‘On the Ground’ in Sidi Bouzid: Investigating Social Media Use during the Tunisian Revolution

Volker Wulf1,2, Kaoru Misaki2, Meryem Atam2, David Randall1, Markus Rohde1,2

1Information Systems and New Media
University of Siegen, 57068 Siegen, Germany
[volker.wulf, dave.randall, markus.rohde]@uni-siegen.de
2International Institute for Socio Informatics (IISI)
Stiftsgasse 25, 53111 Bonn, Germany
misaki@iisi.de, meryem_atam@web.de

ABSTRACT
We present a study conducted in Sidi Bouzid, the Tunisian town where the Arab Revolution, also known as ‘Arab Spring’, started, and where the role of Web 2.0 and social media applications in the people’s uprising have been much discussed. We identify four relevant phenomena: (1) the publication of classified materials via WikiLeaks challenged the regime’s legitimacy, (2) Web 2.0 connected local activists with Arab satellite TV, (3) social media linked the young activists with actors in other cities in Tunisia, (4) social media allowed organizing resistance inside Sidi Bouzid. Methodologically, we question a too deterministic view of the role of the new media and the representativeness of investigative techniques that uniquely use the new media in order to assess their impact. At the same time, rigorous investigations ‘on the ground’ are extremely difficult. We present a modest and initial attempt to provide such an ‘on the ground’ approach, cognizant of necessary limitations. We compare our findings with studies which analyze data downloaded out of social media applications and suggest that studies of the kind we describe offer additional insight and play an essential role in better understanding political uses of social media.

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Arab Spring, social media, ‘on the ground’ studies

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION
IT applications, and social media in particular, have become part of the everyday infrastructure for different aspects of life (Pipek and Wulf 2009; Wulf et al. 2011). Social media also appears to be where ‘mobilization’ of one kind or another takes place (see e.g. Starbird and Palen, 2011; Palen et al. 2010). Our specific interest here is the case of political activism and participation. Web 2.0 applications have important characteristics which arguably differentiate them from other (mass) media. In contrast to traditional communication channels, first they have the potential to reach large numbers of people quickly, second, equally important, offer two-way communication, and therefore provide opportunities for users to produce content and send news to the world. Users, as the research cited above attests, are not just passive recipients but can act as political organizers, commentators, or videographers.

In principle, then, the new media afford new prospects for activism. Some literature in recent years suggests we have seen an increasing density of IT usage in support of political activism (Diamond 2010) as well as a raised interest in the CSCW and CHI communities in these topics (Rohde 2004, Saeed et al. 2010 and 2012, Ben Ali et al. 2012; Kavanaugh et al. 2012). It looks like social media systems together with mobile phones may well play an increasing role in political uprisings such as the post-election protests in Iran in 2009 and the series of uprisings transforming the Arab world (the so-called ‘Arab Spring’) following the Tunisian revolution in January 2011. To the extent that this is true, these technologies go some way to meeting Amartya Sen’s (1985) plea for new technology to focus on empowerment for choice and capability as an alternative to economistic and technological determinism. They may well bring with them new possibilities for engagement and participation (see e.g. Steyn and Johanson, 2011) and hold out a promise for addressing ‘digital divide’ issues (see e.g. Chen and Wellman, 2004).

Strong claims are sometimes made about the putative effects of these new affordances: “The use of new technology as potent political communication, and mobilization tool was demonstrated in the Arab Spring that engulfs North Africa and Middle East since the beginning of 2011. In this case, a combination of social media including the mobile technology has increasingly empowered the people to be connected together. This connectivity enables the citizens to create communities engaged on single issue, and bounded together by a common goal, which has caused unparalleled political revolution that has consumed forces of undemocratic political hegemony in the Middle East.” (Olaore, 2011)

At the same time, some skepticism has been expressed concerning this role, and there are reasons to be cautious. Gladwell (2011), for instance, argues that the role of social
media may have been rather overestimated by Western observers who did not have access to the events on the ground. Hassanpour (2011) even claims that sudden interruption of mass communication may accelerate revolutionary mobilization since it provides radicals with more effective venues for organization. Moreover, he argues that social media can act against grass root mobilization. It may discourage face-to-face communication and mass presence in the streets. Similar to more traditional and highly visible media, it creates greater awareness of risks involved in protests which in turn can discourage people from taking part in demonstrations. To formalize the dynamics of participation in political action, Hassanpour (2011) develops a graph theoretical threshold model. To support the plausibility of his model empirically, the author argues that the Egyptian uprising widened in participation and spread geographically after the Mubarak regime disrupted the Internet and the mobile communication for two days on February 28, 2011.

Even so, and as Anderson (2011) has pointed out, spontaneous eruptions of political protest across North Africa and the Middle East occurred in 1919 without the aid of such media. Further, the effects of this media role remain uncertain and will be contingent, at least to a degree, on local conditions, conditions which remain largely unexplored in research communities with a technological focus. As a Hansard report argues, while acknowledging the density of new media use: “One must be careful not to overstate the role of social media; it is only a tool. The previous example was largely done face-to-face, not online, and what social media can achieve is down to alignment with social behaviour and its effective social appropriation.” (Hansard Society 2012)

There is, in sum, little doubt that the new media have been extensively used for mobilization during the Arab spring but we as yet have no convincing picture of how in detail they were and are used, nor of their effects. The contradictory findings and predictions described above require, we suggest, empirical investigations of a more traditional kind in order to supplement (but not replace) the e-research that typifies investigation at the moment. In the following, we present early results of such a study, which investigates ‘on the ground’ how social media was used in the uprising in Sidi Bouzid, Tunisia. In this paper we describe this from the perspective of those having participated in it. We were particularly interested in how activists in a provincial town made use of Web 2.0 and social media applications in: (1) supporting the uprising over a period of four weeks and (2) spreading the news to the rest of the country and beyond its borders.

The paper is structured as follows: We first summarize the state of the art on social media use during the Arab Spring. We then provide some historical and socio-economic information on Tunisia and its revolution. After describing our research methods, we present the empirical findings with regard to the local uprising, as well as to the use of social media in its support. Finally, we discuss our results and their limitations.

STATE OF THE ART
Most investigations of the role of the social media in the Arab Spring have relied on digital traces in one form or another. Some kind of ‘trace’ ethnography or similar ‘logging’ methodology has been the main method by which data has been collected (Geiger and Ribes 2011). Examples include Ban Ani et al. (2012), who analyzed some 15,000 Egyptian blog entries which were posted in the period from 2004 to 2011 via an aggregator blog. Lotan et al. (2011) similarly examined Twitter usage in the Egyptian and Tunisian revolution. Looking for information flow of (nearly) duplicated tweets, they point out to the important role of both journalists and activists in disseminating news. Looking at data on the Egyptian revolution, Starbird and Palen (2012) confirm these findings. They analyzed Twitter data collected over a period of 13 days in February 2011. Looking at retweeting patterns, they speculate that information filtering and expressions of social solidarity can be meaningful for the social movement ‘on the ground’.

Kavanaugh (2012) analyzed statistical data on social media usage during the Arab Spring and compared the findings with her own data of a survey among Egyptian students, collected in June 2011. Moreover, in January and February 2011 she collected Twitter data from Egypt and Tunisia. She argues that social media had an impact beyond its general adoption rates due to the age distribution of the user population, largely concentrated on the protesting youth. While quantitatively marginal, she suggests that Twitter users were most likely opinion leaders and therefore Twitter usage probably had a disproportional larger social impact. As we have argued, however, there is a shortage of material that adequately describes how this media traffic actually translates into activity (political activism in practice). We know of no papers which investigate the role of the social media have played in enabling the Arab Spring ‘on the ground’. The research reported here begins to fill that gap.

TUNISIA AND ITS REVOLUTION
After the independence from France, Tunisia was ruled by two presidents, Habib Bourguiba (1956 – 1987) and Zine el-Abidine Ben Ali (1987 – 2011) who impeached his predecessor in a bloodless coup d’état. Bourguiba’s secular reform agenda included female emancipation, a state-run healthcare system, public education, fostering of literacy, administrative institution building, and attempts to a partial industrialization. Ben Ali mainly continued these politics, focusing on economic development, bolstering exports, foreign investment, and tourism. Throughout four decades, Tunisia managed to achieve an annual GDP growth of 4-5% (CIA World Factbook 2012).
While economic growth led to the emergence of a middle class, the Ben Ali regime was increasingly characterized by high levels of corruption and rising unemployment among young, often well-educated Tunisians. The political system was characterized by electoral fraud and a harsh suppression of the opposition, including people with an Islamist background. National radio and TV stations as well as newspapers were censored and under strict state control. However, since the 1990s satellite TV channels such as Al Jazeera, with its headquarters in Qatar, started to fundamentally change and influence the media landscape all over the Arab World. Most Tunisian households are able to receive satellite TV. While there are only 1.3 million telephone landlines, about 11 million cell phones are in use (of a population of 10.6 million inhabitants) (CIA World Factbook 2012). By the time of the Tunisian Revolution a significant proportion of these mobiles were smartphones with cameras and even internet access. At the end of 2010, Tunisia had one of the highest rates of Facebook usage among the Arab states (17.6%), which was strongly increasing during the months to follow (22.5% in April 2010). Young people made up 75% of the Facebook users. Twitter, in contrast, was only used by 0.34% of the population (Kavanaugh 2012).

In comparison with the coastal areas, the center of Tunisia, specifically the districts of Kef, Kasserine, Sidi Bouzid, and Gafsa, are economically disadvantaged. The standard of living is lower and the unemployment rate among young people is higher than in the coastal regions. Since 2008, these regions have already seen several local uprisings which were violently suppressed; specifically those in Gafsa in 2008 and in La Skhira in 2010 (cf. Bettaieb 2011).

Sidi Bouzid is a town of approximately 40,000 inhabitants, located inland about 200 km southwest of Tunis. The uprising in Sidi Bouzid started on December 17, 2010 when a street vendor named Mohamed Bouazizi immolated himself after a female policeman had humiliated him by accusing him of cheating his customers. The self-immolation happened in front of the governor’s office after the governor had declined to meet Bouazizi. On the same day the self-immolation led to a spontaneous demonstration by Bouazizi’s family members and other members of the Sidi Bouzid community. Three days later the demonstrations had reached neighboring villages (Mezzouna, Ouled Hafez) and districts (Kasserine, Gafsa, and Sfax). As suppression efforts by the police became more violent in Sidi Bouzid, the demonstrations reached the capital, Tunis, for the first time on December 27. Mohamed Bouazizi died on January 4. Two days later the first countrywide strike organized by the lawyers’ association took place. Following a speech by Ben Ali on January 10, demonstrations spread throughout the country the next day. These demonstrations were subsequently suppressed by the Ben Ali regime. Allegedly, snipers and police forces killed hundreds of protesters. Ben Ali left the country on January 14, 2011 for Saudi Arabia, ending the first phase of the Tunisian revolution (cf. Bettaieb 2011).

RESEARCH METHODS

The data for this paper were collected in two phases. The central themes of this paper emerged from a 10-day visit to Tunisia from December 28, 2011 to January 8, 2012. In a second phase, we elaborated on our findings during a 7-day visit to Sidi Bouzid from August 14 to 21, 2012. At the time of the first anniversary of the Tunisian revolution, the first and second author travelled by means of public transportation from Tunis, the capital, along the coast south up to the island of Djerba. Later they visited districts in the center of the country: Tozeur, Gafsa, Sidi Bouzid and Kairouan. They spent two days in Sidi Bouzid. The findings of the first phase are mainly based on data collected at various occasions in Sidi Bouzid. A starting assumption was that the uprising in Sidi Bouzid was a contingent event, driven by the general dissatisfaction of local citizens and precipitated by the Bouazizi suicide. Therefore, we focused on interviewing citizens who were present during the uprising and participated in local activities contributing to the uprising.

We chose the small square in front of the governor’s palace to come into contact with potential interviewees. The site of the self-immolation of Bouazizi was still a meeting point for citizens and political activists. During our first visit unemployed youths still maintained tents to remind the public of their problems and to show their dissatisfaction with the developments after the revolution. After their arrival in the city, the first two authors spent some 5 hours there conducting informal interviews. The interviews were conducted in the first instance with two persons who had taken part in the local uprising the year before. Subsequently, two small group discussions with people at the square took place. Later on, further informal interviews were conducted in the hotel, a local youth cafe, and during two long taxi rides. On the first and second day, two more activists were interviewed in front of the governor’s palace. Overall, 12 interviews were conducted which lasted between 10 minutes and 2.5 hours. While the places for the interviews were chosen deliberately, the interviewees were selected on an opportunistic basis.

The interviews were non-structured and open ended. After some relationship and trust building between the interviewers and the interviewees, the local actors were typically asked to describe their personal background, how they perceived the last year’s uprising, and which role they had taken in it. The interviews also dealt with the usage of the internet and social media applications. The interviews were conducted in French and English depending on the interviewees’ foreign language capabilities and were not recorded.
Trust building turned out to be a real challenge. Locals typically assumed that the first author was a Western journalist of whom they had seen many during the last year. Certain actors distrusted Western visitors, specifically journalists. One actor, a translator by profession, expressed this attitude towards the second author – an Asiatic native. He mentioned that from his experience, Western media did not take local informants seriously. Their coverage follows, he argued, a Western political agenda, does not seriously reflect local voices, and focuses on facts about Sidi Bouzid which fit into such a world view.

Given the delicate political climate at the time of the uprising’s first anniversary, we felt it inappropriate to write explicit field notes in front of the governor’s palace. We also assumed that audio recording would have a negative impact on the interviewees’ willingness to talk to us about these politically still sensitive issues. Still, in the course of the interviews, we wrote down some brief notes inside a travel guide book and took photos selectively with an iphone. However, we later found that using an iphone in public could put us in dangerous situations. In the evening, when the authors left a youth café, an attempt was made to forcibly remove the iphone from them. The resulting scuffle saw the first author falling to the street floor, shouting loudly for help. Given these circumstances, comprehensive summaries of the interviews, group discussions, and observations were only written in the evenings back at the hotel.

The results emerging from the interviews were extended and triangulated by findings from informal interviews conducted during the trip in other parts of Tunisia. The reliability of this information was also confirmed by an analysis of press reports and publications, specifically (Bettaieb 2011). Nevertheless, we were conscious that our empirical results were ‘opportunistic’ and perhaps lacked a certain robustness. Therefore, we collected additional empirical data in a second phase of the study. The third author who conducted the field research in September 2012 is a translator of Arabic and lecturer for intercultural communication. She conducted three semi-structured interviews based on guidelines emerging from the results of the first phase. The focus of the interviews was on social media use during the time of the uprising, by the local population in general, and, more specifically by the interviewees themselves.

In this second phase, interviewees were partly recruited via the third author’s social network. She had worked before as a translator for a Tunisian businessman. One of the businessman’s employees was from Sidi Bouzid and introduced her to local political activists: (1) a young member of the moderate Islamist El-Nahda Party who, however, had not been a member of the party at the time of the local uprising, (2) a 19-year-old Facebook user, (3) an internet “activist” to whom the author was introduced through the Facebook user; and who worked as a producer and cameraman for a local internet radio hub and web-based news platform. The notion “activist” implies here that this person attended some part of the local events in person. The interview with the young member of the El-Nahda Party took place in the party’s local premises, the one with the young Facebook user in the house of the contact person’s family, while the interview with the internet activist and radio producer was conducted in a local street café. The fact that the third author was personally introduced to her interviewees played a crucial role in terms of trust and relationship building. Therefore, it was possible to audiotape all of these interviews. They lasted between one to three hours, one interview spanned two sessions. The interviews were partly translated from Arabic into English and transcribed by the third author.

As with the first phase of the study, the third author conducted additional informal interviews: in her hotel, during long bus rides, in a tea house, and when invited to the interviewees’ families for “iftaar”, the fast-breaking meal during Ramadan. She conducted a total of 15 informal interviews in Arabic which lasted between 10 minutes and 1 hour. Necessarily, interactions which involved - for instance - being invited to her contact person’s and the young Facebook user’s families entailed an ‘observer as participant’ role in discussions. Such an approach was both necessary and desirable since trust issues, as we had previously argued, were paramount. By trying to become friends, or at least, to be accepted by members of the community, she built trust so the target group did not feel threatened by her presence (Howell 1972). As an example, the third researcher adopted this ‘observer as participant’ role when joining the internet activist and local radio producer: in the evenings he and his friends would sit in a local street café drinking tea and smoking their water pipes. During some of these sessions the researcher preferred not to record any interviews but instead to adopt the very informal stance of attentively following the conversation around the table. These observations helped her to a better understanding the social context of the interviewees’ media use.
SIDI BOUZID AND ITS UPRISING
The personal background of the interviewees reflected the economic problems Sidi Bouzid has to face. During the first phase of research conducted in front of the governor’s palace the authors interviewed two young, well-educated adults aged between 20 and 30 who could not find proper jobs. One male interviewee went abroad for two years to work (illegally) in the Netherlands, Germany and China. Upon his return, he could not find an adequately paid job and by the time of the interview he depended on a low paid job in the building industry. Our first interviewee was a young mother with a university degree in biology who had not yet found a job either. She lived together with her husband who also had graduated from university and, like her, could not find an appropriate job. In order to make their living together with their three children, they had to depend on financial support from their families.

The interviewees also described how they experienced the suppression exerted by the Ben Ali regime. The male interviewee who had left Tunisia described how Tunisians living outside the “Zones Touristique” were controlled with regard to their contacts to foreigners. He said that the police registered these contacts. Media was strongly censored and critical reports were banned from publication. Therefore, accounts of local uprisings, like the one in Gafsa in 2008 which was similar to the one in Sidi Bouzid, were not widely known inside Tunisia, at least not during the time when these rebellions took place.

During the second phase of the research, the third author was referred to one interviewee, an ‘internet junkie’, whose pattern of life may explain why internet and Facebook play such an important role in this specific social environment. When invited by his mother on the occasion of the first day of the Eid el Fitr, the feast at the end of Ramadan, the third author witnessed this 19-year-old young man online continuously on his smartphone, for example when he walked with the author to his favorite tea house where he and his friends would hang out until late at night. At the family’s home the mother pointed out that all through the evening her son was checking his Facebook account. At the time the interview was conducted the young man was about to finish school. The mother worked as a web designer on a freelance base, and her husband served in the medical sector. Both parents told us that they regularly record films and music from TV or the internet and are thus very comfortable with using all kinds of electronic devices.

There is little doubt that the new media are pervasive among this educated population. The mother smiled when explaining that “nowadays” young girls even meet their future husbands via Facebook. Young people in Sidi Bouzid otherwise seem to have rather limited choices regarding how to spend their free time which may also partly explain this usage density. Allied to the fact of the general economic situation, this kind of ‘chat’, either face-to-face or via Facebook, was - as the internet activist put it - “the only pastime these youngsters have”. On the other hand the limited pastime opportunities for young people originate in the rather traditional and patriarchal family structures where sons and daughters stay with their families until they get married. Broadly, therefore, young men visit street cafés while young women are more likely to be at home. Both groups, however, actively use their Facebook accounts while engaging in these constrained forms of social interaction.

Against this social background, the uprising in Sidi Bouzid lasted from December 17, 2010 until January 14, 2011 (the day of Ben Ali’s resignation). According to the information given by the young El-Nahda member, in the beginning it was only individuals who took to the streets; the protest was not organized and took place in a spontaneous manner, he said. The demonstrations continued throughout the four weeks of the uprising. However, they seem to have differed in intensity. Soon after the beginning of the demonstrations the Ben Ali regime sent a large number of additional police forces into the city. Our interviewees spoke of about 3.000-4.000 additional policemen who had built up a provisional camp inside the town. Some of the police forces left Sidi Bouzid and moved to other towns when civil uprising began there. The policemen used barbed wire, tear gas, and rubber bullets. At some point, it seems, there were also snipers of the Presidential Guard in town. However, it seems that they used rubber bullets rather than real ones. One of our interviewees showed us a scar on his leg that he said resulted from a rubber bullet. Our interviewees reported that in Kasserine and towns closer by, live ammunition was used by the police and led to dozens of injuries and deaths. Several demonstrators died when climbing electricity poles to engage with the demonstrating crowd by shouting their support.

The extent to which these disturbances constituted a ‘danger’ very much depended on individual perspectives. One taxi driver reported that, for him, life continued ‘more or less as
smartphones were, in contrast, rather common in Tunisia. They were later used by the protestors. Cell phones and

THE ROLE OF SOCIAL MEDIA

At the time of the uprising, the internet was not widespread in the households of Sidi Bouzid, at least via PC-based hardware. It was available in five internet cafes, run by a start-up (‘Publinet’). Some schools had internet access; they were later used by the protestors. Cell phones and smartphones were, in contrast, rather common in Tunisia. Besides camera functionality, some smartphones offered mobile access to the internet. The Ben Ali regime had blocked some www-sites for political reasons, but, significantly, not the ones of WikiLeaks.

According to the interviewees social media played a key role in promoting the people’s uprising. Almost all interviewees regarded Facebook as important for the revolution, along with the Qatar satellite TV program Al Jazeera, and a number of other media resources. In a personal conversation, a newly appointed Tunisian minister (a member of El-Nahda, the moderate Islamist party, who had been a political prisoner for almost 20 years under the Ben Ali regime) called both Facebook and Al Jazeera ‘heroes of the Tunisian revolution’. The following effects were attributed by the interviewees to social networking systems.

Information disseminated via Wikileaks: The cables of the US embassies played a major role in preparing the uprising by delegitimating the Ben Ali regime. According to our interviewees there were mainly two topics of importance in the cables of the US embassy in Tunisia: (1) The documents offered a detailed account of the corruption of the Ben Ali regime. The diplomats had described in detail the ways in which the presidential family was corrupt, especially the relatives of Ben Ali’s second wife, Leila Trabelsi. The relatives of Ben Ali’s wife had controlled the important sectors of the Tunisian economy and taken bribes. (2) The cables also revealed the intense level of cooperation between Ben Ali and the State of Israel. Wikileaks showed that the Ben Ali regime had provided information to Israel to help in the murder of a Palestinian leader in Tunisia. Moreover, the cables revealed that Ben Ali had business relationships with Israel. Even before this information had been revealed to the Tunisians, they knew that the regime was corrupt; however, our interviewees pointed out to the fact that the involvement in the assassination of the Palestinian leader clarified the huge discrepancy between pro-Palestinian rhetoric and the actual politics of the Ben Ali regime. The young mother stated, “Despite all announcements of Arab solidarity, you could see who their real friends were.”

Reaching international media: In contrast to Egypt, in Tunisia all terrestrial TV stations were strictly state controlled (see section 3) and did not report on the events in Sidi Bouzid. According to almost all of our informants, satellite TV played a key role in making the local protests known countrywide (see section 3, concerning satellite TV distribution) and provided them with a basis on which they could decide whether or not they would actively take part in the demonstrations. Al Jazeera was the first and most influential TV channel in reporting on the Tunisian Revolution (e.g. see the quote from the Tunisian minister).

Al Jazeera did not have a correspondent in Tunisia. The station had been banned by the Ben Ali regime. However, on the same day that the self-immolation of Mohamed Bouazizi took place, Al Jazeera broadcast the news on this event via Satellite TV. However, the video materials of the self-immolation itself were not released at that point in time.

When doing research on the ground we encountered conflicting accounts for how Al Jazeera became so rapidly informed of events. According to the local internet radio producer, the video that shows Mohamed Bouazizi setting himself on fire was taken by two eyewitnesses both of whom

![Figure 3: Sidi Bouzid, Monument of the Tunisian Revolution (January 2012): A young man appropriates the monument to pose for the photo.](image)
were filming with their mobile phones. One of the eyewitnesses was working for the ambulance and in charge of bringing the heavily injured person to the local hospital. The other eyewitness happened to be on the scene by chance. The internet radio producer added that some other individuals also might have filmed Bouazizi’s self-immolation. A third activist, it seems, subsequently uploaded the video material of the self-immolation to his public Facebook account. Then Ali Bouazizi (not one of Mohamed Bouazizi’s relatives) as well as at least one other activist called Al Jazeera in Qatar to inform them of the event. This means that in this version of how the information flowed the traditional media (Al Jazeera) followed events on the new media (Facebook).

The young member of the El-Nahda Party disagreed with this version of the information flow, saying that the initiative to search for a person who could give a statement on the event came from an Al Jazeera journalist who was originally from Sidi Bouzid. According to the El-Nahda member, the Al Jazeera journalist was probably first called by someone from Sidi Bouzid and then tried to find a suitable person from Sidi Bouzid who could give a statement. This person was, according to the young El-Nahda member, Ali Bouazizi. In this alternative version, the traditional media played a more active critical journalistic role.

While we were not able to resolve the contradictions between the two versions, both agree the Facebook platform played an instrumental role in making the material accessible to Al Jazeera, the Qatar-based satellite TV station. Also, both interviewees’ versions agree on the fact that it was by means of a telephone call that the broadcasting station’s attention was drawn to the events in Sidi Bouzid.

What is not in doubt is that, in the course of the evolving uprising, people/citizens on the ground continued to take photos and videos of the demonstrations and upload them to the internet; in turn Al Jazeera continued to monitor and sort out those photos and videos from the internet to broadcast them more broadly over satellite TV. Many of the photos and videos of the demonstrations were recorded with mobile phones and then uploaded to Facebook. The internet activist was of the opinion that “95% of this information was true and provided evidence” of what was happening.

As far the role of international media is concerned, according to the receptionist of the only Western hotel in town, international journalists arrived in Sidi Bouzid on January 10, 2012, four days before Ben Ali’s resignation (of course, they would not have known at that time that the resignation would come within this period). Specifically in the first phase of our study interviewees expressed their distrust towards Western mass media they claimed had not covered their uprising for a long time and reported on Tunisia in what they saw as a biased manner (see section 4). Al Jazeera, in contrast, was trusted for its perceived impartiality and quick response to events.

**Reaching out to other cities in Tunisia:** A significant number of activists used their network of friends, specifically those who had Facebook accounts, to make people outside of Sidi Bouzid aware of what was going on in the town. The young mother explained that she had uploaded photos of the demonstrations to her Facebook account and pointed out the existence and the extent of the rebellion in Sidi Bouzid to friends in other Tunisian cities.

Since Sidi Bouzid does not have a university, all young adults who want to receive university education leave the town. The young mother explained that during her time at university she built a network of acquaintances and friends in other parts of the country. Facebook, it seems, is widely used by young Tunisians to foster and maintain networks after university. These country-wide social networks seem to be one of the reasons why the news about the ongoing political activities in Sidi Bouzid started to circulate widely. Other cities followed rather soon with demonstrations (Kasserine, also Tabâ and Sfax). Specifically important were two places close by called Regueits and Barzem.

In an overall estimate of impact, the internet activist and producer of the Sidi Bouzid internet radio was even of the opinion that information spread via public Facebook accounts (especially through the “share” function) played a more important role in making the local events known to the Tunisian public than the satellite programs broadcast by Al Jazeera. The sheer speed with which information about the self-immolation went “viral” was, he argued, unprecedented. The previous uprising of 2008 in Gafsa had failed, he said, because at that time there was no medium available to spread the news across the country. Instead, he explained, all the news concerning the uprising in Gafsa was able to be suppressed by the Ben Ali regime. While this judgment may be partial a result of this activist’s overestimation, it makes clear how important the role attributed to Facebook in this context is.

**Organizing resistance inside the city:** According to our informants Facebook also played a major role in helping activists and others to organize the uprising. The organizers of the local demonstrations used Facebook to develop and communicate their strategies for the next day, such as where to gather or where to build barricades overnight. For example, one of the male interviewees with whom the first authors spoke was able to access the internet via his smartphone. He told us that he searched Facebook regularly to find out when the next planned demonstration would take place and where to meet. If he found some announcements, he distributed this information among other potential participants and acquaintances. The ones without internet access he called with his mobile phone. The young mother told us that even the building of barricades was planned and reported via Facebook. On Facebook the demonstrators also shared advice on how to deal with attacks by the police, e.g.,
“for tear gas do not use water but milk”, or on “how to build molotovs”.

The demonstration in Tunis was the first one with a nationwide call for participation and seemed to have been organized mainly via Facebook. The use of telephones and the internet was especially important during the days of curfew when the citizens were not allowed to leave their houses at night. At the same time, it should be stated that the effects of this curfew were intermittent - we were told that gatherings in street cafés continued to take place, albeit in relatively small numbers.

Dealing with the regime’s suppression in the virtual world:
Importantly, the police of Ben Ali did not seem to be completely aware of the importance of social media nor well enough equipped to deal with it technically. Champagne (2012) argues that the version of the internet surveillance software delivered to the Tunisian secret service by an Italian company was not yet fully functional. However, the local police authorities did act against social media users. It was possible for them to do so because the Facebook accounts that published information on the uprising were usually set to public access to reach the largest possible number of users, in Sidi Bouzid as well as in other Tunisian cities. The internet activist and local radio producer interviewed by the third author said that already during the first three days of the uprising a total of 200 persons, among them 60 young adults, were arrested on charges of having uploaded video materials, pictures and news of the local uprising to their Facebook accounts. The internet activist added that as a result, Facebook and internet users began to use nicknames instead of real names in order to protect themselves from prosecution. More experienced users connected to the internet via proxy servers, hot spots, and used other ways to hide their identities. In the words of another person we talked to the declared goal was to leave “zero trace”. As soon as one Facebook account was shut down by the authorities, a new one was opened under another name. The most “effective” measure taken by the authorities to suppress and obstruct the information flow between local internet activists was, however, to reduce the speed of data transfer by manipulating and pressurizing the local provider. Thus, it took a long time to upload video materials to Facebook accounts. A solution sought by the internet activists was to send the material abroad via email in a low resolution, often to friends in France, and to ask them to upload it for public use.

DISCUSSION
Our empirical findings indicate the important role Web 2.0 and specifically social media played in (1) overcoming the limitations of a strictly censored national media system; (2) converting a network of friends into a base for political activism; and (3) organizing political action under harsh oppression. At the same time, we should be careful not to ascribe these outcomes to the new media alone. Their role was, without question, mediated by a number of factors. Firstly, the existence of a large class of well-educated but economically underprivileged young people with a great deal of time on their hands created both a politically aware class which actively sought information, offered in parts through WikiLeaks, and a Facebook culture through which information could be disseminated. There is little doubt that resentments caused by the association of high educational standards, including a degree of ‘internationalisation’, with low economic expectations created a climate that a Facebook generation was able to amplify. Again, a ‘learning’ process was engendered, such that privacy settings became used to maximize exposure of images and video; anonymous accounts and proxy servers were used by the technically competent, and their use disseminated to others.

Secondly, the role of the new media cannot be understood without understanding the way in which it was used by the mass media (notably Al Jazeera) and how ‘word of mouth’ acted to amplify these communications. What is especially interesting is the way in which social and mass media were mutually elaborative. Though national mass media were strictly censored in Tunisia, satellite provision was not. Ironically, it was the coverage by a French government-owned satellite channel of the Wikileaks’ story that helped destabilize a regime that was for a long time a close ally of the West, especially France.

It is intriguing that citizens from a provincial town in Tunisia were able to reach the Qatar satellite TV channel Al Jazeera; and, in turn, how Al Jazeera was able to make use of a social media application (specifically Facebook) to cover a political uprising in a country in which it was not allowed to have journalists in place. Specifically among young Tunisians, openly accessible Facebook pages are appropriated in such a way that they almost function like a mass medium.

Thirdly, some part of the use of the new media was a function of the ineptitude of the regime. The amplifying effect of new media use was additionally facilitated by the relative technical incapability of the Ben Ali regime to fight for its interests in social media spaces (Champagne 2012). We have documented some of the strategies internet activists applied to overcome interventions by the government’s security apparatus. However, we should remind ourselves that government behavior in cases such as Iran or Syria has been demonstrably different. There, social media spaces have been used for technologically sophisticated secret service activities. To better understand the role social media can play in political uprisings, more research is needed into governments’ use of surveillance technologies, such as Deep Packet Inspection, and activists’ counter-reactions.

To summarize, the events in Tunisia can be understood as being the consequence of a number of interlocking elements, of which the new media are one, albeit important, part. We agree with Kavanaugh (2012) that the Tunisian demographic, young people (aged 15-29) making up a large
part of the total population, and their relatively intense appropriation of social media contributes to the political importance of these media. The young Tunisian peoples' high level of education and economic dissatisfaction created both an information seeking and an information disseminating network. A mutually elaborating amalgam of the new media and the more traditional mass media then facilitated and amplified these effects in specific ways. Taken together, they constitute an ‘information ecology’ which explains the patterns we describe.

We have alluded to the fact that ‘on the ground’ studies of the kind we advocate are, in circumstances such as these, difficult and occasionally dangerous to conduct. They place serious methodological limitations on investigation. The data presented were gathered between 12 to 18 months after the uprising took place in Sidi Bouzid. The mass media coverage may have influenced the interviewees’ perceptions with regard to the importance of social media. Collecting the data was not easy due to the inaccessibility of interviewees, their attitude towards foreign investigators, the situational dynamics, and security concerns on the side the interviewees as well as on the side of the researchers. We, nevertheless, believe that this study led to relevant insights. Our data, collected from local interviewees, can be seen as complementary to data collected from (micro) blog sites (Kavanaugh 2012, Ban Ani et al. 2012). For understanding the role of social media usage in political uprisings, such as the Arab Spring, ‘on the ground’ studies seem to us desirable if not essential. Following the result of our investigation, there are at least three reasons why ‘on the ground’-studies are required:

1. They can relate social media usage to a broader understanding of the actors’ political and social positions and practices, such as the motivational factors that illustrate their participation in discussions, demonstrations, or their engagement in political parties and trade unions.
2. They allow understanding of how the usage of particular social media applications works as part of the (collective) information and communication ecology of citizens and political activists. This way it is possible to investigate how people perceive certain information (received via different applications), how actors switch among different social media applications, how they transfer data to tools for individual communication, and how they try to reach mass media.
3. They may allow understanding (aspects of) secretive media usages that would typically not be found by traditional on-line data collection methods. Thus, the use of anonymous accounts, proxy servers, differing public and private Facebook settings, and so on, is largely invisible to online investigation. Investigations into usage data of social media applications can uncover interesting pattern of appropriation. By analyzing retweeting behavior, Starbird and Palen (2012) could, for example, reveal interactions between those who were “on the ground” in Cairo and those who were not.

While this is an interesting phenomenon, its importance and relevance ‘on the ground’ remain unclear. We do not know what overall use density looks like in such cases without some kind of triangulation. Interestingly, Twitter usage was not mentioned in the interviewees’ accounts from Sidi Bouzid while it seems to be the main social media application to be investigated in understanding the Arab Spring (Starbird and Palen 2012; Kavanaugh et al. 2012). Tweets can be rather easily downloaded by researchers far away from the events. However, Twitter may not be the most important social media, at least not for emerging uprisings starting in provincial towns. Accounts mainly based on tweets may not offer a differentiated enough picture of the events on the ground.

CONCLUSION

We believe that investigations of on-line materials needs to be complemented by ‘on the ground’ studies, such as this paper, even though on the ground approaches may have their own limitations. As we have already stated, we do not see such studies replacing ‘trace’ ethnographies or indeed any other form of online inquiry. Rather, such on the ground studies provide a useful method of triangulation or ‘reality’ testing.

Hassanpour’s (2012) rather generic model, which argues that social media can impede grass root mobilization seems to be problematic. It does not take the historically grown differences in societies, the structure and the location of the uprising, and the variation of (social) media types into account in the ways we suggest. Once one does, we find that glosses on the ‘Arab Spring’ disguise local variation. In the case of Tunisia, Sidi Bouzid was a local focal point in which an uprising started in the countryside and spread to the rest of the country, including the capital. It shows a different appropriation of social media than one which is based on a central square in the capital – as it was the case with the Egypt uprising centered around Tahrir Square.

Our study is an exploration of the role social media played in enabling the Arab Spring in one context. The role of political organizations such as trade unions, the lawyers’ association, or the Muslim Brothers should not be underestimated and needs further investigation. However, our data seem to indicate that social media, in conjunction with the more traditional media, performed an amplifying role for people who might otherwise have been content with a lower level of participation (Arnstein 1969).

While the role of new (social and mobile) media will continue to be mediated by local and contingent factors, our aim with this paper is to make a small contribution to that literature which includes aspects of e-governance, the ‘digital divide’ and participatory agendas. This discourse has as much importance to Western countries as to those in the Middle East, given the sometimes over-stated arguments about the determining role of the new media. Our research suggests that a nuanced view of real political and economic
forces as well as online affordances is desirable to better understand the design and appropriation of social media in fostering social participation.

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