1. Introduction

This paper investigates the role that the social network platform Facebook played during the so-called Jasmine Revolution in Tunisia at the end of 2010, leading to the toppling of the Tunisian dictator Zine el-Abidine Ben Ali one month later. While in the past, the control of traditional mass media was a major factor for corrupt regimes to maintain their power, the Tunisian case is the first example in the Middle East of a successful revolution brought about by circumventing traditional mass media, transforming an online social media platform originally designed for private communication into a political communication tool. While the Tunisian mass media as well as most Internet sites were tightly controlled and censored by the Ben Ali regime, control over the social network site Facebook proved to be futile. The paper analyzes the case of the Jasmine revolution in order to explain the specific role that social network communication played in the sequence of political events. For this case study, a five-dimensional typology was developed to analyze the various functions the social network platform performed. A further aim of the study is to provide a first typological model of social media functions to be tested in future comparative studies of political and media systems in transition.
village in central Tunisia on December 17, 2010. Mohamed Bouazizi, a street vendor of fruits, who had been harassed by police and corrupt bureaucratic practices for years, burned himself alive (Abouzeid, 2011; Howard & Hussain, 2011: 36). In the weeks that followed hundreds of thousands of Tunisians rose up in what would become the Arab Spring movement. Although Bouazizi’s act of self-immolation is generally considered as the catalyst of the movement, a closer look at history reveals that Bouazizi was not the first to set himself afire. Allegedly, one month earlier, a man called Chamseddine El Hani had burned himself in Matlaoui and, in April 2010, a man named Abdesselem Trimech self-immolated in Monastir (Ryan, 2011, January 26; Tunisian Girl, 2010). These previous incidents led the authors to question, why previous self-immolations did not spark a similar development as Bouazizi’s suicide?

Although the importance of free media for democratic transitions has been discussed extensively (e.g. Randall, 1998: 3; Garon, 2003; Schmitt-Beck & Voltmer, 2007; Farrell, 2012), the question of how this relationship has been influenced by the emergence of social networking platforms like Facebook is ongoing (Howard, 2010; Shirky, 2011; Morozov, 2011; Goldstone, 2011). Since 2011 many publications on the role of digital media (e.g., Howard & Hussain, 2011, 2013), social media (e.g., Shirky 2011; Kiss & Rosa-García, 2011; Hamdy & Gomaa, 2012; Lim, 2012; Schmidt 2012; Northwestern University in Qatar, 2013), and social networks (ASMR, 2011, 2012; Nisbet, Stoycheff & Pearce, 2012) in the Arabic Spring uprisings have been published. The majority of these papers focus on Egypt or Arab uprisings in general. With the exception of the paper and the follow-up book by Howard and Hussain (2011, 2013) which compare the role of digital media in Tunisia and Egypt, the majority of the authors treat the mass movements in North Africa as a single phenomenon, focusing on the general characteristics of the usage and influence of social media in several countries. While we do not deny the contagious effect, and the similarities, our research is focusing on the first country in North Africa and the Middle East in which the revolutionary spirit emerged digitally, namely Tunisia. We propose a theoretical model for analyzing the functions of the online social platform Facebook, which may be compared to other cases in order to identify not only the commonalities, but also the differences of the Arab social movements’ communication patterns in 2011, and their long-term consequences. Thus, our contribution is, apart from shedding light on the case of the Jasmine revolution, to propose a conceptual tool for further comparative research (see Esser & Hanitzsch, 2012).

2. Research Design

In order to assess the role that Facebook communication played throughout the Jasmine Revolution a five-dimensional theoretical model was created, which is first explained and then applied to the case of Tunisia (see Figure 1). This research is guided by the following major research questions: How, and to what extent did Facebook facilitate the outbreak of the protests? What were the functions of the social media platform during the events? What was the role of visuals in this process? Why was there a massive reaction following Bouazizi’s self-immolation, and why did this not happen in the case of earlier self-immolations? Our research is exploratory in aiming to create a theoretical model of the functions a major social networking site had during the political upheaval in Tunisia at the end of 2010, and the beginning of 2011. This model is five-dimensional (see Figure 1), every dimension relating to a specific function that Facebook had during the unfolding events. One key characteristic of Facebook communication during the Tunisian uprising is its hybridity (Kraidy 2005; Chadwick 2013). The hybrid character of the online social network fuses formerly separated interpersonal levels of communication with public and political communication on a potentially global level. We are interested primarily in the functions of Facebook communication. Although the functions of media communication are intrinsically linked to the question of their effects, we will only focus on the functional aspects in this exploratory study, since the empirical measurement of the actual effects would go beyond the scope of a single paper. In our five-tier model (see Figure 1) we ask for the potential functions of Facebook communication. The same criteria are then applied to our case study which looks at whether and how these five functions played a role in the Jasmine revolution.
Based on previous research the identified five functions of Facebook communication in a political situation of transition are: The demonstration function, the widening function, the bonding function, the acceleration function, and the anonymity function. Each function approaches Facebook’s communication potential as a potentially novel mass medium from a different angle and analyses from a theoretical understanding to what extent the online platform exposed its users to pro-democratizing forces. The five dimensions represent a selection of functions which the authors identified as most relevant for the research interest of this paper. While some of the functions have been discussed extensively in the literature with respect to media in general (such as the demonstration, the acceleration, and the anonymity functions), others (the widening function and the bonding function) were developed by the authors themselves. To the best of our knowledge, none of these functions have been applied with reference to social networking platforms before. In its entirety, the model represents the theoretical framework that will allow for a thorough investigation of the role Facebook played during Tunisia’s political transition. Finally, the five dimensional model is meant as a first step and foundation for following studies comparing the role of social media platforms during times of transition. After discussing the characteristic features of Facebook communication in the next chapter, the five functional dimensions will be introduced, and then applied to the Tunisian case. The results, and also the limitations of this study will be discussed, concluding with an outlook on future research in the field of social network communication and systems in political transition.
spheres (Toffler & Toffler, 1995: 31). The plural applicability of social networking platforms potentially promotes individual empowerment, particularly in political systems where the public and the private sphere, and their channels of communication were segregated, and the public sphere was heavily policed and controlled by the state and official institutions, including the dominant mass media, which had become corrupted by the ruling class. In a free society, Facebook has additional potential to forge social connections, foster group formation, and help create friendships (Saveri, Rheingold & Vian, 2005: 22; Kirby, 2009: 122). These primary functions of Facebook were also transported to political and societal settings that differed considerably from the communication and media context in the US or Europe. There e.g., the function to create social bonds between strangers had different implications than, when applied to a political and socio-cultural context that did not grant the basic human rights of free speech, free association or the freedom to publicly demonstrate without inferring severe punishment. Now, via Facebook, its users in Tunisia were able to express their political will, their outrage at the corrupt regime, and they were getting feedback, and thus motivation and encouragement that they were not alone in their misery and outrage, but that many people shared the same feelings, and were willing to express them, and act against a system of injustice and its representatives. Thus, Facebook communication can be characterized as a hybrid medium that covers all communication levels – from the interpersonal to the group level, from parasocial to mass communication. Depending on the respective political, social and cultural context in which the social online platform is used, the functions of Facebook communication are adapted by the prosumers using the medium to serve their respective needs. As an ‘alternative’ medium with a potentially high reach, the five functions detailed in the next chapter, worked like a snowballing effect in creating a parallel virtual communication sphere that reached its tipping point in Tunisia with the toppling of the corrupt Ben Ali regime.

4. Five functional dimensions of Facebook

4.1. The demonstration function

The demonstration function is inherently linked to what is also known as the spill-over effect. One of the first scholars to point to this effect was Samuel Huntington, who highlighted that international stimuli when diffused through the mass media are central drivers of regime change (Huntington, 1991: 100). With respect to Facebook, the demonstration function describes borderless communication patterns and the multi-national origin of its users. Facebook users constantly engage with events occurring outside their physical sphere of control. The knowledge proximity between users across vast geographical regions leads people to be ‘informed about and encouraged by changes elsewhere’ (Voltmer & Rawnsley, 2009: 237). Facebook globalizes communication and connects individuals irrespective of their physical distance. This has the effect that users ‘communicate with others independently of temporal and spatial constraints’ (Fuchs 2008: 324). Facebook users thus can become a politically active group of perfect strangers, similar to an actual “demonstration” that assembles citizens for a shared cause, irrespective of the diverse personal or social background of the participants. The main added-value of the demonstration function is that geographically disconnected people can share their experiences. Thus, Facebook users are constantly informed about the fate of others. The demonstration function also leads to the blurring of interpersonal and political communication content: The personal becomes political, and vice versa, the political becomes personalized.

4.2. The widening function

The widening function describes Facebook’s influence on the size of the audience involved in the communication process. This dimension hints at the inclusive character of Facebook communication based on both the receptive audience (consumer) and the information transmitter (producer). Facebook widens the audience based on two reinforcing mechanisms. First, it exerts external social pressure by registered users on non-users to join the network in a process similar to what Charles Tilly described as the deactivation of social boundaries (2005: 144). This factor is particularly prevalent in societies in which access to other media is restricted. The external pressure is intensified the larger the number of individuals is that are already registered and the smaller the amount of acceptable alternatives are. Second, Facebook
widens the audience through its internal make-up. Facebook’s first entry page following the user’s registration online, more commonly known as the ‘wall’, works like an interactive bulletin board that updates the users about their friends’ most recent activities in chronological order. The wall functions like a personalized blog in which users can share information by posting a comment, a picture, or a video (McClard & Anderson, 2008: 12; Mellese, 2014). Facebook forces users to socialize and engage with the activities of other contacts in what critics call the ‘mimicry of friendship’ (Kirby, 2009: 121). The impact of the widening function is reinforced through the growing diffusion of internet access and the rapid increase in mobile internet devices, which enable Facebook users to share, post, read, or comment on information around the clock.

4.3. The bonding function

The bonding function illustrates the information content shared on Facebook. Information shared on Facebook is less institutionalized and closer to the user than that diffused by other media. Although the content can reach a potentially large audience, the setting in which the information is shared appears more private and intimate due to personalized framing options (McClard & Anderson, 2008: 12). The level of communication mediation ‘can render almost invisible [the] process of electronic textualization’ (Kirby, 2009: 122) and users may lose the consciousness of the transfer. Since the communication content is fully steered by the users, no censorship but self-censorship controls the information exchange. Ethics of privacy are routinely challenged and the only factors constraining information sharing are cultural codes of conduct. Moreover, information exchanged on Facebook is experienced collectively. The mix of personalization and collectiveness strengthens social bonding.

The bonding effect is amplified through the exchange of images and videos, which carry emotions more easily than textual messages (Müller, 2007; Müller & Kappas, 2011) and foster collective experiences based on emotions. This phenomenon, which is also described as the realism of images, offers observers ‘a transparent window onto reality’ (Mitchell, 1994: 325) similar to that of an eyewitness. Facebook users can easily relate to the experiences of other individuals through photographs (Müller, Kappas & Olk, 2012; Mellese, 2014), which naturalize meanings (Van Leeuwen, 2001: 97). Thus, when the connection between meaning making and power is taken into consideration, images are a crucial element of the bonding function. For Chadwick (2013: 16), referring to Lukes (2004), the construction of meaning is an essential precondition of power. Part of the bonding function is also to redefine meaning in terms of the emotional, but also the cognitive self-construal as a citizen. New meaning construction in words, visuals and sounds is a particular effect of the bonding function. As a consequence of sharing experiences online through a ‘faked perception’ of reality, the empathy among the users is dramatically heightened due to the ‘eyewitness effect’ of photographs (Fuchs, 2008: 259; Müller, Kappas & Olk, 2012). A feeling of social togetherness emerges through which the bonding function is significantly strengthened, and ‘shared meanings that constitute collective identities and practices’ (Fuchs, 2008: 278) are produced. This effect is intensified depending on the socio-political context and content of the visual-sharing process. Visuals depicting scenes in which humans are de-humanified, for example in war scenarios, can potentially traumatize the media user, particularly if he or she identifies with the victim (Müller & Kappas, 2011). Sharing the experience of traumatic moments further enhances social bonding among Facebook users. In this particular case a relative of Bouazizi’s commented on the videotaping of the peaceful protest: ‘We could protest for two years here, but without videos no one would take any notice of us’ (Ryan, 2011, January 26). Thus, the visual material of the protests following Bouazizi’s self-immolation – not the filmed suicide itself – and its distribution via YouTube and Facebook made a huge difference in terms of raising other citizens’ awareness, and mobilizing ordinary Internet-users to join in the actual protests.

4.4. The acceleration function

The acceleration function points to the rapidness of information exchange on Facebook. Due to technological advancement and growing internet connectivity, information sharing on Facebook happens always and instantly (Louw, 2005: 119). The opportunity to share and to access information is permanently given, which leads not only to an acceleration of information exchange
but also to temporally synchronous and asynchronous communication (Fuchs, 2008: 314). Moreover, the volume of information is substantially increased (Shirky, 2008: 98). Similar to the widening function, this dimension is reinforced through the growing number of mobile internet devices that allow information sharing irrespective of the user’s location.

4.5. The anonymity function
The last dimension is the anonymity function, which gives insights about who participates in the communication process. This function directly links to the widening function and is crucial for Facebook’s large penetration rates. The anonymity function reduces interaction costs because ‘anonymity and the lack of visual cues encourage projection’ (Turkle 1997 in Fuchs 2008: 314). Individuals are less hesitant to share and access information if their real identity is kept secret and the means are given ‘to break off interaction and observation with the [...] click of a mouse’ (Jones, 1997: 26). The anonymity function increases the ‘public incidence of oppositional views’ (Lynch, 2011: 304) and encourages individuals to express opinions openly. Once a certain number of people are involved, the freedom to express opinions starts to snowball, attracting increasingly more users.

In summarizing our model (Figure 1) it should be kept in mind that these functions are interactive. One function contributes to another, and typically enhances the potential effect of the others, very similar to a snowball that gets bigger and bigger, consuming other smaller snowballs, until it is too heavy, and falls apart. The demonstration function brings strangers together, informing them about facts and opinions of other users. The multimodal communication on Facebook blending text, hypertext, images and videos forms bonds between the Facebook users and their Facebook friends. The anonymity function lowers the threshold of participation and limits the risks by always having the option to ‘resign’, and leave the social network. Inside the network, communication then is widened and accelerated constantly, by the increased steady input of new text, hypertext, images and videos. How this process worked during the Jasmine revolution in Tunisia 2010-2011 is the topic of the next chapter.

5. Case Study – the Jasmine Revolution in Tunisia
Regarding many aspects, Tunisia presents an exceptional case. Despite the fact that it has been under the rule of an authoritarian regime (Alexander, 1997), the country harbors a well educated middle class, its economy is liberalized and it has a long history of women and gender equality rights, including women’s right to divorce, to abort as well as the prohibition of polygamy (Arieff, 2011: 2; Eltigani, 2009: 218). The country’s population of 10.5 million is relatively homogenous with 98% of Tunisians being Sunni-Muslims and Arabic speaking (AMCR, 2011, Table 4; UNILO 2011). Although 42% of the population is under the age of 24, Tunisia’s youth bulge is shrinking and the demographic situation resembles that of more developed countries (Arieff, 2011: 2; UN Population Division, 2010). Moreover, Tunisia is highly influenced by the West through social and economic ties based on trade and the tourism industry (Arieff, 2011: 2). Overall, Tunisia can be characterized as one of the technologically more advanced countries in the region.

Yet, in 2010, in terms of freedom of the press, Tunisia had ‘one of the worst media environments in the world’ (Freedom House, 2011), its civil liberties and political rights were barely developed, and arbitrary detention, corruption, and police violence were rampant. Tunisia’s President Ben Ali, who ruled the country with an iron fist for 23 years, succeeded in establishing a repressive one-party police state. Overthrowing his regime meant demolishing a stable dictatorship that had managed to assert authoritarian control over the Tunisians for decades. Press freedom and the freedom of expression were barely existent and the government developed a tradition of media interference that pertained to all spheres of society. Media outlets critical of Ben Ali’s regime were routinely silenced and journalists frequently experienced physical detention and severe punishments (Freedom House, 2011). According to Reporters Without Borders’ Press Freedom Index (2010), Tunisia’s press freedom was ranked 164, out of a total of 179 countries, with 1 being the most free, and 179 the least free when compared internationally’. By comparison, three years later, Tunisia’s ranking in the Press Freedom Index had improved to position 138 of 179 countries. However, by comparison to the year before (2012) it had dropped by 4 ranks. Since Tunisia first gained internet access in 1996, the government actively
promoted the improvement of the internet and telecommunication infrastructure (Axford, 2011: 683). Ever since internet usage has skyrocketed. Today, Tunisia ‘has one of the most developed telecommunications infrastructures in Northern Africa’ (OpenNet Initiative, 2009: 1) and about 3.85 million internet users reflecting a penetration rate of 36% (World Bank, 2012b).

Tunisia looks back at a long history of internet censorship, including censorship of online social networking sites. Contrary to other online platforms, Facebook has been freely accessible for most of the time with the exception of a short period of about two weeks in 2008 (Ben Gharbia, 2008, August 18). Despite free access, Tunisian Facebook users frequently experienced content censorship (Ben Mhenni, 2011). The regime actively restricted and modified material posted on Facebook through the Tunisian Internet Agency (TIA), an organization established by Ben Ali in 1996 to patrol the internet. The TIA deliberately hacked log-in information of Facebook users in order to alter online communication (O’Brien, 2011). Amongst others, the TIA deleted user accounts, substituted photos by other images, and modified information content (Ben Mhenni, 2011). Additionally, internet users have been jailed for posting regime-critical information on Facebook (Beaumont, 2011). At a later point, Tunisian internet activists took revenge for the TIA’s censorship in an anti-government campaign called Operation Pay-back, which consisted of blocking government internet sites with the identical image of a pirate boat used by the TIA before (Ben Mhenni, 2011).

Even if Tunisia can be considered a typical case for an authoritarian regime in Northern Africa, its modern media infrastructure is rather untypical for the region. One out of four Tunisian families has a broadband connection (BBC, 2011). 95% of Tunisians had their own mobile phone at the time. And Tunisia has the highest Facebook penetration rate in comparison to its overall internet users in all of Africa (OAfrica, 2012). According to Freedom House’s Freedom in the World Report (2012), Tunisia was the only country affected by the Arab Spring uprisings which experienced a transition towards an electoral democracy and became ‘partly free’ following successful elections in October 2011. Although Ben Ali’s regime exercised strict internet censorship, Facebook was accessible throughout the political transition period (Beaumont, 2011). Whereas Twitter counted not more than 500 users at the beginning of the revolution and access to YouTube was blocked, Facebook’s penetration rate grew tremendously in the year preceding the revolution (Brisson & Krontiris, 2012). Tunisia was the country in which the Arab Spring movement originated and Facebook’s involvement can be analyzed without external interferences by other regimes in transition.

In retrospect, Mohamed Bouazizi’s desperate act of self-immolation marks the beginning of the Jasmine Revolution in Tunisia. Within hours after Bouazizi had been rushed to hospital the first demonstrations erupted in the streets of Sidi Bouzid, and they spread to neighboring towns like a wildfire (Meredith, 2011: 700). The same day, Ali Bouazizi, a cousin of the victim, posted a video of the protests in Sidi Bouzid on Facebook (Ryan, 2011, January 26). In the evening, the video was aired by Aljazeera’s TV channel Mubasher after it had been discovered by the channel’s new media team on Facebook (ibid.). In the following days the protests intensified, uniting Tunisians with very diverse backgrounds. Returning now to our initial question, why Bouazizi’s self-immolation sparked public protests – the answer to this question is that visual documentation was taken, and disseminated via Facebook. Thus, the crucial difference between Bouazizi and his predecessors was that none of the earlier cases had been reported by the mass media and thus they had passed without public notice. Not so in the case of Bouazizi’s self-immolation that triggered a chain of events leading to the ouster of Ben Ali’s regime 28 days later.

With Ben Ali becoming increasingly aware of the importance of social media for the protesters, internet surveillance and censorship dramatically increased in the early weeks of the revolution. More than 100 Facebook pages were censored and messages containing information about the protests removed. Meanwhile, the TIA tried to counter-act the posting of new regime-critical material on Facebook (Reporters Without Borders, 2011). The frequency of the error notification ‘404 not found’, which appeared on censored websites, led Tunisians to invent a fictional person called “Ammar 404” (Ben Mhenni, 2011). In the first quarter of 2011 (January 1st – March 30th) Facebook averaged 2,356,520 members in Tunisia (ASMR 2011, Table 6). This equals a Facebook penetration rate of 22.49%. Among 22 Arab countries evaluated, only five (UAE, Bahrain, Qatar, Kuwait and Lebanon) ranked higher than Tunisia (ASMR 2011, Table 6). Egypt, by comparison,
had a Facebook penetration rate of 7.66 % for the same period (ibid.). Additionally, Tunisia ranked third among 22 Arab countries and the US, UK and Israel in terms of new Facebook users in 2011 (ibid.). The largest group of Facebook users consists of Tunisians between 18-24 years of age (39%). However, Facebook is not a medium exclusively used by younger Tunisians as indicated by the 15% of Tunisian users above the age of 35 (Socialbakers, 2012).

5.1. Results: The demonstration function

The demonstration function was crucial for the outbreak of the Jasmine Revolution. Facebook connected Tunisians over vast geographic distances and helped bridge the regional disparity that had historically evolved within the country. Over decades the social disproportionality between Tunisia's well developed urban and coastal areas and the country's significantly lesser developed rural areas has been growing (Brisson & Krontiris 2012: 23). Located in central Tunisia, Mohamed Bouazizi's home town Sidi Bouzid clearly belongs to Tunisia's provincial areas where unemployment is high and poverty thriving. Moncef Marzouki, Tunisia's current president, explained in an article published in October that the Jasmine Revolution erupted because ‘people [in the provincial towns] could no longer bear their poverty and humiliation in contrast to the wealth of the developed coastal cities’ (Marzouki, 2011). Tunisia's regional disparity also includes unequal access to the internet and to mobile phones (Brisson & Krontiris, 2012: 30).

The demonstration effect played a pivotal role in transmitting information about unequal living conditions from Tunisians living in rural parts to those in more prosperous areas. With national media remaining silent about the protests erupting in central Tunisia, it was essential that Mohamend Bouazizi’s cousin published a video which showed the first public demonstrations. Facebook served as the primary mouthpiece of the protesters and was essential for establishing an information channel from Tunisia’s social periphery to the centre. However, on a different level, the demonstrations in Tunisia’s provinces could only have erupted due to an earlier information flow from Tunisia’s centre to the periphery, which had carried information about democratic principles and values. Although the country became an electoral system in 1956 on the surface, Tunisians had never experienced a functioning democratic system (Marzouki, 2011). And while Tunisia’s affluent regions had been heavily influenced by the West, rural areas first had to learn about democratic values. Overthrowing Ben Ali required all Tunisians to understand the concept of democracy without ever having lived in a democratic regime before. Furthermore, Facebook enabled Tunisians to get in contact with the large expatriate group of Tunisians living in democratic systems abroad (Arieff, 2011: 2). Facebook facilitated the ‘spill-over’ of democratic values to rural areas and it was key to informing Tunisians about the inequalities within their country. At a later point, the demonstration function of Facebook was crucial for the spread of the revolution to Egypt and other countries affected by the Arab Spring movement (Ghonim, 2012; Sowers & Toensing, 2012).

5.2. Results: The widening function

In Tunisia, the number of Facebook users increased as a result of the mass media’s muteness. It was imperative for Tunisians who wanted to follow the protests to turn to Facebook for information. Due to the lack of alternatives and an increasingly larger share of the population registered on Facebook, the external social pressure to join the network was high. Tunisia’s Facebook penetration rate experienced a dramatic upsurge in the weeks of the revolution, as indicated in Figure 1. Whereas in the first days of January 1.8 million Tunisians were registered Facebook users, one week later 1.97 million users had registered (Daniel, 2011). This number further increased to 2.4 million users until the end of the month (Ben Mhenni, 2011). Linked through Facebook’s interactive bulletin board, Tunisians registered on Facebook simultaneously subscribed to following recent news updates of their friends and their friends’ befriended contacts. The snowballing Facebook community was clearly a consequence of the informational insufficiency of other media outlets.

The external social pressure to join Facebook was reinforced when on January 12 the government installed a night curfew in greater Tunis (BBC Online 2011, January 13). Binding Tunisians to their houses, the curfew forced Tunisians to rely ‘almost exclusively on the internet and telephone to communicate and exchange information’ (Hafedh Bouakez, personal communication, April 02,
The curfew strengthened the external pressure to join Facebook and further widened the audience of ‘prosumers’. It remained in force until February 16 (Mu, 2011).

The widening function was also driven by the widespread availability of mobile internet devices. In 2011, more than 95% of Tunisians owned a mobile phone (Dutta & Mia, 2011; ASMR 2011, Table 6). Throughout the revolution ‘[t]he availability of cheap web-enabled smart phones allowed the uploading of [...] user-generated videos and content’ (Lynch, 2011: 303). The importance of mobile internet devices for the widening function is illustrated by a number of images which show protesters taking photographs of the demonstrations and by the on-the-spot video footages available online.

**5.3. Results: The bonding function**

The bonding function was created by shared experiences, which leads to the emergence of a collective identity based on empathy. As mentioned before, visuals can be of particular importance for the bonding process because, contrary to textual messages, visuals communicate by immediate, individual association. They are context-driven and elicit spontaneous emotional reactions (Müller, 2007: 13). Visuals on Facebook played a crucial role for the emergence of a collective protest movement in Tunisia, which was essential for the development of collective action. Although the Jasmine Revolution was driven by countless key visuals, one was of particular importance. On December 28, Ben Ali had himself photographed while visiting the dying Mohamed Bouazizi in hospital, with the obvious intention to appease the protesters by showing empathy with the victim who was turning into a martyr figure. However, the photograph did not have the intended effect for two reasons: Instead of sending signals of a ‘caring president’, Ben Ali’s visit was perceived as an invasion of the victim’s retreat. Bouazizi, lying helplessly and fully covered in bandages in the hospital bed, encountered his enemy in a defeated position. Although the hospital staff wore surgical clothing, Ben Ali did not. Moreover, with the hospital personnel looking at Ben Ali in an inquisitive manner and Ben Ali looking down at the victim in a superior way, the scene seemed to be staged to portray Ben Ali as the concerned leader. This was further underlined by the microphone which, emerging from below, seemed to await Ben Ali’s speech.¹⁹

During the Jasmine Revolution visuals on Facebook frequently depicted extremely violent scenes and were intended to cause a public outcry (Addissou Striegel, personal communication, April 21, 2012). In all likelihood, the violence experienced vicariously by Tunisians via the traumatic visualization of injured bodies on photographs and videos amplified the social bonding among Facebook users.

The second reason why this visual triggered a public scandal relates to the prehistory of the scene. The act of Mohamed Bouazizi’s self-immolation had such a dramatic impact because the average Tunisian could fully identify with the man. Due to the associative power of visuals, which is found in the symbiotic combination of image, thought, and feeling (Müller & Kappas,
the scene depicts more than is actually seen. It stands metaphorically for the miserable life Bouazizi had led, the recurrent abuses he had encountered, the extreme poverty, and the political hopelessness he had experienced – in short, Bouazizi personified the human indignity felt by most Tunisians. Michael Biggs, a leading scholar of globalized protest movements, pointed out that the act of self-immolation is so ‘potent because it provokes pity for a victim whose unjust death is attributed to the opponent, and at the same time admiration for a hero who willingly died for the cause’ (Biggs, 2005: 26). The visualization of Bouazizi’s sacrifice for ‘the cause’ represented the emotional trigger that set off the Jasmine Revolution (Bellin, 2012: 136). Bouazizi’s self-immolation served as the catalyst of the revolution because it was the ultimate justification to rise up against Ben Ali’s regime. It provided Tunisians with a collective vision to not have let him die in vain, a vision which was strong enough for the mass protests to erupt (Shirky, 2008: 53). However, the image could only have such a powerful effect because it was seen by a large audience of Tunisians through Facebook, and because this narrative was amplified through the coverage of Al Jazeera – a credible Arabic mass medium.

5.4. Results: The acceleration function
28 days passed between Mohamed Bouazizi’s self-immolation on December 17 and the ouster of Ben Ali’s regime on January 14 (Ryan, 2011, January 23). The short time it took the revolutionaries to topple the regime speaks for itself. Facebook accelerated information sharing between the protesters and served as an organizational tool for the mass-mobilizations. Furthermore, the sheer amount of material exchanged during those weeks and the frequency of posts, ‘likes’, and comments on Facebook indicates that the volume of information was massive. The large number of videos and photographs taken during the street protests and uploaded on Facebook illustrate the pivotal role mobile internet devices played for the acceleration function throughout the revolution.

5.5. Results: The anonymity function
A key characteristic of Facebook is that information sharing can happen anonymously. This is particularly important in repressive political systems, in which people who advance their opinion risk punishment, if not torture. Tunisia’s penal code entailed 140 articles pertaining to attacks against the public order (Human Rights Watch, 2011). Ben Ali made frequent use of these laws to defend his position and assert repressive control over political dissidents and journalists. Facebook provided Tunisians with less dangerous means to express themselves because they could conceal their true identity. This fact is confirmed by several internet activists who hid their identity behind pseudonyms. One example is Lina Ben Mhenni, who is also known as the ‘Tunisian girl’ (Ben Mhenni, 2011; Tunisian girl, 2010, December 19). That ‘people feel more courageous online (because) there are potentially less consequences for action in a symbolic than a physical space’ (Fuchs 2008: 315) has also been proven by numerous anti-regime videos uploaded on Facebook. Although there have been cases of arrests due to Facebook activism, the threshold for activists to express themselves freely was significantly lowered due to Facebook’s anonymity function.

6. Discussion and limitations
The aim of this paper was to investigate the influence Facebook had on the overthrow of an authoritarian regime, and the specific functions that the social network platform provided in the case of the Tunisian uprising. Through the development of a five-dimensional model (Figure 1), the particular functions of Facebook communication on the unfolding events could be analyzed. The application of the model to the Jasmine Revolution in Tunisia (see Table 1) seems to support the hypothetical assumption of a strong impact of Facebook communication on the identification with and mobilization for the cause of the Jasmine revolution. Facebook was crucial for raising awareness of existing inequalities within the Tunisian society (demonstration function), for creating a strong collective identity that united Tunisians through a common goal (bonding function), and for providing the organizational framework that linked Tunisians across classes (widening and anonymity functions) with staggering rapidity (acceleration function) – all of which were essential for the overthrow of Ben Ali’s regime. Thus, Facebook played a vital role...
in the outbreak and advancement of the revolution.

Table 1. Five-dimensional model of Facebook communication functions applied to the Jasmine Revolution in Tunisia, 2010-2011

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<tr>
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<th>Theory</th>
<th>Tunisia</th>
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<tr>
<td>1. Demonstration</td>
<td>Information spill-over</td>
<td>Bridging of rural-urban divide</td>
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<td></td>
<td>Spatial and temporal constraints are dismissed</td>
<td>Spread of democratic values</td>
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<td>2. Widening</td>
<td>Audience enlargement and heightened interaction</td>
<td>Increase in Facebook penetration rate</td>
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<td></td>
<td>1) External socialisation</td>
<td>Lack of alternatives/censorship</td>
</tr>
<tr>
<td></td>
<td>2) Internal socialisation</td>
<td>Curfew and mobile phones</td>
</tr>
<tr>
<td>3. Bonding</td>
<td>Sharing of experiences</td>
<td>Collective vision surfaces following Mohamed Bouazizi’s self-immolation</td>
</tr>
<tr>
<td></td>
<td>Collective identity based on shared information and strong visuals</td>
<td>(Traumatic) visuals increase bonding process</td>
</tr>
<tr>
<td></td>
<td>(photos, videos) eliciting empathy</td>
<td></td>
</tr>
<tr>
<td>4. Acceleration</td>
<td>Speed and volume of information exchange</td>
<td>28 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large amount of online data recorded</td>
</tr>
<tr>
<td>5. Anonymity</td>
<td>Identity concealment</td>
<td>Threats of imprisonment and torture</td>
</tr>
<tr>
<td></td>
<td>Reduction of participatory barriers</td>
<td>are overcome</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pseudonyms of internet activists</td>
</tr>
</tbody>
</table>

However, to say that Facebook gave rise to the mass uprisings would be oversimplified and fails to give credit to the people behind the protests. Hence, a number of factors need to be taken into consideration that limit the explanatory power of the model and the assumptions made in this paper. Since Facebook had been available in the years preceding the revolution, the case study of Tunisia suggests that a certain penetration threshold had to be overcome in order for Facebook to have an impact. The size of the ‘prosumer-community’ had to be sufficiently large (see Figure 2) and a certain number of Tunisians had to develop a sustainable interest in joining Facebook even before the widening effect could materialize. The case study of Tunisia proposes that a minimum threshold of approximately 1.8 million users was critical, a penetration rate of about 17%. Nevertheless, the role emotions and compassion played in the outbreak of the revolution, following Mohamed Bouazizi’s self-immolation, should not be underestimated. Additionally, the internet infrastructure in Tunisia was unusually well developed for a country in Northern Africa due to Ben Ali’s ambitions to modernize the country (El Difraoui & Abel, 2012: 63). And finally, language and age barriers had to be overcome. The undisputed role international satellite broadcasters, most prominently Al-Jazeera (Seib, 2008; Youmans, 2012), played in adopting footage posted on Facebook for their own programs, further raises the question whether Facebook’s impact can be assessed isolated from other media. And although it is highly unlikely that mass protests would have erupted as forcefully and speedily as they did, had Facebook been more effectively censored (Howard & Hussain, 2013: 70), it is impossible to foreclose that another social networking platform could have led to a similar outcome.

Therefore, on a methodological level, no general conclusions pertaining to all countries following suit in the ‘Arab Uprisings’ can be drawn. However, with this case study the foundations are laid for comparative studies (Esser & Hanitzsch, 2012; Müller & Griffin, 2012) with respect to the role Facebook and other social media played in other countries of the Arabellion. The agenda for future research is immense and the findings of this paper are, at best, preliminary. Nevertheless, the conclusions of this paper encourage further comparative research in the structure and functions of social media in times of political transition.
7. Conclusion and future research

When assessing Facebook’s impact on the Jasmine revolution in Tunisia, it is essential to be reminded that Facebook is a communicative instrument that mediates people’s voices and that is essentially people-made and people-driven. The findings of this paper suggest that the absence of a democratic public sphere – Facebook provided Tunisians with a communication forum that enabled the emergence of a (virtual) counter-public sphere, snowballing information and creating a common cause and understanding that kept mobilizing Tunisian ‘netizens’ to reclaim their rights as citizens, and, in the end, to oust Ben Ali’s regime. By giving Tunisians a public forum to express and discuss their ideas, Facebook lowered the transaction costs of communication and evaded the state’s ability to contain information, thus functioning as an “information equalizer” (Seib, 2008; Howard & Hussain, 2013: 18). The increased transparency created shared awareness among Tunisians and enabled their collective action.

In the case of Tunisia, Facebook challenged an authoritarian regime by undermining their oppressive capacities and provided citizens with democratic incentives, including the freedom of expression. However, the present study demonstrates only the functional usage of interpersonal online communication via a popular platform for a relatively brief transitional period. Particularly the widening function of Facebook communication was enhanced by traditional mass-media like Al Jazeera television which provided crucial live transmission of information obtained on Facebook or the video platform YouTube.

Future studies will have to take not only a comparative look at the level of the nation state, but also on the role that traditional mass media like television, radio and print media played in stifling or reinforcing the various videos, images and text messages originating online. This kind of research is a huge challenge on many levels, but it is a research effort that merits paying closer attention in understanding the functions and consequences of hybrid media communication.

While originally Facebook had been conceived as a private online communication platform that allowed for inter-personal communication of text and visual messages between individuals, but with a reach for larger groups or communities, this novel campus communication tool took on different functions once it left student communication in the US. Social network communication is both, a hybridized form of communication, and it has a hybridizing effect on other media. Traditional distinctions between inter-personal, group, and mass communication are no longer valid in a hybrid communication environment. However, Facebook is not a replacement for the functions of traditional mass media. Social network communication is only an ‘incomplete’ mass medium. While it can provide a forum for mass communication, it can only do so temporarily. It is a hybrid communication medium that can provide ‘winds of change’ in a particular situation, but it cannot provide the social glue necessary for building a stable and free society.
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Endnotes:

1 An earlier version of this paper was presented at the 63rd Annual Conference of the International Communication Association (ICA) in June 2013, London, UK. The authors would like to thank the session participants for their valuable comments and suggestions.

2 The name Jasmine Revolution originates from the jasmine flower, one of Tunisia’s national emblems. The same title was given to the 1987 revolution in Tunisia, which gave rise to the presidency of Ben Ali, and it also describes a number of Chinese pro-democracy protests that occurred as a reaction to the Tunisian protests in February 2011.

3 The first incident of social media playing a role in the toppling of an authoritarian ruler is reported by Shirky (2011) in the Philippines in January 2001. Preceding the Arabic Uprisings was the so-called ‘Twitter-Revolution’ in Moldova, in April 2009 (Lysenko and Desouza, 2012).

4 Unfortunately, Bouazizi was also not the last desperate Tunisian to set himself on fire. Half a year after the toppling of the Ben Ali regime, BBC online (2012, January 12) reports a dramatic increase in suicide rates by self-immolation. ‘In the six months immediately after Bouazizi’s death (he took two weeks to die from his injuries) at least 107 fellow Tunisians tried to kill themselves by setting themselves on fire.’ Additionally, Bouazizi’s fame has spread in the Arab world, and many men have followed Bouazizi’s example in the Arab world outside of Tunisia (AlArabija 2012, January 21).

5 Facebook refers to http://www.facebook.com/. For Facebook user data see: Allfacebook http://allfacebook.de/userdata/

6 Facebook’s wall updates the user regarding new posts, newspaper articles or internet sites recommended by other users, photos/videos/articles 'liked' by other users, new online friendships, photos users were tagged on, recent activities in online social groups, new memberships in virtual communities, etc.

7 Following the ouster of Ben Ali’s regime, Tunisia’s Press Freedom Index improved to 134. Reporters Without Borders compares and ranks the press freedom of 179 countries with 1 being the best and 179 being the worst (Reporters Without Borders, 2012).

8 Ben Ali’s regime censored access to Facebook on August 18, 2008. However, the regime was forced to re-open access two weeks later on September 3 due to public protests. According to Ben Gharbia (2008, September 04), Ben Ali gave the order to lift the censorship himself. Access to Youtube had been blocked in Tunisia since November 2, 2007 (Ben Gharbia 2008, August 18). Furthermore, it seems that the Tunisian Internet Agency (TIA) restricted access to Facebook sporadically. Bloggers, such as Lina Ben Mhenni (2011), report that Facebook was inaccessible on certain days. Nevertheless, access to Facebook was stable throughout the Jasmine Revolution (Beaumont, 2011).

9 Image available at http://cdn2.spiegel.de/images/image-192699-galleryV9-qmbc.jpg Spiegel Online, Photo: DDP/AP. For a similar case of visual documentation sparking mass protests in Egypt see ‘We are all Khaled Said’ (Howard and Hussain, 2011: 38).

10 Although Tunisia’s user age distribution on Facebook suggests that only 15% of Tunisian Facebook users is above the age of 35, statistically seen 36% of the population, or every 3rd Tunisian, has access to the internet (World Bank, 2012b). This suggests that every Tunisian family should be able to access the internet.