Social Media and Protest Mobilization:
Evidence from the Tunisian Revolution

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Abstract

One of the hallmarks of the Arab Spring uprisings has been the role of social media in articulating demands of the popular protesters and broadcasting dramatic events as they unfolded, but it is less clear whether social media acted as a catalyst for many of the movements in the region. Using evidence from the popular protests in Tunisia between December 2010 and January 2011, this paper argues that social media acted as an important resource for popular mobilization against the regime of President Zine El Abidine Ben Ali. Drawing on the insights from 'resource mobilization theory' (RMT), we show that social media (1) allowed a 'digital elite' to break the national media blackout through brokering information for mainstream media; (2) provided the basis for intergroup collaboration that facilitated a large 'cycle of protest' to develop; (3) overcame the collective action problem through reporting event magnitudes that raised the perception of success for potential free riders, and (4) led to an additional element of 'emotional mobilization' through depicting the worst atrocities associated with the regime's response to the protests. These findings are based on expert interviews with Tunisian bloggers and digital activists conducted in October 2011 and a revealed preference survey conducted among a sample of Tunisian internet users between February and May 2012.

INTRODUCTION

Over the past two decades, the political role of the Internet and digital social media has developed into a well-established topic of research on political communication and political participation. The Internet's prominent role in the diffusion of popular protest across the Arab World and the ouster of authoritarian regimes in Tunisia and Egypt has re-energized the debate on the implications of social media networks for organizational strategies for political mobilization and patterns of protest diffusion, as well as the impact of social media networks on individual political engagement.

Much of the research on these aspects of social media has hitherto been conducted in the context of consolidated Western democracies on the forms of political participation that tend to support the system. For example, work has been carried out on how Internet use can be used as a direct influence on actions of legitimate governments through affecting the decisions of elected officials or indirect influence through the selection of officials.[1] Typical activities include <u>conventional</u> political participation (voting, donating money to a campaign or political group, canvassing, attending political meetings and electoral rallies, being interested in and talking politics) and lawful <u>unconventional</u> participation (signing petitions, participating in authorized demonstrations and strikes, political consumerism).

The political science literature has focused primarily on whether and how people's use of digital media affects their political engagement, where it is plausible to argue there is a positive relationship between an individual's exposure to and use of digital media and the degree of his or her political engagement (Brady, Verba, and Schlozman 1995). Social network platforms such as Twitter, YouTube, and Facebook have multiplied the possibilities for the retrieval and dissemination of

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[1] Besides, a substantial body of literature has accumulated regarding the impact of Internet use on the formation of social capital, which in turn, is considered an important predictor of political participation (Shah, Kwak, and Holbert 2001; Shah, McLeod, and Yoon 2001)((Gibson, Howard, and Ward 2000; Jennings and Zeitner 2003; Xenos and Moy 2007)

political information exponentially and thus afford the Internet user a variety of supplemental and relatively low cost access points to political information and engagement. Social media users can be automatically updated about their friends' political activities through their News Feed. They can comment on these activities or can join online discussion groups, which actively engages them in political conversation from the convenience of their homes and at any time of the day. They can "befriend" political organizations online and stay informed about their positions and activities without having to attend a meeting or a rally.

Digital media have considerably lowered the transaction costs associated with political learning and political action; however, despite these positive attributes, the impact of digital media use on participation rates at the individual level in Western democracies has remained "underwhelming" (Bimber and Copeland 2011). A meta-analysis of 38 studies on the impact of Internet use on civic engagement between 1995 and 2005 confirms a positive but very modest impact (Boulianne 2009). These small positive effects appear to be positively moderated by factors that have long been established as standard predictors of political participation such as social capital (Gibson, Howard, and Ward 2000) and political interest (Xenos and Moy 2007). Regarding the meso-level of social organization there is broad scholarly consensus that the Internet has expanded the collective action repertoire of organizational actors, such as social movements and grassroots organizations (Geser 2001; Doug McAdam, Sidney Tarrow, and Charles Tilly 2001; van Laer and van Aelst 2009). The strategic toolkit of these actors has been complemented by the additional informal procedures that the Internet offers for mobilization. The decentralized structure of digital networks facilitates decentralized forms of campaigning that are based on the parallel activities of independent individuals. The task of information diffusion can easily be delegated to a multitude of members who act as unpaid volunteers who circulate received messages among their personal networks. The Internet has thus arguably developed into an important resource for political mobilization which reduces costs previously allocated to professional communication (Geser 2001; Krueger 2006).

At the same time, the political implications of the Internet in the context of authoritarian or democratizing political systems remain relatively under researched, even though there is widespread popular belief that the Internet can undermine authoritarian rule. Case study research from the Berkman Centre for Internet and Society investigates the impact of information and communication technologies (ICTs) on civic engagement in authoritarian regimes (Chowdhury 2008; Goldstein 2007; Goldstein and Rotich 2008), as have several additional publications on the cases of Iran (Kelly and Etling; Rahimi 2003; Tezcür 2012; Weitz 2010) and China (Chen 2099; Dai 2000; Weber 2007; Yang 2003; Yu 2006). The democratic transitions literature, however, is still a long way from having established a clear understanding of the relationship between new media and political participation, mobilization, and protest under authoritarian rule and the rich empirical data needed to establish such causal influences have yet to be gathered (Aday et al. 2010; Kalathil and Boas 2001; Lynch 1999).

The Tunisian uprising of 2010-2011 provides an excellent opportunity to address this research lacuna. Using a mix of evidence from 16 elite interviews with digital activists and a survey among 437 Tunisian Internet users conducted between February and May 2012, this paper analyses the use of the Internet as a significant resource for protest mobilization in the case of Tunisia. Earlier analysis of the Tunisian case Gränzer (1999) showed that early 'tactical concessions' (Gränzer 1999; Risse, Ropp, and Sikkink 1999) from the regime to a growing protest movement in the 1980s halted political reform and led to a deterioration in the human rights situation, making Tunisia a 'least likely' case where protest would be possible to make a contribution to political transformation (Eckstein 1975; Landman 2008). Drawing on the insights from 'resource mobilization theory' (RMT), the paper shows that social media (1) allowed for a 'digital elite' to break the national media blackout in Tunisia through brokering information for mainstream media; (2) provided an element of 'emotional mobilization' through depicting atrocities associated with the regime's response to the protests which, in turn, led to the formation of a national collective identity supportive of the protest

movement; (3) laid the foundation for intergroup collaboration that facilitated a large 'cycle of protest' to develop.

In order to sustain this argument, the paper is divided into four sections. The first section outlines briefly the main theories of social mobilization to show where Internet use and social media 'fit' in terms of explaining how new technologies contribute to the kind of mobilization that took place in Tunisia in late 2010 and early 2011. The second section examines how a digital elite in Tunisia was able to use new technologies to create networks and frame the mobilization against the regime, aggregate discontent across different opposition groups and overcome regime attempts to control the flow of information. The third section presents descriptive and analytical statistics drawn from the survey data to show how increased levels of Internet use raised the probability that Tunisians would become involved in anti-government protest activity. The final section draws some tentative conclusions about the Internet and social media as a resource for protest mobilization more generally.

SOCIAL MOVEMENT THEORY AND NEW TECHNOLOGIES

Much of the literature on contentious politics draws a sharp distinction between protest under democracy and protest under authoritarianism. Democracy is generally viewed as a system variously open to organized contention in which the organization of usually non-violent protest on behalf of social movements to voice dissent against the political status quo constitutes a central element of mainstream politics (Meyer and Tarrow 1998). Under authoritarian rule, by contrast, the task of coordinating and orchestrating civil protest is significantly harder. From a resource perspective of mobilization the main challenges consist in the fact that citizens in authoritarian regimes lack the ability to organise freely and publicly, use public media to communicate their ideas, and risk a higher cost for their activities, since authoritarian regime will more readily use coercive measures to quell dissent. Power for such groups resides in their numbers, latent networks and their potential for

mobilization against the regime. Since autocrats use persecution, censorship, repression and propaganda to silence opposition voices, citizens face higher levels of incomplete information about their fellow citizens' attitudes toward the regime than in a democracy, and more importantly for this paper, their disposition to mobilise against the regime.

It has been argued that public protest under authoritarianism is rare (Tullock 2005), spontaneous, politically and geographically isolated, and will largely occur without coordination through organized social movements (Doug McAdam, Sidney Tarrow, and Charles Tilly 2001; Tilly 2004). In explaining the breakdown of authoritarian regimes, the political economy literature has consequently mainly focused on the role of elites. It is argued that the most serious challengers of autocrats come from their own ruling coalitions, that is the military or security forces (Geddes 2003, 2006), the ruling party or coalition (Boix and Svolik 2008; Guriev and Sonin 2009; Magaloni 2008), or their royal families (Fjelde 2010; Kricheli, Livne, and Magaloni 2011). Where attention is given to citizen groups, it is in relation to the elites that they support and how that support affects the strategic interactions or 'game' between elites from the government and opposition (Colomer 2011; Colomer and Pascual 1994; Przeworski 1991). Beyond the game-theoretic literature, however, work on social movements has shown not only the possibility for mobilization under authoritarianism but in many cases successful mobilization that contributes to regime liberalization and democratic transformation (Foweraker 1989, 1995; Foweraker and Craig 1990; Foweraker and Landman 1997; Hawkins 2002; Landman 2008 ; Risse, Ropp, and Sikkink 1999)

Not only does civilian-led anti-government protest occur under authoritarianism, but it can even spread across state boundaries through different processes of diffusion. Indeed, the past three decades saw four cross-national waves of anti-regime mobilizations in different regions of the world: popular opposition and regime change in Latin America in the 1970s and 1980s; the spread of popular challenges to communist party rule in the Soviet Union and Eastern Europe from 1989 – 1991; the 'colour' revolutions of post-communist Europe and Eurasia from 1996 – 2005; and now the

on-going protests in the Middle East and North Africa (MENA). Other cases of popular and yet less successful anti-authoritarian protest include the Tiananmen Protests in China in 1989, the Student Revolt in Indonesia in 1999, the Saffron Revolution in Myanmar in 2007, and the Green Movement in Iran in 2009 – 10.

The social sciences have developed different theoretical approaches to explain why citizens opt for protesting, in what way their decisions may be shaped by the type of regime and under which conditions such protest can lead to regime breakdown and transformation. Explanations focus on different aspects of mobilization and comprise four main approaches: (1) grievance and relative deprivation, (2) rational choice and collective action, (3) resource mobilization, (4) structure and networks and (5) culture and identity. A brief overview of them shows how the Internet and new communication technologies fits largely within the resource mobilization perspective as one means for aggregating grievance, building networks and communicating strategies for opposition to the regime.

The traditional <u>grievance</u> or <u>relative deprivation</u> models of political activism focused on the psychological factors that lead people to engage in contentious politics (Block, Haan, and Smith 1968; Braungart 1971; Fendrich and Krauss 1978; Lewis and Kraut 1972; Thomas 1971). According to Gurr (1970) people protest as a result of a feeling of "relative deprivation" defined in terms of a perceived entitlement or expectation which results from either *inter-personal* or *inter-group* comparisons. Unfulfilled material expectations cause frustration and resentment which manifest themselves in an individual propensity to engage in protest. Since inter-personal and inter-group deprivation stem from comparison of an individual's or group's economic circumstances to those of more advantaged individuals or groups, societies with more unequal distributions of income, power and/or social status ought to experience more collective violence (Acemoglu and Robinson 2005; Boix 2003; Hendrix, Haggard, and Magaloni 2009). While the relative deprivation approach emphasized the

primacy of <u>material</u> grievances, recent studies have shifted attention back[2] towards <u>emotional</u> motives that relate to beliefs about society (Aminzade 2001; Goodwin, Jasper, and Polletta 2001; Jasper 1998; Jasper and Poulsen 1995; Oliver and Johnston 2000). People may be motivated to engage in protest out of a sense of moral indignation determined by an emotional response to an aggrieving situation (van Laer 2011). Strong reactive emotions may even incline those citizens to participate in protests that do not have pre-existing affective ties to a protest movement or personal links to other protesters (Jasper and Poulsen 1995; van Laer 2011).

The ability for civil society to mobilize collective action around material and emotional grievance is made more difficult under authoritarian conditions by the fact that the public sphere is not nearly as open as in democratic societies. While it would be incorrect to say there is no public sphere under authoritarianism (Foweraker 1995; Foweraker and Landman 1997), the national narrative is often controlled by the government which typically resorts to a mix of censorship, intimidation and persecution to suppress negative information about the government or conditions within the country. By providing a space for increased free speech, the Internet poses an existential threat to the ability of authoritarian governments to control the national narrative (Kuebler 2011). Ordinary citizens, not necessarily linked to any political movement, may share their grievances by voicing them through online social networks, and once such information is leaked to the public it may unleash effects at two different levels. At the micro level, it can act as a cognitive maximizer that pushes people into protest action. At the macro level, media content that evokes negative emotions has a high potential to "go viral", where anger and anxiety as emotional states of heightened physiological arousal are key in driving social transmission and diffusion (Berger and Milkman 2010).

<u>Rational choice</u> approaches argue that while grievance is common, it does not account for a self-interested individual's decision to engage in collective political action such as protest or rebellion

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[2] We argue 'back' to the emotional as this argument can be found in <u>Injustice: The Social Bases of Obedience and Revolt</u>, where Barrington Moore (1978_469) argues that 'moral convictions become an equally necessary element for changing the social order, along with alterations in the economic structure.'(1978)

(Foweraker 1995; Lichbach 1998; Olson 1965; Tullock 1971). (Tullock 1971) (Since grievances typically represent desires for outcomes such as a reduction in inequality or a change in government policy they are considered demands for public goods and thus fall prey to the problem of collective action (Olson 1965). While rational choice theory predicts the absence of protest, history has shown and continues to show numerous and widespread examples of protest. The rational choice explanation focuses on the private or selective incentives made available only to members of a group that is protesting to solve the collective action problem (Lichbach 1994; 1998). Non-material solutions to the problem focus on personal beliefs, group efficacy, ethics and expectations of success.

The limited supply of information under authoritarian conditions means that individuals can expect to pay high personal costs (arrest, incarceration, or death on streets) if they participate in unsuccessful protest activity that results from the lack of coordination and sharing of information. The key challenge for the formation of protest under authoritarian regimes is that potential protesters will only turn out to protest if they are convinced that a large number of others would do the same (Hendrix, Haggard, and Magaloni 2009). Social networks provide individuals with information that allows for a better calculation of their 'individual risk threshold' (Granovetter 1978) in two important ways. First, online content that documents past protest events may trigger informational cascades that lead to mass civil uprisings. Second, event management features (e.g. "Facebook events") offered by some social networking sites inform users about the prospective participation in upcoming scheduled events.

Resource Mobilization Theory (RMT) grew out of a certain dissatisfaction with rationalist approaches and its critique of psychological and attitudinal approaches (Feree 1992). RMT claims that open and affluent societies provide more favourable conditions for contentious groups to thrive, thus making protest more common (Dalton and van Sickle 2005). Here, the existence of extensive non-governmental organizations and other civil society groups provide the crucial variable linking

dissatisfaction to political action, as they allow citizens to freely engage in a variety of voluntary associations and to develop the necessary social and organizational skills to promote their interests (Coleman 1988; Putnam 2000; Putnam and Feldstein 2003). Such groups are able to raise funds, increase membership, and engage in communication and awareness-raising strategies to bring about their goals. During times of political stress, or a change in the 'political opportunity structure', such groups of disparate social movement organisations can come together in larger 'cycles of protest' to challenge the regime on significant issues of policy, such as civil rights, war, women's rights, and the environment among other issues areas (Doug McAdam, Sidney Tarrow, and C.   Tilly 2001; Tarrow 1994).

While the occurrence of protest in closed authoritarian societies runs counter to the basic premises of RMT, many authoritarian societies have the presence of latent networks, proto-organisations and community leaders and organisers, all of which can provide the basis for social mobilisation. In Latin America, for example, ecclesiastical base communities organised by the social justice strand within the Catholic Church provided a space for discussion of economic hardship under authoritarian rule and site for early mobilization against military regimes across the region (Foweraker 1995; Foweraker and Landman 1997; Foweraker, Landman, and Harvey 2003). The advent of the Internet builds on ever denser communication infrastructures as societies develop and provides a resource that can be used to orchestrate protest where institutional distrust looms large and civic activism is systematically suppressed. Internet use can coincide with a kind of participatory dynamics which are characterized less by formal relationships in civil society organizations and more by spatially dispersed, loosely-knit personal networks heavily and increasingly mediated through electronic communication (Wellman et al. 2003). The availability of Internet communication technologies may enable activist groups to communicate with potential constituencies across large distances. Thus, they constitute important resources to achieve intergroup-collaboration and challenge the strategies of social isolation typically employed by authoritarian regimes to obstruct civil society formation.

In contrast to rationalist approaches, structural and network approaches to activism consider the causes of collective action as rooted outside the individual, and strongly influenced by structural proximity and network connections (Friedman and McAdam 1992). As Snow, Zurcher et. al. (1980) argue an essential element of a mobilization process is that potential protesters are targeted by 'recruitment agents' who inform them of upcoming protest events and encourage their participation. The most infuriated and risk-acceptant citizen will not be able to participate in an anti-government demonstration if he or she does not know a demonstration event is actually taking place. Some scholars define *being targeted* as being asked by someone to take part (Klandermans 1997), while others operationalize mobilization attempts in terms of awareness of the upcoming event (van Laer 2011), leaving open the question of any interpersonal links. In either case the likelihood of a person to become mobilized increases with their network 'embeddedness'. A frequently cited factor in this respect is the number of memberships in multiple organizations. Overlapping memberships allow information about upcoming protest events to travel beyond the boundaries of a network of hard-core activists and 'spill over' to networks of less-engaged citizens (Carroll and Ratner 1996). Another important function of social networks in this context is to build a collective identity supportive of protest action, which is achieved through interpersonal conversations with other network members. Collective identities motivate protest participation by providing the potential participant with a sense of in-group solidarity and an oppositional consciousness of "us" versus "them" (Friedman and McAdam 1992; van Laer 2011).

Political activists nowadays heavily rely on the Internet to maintain and reinforce multiple engagements and relationships across issue and organizational boundaries (Bennett, Breunig, and Givens 2008; della Porta and Mosca 2005). It can thus be assumed that the Internet is conducive to increased awareness about collective action events, such as mass demonstrations of the kind observed during the Arab Spring. The more embedded an

individual Internet user is in terms of memberships in different online social networks and number of contacts in these networks, the higher should be the likelihood of him or her being targeted by an online mobilization attempt.

Taken together, these different theoretical approaches to explain and understand social movements and social mobilization across different political contexts are all concerned with the conversion of grievance into action, the interaction between aggrieved individuals, and the ways in which social mobilization rises and falls. Each perspective has a number of different starting assumptions and observable implications for social mobilization, but for our purposes here, some of the perspectives fit well for the new Internet and social media phenomena that is the topic of this paper. We have argued that aggrieved individuals under authoritarian regimes will find additional challenges that need to be overcome for successful mobilization, and that the Internet and social media provide an important tool, catalyst and resource to meet some of these challenges head on. In a country like Tunisia with an authoritarian regime, disparate communities with varied dialects, and a lack of shared information, the Internet and different forms of social media provided access to information, lowered transaction costs, buttressed networks of activists and contributed to anti-government mobilization particularly after the self-immolation of Mohamed Bouazizi on 17 December 2011. The next section discusses the development of Tunisia's ICT-infrastructure and how a digital elite was able to mount a generalized critique of the Ben Ali regime and side-step government attempts to establish a media blackout building on this infrastructure.

DIGITAL ELITE AND THE AGGREGATION OF DISCONTENT

During the 1990s, governments in the Muslim world adopted strategies to regulate the use of ICTs that varied across regime type. In liberal regimes competition in the ICT-market was permitted, while in more autocratic regimes ICT development was controlled by state owned companies, which held a

monopoly, reported directly to the government and monitored online content (Howard 2011). Tunisia was somewhere in the middle of this spectrum, and President Ben Ali's administration invested heavily in the telecom sector from the middle of the 1990s. Within a decade, Tunisia had one of the most developed telecommunications infrastructures in Northern Africa. Competition between eleven Internet service providers led to one of the most developed Internet markets in the region (Reporters Without Borders 2004). By 2008 there were 1.7 million internet users out of a total population of 10.2 million, and for these users, Internet access was available in homes (84%), work (75.8%) and internet cafes (24%) as well as in over 300 public Internet centres (*publinets*) set up throughout the country. Ben Ali's strategy to depict himself as a role model for the promotion of ICTs in the developing world sold well internationally when in 2001, Tunisia was chosen to host the second stage of the UN-World Summit on the Information Society (WSIS) in 2005.

Government censorship activities

Despite its positive international image, the Ben Ali regime went at great lengths to develop a visual personality cult, political programmes intended to fashion regime obedient citizens using messages of messages of liberty and plurality, [3] while at the same time controlling information and increasing regulation of ICTs (Chomiak 2011; International Crisis Group 2011). The Tunisian Internet Agency (ATI) was established in 1996 to regulate the country's Internet. A 1998 telecommunications law authorized the agency to intercept email messages under the pretext of preventing access to material contrary to public order and morality. Since the ATI was the gateway from which all of Tunisia's Internet Service Providers (ISPs) leased their bandwidth the agency was able to load content control and filtering software onto their servers (OpenNet Inititative 2009). Different from other Internet censors in the Arab World (e.g. Saudi Arabia and United Arab Emirates) who alert users when they try to access a blocked page, the ATI purposefully hid its censorship activities from

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[3] A good example is the *Pacte Jeunesse* launched by the ruling RCD in 2008 , which Ben Ali lauded as a "*a celebration of the Youth's independence*" and an invitation for them to resume conscious responsibility in shaping the country's future job market by entering in a dialogue with the government and "*expressing their concerns in freedom*"

Internet users. Websites blocked within Tunisia appeared with a fake 404 "File not found" error message – a practice which gained the agency the nickname "Ammar 404"[4]. In addition, the ATI exercised control by obliging private Internet café owners and the *publinets* to register the ID numbers of Internet users and by holding them legally responsible for their customers' online activities. The trajectory of online censorship from the nascent development of ICTs in Tunisia follows a dynamic where filtering dealt with websites containing pornographic content, and then gradually extended to political online culture as government officials become increasingly versed in the application of control software (see Howard 2011); a process that accelerated rapidly in 2008 in response to demonstrations against corruption of the Phosphate Mining Company (*Compagnie Phosphate de GafsaI*) in the region of Gafsa.

After violent clashes between police and strikers the protests began to attract considerable citizen support and developed into a social movement across the Gafsa region (Pollock 2011; Schraeder and Redissi 2011). While state-controlled media ignored the events, Internet activists began to cover them on Facebook and the ATI stepped-up its censorship programme. In August 2008 Facebook was blocked at the request of Ben Ali who cited national security violations by terrorists (Chomiak 2011; International Crisis Group 2011), but after considerable online protest the government lifted the blockade a few weeks later and switched to a strategy of covert surveillance of the social network. According to The U.S. State Department and the Committee to Protect Journalists (CPJ), the government ordered Tunisian ISPs to intercept the log-in details of Tunisian Facebook users and relay them to the ATI which then used them to either block the accounts entirely or remove undesired content[5]. But the government's censorship efforts went even further than that. As cyber activist Yassine Ayari recalls:

> In 2009, there was a wave of censorship never seen before. It was ridiculous. Everything was censored. Any website having the words *human* or *rights* in it would be blocked.

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[4] Censor 404
[5] CNN World. January 2011. http://articles.cnn.com/2011-01-12/world/tunisia_1_protests-twitter-and-facebook-tunisian-government?_s=PM:WORLD

> YouTube, DailyMotion, WordTV …all the video sharing platforms were shut down. If you had more than 20 visitors on your blog, no matter what the subject - even if you were blogging on cooking recipes - it would be blocked automatically[6]

Cyber-activism 1998 – 2010

Cyber activism in Tunisia is a phenomenon that long predates the Arab Spring. As early as 1998, two anonymous activists named "Foetus" and "Waterman" founded the group *Takriz*[7], described as a "cyber think and street resistance network". From its beginnings, the group clearly targeted the country's politically alienated youth as its core audience through a combination of aggressive street slang and irreverent mockery of the authorities, which soon caught the regime's attention. Takriz's website was blocked within Tunisia in August 2000, but soon other sites sprang up to take its place. One of them was *TuneZine*, a satirical political web magazine whose founder Zouhair Yahyaoui, under the pseudonym *Ettounsi*[8], published numerous columns and essays criticizing government corruption and the absence of the rule of law. He was arrested at a Tunis *publinet* in 2002, launched a hunger strike to protest against the harsh conditions of his imprisonment in 2003 and was awarded the Cyber-Freedom Prize from Reporters Without Borders the same year.

Another example of cyber-activism is the collective blog *Nawaat*[9], co-founded in 2004 by Riadh Guerfali, a constitutional lawyer living in exile in Europe, and political science student Sami Ben Gharbia. *Nawaat* sought to provide a public platform for Tunisian dissident voices and publish information about the regime's corruption and human rights violations. *Nawaat* bloggers combined citizen footage and data from other sources to get their message across, which soon became one of the group's most innovative and distinctive trademarks. In one of its most popular YouTube videos, produced in 2008, *Nawaat* combined pictures from plane spotter sites with a geo-tagging programme to document the flight paths of Tunisia's presidential jet. By reconstructing the plane's itinerary across Europe at times when the president was known to be in-country, the bloggers sought

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[6] Yassine Ayari, interview conducted in Tunis, 18th October 2011
[7] Tunisian slang expression, roughly equivalent to „bollocks" or „don't break my balls"
[8] The Tunisian
[9] The core

to demonstrate that the jet's main purpose was to transport Ben Ali's wife to exclusive shopping destinations.

While these groups were political from their beginnings, other activists started out with cultural or entertainment topics and became politicized along the way in reaction to the regime's increasing repressiveness. Lina Ben Mhenni, a lecturer in linguistics at the University of Tunis, started out reporting on the capital's club scene on her blog *Nightclubbeuse*, but from 2009 increasingly reported on social and political issues which led the authorities to block her site in early 2010. The re-launched version of her blog *A Tunisian Girl*[10] adopted a decidedly political tone that won her several journalism awards as well as a Nobel Peace Prize nomination in 2011 for the courageous documentation of the regime's human rights violations. Another example is Haythem El Mekki (@ByLasko on Twitter), now a popular political commentator on Tunisian National TV-channel *El Watanya*. A digital native and student of communication sciences, El Mekki originally made himself a name by commenting on Tunisia's independent music scene on Facebook and Twitter. By the late 2000s his fan community had grown to such an extent that any political content posted on his profile would spread widely throughout the social networks, virtually turning him into a political cyber activist.

It is clear from these examples that a political culture of dissent existed prior to the events of December 2010. The Internet provided an alternative public sphere that was at least partially shielded from the government's unilateral oversight and control. Tunisians were able to form solidarities through shared feelings of repression and humiliation and to formulate a collective alternative discourse (Chomiak 2011; International Crisis Group 2011). It is also obvious, however, that Tunisia's cyber avant-garde was dominated by affluent, well educated, and polyglot individuals with a high degree of cultural capital - a social profile characteristic for early ICT adopters throughout the developing world (Norris 2001). Yet it would be inaccurate to dismiss their network as a socially

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[10] http://atunisiangirl.blogspot.de/

exclusive club. The early opening of the telecom market to free competition had considerably reduced the cost of Internet access, such that Internet use was not the privilege only of the economic elite (Howard 2011). However, the ability for bloggers to convey their political messages to a critical mass of citizens was thwarted by tight control from the Ben Ali regime. According to Kuebler (2011), this limited impact of blogging between the late 1990s and 2010 can be attributed to its failure to build "*the bridge from an elitist medium to the general public sphere*". As illustrated in Table 3, prior to the Revolution traffic on the websites of Tunisian blogger communities such as *Nawaat* originated mainly from the host countries of sizeable Tunisian diaspora communities.

Table 1: Country Traffic for Nawaat.org prior to January 2011

Country	Pageviews	Users
Canada	85.9%	43.6%
France	2.8%	11.3%
Morocco	2.0%	7.7%
Other	9.4%	37.5%

Source: http://www.serverinsiders.com/traffic/nawaat-org.html

Digital activists had thus stepped-up their efforts to connect with both international and domestic constituencies. Several core activists started to become active in international blogger communities, such as Global Voices,[11] to increase their visibility abroad. Some received training in e-journalism from programs funded through the US Middle East Partnership Initiative (MEPI), which focused on training journalists throughout North Africa and the Middle East in the years leading up to 2010.[12]

The spring of 2010 saw a new wave of anti-censorship protests organized online and offline. One example is the initiative *Tunisie en Blanc*[13] (or *A'la A'mar*[14] in Arabic), where activists Slim Amamou and Yassine Ayari (joined later by Lina Ben Mhenni), called for a rally against Internet censorship in

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[11] http://globalvoicesonline.org/
[12] http://mepi.state.gov/
[13] Tunisia in White
[14] Day against the censor

front of the Ministry of Communication Technologies on May 22nd 2010. In preparation for the rally, the organizers requested legal authorization which was denied. The bloggers were careful to document each step of the negotiations in a series of videocasts.[15] When Amamou and Ayari were arrested for investigation and forced to call the rally off, their online community called for a public demonstration on the 22nd of May wearing white shirts in a symbolic act to protest censorship. The initiative was only partly successful. Various online groups supporting the protest attracted roughly 19,000 followers (Gharbia 2010) and several hundreds of Tunisians living abroad assembled in front Tunisian embassies in Bonn, Paris, Montreal, and New York to support the protest, but in Tunis itself only a few dozens of youths dared to participate in the flash mob on Avenue Habib Bhourghiba.

Protest 'Ignited': 17th December – late December 2010

The event that finally undid the ability for Ben Ali's security apparatus to control the public sphere occurred in the marginalized provincial town of Sidi Bouzid southwest of Tunis. On 17th December 2011, distress triggered by socioeconomic, generational and geographic disparities within Tunisia's many governates was epitomized by the self-immolation of Mohammed Bouazizi. The 26 year-old fruit seller set himself on fire after a female police officer had confiscated his wares because he did not have a vendor's permit and publicly humiliated him by slapping him in the face. By committing his desperate act in front of the office of the regional governor, Bouazizi forced the regime to assume political and moral responsibility for his situation, thus turning him into the symbolic representative of millions of young Tunisians who lacked chances for socio-economic advancement (Aday et al. 2010; Lynch 2012). The same day, members of Bouazizi's family, accompanied by trade unionists, marched to the police headquarters to express their anger. The protests soon turned into violent clashes between the police forces and members of Bouazizi's extended family, neighbors and youth who identified with his plight. Within a week, the protests spilled over to the neighboring cities of Menzel Bouzaiane, al-Maknasi, and al-Mazuna, then Argab, Bin Aoun, Jilma, Souq al-Jadid, Bi'r al-

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15 For a subtitled English version see: http://vimeo.com/11987373

Hafi, and, Sabala, all of which are dominated by the Hamama tribe to which Bouazizi's family belongs. However, unlike in Gafsa two years earlier, the regime failed to contain the uprising and limit its ability to spread beyond the region. By the time Bouazizi died in hospital from his injuries on January 4th, what had begun as a local, socio-economically, and partially tribally motivated protest had turned into a nationwide anti-regime movement with tens of thousands of Tunisians from all levels of society demanding Ben Ali's fall. Bouazizi's death provided the necessary collective frame of reference to propel the online anti-regime movement onto the Tunisian street. But how did this information manage to break the filter of state-controlled media to reach such a broad audience so quickly?

One answer lies in the way that the online networks that had developed previously interacted with traditional international media outlets. The initial protests in Sidi Bouzid were recorded by participants with cell phone video cameras and posted on personal Facebook profiles. On the eve of the revolution, Facebook penetration still hovered around a modest 17% (Dubai School of Government 2011) and Tunisian users were wary to access and share regime-critical content overtly given the heavy levels of surveillance. It is unlikely that this information would have reached a mass audience had it not been for a small elite of digital activists, many of them operating from exile, who acted as information brokers.[16] Around the globe, these activists now joined efforts to screen Facebook for protest related posts, translating the material,[17] and structuring it into a coherent, chronological narrative, as Yassine Ayari explains:

> When the revolution came I was in Belgium. At that time I was already known
> through the [Tunisia in white] demonstration and my blog. I had 2000 or 3000
> friends on Facebook which gave me a little bit of influence. So I took a vacation

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[16] See Ethan Zuckermann: Ben Ali and Bart: Understanding Participatory Media and Protest. Video Talk delivered at the International Online Conference "Facebook Revolutions? The Role of Social Media for Political Change in the Arab World", Friedrich Naumann Foundation, September 2011. http://www.youtube.com/watch?v=Fzh1Trc-B70

[17] Translation was essential given that many Tunisian users post in *Derya*, the Tunisian dialect. In addition, young Tunisian internet users, like elsewhere in the world, have developed their own particular argot and abbreviations. The resulting mixture is barely comprehensive to non-Tunisian Arabic speakers.

> from my job and sat with three other friends, PCs, pizzas, and a telephone. We tried to use all the information we could handle: status updates, pictures, videos. When we heard that something happened in Kasserine or somewhere else, we'd pick up the phone, we'd know someone who knows someone and we would find the information and post it (Yassine Ayari)[18]

Networks like Global Voices and *Nawaat* started to run special online features covering the protests and spread the word through their own social media channels on Facebook, Twitter, and YouTube.[19] Once the information had been made available in a publishable form, international broadcasters were able to pick it up and re-import it into the country, thus 'leapfrogging' the blackout imposed by Tunisian state-media gatekeepers. Social media footage about the Sidi Bouzid protests first appeared on Al Jazeera on 20th December 2010.[20] It was only through this complex threefold interaction between individual, non-elite protesters, motivated and strategically oriented digital activists and international broadcasters that the information about the death of Bouazizi and the ensuing protests were able to reach a larger portion of the Tunisian society. During the first ten days of protests, the regional administrative centers of the two Midwestern governorates, Sidi Bouzid and Kasserine, became the focal points of popular action (Saidani 2012). During this first period, Twitterbegan to play a significant role with the emergence of the hashtag #sidibouzid.[21] One study of Twitter information flows during the Tunisian uprising shows that cyber activists served as key information brokers for mainstream media, where journalists heavily retweeted the posts of activists (Lotan et al. 2011).

Protest escalation and regime collapse: late December 2010 – 14 January 2011

Over the second week of the conflict, the movement expanded geographically, socially and politically. Protests reached the neighboring governorates, moving to Kef in the northwest, Kairouan

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[18] Yassine Ayari, blogger and cyber-activist, interview conducted in Tunis, 18th October 2011
[19] See for instance
http://www.youtube.com/watch?v=T9Kr5FQNeQ4&list=PLEA29C4B2813B9146&feature=plcp or
http://globalvoicesonline.org/specialcoverage/2011-special-coverage/tunisia-uprising-201011/
[20] http://www.aljazeera.com/news/africa/2010/12/2010122063745828931.html

[21] When a Twitter user places the symbol "#" before a string of text, that string can then be clicked as a link to a global search of tweets using that string, a tagging feature meant to facilitate a global discussion on a topic beyond a user's follower network. These tags are called *hashtags*

in the center, as well as Kebili, Tozeur, and Ben Guerdene in the south. Unemployed youth, who had so far been the socially dominant group among the protesters, were joined by employed professional and occupational groups, most notably elements of trade unions and legal professionals. The National Bar Association and the regional branches of the UGTT (Union Générale Tunisienne du Travail) emerged as poles of contestation, giving the movement both structure and sustainability (International Crisis Group 2011; Lynch 2012; Saidani 2012). Politically, the movement radicalized with socio-economic demands rapidly transforming into overt challenges to the regime, most clearly expressed by the slogan *Ben Ali dégage!*[22]

The regime responded with increased repression on the one hand, and an almost complete breakdown in public communication on the other hand. Between the 8th and 10th of January, police violence increased in Kasserine, Thala and Regueb in particular, resulting in the deaths of 21 protesters according to official sources and roughly 50 according to union and hospital sources (International Crisis Group 2011). Ben Ali had only addressed the nation in a first televised speech on 28th December, promising to respond to the protesters' demands. Thereafter, almost two weeks elapsed before in a second speech on 10th January he promised to create 300.000 jobs over the next two years, but at the same time condemned the protests as "terrorist acts" orchestrated by foreign interests. These delayed and disconnected reactions from the regime stood in harsh contrast to a reality that had become visible for all to see through social media, and significantly contributed to transforming a spontaneous and locally-rooted movement into a determined national revolution.

Towards the end of December 2010, web activists from the capital had begun to travel to the remote regions of the country to cover the events and transmit them through Facebook real- time videos. Although Al-Jazeera had only one correspondent based in country and its Tunis office had been shut down (Lynch 2012), the TV channel could now draw on a wealth of footage circulating on the web which it broadcasted into Tunisian households without an Internet connection::

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[22] Ben Ali step down!

I remember a video taken at somebody's funeral in Thala. People were carrying him on their shoulders and suddenly the police started shooting at them. So they were obliged to put the body on the ground and run. This was shocking because a funeral is a very sacred thing in our culture. You cannot harm somebody attending a funeral […] In another picture you could see a dead man lying on the street and beside him a packet of milk. He wasn't armed, he had just gone to buy milk. These pictures were important because until then the RCD had been saying that police were only shooting at armed people, people trying to burn and loot. But now everybody could see that the President and the RCD were lying. (Yassine Ayari)

One video with particular impact was recorded by a medical student at the emergency ward of the

Kasserine municipal hospital and showed the desperate attempts of medics to handle the flow of

incoming injuries[23]

The Kasserine video was very graphic. You could see people had been killed, their heads blown up. There were also videos with mothers and women from Sidi Bouzid. One old woman had been beaten by the police, she was begging them: "*you are our children, you have to protect us*", and they kept insulting her.[24] Videos like this are very shocking, but that's what good about them. Because many Tunisians did not have a problem with Ben Ali. They said: "we're ok, we are not poor we have food, we have hotels, we have beaches… it's ok. Where is the problem!?" But when you show them stuff like this they radically change their point of view about the system. (Haythem El Mekki)[25]

During the final days of the uprising, an important function of the Internet consisted in helping to

overcome the collective action problem associated with protest under authoritarian regimes. Reports

about large scale demonstrations helped many Tunisians to overcome the barrier of fear that had so

far prevented them from taking offline action. On 12th January the UGTT called for a rally in Sfax.

With about 30.000 people in the streets, the city witnessed the largest demonstration prior to the

fall of Ben Ali and is considered the revolution's point of no return by many observers:

Everyone who saw the video about the demonstration in Sfax said: if this has happened in Sfax then it can happen in Tunis. And if it happens in Tunis then it will be a success
(Sara Ben Hamadi)[26].

[23] http://www.youtube.com/watch?v=vPr8ENP-zeE,
[24] https://www.facebook.com/video/video.php?v=1372680136630
[25] Haythem El Mekki, blogger and political commentator on TV channel El Watanayah, interview conducted in Tunis, 17th October 2011.
[26] Sara Ben Hamadi, Blogger for Arte TV, interview conducted in Tunis, 19th October 2011.

> I think the demonstration in Sfax was the point of no return. Because all the cities wanted to be like Sfax. There were tens of thousands of people in the street and everyone, in every city who saw this would say: My city will not be less than Sfax!
> (Yassine Ayari)

Besides revealing information about the extent of past demonstrations, social media also helped users calculate the turnout of forthcoming protest events. Towards the end of December activists increasingly began to use social media for the organization of demonstrations. The event planning feature of Facebook that allows users to create an event online to which other users can then sign up to, proved to be a particularly helpful tool for this purpose.

On 13th January, Ben Ali delivered his last televised speech, in which he announced that he would abstain from running as a presidential candidate in 2014 and offered to call for early parliamentary elections. It was too little too late. According to Schraeder and Redissi (2011), especially students and young people under 30 felt reluctant to grant the regime another four years to craft an authoritarian transition. Many of them saw the mass demonstrations staged for 14[th]January in the centre of Tunis as a unique opportunity of their generation to break with a tradition of quiescent obedience and considered participation in these protests as a patriotic duty. It also appears that social media were a crucial element in the politicization and mobilization of the young urban middle class and elites. As Nadia Zouari, a Tunis based plastic artist and feuilletonist for *Le Temps*, remembers the final days leading up to the regime's fall[27]:

> During this period we spent white nights in front of the computer. Facebook connected us to the things that were going on and it felt like we were living in a different country. Because in Tunis you could lead a normal life. But in Sidi Bouzid, Kasserine and Kef it was totally different. And when we saw what was happening to people there we decided that we had to show solidarity with them.

Blogger Yassine Ayari argues along a similar line:

> The first people to protest were the poor people in the street and the bloggers online. These are two groups that have nothing in common […] But

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[27] Nadia Zouari, Interview conducted in Tunis, 17th October 2011.

> to put the middle class in the street you needed really strong things for them to see and feel what was happening. Because the middle class is selfish. They have their own concerns: they have their loans to pay and their consume problems. And there was no other way to touch them than through social media. [...] So as the revolution progressed, middle class people started to get interested. And in the end all of these groups overlapped. [...] I strongly believe that if the revolution succeeded and spread it was because for the first time the middle class had an interest in this.

Religious political actors seem to share this interpretation of the Internet's role. In an interview by the International Crisis Group a member of the moderate Islamist Ennahda party states: *"The internet caused the failure, to all of our surprise, of the regime's project of creating a consumerist and apolitical middle class"*.[28] It appears then, that another important role of Facebook and other social media was to span a bridge between hitherto unrelated socio-economic groups, thus providing the basis for intergroup collaboration that facilitated a large cycle of protest to develop. On 14th January, confronted with the largest anti-government demonstration that Tunis had ever seen, Ben Ali and his family fled the country on a plane to Dubai.

THE INTERNET AND MOBILISATION: SURVEY EVIDENCE

These developments in the provision, restriction and use of the ICTs in Tunisia, as well as the strong anecdotal evidence from our interviews suggest that the internet and social media contributed to the downfall of the Ben Ali Regime. In this section we present further evidence of this contribution through our analysis of survey data. Between February and May 2012, we conducted a survey of 437 Internet users in Tunisia. The survey was hosted on line and as such the respondents comprise a 'convenience sample' of Internet users who found the time, interest and energy to complete the survey. It is not a random sample of the Tunisian population, and it is not a random sample of Internet users; however, we have found good variation and distributions in responses across the questions and are confident we have uncovered a wide ranging cross-section of internet users to which we can make reasonable inferences. Our analysis proceeds by looking at the frequency of

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[28] Crisis Group interview, Nourredine al-Beheiri, An-Nahda organiser, Tunis, 24 January 2011

responses across the different questions that relate to our theoretical concerns outlined in the first section of this paper. We then show how we constructed a scale of internet use and a scale of likelihood to engage in political protest activity. With these two scales, we engage in a simple bivariate analysis and then move on to an ordered-probit multiple regression analysis to examine the importance of Internet use for protest mobilization in the presence of additional explanatory variables.

The survey reveals a complex mix of attitudes to the Ben Ali regime itself and offers different measures of attitudes that variously map onto the main theoretical concepts outlined above. For gauging a sense of deprivation, moral outrage, and grievance more generally, there are several questions on government capacity to run the country, where two dimensions of attitudes relating to managing the economy and protecting rights and freedoms emerged. For managing the economy, we collapsed four questions on the economy, jobs, income distribution and corruption into a scale, where the frequency of the respondents in our sample with strong opposition to the regime is high (i.e. they strongly disagreed across all four questions relating to government capacity in that issue area). For rights and freedoms, we collapsed three questions relating to freedom of speech, freedom of the press and general respect for people's rights under the Ben Ali, where the frequency of opposition again is very high. Figure 1 shows both scales of opposition among the respondents, where higher scores on the scale show greater levels of discontent.
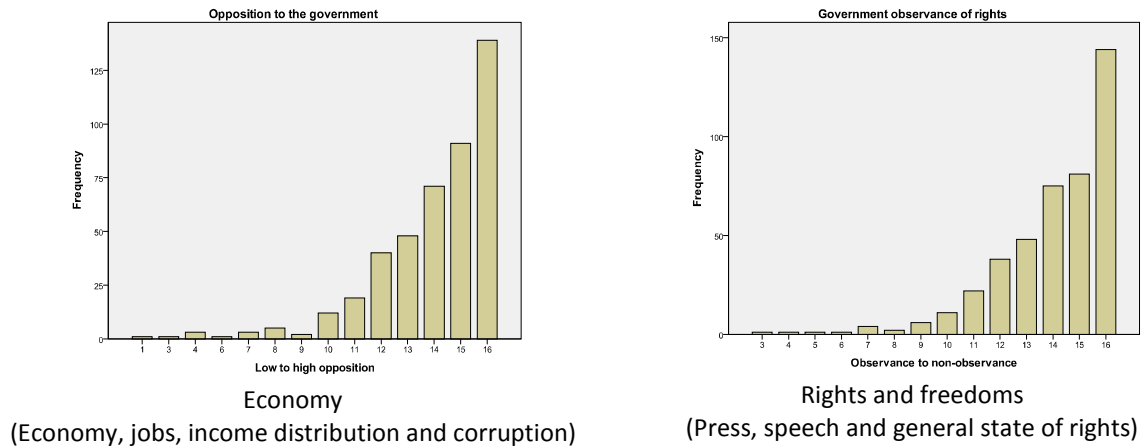
Economy
(Economy, jobs, income distribution and corruption)

Rights and freedoms
(Press, speech and general state of rights)

Figure 1. Levels of opposition to the Ben Ali Regime

In addition to these general levels of opposition to the regime, the emergence of a collective identity

supportive of protest action is illustrated by the fact that 59.5% of the sample expressed anger,

sadness and frustration over pictures and videos of regime responses to opposition activities that

circulated on the Internet and made them doubt the legitimacy of the regime itself. In terms of

personal efficacy, prior to the revolution, in terms of self efficacy 61.6% of the sample felt that

'people like me' could not influence the way in which political decisions were taken in Tunisia under

the government of Ben Ali; however, in relation to participation in the protests, 53.6% felt that they

could make a positive contribution towards political change. This sense of enhanced personal efficacy

was coupled with a sense of group efficacy, as 80.4% of the sample 'agreed strongly' or 'agreed' that

the protest movement would achieve its goal of bringing down the Ben Ali government, while 92%

agreed strongly or agreed that they had a lot in common with those involved in the protests. These

attitudes were joined with a general level of national pride in opposing the regime, where 93.5%

agreed strongly or agreed that as Tunisians they needed to support the protest movement and 96.1%

agreed strongly or agreed that the events filled them with a sense of pride about being Tunisian. In

rationalist terms, the respondents were conscious of the risks involved yet at the same time aware of

the growing beneficial ratio of participants involved in the anti-government protests: 81.9% felt that their participation in protests could result in injury, arrest or other sorts of repression, yet 82.2% agreed strongly or agreed that from what they were able to see on the Internet, the number of people involved in the protests outnumbered those who supported the regime.

In terms of network embededness and intergroup collaboration it is interesting that 73.8% of respondents had learned through the Internet that a large number of people had signed up for a demonstration in their own town, city or municipality. 73% agreed strongly or agreed that in order to keep informed of what was happening, they started to connect with people on social networks that they had not previously known. Membership in popular social network sites varied across Facebook (98.4%), YouTube (46.4%), Twitter (42.7%), LinkedIn (23.0%), Dailymotion (13.7%), Flickr (7.4%) and Vimeo (7.1%).[29] Finally, 65.1% of the sample has more than 200 friends in their social network. But did the use of the internet and participation in social media contribute to mobilization for protest?

To address this fundamental question, we combined several related questions into two scales. First, we combined seven questions on the frequency of use of the Internet for protest-related activities, which include questions relating to online discussion of the political situation with known and unknown people, online searches for information on local and national protest events, and the use of the Internet to share information within Tunisia as well as to international audiences[30]. Second we combined questions on offline political behavior during the revolution, including such activities as participating in demonstrations; leafleting, wearing clothing, buttons or stickers with political messages; or discussing politics face to face Figure 2 shows both scales, where it is clear that there is a cumulative frequency for respondents who used the internet for protest-related activity, but their cumulative frequency of political activity tends toward the lower end of the scale.

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[29] The total is greater than 100% as respondents have multiple accounts.
[30] Respondents were offered three frequency options ranging from never (1) to frequently (4)
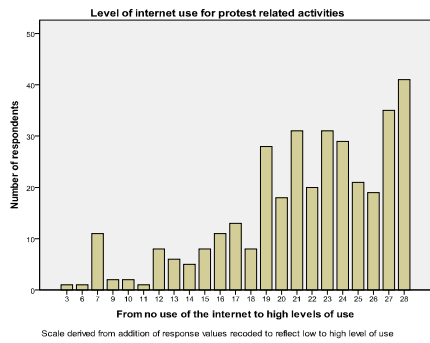
Internet use for protest-related activities
(discussion, searches, sharing)
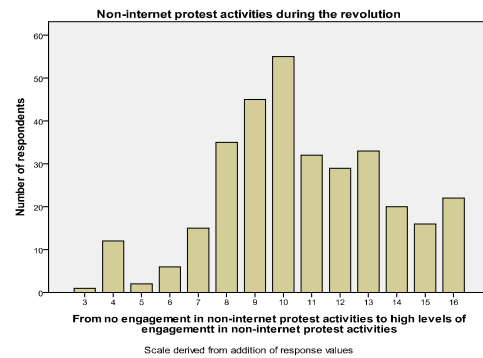
Protest activity
(demonstration, leafleting, displaying political
messages, discussion)

Figure 2. Internet use for protest-related activities and protest activities during the revolution

As a first look at the relationship between internet use and protest activity, we present a cross-tabulation based on dichotomizing both scales and comparing frequency counts for low and high internet use against low and high protest activity. The cross-tabulation (Figure 3) shows that respondents with low internet use were less engaged in protest activity than those respondents with high internet use (compare the shaded areas), where the difference in percentages is statistically significant ($\chi 2$ = 17.767; p < .001). Such bivariate results, however, need to be subjected to further analysis that can take into account additional explanatory variables to check the degree to which internet use is indeed related to protest activity.

Level of protest activity

Level of internet use		Low	High	Total
	Low	17 (48.6%)	51 (17.8%)	68 (21.1%)
	High	18 (51.4%)	236 (82.2%)	254 (78.9%)
	Total	35 (100%)	287 (100%)	322 (100%)

$\chi^2 = 17.767; p < .001$

Figure 3. Cross-tabulation of internet use and protest activity

We tested a series of increasingly complex models using ordered-probit multiple regression, which is the best statistical estimator given the ordinal scale that we created for political protest activity. Ordered probit calculates the degree to which independent variables raise the probability of a respondent moving into higher levels on an ordinal scale. Our dependent variable is thus the scale for level of protest activity and our independent variables variously include the level of internet use, a scale for opposition to the Ben Ali regime to be read as an indicator of socio-economic and political grievance, a scale for political efficacy, a scale for support for liberal religious views, level of education, occupational status, age and gender. The results for six models are shown in Table 1.

Table 2. Internet use and the propensity for non-internet political activity during the Tunisian Revolution

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Internet used for protest activities	.088***	.086***	.084***	.076***	.075***	.074***
	(6.99)	(6.82)	(6.59)	(5.88)	(5.83)	(5.61)
Opposition to Ben Ali regime		.103**	.131***	.151***	.152***	.152***
		(3.33)	(4.08)	(4.55)	(4.60)	(4.57)
Weak sense of political efficacy (pre-revolution)			-.117**	-.120**	-.120**	-.119**
			(-3.34)	(-3.31)	(-3.32)	(-3.24)
Support for conservative religious views				-.036*	-.042*	-.043*
				(-2.25)	(-2.59)	(-2.58)
Level of education					-.220*	-.216*
					(-2.40)	(-2.27)
Present occupational status						.007
						(0.20)
Age	.057	.055	.025	.019	.015	.025
	(1.36)	(1.29)	(0.57)	(0.43)	(0.35)	(0.50)
Gender	.077	.075	.102	.094	.142	.140
	(0.53)	(0.52)	(0.70)	(0.63)	(0.95)	(0.93)
N	290	290	290	286	286	281
X^2	50.04***	61.17***	72.32***	76.14***	81.93***	79.62***
Pseudo R^2	.037	.045	.053	.057	.061	.060

Order-probit parameter estimations; Z scores in parentheses; * p<.05 ** p <.01*** p < .001

Reading across the different models, the results show that protest-related Internet use is positively and significantly related to increased offline protest activity among the respondents, even after controlling for an increasing number of additional independent variables. There are other findings of note alongside the main finding for Internet use. First, across models 2 to 6, opposition to the Ben Ali regime also contributes to the probability of becoming involved in protest activity – a finding that goes in line with previous research on the effect of attitudinal and opinion issues on protest behavior (Lowrance 2006; Pierce and Converse 1990). Second, across models 3 to 6 a weak sense of political efficacy lowers the probability of engaging in political protest activity. This finding fits in with the recent revival of personality as an explanatory variable for political behavior in social science

research (Gerber et al. 2010; Mondak 2010). John et. al. (2011) for instance demonstrate that people with an internal locus of control are significantly more likely to start a mobilization.

Third, across models 4 to 6 support for more conservative religious views lowers the probability of involvement in protest activity. This is interesting since it supports the notion that despite the success of the Islamist Ennahda party in the October 2011 elections the protest movement was essentially borne by the secular segments of Tunisia's society (Lynch 2012; Noueihed and Warren 2012).

CONCLUSION: THE INTERNET AND SOCIAL MEDIA AS A RESOURCE

This paper has shown how the use of the Internet and social media in Tunisia contributed to the mobilization of anti-government protests. The paper has made clear that Tunisia's early commitment to ICT infrastructure development created an essential resource for the mobilization of nation-wide anti-regime protests. Increased frustration at the absence of socio-economic opportunity coupled with increasing exercise of government restrictions on internet use for political purposes provided the conditions from which significant cyber-activism was made possible. Digital elites traded on past examples of cyber activism, aggregated stories of government abuse and used technology to bypass state authorities to broadcast images and narratives about the Ben Ali regime that provided the information basis upon which movement activists were able to build. Internet use and social media helped overcome censorship barriers to information and provided a significant resource for individuals to calculate their 'risk threshold' and respond to the growing sense of crisis. The internet and social media contributed to transcend geographical and socio-economic disparities and provided the basis to construct a national collective identity supportive of protest action against an increasingly unpopular regime. In this way, the internet served as the foundation for the articulation and aggregation of grievance, and acted as a significant resource that helped overcome problems of collective action and foment a successful protest movement that resulted in regime change.

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