivalent attitudes toward the potential of the newer medium. The majority of trending topics on Twitter tend to be headlines of breaking or persistent news on sports, cities, or brands (Kwak, Lee, Park, & Moon, 2010). News organizations typically forward print and broadcast stories to their news feeds, delivering the same news, over a different platform (Armstrong & Gao, 2010). Such uses may undermine the potential of Twitter, which works best in premediated situations where the story is changing so quickly that TV or print media do not have the time to develop a fully sourced story (Grusin, 2010). Examples of such situations include disasters, accidents, riots, and political events (Farhi, 2009). Journalists using Twitter frequently experience confusion between their roles as reporters, editors, critics, or independent individuals, leading them to use Twitter in a way that supplements their traditional role as information disseminators and prompting news agencies to issue guidelines regarding the use of social media (Ahmad, 2010; Emmett, 2009). Citizens, on the other hand, are likely to use the medium as a mechanism for public accountability (Ettema, 2009; McNair, 2009).

By contrast, organically developed hashtag feeds deviate from the organizational logic of prominent news values to provide coherence by blending fact with opinion, and objectivity with subjectivity. Inclusive of both news and conversations about the news, hashtags exploit the affordances of the Twitter platform more aggressively

and innovatively than any news organization. They highlight the character of the platform as a social awareness stream, inclusive of news, among other things. Viewed alternatively, hashtags present a user-generated collaborative argument on what is news. Recognizing these innovative uses of Twitter, scholars have begun to examine emerging trends on Twitter by studying the content of hashtags as well as the location and links between those who post (Sakaki, Okazaki, & Matsuo, 2010; Singh & Jain, 2010; Yardi & Boyd, 2010a).

In further investigations of the relationship between posts and connectivity, Yardi and Boyd (2010b) studied Twitter posts around controversial topics and found that replies between like-minded individuals strengthened group identity, whereas replies between different minded individuals reinforced in-group and out-group affiliation. As a result, individuals increased their awareness of broader viewpoints but were restricted in their ability to engage in meaningful conversation. More recently, Wu, Hofman, Mason, and Watts (2011) examined "who says what to whom on Twitter" by looking at Twitter lists—a feature that permits users to organize people they follow into lists organized topically and found evidence of homophily in sharing. Additional research underscores the connection between shared geolocality and communal bonds strengthened via Twitter posts, permitting forms of "peripheral awareness and ambient community" (Erickson, 2010, p. 1194). The practice of following opinion leaders on Twitter has been likened to emerging disciplines of listening in social media, characterized by background listening, reciprocal listening, and delegated listening (Crawford, 2009).

Synthesized, this research indicates that the use of Twitter by journalists, news organizations, and individual users creates a complex and networked system of social awareness. These patterns introduce hybridity into the news system by further blurring boundaries between information, news, and entertainment and by creating "subtle, but important shifts in the balance of power in shaping news production" (Chadwick, 2011, p. 6). Hermida (2010, p. 301) terms this news environment "ambient," suggesting that the "broad, asynchronous, light-weight and always-on" aspect of platforms like Twitter afford individuals "an awareness system [with] diverse means to collect, communicate, share and display news and information, serving diverse purposes . . . on different levels of engagement."

Twitter as a news sharing system during crises

Twitter is frequently used to call networked publics into being and into action during periods of political instability. Understandably, the homophily encouraged by Twitter lends itself to calls for solidarity among publics, imagined or actual, that share a common set of goals. The enhanced connectivity experienced between Twitter users with shared geo-locations could also help activate and deepen ties during uprisings. The ambient nature of this social awareness environment ultimately lends itself to providing an "always-on," interconnected web of information that provides an efficient, mobilizing "electronic word of mouth" (Jansen, Zhang, Sobel, & Chowdury, 2009, p. 2169). At the same time, it permits individuals to change the dynamics of

conflict coverage and shape how events are covered, and possibly, how history is written (Hamdy, 2010). During the Nigerian 2007 election, for example, Twitter enabled citizens to participate in public discussions, to mobilize, and to function as watchdogs during the electoral process (Ifukor, 2010). Under these circumstances, platforms like Twitter force a radical pluralization of news dissemination and democratic processes (Dahlberg, 2009). In regimes where or during times when media are controlled, inaccessible, or not trusted, platforms like Twitter permit individuals to bypass traditional gatekeepers and contribute directly to the news process. However, these instances also expose temporal incompatibilities between Twitter as a news platform and the conventions of journalism. For instance, during the 2008 terrorist attacks in Mumbai, Twitter was useful in communicating breaking news, but also exposed the risks associated with reporting rumor as fact (Jewitt, 2009).

During protests following the Iranian 2009 election Twitter permitted communication despite state censorship of other media coverage and access, affording citizens opportunities to publish information and broadcast news, audio, and video account to other media and the world watching. Nonetheless, these opportunities were limited to those with access to Twitter and the skills to use it as well as by the risks created by the government's online censorship and surveillance. In fact, the majority of tweets during the postelection protests came from outside the country, with only few updates coming from influential individuals inside the country (Christensen, 2009). The role of Twitter in this case is better understood if reconceptualized "not in terms of whom the medium allowed to speak, but in terms of who could listen because of the medium" (Solow-Niederman, 2010, p. 35). When Twitter becomes the only, or primary, channel of information we can tune in to, the form of news on Twitter and the values that belie it become of central importance. If that is the only channel of information sharing we can access, then what exactly are we listening to?

News values on Twitter

News values shape how events turn into news stories. The importance of values in the construction of news has long been recognized (e.g., Galtung & Ruge, 1965; Gans, 1984; Semetko et al., 1991). In the case of Twitter, news storytelling, becomes the process of turning news events into stories, practiced collaboratively through the accumulation of 140-character updates, where news may be broadcast instantaneously and stories develop organically and collaboratively. News frames may be constructed by citizens and journalists contributing to the feed of news in atomized yet networked mode, and news values may be similarly "crowdsourced" to the values of the contributing publics. Or, they may reflect enduring news values which are the products of institutions and ideologies that have long been in place. In the context of uprisings, these institutions and ideologies of course may come under question or attack. Our first research question (RQ1) is therefore: What news values were prevalent in the Twitter news streams capturing the events of the 2011 Egyptian uprising?

News values also shape the form of news stories told. Events take on the form of a narrative relatable to a variety of publics and audiences, and this form is historically sensitive (Nerone & Barnhurst, 2001). The organization and presentation of news is a product of news values and reflects how news organizations relate to their audiences and balance market and news values. News organizations adjust slowly, often reluctantly, to the affordances of newer platforms. Even when they make technological innovations, they may be slow to incorporate the new media "affect" into the dominant form of news (Barnhurst, 2010a, 2010b, 2011). Newer media are often temporally incompatible with fact checking and other conventions of journalism. These observations lead to our second research question (RQ2): What form did news storytelling on Twitter take during the 2011 Egyptian uprising?

Method

Data acquisition and file preparation

The present analysis examined news values and the form of news on Twitter, during the period of 25 January to 25 February, the period during which popular uprisings forced the resignation of Egyptian President Mubarak. We focused on the #egypt hashtag, the most prominent tag used during this period of turmoil and the tag also featured in a majority of tweets cross-posted to other frequently used tags, such as #Jan25 or #Tahrir. Archives were obtained from the online archive service Twapperkeeper, an online tool for capturing public timelines, or archives, of tweets more extensive than the ones provided by the Twitter API. The archives constructed included tweets generated during the aforementioned time period, and contained the text of tweets, hashtags, keywords, date and time stamps, and miscellaneous bits of backend information based on user set preferences. Usernames were also included, but were removed from the file for further analysis.

Programming scripts and filters were used to organize the data set into a workable format and to address issues of noise and inconsistency in the Twapperkeeper files. We collected a total of approximately 1.5 million tweets from the #egypt tag, and measured frequency of tweets shared during the period analyzed via R, an open-source software program. Unfortunately because Arabic characters were not recognizable by the content analysis tools, the approximately 400,000 tweets containing them had to be dropped from the subsequent content and discourse analyses. Nonetheless, given that our focus was on global news, listening practices, and news values, the sample we worked with fit our study objectives in spite of this limitation. A total of approximately 1.1 million tweets utilizing Latin characters, some of which were multilingual, were used for the content and discourse analyses.

Sampling and analysis strategies

A frequency analysis was conducted on the totality of the 1.5 million multilingual tweets. The computerized content analysis and the discourse analysis were conducted on smaller samples, drawn from the corpus of 1.1 million tweets utilizing latin characters.

A sample of 9,000 tweets was drawn from the #egypt corpus using stratification to ensure the generation of a representative sample. This sample was analyzed using centering resonance analysis (CRA), a mode of computer-assisted network-based text analysis that represents the content of large sets of texts by identifying the most important words that link other words in the network (Corman & Dooley, 2006; Corman, Kuhn, McPhee, & Dooley, 2002). The analysis of just a portion of the tweets collected was necessary due to software limitations. CRA calculates the words' influence of a word's influence within texts and sets of texts, using their position in the textual network, specifically the coefficient of betweenness centrality, defined by Corman et al. (2002) as "the extent to which a particular centering word mediates chains of association in the CRA network" (p. 177). The results of aggregating the possible centers or nodes (the most influential words) in a message denote the author's intentional acts regarding word choice and message meaning. The concept of resonance also allows us to compare sets of text to detect similarities and differences. The more two texts frequently use the same words in influential positions, the more word resonance they have, meaning that communicators tended to these words more, and that these words were prominent in structuring the text's coherence. On the basis of these concepts, the tweets were analyzed to detect the most influential words.

Qualitative textual analysis techniques were employed to verify, expand, and illuminate the quantitative findings of the content analysis. This study examined discourse (as defined by Fairclough, 1995; Wood & Kroger, 2000) as a text, using the Wood and Kroger definition of discourse as "all spoken and written forms of language use (talk and text) as social practice" (p. 19). Therefore, the aim of this textual analysis was to understand the "systematic links between texts, discourse practices, and sociocultural practices" (Fairclough, 1995, p. 17). Hartley (1982, 2002) defines news values as ever-evolving and reflective of news stories and not news events themselves (1982 and 2002). Our goal was to understand how the medium of Twitter was employed in turning events into news stories. In analyzing the text, we referred back to this definition and prior categorizations of news values, identified in previous research and detailed in the previous section.

The sample for discourse analysis was assembled through a composite approach, using stratification first, and then random systematic sampling to construct a representative corpus of 150,000 tweets, or roughly a little over 10% of the total sample, which were read and analyzed in greater detail for the purposes of the discourse analysis. The files were also extensively perused to get a feel for the pace and progression of the Twitter stream. The selected tweets were then read over, several times, to identify news values using the aforementioned framework. Notes were taken regarding language use, tone, presence or absence of traditional news values and news values previously identified in research, focus, and differences and similarities in how people shared information over Twitter. We looked for thematic patterns, repetition, and redundancy. Finally, notes and findings were categorized in light of previous research on news values and the form of news. The combined quantitative and qualitative approach sought to expand validity and reliability.

Results

Hybridity of social media news values

The content and discourse analysis both indicated that the stream of news reflected a mix of traditional news values and values specific to the platform of Twitter. The discourse analysis suggested that the types of events covered and the tone of the coverage mimicked the tendency of traditional media to emphasize all of the following news values, as defined by McQuail (2002): large scale of events, closeness to home, clarity of meaning, short time scale, relevance, consonance, personification, significance, and drama and action. The only value identified in traditional media but not present in the Twitter feed was that of negativity. Otherwise, and at varying degrees, information and opinions featured regularly on the Twitter streams tended to revolve around larger-scale events, in proximate locations, were intent on providing clarity and accuracy, prioritized more recent events, were reflective of drama and action, and associated specific persons with aspects of a story.

The computer-mediated text analysis of the #egypt tag identified similar patterns. The quantitative approach adopted in this analysis—CRA—is designed to back out patterns of meanings found on precise mathematical rules, avoiding in this way coder bias and sometimes manifesting unexpected findings (Oliveira & Murphy, 2009).

Figure 1 reveals the arrangement of words by the CRA, based on how influential or central they were. The most influential words are those in black boxes; words with slightly lesser influence have gray boxes; and less influential words are unboxed. The lines in the map depicted levels of associations among words, with darker lines depicting stronger associations (Corman & Dooley, 2006).² The configuration of the map shows one tightly connected cluster of meanings, where the information tweeted about the uprisings in Egypt reflects many traditional news values. The most influential words and the tweets behind them illustrate the following aspects: closeness to home (represented by the words Egypt and Egyptian), personification (Mubarak), significance and relevance (revolution), and drama and action (people and protest). The discourse analysis further illuminated these trends, suggesting that differences lie not in the news values that are prevalent, but in who makes the decisions based on the same news values. So, whereas in a traditional news room, it is the professional hierarchy and ethos that drives how these news values are applied to judge and cover events, in the case of Twitter, these judgments were made collectively and organically.

Although the stream focused primarily on larger scale protests, there was a pronounced tendency to ensure that smaller scale protests, occurring in cities peripheral or remote to Cairo were not neglected or undercovered. Proximal locations were covered, but attention was also called to connecting with remote areas of Egypt under turmoil. References were also made to uprisings in neighboring states like Libya, and reaction to the uprisings from potential strategic partners, like the United States. The computer-mediated text analysis of the #egypt tag corroborated this finding when it revealed that "Libya" was among the most influential words in the corpus.

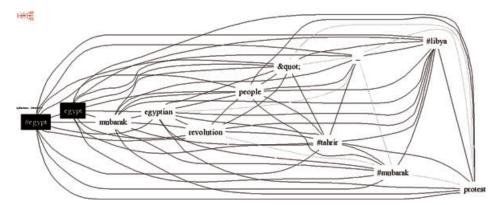


Figure 1 Centering resonance analysis of #egypt Twitter hashtag (sample taken between January 15 and February 15, 2011).

The stream leaned toward relevant news and opinions, even though the architecture permits irreverence. Comments that were irrelevant or unrelated were simply not retweeted or ignored, and thus organically eliminated from the process of forming the dominant news story. The topical organization of the hashtag, including the fact that the tags were created specifically for the purpose of covering these events facilitated this focus. The nature of the events tweeted also facilitated the prevalence of the news values of ethnocentrism, altruistic democracy, and moderatism, which have also been previously identified by Gans (1984) as characteristic of western media. Several tweets reflected pride in the Egyptian ethnic identity, selfless declarations and actions in favor of democracy, and many urgent calls to cover events carefully, accurately, and not rush to judgment. It is not uncommon to encounter altruism and a measure of national pride during political uprisings, as well as an emphasis on using the media at hand to communicate the accurate and authentic version of what is happening to potential audiences and publics. At these times, individuals are recast as journalists. They function based on what they have been socialized to recognize as accepted news values, but they adapt them to the context, what the situation calls for, and their own perspective.

There were, however, specific news values that emerged and were unique to the platform of Twitter and the context of the uprising. Following Hartley's view of news values as evolving, but shaping news events into news stories, we identified the four prominent news values: instantaneity, crowdsourced elites, solidarity, and ambience.

Instantaneity

We use the term instantaneity to describe the drama of events unfolding, being recorded and reported online instantly. The ability to live-tweet events as they happen presents the primary appeal of Twitter. At times when mainstream media are restricted in their ability to report, or disseminate information, it is because of this ability that platforms like Twitter rise to prominence. It is also this instantaneity that

exposes the temporal incompatibility of Twitter with our conventional definitions of what is news, what separates fact from opinion, and subjectivity from objectivity. Instantaneity, or, the coverage of things that happen as they happen, reigned over #egypt. The tone and the language used emphasized this tendency, with individuals retweeting and requesting instant updates.

The network map of the #egypt tag also supported this interpretation, with a number of other hashtags, such as #libya, #tahrir, and #mubarak emerging as the most influential words. The rhythms of updates posted reflected the infatuation with instantaneity, with updates streaming every few seconds, and during certain events, on every second. The tendency to instantly communicate to as many publics as possible was also reflected in the urgency of the language employed and the repetition of instant reports from the ground, in ways that sought to affirm and spread word of mouth retellings of what is going on. Our frequency analysis illustrated these tendencies, with updates and retweets transmitted every second. The repetition of events on the one hand mimicked the tendency of media to repeat breaking news and on the other hand, was afforded by the platform, which permits endorsement of information through repetition and cross-postings. Tweets frequently used words that conveyed urgency, like now, live, happening now, and linked to sites that offered live streaming of the events. Moreover, the constancy of the updates combined with the tone of the language drummed up the heartbeat of a news feed and the movement the feed reflected and mediated. As individuals constantly tweeted and retweeted observations, events instantly turned into stories.

Crowdsourced elites

It is common for news coverage to award priority to elite nations, organizations, or individuals. While there is no priority granting authority in the organically generated stream of news on Twitter, it is common for elite news organizations and specific individuals to be featured prominently in the stream of news. This is typically facilitated via the logic of tweeting and retweeting stories or news that come from prominent news organizations or individual citizens who provide constant news updates. #Egypt was characterized by patterns through which elites and individuals achieved prominence. In the first few hours that the stream was active, the news feed was populated by tweets of a general nature, commentary, some fact and some opinion. As events and protests gradually escalated, media elites started to participate in the news feed regularly, typically through cross-posting headlines and links to stories they were running on their Web sites. Individual citizens' regular live reports, and reports about reports, simultaneously emerged as primary or adjunct sources of information. Elite status was awarded to those citizens through the practice of retweeting, but also through directly encouraging others to follow the timelines of specific bloggers, activists, and ordinary citizens who tweeted constant updates.

The tweets contributed from mainstream news sources typically assumed the objective and laconic tone of a headline, with the occasional exception of live tweets produced by journalists, through their individual accounts and not the generic

outlet stream, as they were observing events taking place on site. Well-known examples include the tweets filed by journalists like Ben Wedeman (@bencnn), Ivan Watson (@ivancnn), and Nick Robertson (@nicrobertsoncnn) which were frequently integrated into the taped or live news broadcasts produced for the station affiliate. On occasion, these tweets would integrate fact with opinion, typically integrating reports of events with moderate and careful expressions of solidarity. For example, reporters frequently retweeted expressions of solidarity texted by Egyptians, as a way of reporting public sentiment. These conformed both to the news values of the parent news organization and the evolving values of the news stream. While media elites frequently dominated blocks of the feed through constant tagged updates, they were only awarded leader status through retweets or mentions.

A parallel and more vocal stream of opinion leaders emerged, consisting of bloggers, activists, and intellectuals with some prior involvement with online activism that was associated with the uprisings. These included senior Google executive Wael Ghonim (@ghonim) who had been secretly incarcerated and interrogated by Egyptian police for 11 days regarding his work as the administrator of the Facebook page, "We are all Khaled Saeed," which had helped spark the revolution. They also featured citizens with little or no prior involvement with activism, as was the case with Gigi Ibrahim (@gsquare86) and Mona Seif (@monasosh), two activists/bloggers who rose to prominence through documenting events. And they also included individuals who were not in Egypt during the entirety of the uprisings but who received and retweeted reports, together with their own opinions and comments, as was the case of Mona Eltahawy (@monaeltahawy). The discourse analysis revealed that organically emerging leaders interacted with media elites, through processes of retweeting, mentions, and commenting, but differed in the form of their updates, with organic leaders frequently being more openly emotive and media elites trying to balance the values of the parent news organization with the drama of the reports forwarded on Twitter. The crowdsourcing of elites is affected by networked publics consisting of both Egyptians and a globally interconnected diaspora of supporters.

Solidarity

Tweets documenting events and expressing opinion reflected overwhelming expressions of solidarity. The emergent news streams were characterized by a hybridity of new reports and solidarity, so much so that it became difficult to separate factual reports from expressions of camaraderie. Indeed it may be misleading to attempt to do so. The network map of prominent words emerging in #egypt reflects the expression of solidarity with its the dense connections that place "revolution" and "people" in the core, connect them to sites of struggle ("tahrir"), and unity against the cause of the struggle ("mubarak," appearing both as a word and a tag), as well as unity for the country of Egypt (also prominent as a word and a tag). The centrality of "revolution," compared to the presence but peripheral position of "protest" suggests an anticipatory tendency to affirm this movement as revolutionary, and thus distinguish it from protests that might connect publics but not result in decisive

breaks with past hierarchies of governance. The frequency and prevalence of hashtags present in the map reflects the tendency to cross-post, cross-reference, and coordinate mobilization efforts, and maintain high awareness of all concurrent movements and protests, which characterized this uprising. Many tweets contained a sequence of tags, followed by a couple of encouraging words or just emoticons.

These results were corroborated by the discourse analysis which revealed a confluence of solidarity and news sharing. For example, tweets frequently featured calls like "Its time to come back NOW and join your fellow brothers and sisters," or "If the dove is a symbol of peace the #Twitter Bird is a symbol of freedom," or "Muslims and Christians Work Together in a New Egypt," and "#Libya and #Egypt one hand together ..#Revolution until victory against all dictators." These typically ended with a link to additional content; a photograph, blog post, live stream, or just a list of several relevant tags and users to follow. The solidarity findings are consistent with previous research, which points to greater social cohesion and a measure of homophily among individuals sharing both topical interests and geolocation.

Ambience

The constant pace, frequency, and tone of tweets contributed to and constructed an "ambient" information sharing environment. We term this a news value, because not only does the architecture of the medium invite the constancy and continuity that constitute ambience, but also because the continuous updates, even if redundant, contributed to the creation of a live and lively environment that sustained online and offline expressions of the movement. For example, as our frequency analysis illustrated, on 11 February, the day of Mubarak's resignation, thousands of tweets repeated the same news, before, leading up to, but also well after the event of the resignation had been widely disseminated, even by mainstream news outlets. These tweets did not constitute news updates, but sustained an always-on news environment. They were also focused on communicating personal news, personal emotion, and a genre of news that we term *affective*.

Affect refers to emotion that is subjectively experienced, and has been connected to processes of premediation, enabled by newer media, that frequently anticipate news or events prior to their occurrence (Grusin, 2010). Typically, premediation involves a variety of affective gestures or expressions, made in anticipation of an event. These anticipatory gestures afford emotive expression but also inform the shape an event will take, and of course are further shaped by ongoing events. Such anticipatory gestures are rendered by audiences, publics, governments, and the media, and characterize how we experience global public events, like 9/11, and more recently, the Arab Spring. The concepts of mediality, affectivity, and premediation characterize the flow of information across networked mediated systems, and permit us to understand governmental and social agency in a more complex way, inclusive of the role of emotion in coloring public disposition (Grusin, 2010).

#Egypt is characterized by mounting, emotive anticipation, expressed through posts that are shared to inform, but also frequently simply for the sake of opinion

expression and release. These constant and repetitive streams of updates sustain a lively stream of news that is always on, and thus mediates a networked movement that never sleeps. Drawing emotive tweets from those in Egypt and supporters from abroad, tweets conveyed news, solidarity, and emotion ("Proud of you Egyptians! Over 20k Ideas and More than 630k votes. Everyone is thinking what should be Egypt 2.0 http://bit.ly/hF5F65"), sustained cohesion even when there was no news to report ("Good morning sunshine. . . Good morning my sweet lovely Egypt:) #Egypt #Jan25"), communicated emotion, opinion and affection in 140 characters or less ("Seeing amazing footage on AJA ppl are helping the army clean #Tahrir. Oh #Egypt I love u #Jan25 http://dlvr.it/GQ53L"), and also invited others to maintain an ambient stream of news that is accurate ("Triple-check news before you retweet. At least today. This is not a video game #Jan25 #Egypt #Tahrir #jan24"). In response to our second research question, concerning the form of news, we explore affective news further.

The form of affective news

The shape and rhythm of #egypt is reflective of a form that we characterize as affective, for a number of reasons, Early tweets resembled conversation openers, in that they were too general or too specific; inquisitive and anticipatory in a phatic mode. The streams commenced in an amorphous manner, with tweets like "#Egypt's street awakening tomorrow #Jan25 #Revolution" or "Egypt is about to have a Facebook revolution," both retweeting and endorsing the sentiment conveyed in a Time magazine article by the same title. Slowly, the pace of posting attained regularity, with several tweets posted first in a matter of hours, then minutes, then seconds, as reflected through the rhythms of posts depicted on our frequency analysis. Eventually opinion leaders emerged, in the form of frequent posters whose tweets were retweeted, and through this means attained visibility, and potentially, credibility. Mainstream media began to chime in, especially as the protests attained greater visibility, and despite the fact that Internet access was shut down. Once Internet access was reinstated or workarounds became available, the stream regained regularity, and more voices joined the conversation, from Egypt, neighboring countries, some countries in Europe, and primarily, from the United States. The texts expressed opinions and reported facts, but rarely new ones.

Tweets blended emotion with opinion, and drama with fact, reflecting deeply subjective accounts and interpretations of events, as they unfolded. Perhaps this is an illustration of what Robinson (2009) had termed "finding one's own place in the story" when describing the blogged accounts of Hurricane Katrina victims. Revolving around this *drama of instantaneity*, tweets were personal and emotive, blending opinion and fact to the point where distinguishing one from the other was impossible, and where doing so missed the point. This frequently conveyed the perception that events were occurring at a pace faster than they actually were, or, as one individual put it on January 25, 2011: "amazing how #social media make #history happens faster...#egypt #Tunisia."

The progression of tweets reflected patterns of repetition and mimicry that were similar to trends observed between and within mainstream news organizations (Boczkowski, 2010). Prominent and popular tweets were reproduced and endorsed, contributing to a stream that did not engage the reader cognitively, but primarily emotionally. Frequently, the same news was repeated over and over again, with little or no new cognitive input, but increasing affective input. The tone of many tweets was deeply emotive but on occasion reflective of the expressive habits of western media, as tweets from western media were frequently quoted with commentary or simply retweeted. The result reflected a confluence of conversational norms, enacted through oral practices of conversation, and specifically reciprocity and reflexivity in opinion sharing and listening.

In response to the Internet shutting down and the state monitoring online practices, the stream became more populated with a diaspora of global supporters and locals with net access to the stream. The resulting stream became even more dense and emotion-filled, characterized by repetition, restating, resaying, and similar expressive patterns typically encountered in the oral traditions of interpersonal communication. Links to multimedia, mainstream and independent media coverage resembled the interpersonal gestures of pointing, nudging, and affirming. They also featured insider Twitter jokes, like "A government that is scared from #Facebook and #Twitter should govern a city in Farmville but not a country like #Egypt #Jan25," or "Deleting Dictator. . . Deleting Installation files. . . Some files could not be removed. Country still being used. . . Aborted. #Egypt #Mubarak," that adapted cosmopolitan references to the local context. Blending humor, news sharing, opinion expression, and emotion is reflective of the affective patterns of interpersonal conversations. In this manner, affective and ambient news streams might not be perceived as journalistic substitutes, but rather, as alternatives to existing journalistic traditions.

Affect, of course, was not always absent from traditional news reporting, and it still is variably present in more partisan paradigms of journalism. The evolution of neutrality as a dominant value in western news paradigms has marginalized affect in news, primarily as a result of commercial concerns. Organically generated news feeds may be freed from commercial concerns and thus more inclusive of affective expressions. Hashtags, for instance, if understood as frames for naming covered events, are both attempts to claim power by cognitively characterizing an event and are simultaneously inviting of affective language. The present analysis is indicative of news values that were prominent during the events of the January 25th uprisings. Further work could consider traditional reporting and direct indications from authors of tweets to attain a comprehensive understanding of news values on Twitter.

Discussion

History has yet to render a final judgment regarding the influence of social media in the Egyptian revolution of 2011. Our objective was to illuminate one factor that might be particularly influential in shaping our historical sense of these events: the way in which news events were turned into news stories in the midst of crisis. We focused specifically on the news values that structured how events were turned into stories and considered the form that news storytelling took on. Through Twitter, stories were told about this event that affected how Egyptians viewed themselves and the potential for political change. And these stories also affected how publics watching reacted and responded. Once told, the impact of these stories remained and resonated, and turning the Internet on or off did little to curtail the effect. We believe that the findings of this study may carry important implications for the interplay between social networking sites like Twitter, journalism, and political engagement.

First, news feeds collectively generated by citizens, bloggers, activists, journalists, and media outlets expose the temporal incompatibilities between live tweeting news and traditional reporting. Tweets attain the drama of instantaneity, which is compelling and engaging for readers, but not necessarily compatible with fact checking processes of western paradigms of journalism. Journalists are nonetheless drawn to the drama of instantaneity because it aligns with dominant news values such as relevance, proximity, and in particular, drama and action. Yet Twitter affords journalists neither the time to process information, nor the privilege of being the first to report it. Instantaneity on Twitter also creates levels or layers of agency that are networked, complex, and diffused. Storytellers must still make concrete decisions about how events will be presented, but these decisions are collaboratively and organically made through practices of repetition and redaction that do not always produce a coherent narrative. Instead they result in parallel narratives, possessing variable levels of coherence and continuity, yet interconnected through the presence of affect.

Second, our observations challenge the assumption that movements utilizing social media are somehow leaderless. #Egypt was energized by several key bloggers, activists, and informed citizens who turned to social networking platforms because other forms of opinion expression were not as accessible, under surveillance, or otherwise regulated. Digital platforms do not rob movements of their leaders. But they do permit a distributed or "crowdsourced" form of leadership based on mechanisms that reward those more involved in mobilization, and the reporting and curating of information, online and offline.

Third, the results of this study underscore the need to consider affect in explanations of the role of media use during mobilization. We characterized the news streams we studied as affective, because they blended opinion, fact, and emotion into expressions uttered in anticipation of events that had not yet attained recognition through mainstream media. Combined with the networked and "always on" character of social media, the affective aspects of messages nurture and sustain involvement, connection, and cohesion. Previous studies have emphasized the role of shared topics, interests and geolocality. We extend this work by advancing the concept of affective news streams, to describe how news is collaboratively constructed out of subjective experience, opinion, and emotion within an ambient news environment. Characterized by premediation, affective news streams may be filled with anticipatory gestures that are not directly predictive of the future, but instead communicate a

predisposition to frame it, and in doing so, lay claim to latent forms of agency that are also affective and networked.

In repressive regimes, courage is required to express dislike, hatred, and anger, and affective statements thus become political statements. Even though our study was limited to a single crisis in a particular type of regime, we believe that affective news streams are important to examine in a variety of sociocultural contexts, because they provide a form of emotional release that simultaneously invigorates and exhausts tension; what in Lacanian terms is labeled jouissance, and (imprecisely) translated in English as affect. Affect is embedded in the circulatory drive that characterizes networked publics and the ambient streams of premediation they produce, sustained by ongoing reflexivity and connection (Dean, 2010). Depending on context, these affective attachments create feelings of community that may either reflexively drive a movement, and/or capture users in a state of engaged passivity. The affective rhythms of news storytelling on #egypt produced feelings of community for an existing community of indignant citizens who had had enough. The digital path to regime change was aided by further connections to global and diasporic publics, sustained via an always-on affective news feed with a pulse of its own. Whether the affective rhythms of news storytelling on #egypt are indeed telling of the rhythms of contemporary social revolution will be determined by time and curation of historical events.

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Notes

- 1 Code used to perform this analysis available at www.michaelbommarito.com
- Word influence assesses the extent that a word connects concepts that otherwise would be disconnected, creating coherence in a text. The values determining the most influential words (\geq 0.1), words with slightly lesser influence (>0.05 and <0.1) and the less influential words (>0.015 and \leq 0.05) followed the default parameters on the software used for the analysis (see Corman & Dooley, 2006, p. 9).

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情感新闻和网络化公众:#Egypt 上的新闻叙事节奏

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【摘要:】

本文研究 Twitter 上通过#egypt 主题标签发布的新闻的叙事节奏。本研究使用计算话语分析探讨了 2011 年 1 月 25 日至 2 月 25 日期间,Hosni Mubarak 辞职前后 #egypt 主题标签上发布的新闻价值和新闻形式。结果表明了新旧新闻价值的混杂,重点在于戏剧的即时性,精英在网络上共同解决问题,团结和环境。新闻与观点和情感的结合已为一体,难于或不可忽略其一。本文最后运用情感新闻理论来解释网络公众在政治危机时期所制作的新闻的鲜明特点。

Les nouvelles affectives et les publics en réseau : le rythme de la narration des nouvelles sur

l'Égypte

Zizi Papacharissi, Ph.D. & Maria de Fatima Oliveira, Ph.D.

Cette étude suit les rythmes de la narration des nouvelles sur Twitter par le mot-clic (hashtag)

#egypt. Par une analyse de discours computationnelle, nous examinons les valeurs de nouvelles

et la forme des nouvelles présentées sous #egypt du 25 janvier au 25 février 2011, avant et après

la résignation de Hosni Moubarak. Les résultats indiquent une hybridité de valeurs de nouvelles

anciennes et plus récentes, insistant sur le théâtre de l'instantanéité, l'externalisation ouverte

(crowdsourcing) des élites, la solidarité et l'atmosphère. Le flot de nouvelles qui en résulte

combine informations, opinions et émotions au point où il est difficile de distinguer les unes des

autres et où faire cette distinction passe à côté de la question. Nous proposons une théorie des

nouvelles affectives qui explique le caractère distinctif des contenus produits par les publics en

réseau en période de crise politique.

Mots clés: Twitter, printemps arabe, Égype, en ligne, journalisme, nouvelles affectives

Affektive Nachrichtigen und Netzwerk-Öffentlichkeiten: Der Rhythmus des Nachrichtenstroms über #egypt

Die Studie verfolgt den Rhythmus des Twitter-Nachrichtenstroms über das #egypt Hashtag. Wir nutzen die computergestützte Diskursanalyse und untersuchen Nachrichtenwerte und die Art der Nachrichten auf #egypt vom 25. Januar bis 25. Februar 2011, das heißt vor und nach dem Rücktritt von Hosni Mubarak. Die Ergebnisse deuten auf eine Hybridform alter und neuer Nachrichtenwerte hin, da sie das Drama der Unmittelbarkeit, das Crowdsourcing der Eliten, Solidarität und Atmosphäre in den Vordergrund stellen. Der daraus resultierende Nachrichtenstrom verknüpft Nachrichten, Meinung und Emotion so eng miteinander, dass diese nur schwer zu unterscheiden sind, und der Versuch einer Unterscheidung seinen Zweck verfehlen muss. Wir entwickeln eine Theorie der affektiven Nachrichten, um den spezifischen Charakter von Inhalten zu erklären, die von Netzwerk-Öffentlichkeiten in Zeiten politische Krisen produziert werden.

Schlüsselbegriffe: Twitter, Arabischer Frühling, Ägypten, Online, Journalismus, Affektive Nachrichten

감성적인 뉴스와 네트워트화된 대중들: #Egypt 에서의 새로운 이야기의 리듬들

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요약

본 연구는#egypt hashtag 를 통한 트위터에서의 뉴스 이야기의 리듬들을 추적하였다. 컴퓨터 담론분석을 사용하여, 우리는 2011 년 1 월 25 일부터 2 월 25 일까지#egypt 에나타난 뉴스의 가치와 형태들을 조사한 것으로, 이는 무바라크 대통령의 하야 전후기간이다. 결과들은 구미디어와 뉴미디어 가치들의 혼성화를 보여주는 것으로나타났는바, 즉흥성, 연대성, 그리고 양립성들을 강조하였다. 뉴스 결과의 흐름은 뉴스, 의견, 그리고 감정들을 혼합하여, 어느 한 부분을 다른 부분으로부터 분별해 내기가어려울 정도였다. 우리는 정치적 위기 시기에 있어 네트워트화된 대중들에 의해 생산되는 내용의 특별한 성격을 설명하기 위해 정서적 뉴스이론을 제안하였다.

Las Noticias Afectivas y los Públicos de la Red: Los Ritmos de la Narración de las Noticias sobre #Egipto

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Resumen

Este estudio traza los ritmos de la narración de noticias en Twitter a través del buscador de etiqueta #egipto. Usando un análisis de discurso computacional, examinamos los valores de las noticias y la forma de las noticias exhibidas en #egipto desde el 25 de Enero 25 hasta el 25 de Febrero del 2011, antes y después de la renuncia de Hosni Mubarak. Los resultados indican una hibridez de los valores de noticias viejos y nuevos, con énfasis en el drama de la instantaneidad, la tercerización masiva de las élites, la solidaridad, y el ambiente. La corriente de noticias resultante combina las noticias, la opinión y la emoción hasta el punto que el discernimiento entre uno y otro es difícil y el hacerlo pierde sentido. Ofrecemos una teoría de las noticias afectivas para explicar el carácter distintivo del contenido producido por los públicos de la red en tiempos de crisis políticas.