

**A Revolution in 140 Characters?
Reflecting the Role of Social Networking Technologies in the
Iranian „Twitter-Revolution“**

Florian Buhl
Sophie van Hüllen
Philipp S. Müller

DRAFT

Comments Welcome!

Introduction

Two hours after the polls had closed on June 12, 2009 the Islamic Republic News Agency announced the re-election of the incumbent President Mahmoud Ahmadinejad with a majority of 63 percent. Soon thereafter the supporters of Iran's opposition, especially those of Ahmadinejad's rival candidate Mir-Hossein Mousavi, initiated a protest movement in order to get to an inquiry of the election results.

The protesters' actions soon were labelled Iran's "Twitter Revolution" by Western commentators (Cohen, 2009; Schectman, 2009) because the demonstrators made use of web technologies, e.g. *Twitter*, *Facebook*, *Flickr* and *YouTube*, in a twofold manner: On the one hand, the online social media functioned as a tool to organize and coordinate protests. On the other hand, the web technologies played a decisive role in rising awareness for the demonstrations in the international public sphere. Foreign traditional news media had to rely on the information, pictures and videos posted by Iranian protesters on platforms of the social web, because news correspondents and journalists in Iran were deterred to produce their own content by the Iranian regime. Clearly the interplay of web technologies, the global mass media, and politics in the Iranian case are of great interest, therefore, one needs to ask, how can we analyze the interplay between social networking technologies, traditional mass media, and politics?

A Wired Iran

Since the Islamic Revolution in 1979 Iran is an Islamic state under the Sharia law. When the reformer Khatami was elected as president in 1997 the "Tehran Spring" (Ebadi, 2006) promised to bring a relaxation of the suppression of the freedom of speech. Student protests at Tehran's University in 1999 were brought down brutally. Similar movements were cracked down in 2003 again. With the inauguration of Mahmud Ahmadinejad, a conservative hardliner and the incumbent president, in 2005, the hope for a relaxation of the Islamic system was turned down. In the presidential election in 2009 the reformist politician and former Minister of Foreign Affairs Mir Hossein Mousavi was the promising opposition candidate, enjoying a high popularity among liberals and the younger generation, especially students. After his declared defeat by the incumbent president Ahmadinejad, he claimed the election of being rigged and thousands of his followers started protesting in the streets of Tehran.

About 23 million out of 66 million Iranian's have access to the Web (CIA, 2009). With 35 percent of the population online, Iran has far more internet users than its neighbours (Corley, 2009). Interestingly they have the thirteenth largest internet community in total numbers

while they are only holding place 133 with their total number of internet hosts (CIA, 2009). About three million Iranian blogs (Schams, 2009) are online, of which 60,000 are, according to Kelly & Etling (2008), frequently updated. This large discussion space is not only used by the stereotypical young democratic regime critics. Among the four major network groups clustered in Iran's "blogosphere" map, both the "Secular/Reformist" and the "Conservative/Religious" are relevant political. Both groups could be classified as "internet activists" (Hill & Hughes, 1998). Together they occupy more than half of Iran's "blogosphere." Bloggers in these categories are more likely to be male and young (students and young adults between 18 and 35); many of them are blogging anonymously. With over 40 Million Iranians being under the age of 35 and more than half of them are being male this is a huge portion of Iran's total population. Despite Hill's and Hughes' findings on Internet activism (ibid.), Iranian's "Internet activists" are not purely extremely anti-government, but actually covering a wide range of political opinions and topics. As many newspapers had been vanished young Iranian's seem to use the internet as an alternative space for a civil society (Schams, 2009).

Sophisticated Filtering Strategies

Iranian Internet users face one of the most comprehensive and sophisticated filtering-systems of the world. Since 2001 efforts to control the Internet were made by the government (ONI, 2009). A legal and institutional basis for a system of filtering and censorship was initiated by various decrees issued by the Supreme Council of the Cultural Revolution [SCRC] in December 2001 (ibid.). Today the Ministry of Culture and Islamic Guidance [MCIG], the Ministry of Intelligence and National Security, and the Tehran's Prosecutor General Saeed Mortazavi are in charge of filtering methods and deciding upon which websites have to be banned (ICTR, 2005). The legal structures of enforcing speech restrictions in Iran like the Press Law of 1986 (Pars Times, 1986) in the "Name of God" are the legal foundation for regulating media and nowadays the internet. In April 2009 the law was enlarged in order to also apply to domestic news sites and websites by an amendment. The Internet censorship law of the Islamic Republic of Iran is implemented through four different techniques: The employment of a centralized filter blocking certain domains, content filtering methods, surveillance, and bandwidth restriction. In the Open Net Initiative [ONI] report 2006/2007 Iran was already categorized as employing one among the most restrictive and widest Internet filtering systems. According to the latest ONI research on Iranian censorship published in June 2009 (ONI, 2009) the Islamic Republic of Iran has further developed its filtering technology towards a centralized and government controlled filtering regime. In 2008, Iran has blocked access to more than five million Internet sites. In recent years, ISPs have been

told to block access to political, human rights and women's sites as well as social networking sites like Facebook and YouTube and various news sites. Through the election days temporary filters blocked web sites and blogs of the government's opposition. Whatever data traffic comes into Iran or seeks to go outside is filtered by centralized gateways, the ISP's proxy servers (DW, 2009). In July this year the Iranian parliament ratified a law to further monitor cyberspace. Officially it aimed to reduce cybercrime and secure surfers privacy. However, with this law Internet Service Providers are required to store their customer's data traffic for up to three month, so that in the case of suspicious actions the client can be detained by the order of the national security. The Revolutionary Guard is now actively enforcing the Internet content standards, which caused an atmosphere of fear among Internet activists and promotes self-censorship. Last but not least, Iran is the only country, which actually has instituted an explicit cap on Internet access speed for households, which is 128 kilobytes per second. This composition of a priori preventive filters and band-width restriction and a posteriori strict law enforcement grounds the effectiveness of one of the world's most comprehensive and sophisticated internet censorship (Faris & Villeneuve, 2008). According to the ONI criteria it even holds the highest comprehensiveness of filtering efforts and the third most total amount of categories blocked.

The Protests

The protests in Iran began on Saturday June 13, 2009. The day before, Mahmoud Ahmadinejad had been declared the winner of the Iranian presidential elections, only a few hours after the polling stations had closed. The supporters of Iran's opposition, especially those of Ahmadinejad's rival candidate Mir-Hossein Mousavi, suspected an electoral fraud by the Iranian regime and therefore initiated demonstrations in order to challenge the official results of the election.

On June 16th when protests continued the Guardian Council decided upon a partial recount, but as the election was not annulled protests continued. Many protesters and prominent reformists were arrested. Next to the arrest of known reformists like the former vice-president Mohammad-Ali Abtahi, ambulances and hospitals reported people injured by gunshots. The Basij were also filmed while breaking into houses destroying property and shooting into crowds of people. There are also photos that show people apparently belonging to paramilitary groups beating protesters with sticks. In this context the death of Neda Agha-Soltan, a young woman whose dying moments were filmed and spread in the Internet raised attention becoming a symbol of rebellion. Her last words, referred to as "I am burning, I am burning" were used by protesters. *"NEDA DID NOT BURN IN VAIN. WE WILL BURN THE*

ONES THAT SET FIRE TO HER.” Neda became a symbol for peaceful demonstration overwhelmed violently. Many comments on Twitter related to her.

Global Social Media Responds

At first, Western mass media failed to report about those protests immediately (Cohen, 2009). However, via online social media, e.g. *Twitter, Facebook, Flickr* and *YouTube*, Internet users in Iran provided information about the protests such as related photos and videos, so that the global networked public sphere could observe the events (Economist.com, 2009; Cohen, 2009; Stöcker, Neumann & Dörting, 2009). In consequence, Internet users in Western countries were wondering why there was not any mass-media coverage on the demonstrations in Iran yet a. For example, CNN was accused of reacting to the events too late (Economist.com, 2009; Cohen, 2009).

Before and after the election, the government tried to close down all communication channels in order to keep protestors from organizing on the streets as well as isolating the opposition from the outside world. Personal blogging domains on *blogspot.com* and other hosting services were blocked. Some are still entirely inaccessible. Additionally, official web sites created for the planned election campaign like *www.yaarinews.ir*, which was designed for the former president Mohammad Khatami, and websites of the reformist coalition like *www.baharestaniran.com* were shut down. Access to social networking sites, such as *Facebook.com, YouTube.com* and *Flickr.com*, was denied throughout election days and after as the opposition was believed to mobilize their supporters there. Also international, independent Farsi and western media web sites, mainly those with English content, were banned; among them *Huffington Post, New York Times, Al-Arabia, Balatarin*, and *Global Voice* (ONI, 2009). Moreover, during the election and the weeks after, mobile phone service has been cut off frequently. Communication via cell phones or short messages was impossible or at least difficult, so that people have switched to word of mouth, to inform others about rallies going on. However, the protesters managed to circumvent the restrictions. Twitter is harder to regulate than SMS, where the server is controlled by the state-owned cell phone provider. Floods of cell phone video-clips and news about the brutal crackdowns in Tehran’s streets were broadcasted, which triggered an international solidarity movement. Web 2.0 networking tools were used to organize the protests and exchange advice about breaking government’s censorship.

On June 16th the Guardian Council decided upon a partial recount, but as the election was not annulled protests continued. Many protesters and prominent reformists were arrested, according to police officials more than 170. Besides the arrest of known reformists like the former vice-president Mohammad-Ali Abtahi, ambulances and hospitals reported people

injured by gunshots. The Basij were also filmed while breaking into houses destroying property and shooting into crowds of people. There are also photos that show people apparently belonging to paramilitary groups beating protesters with sticks. In this context the death of Neda Agha-Soltan, a young woman whose dying moments were filmed and spread in the Internet raised attention becoming a symbol of rebellion. Her last words, referred to as “I am burning, I am burning” were used by protesters. *”NADA DID NOT BURN IN VAIN. WE WILL BURN THE ONES THAT SET FIRE TO HER.”* The death of Neda was one major event in the documentation of the Iranian revolution also described as the turning point. Neda became a symbol for peaceful demonstration overwhelmed violently. Many comments on Twitter related to her.

The question what is the interplay between web technologies and the revolution can be seen through two lenses: the power-shift and the media-shift perspective. The power-shift perspective assumes that technologies empower the masses and therefore lead to revolution. The media-shift perspective assumes technologies impact how political acts are perceived in the traditional mass media and change the make-up of mass communication. Let us examine them one by one.

The power-shift perspective

Recalling Goldstone (2001) on revolution theory the trigger in a revolutionary process is given, if a regime is perceived as unjust. In the Iranian case this is given by the probably rigged election. The religious roots of Khamenei’s leadership make him sacrosanct and provide him with the support of Iran’s majority. The importance of Khamenei’s decision whom to support is explicit. Goldstone further strengthens that the interplay of a vanguard group, interpersonal networks and cross-cultural coalition are pivotal elements for the development of a revolution. The elite nucleus has to succeed in linking up with other popular groups. For this linkage group structure must exist beforehand. In the Iranian revolution the “dispossessed” were successfully included. Whether the current movement could succeed in mobilizing cross-class groups is highly dependent on the structure of the communication network used. Anyway, Goldstone (2001) emphasizes, that mobilization and networking has to be beyond class structures.

Facebook and other social network sites alike help their users to accumulate weak ties (Granovetter, 1983). Thus in cases of organizing events a greater amount of people can

potentially be reached in a much shorter time. Other than word of mouth strategies thousands of people can simultaneously be reached.¹

The organization and coverage of pro-democratic movements via web 2.0 tools is not a new phenomenon invented by the Iranian protesters. During the French riots in 2005, in the Zimbabwean opposition uprising in 2008 (Nyaira, 2009), in the Greek protests in late 2008 and 2006 during the youth riots in Budapest, e-communication tools like blogs, e-mails and social networking pages were common instruments used (Economist, 2008). Especially during the Greek riots Twitter has been utilized remarkably. The spread of sympathy worldwide among the Internet community triggered small protest in many European cities. The impact on the international level has caused scientists to speak about the rise of a new global phenomenon – “networked protest” (Morozov, 2008), a phenomenon for what the Internet is valued as being crucial for its occurrence. In the Ukrainian 2004 Orange Revolution Goldstein (2007) states that lots of activities were made easier by the use of new technologies. Although he claims as evident that pro-democracy forces used the Internet and cell phones more effectively than those supporting the government, he hesitates to derive the conclusion that the use of the Internet has been essential for the success of the revolution. Thus he passes along the question if “the tools [are] inherently conducive to the expansion of civic engagement and democratization [...]?” (ibid.).

Shirin Ebadi describes today’s situation in Iran as being equivalent to the post revolution days in 1979 despite that “information technology and the internet have made blackout censorship impossible” (Ebadi, 2006: 194). This statement expresses the hope in and the importance of the new communication technologies in Iran.

Iran still has a lively Internet community eager and able to circumvent government’s censorship (Berkman Center, 2009). During the June election and especially during the post election period the Internet turned out to be an essential tool for first the political campaign of the opposition, second the mobilization, coordination and legitimation of anti-government protests and third the information spread outside Iran which triggered a worldwide solidarity movement.

Data traffic in Iran seeking for a blocked destination has to take a circuit over proxy servers (Boyle, 2009). Activists, like exiled Iranians, family friends and relatives as well as, to a great amount, fully uninvolved peers worldwide, set up proxy server on their private computers. If the Internet Protocol Numbers [IP’s] are not on the blacklist of the filtering system, any data traffic from Iran can get through this transit points. From there the traffic can be forwarded to any destination. The astonishing dynamic the post-election crisis in Iran has triggered in the world-wide-web has helped to create countless of proxy server popping up around the globe.

¹ A clear demonstration of the popularity of Facebook and it’s (at least thought by the government) usefulness for the opposition is the fact that during the pre-election period Facebook together with numerous dissident web sites had been blocked (ONI, 2009).

Popular institutions have been eager to support the Iranian opposition with websites like the AnonymousIran, proxy.org or sesawe.net which all offer random proxy to enter blocked URLs (WhyWeProtest.com). Anyway, most of the proxy providers were amateurs. How to create proxy server and how to access them was made public via Twitter under the hashtag #iranelection proxy (Popkin, 2009).

With the micro-blogging service Twitter it is even easier to circumvent censorship, as it is naturally independent from any fixed URL. Whoever requests the service of Twitter does not have to access any Web site. Surely the Iranian government can block access to the Twitter domain or to some Twitter users' feeds. However, Twitter is designed like an atom, which can be built into other molecules like web sites as Facebook, Blogs or TwitterFall (Zittrain, 2009). Thus there is nothing else that can be blocked via filtering through proxy servers than single URL's detected to have Twitter implemented. Tweets (messages send via Twitter) can be sent and received on a broad variety of platforms, which are including cell phones, tools like TwitterFox and numerous websites (Sullivan, 2009). With being able to use Twitter via ones cell phone it does not even require Internet access.

Thousands of Twitter users worldwide followed the events in Iran over Tweets supposedly sent by political activists within Iran. The hashtag #IranElection was the most requested and most active one on Twitter. However, many claim that the role of Twitter in the organization of protest was highly overestimated. According to Gaurav Mishra (2009) there had been less than 10,000 Twitter users in Iran before the election and less than 100 of them show a high activity. According to Sysmos.com (2009) there are approximately more than 20,000 Twitter users in Iran today. In June during the election month 2009 the Iranian Twitter community experienced a growth of almost 10%. Astonishing 93% of the Twitter users are seated in Tehran. After the election the proportion of Tweets including #IranElection from within Iran to those from outside changed drastically. The percentage of those inside Iran declined from over 51 to less than 23 percent, while those from outside grew from 27 to 40 percent (Sysmos 2009). Also the content changes from the day before the election to one week afterwards. Before the word "mousavi" was most frequently used with strong associations to "freedom" and "vote." A week later the content shifted to "iran" with association to "mousavi," "portest," and "Tehran" (ibid.). The development of the Twitter environment could be a hint to several processes triggered by the elections results announced on June 13th, one day after the election was held. Firstly Twitter activists were aware of the fact that the international Twitter community was listening to them, so they added "iran" in their Tweets to label them for people not deeply involved in Iran's politics yet. Secondly protest organization in Tehran (the only city holding a large Twitter community) included Tweets. Simultaneously users reported about protests going on. Through the multiplier effect via retweets, the number of people twittering about the events in Iran dramatically increased. Thirdly there were numerous activists asking people to change their Twitter location to Tehran to mislead the

government and hinder them to trace dissidents in Iran. With the international awareness growing, Twitter became big. This development of the Twitter stream during the post election period made many doubtful about Twitter actually playing a relevant role in organizing protest on the streets of Tehran. Moreover, although there are possibilities to bypass the government blockage, only a small portion of the Iranian population actually did so. Thus it is likely that mobilization within Iran happens through more conventional communication channels i.e. text-messaging and words of mouth (Mishra, 2009; Schectman, 2009), than through the highly restricted and controlled Internet. Mobilization through strong and weak ties of the every-day-life seems to be much easier and harmless usable and thus more effective for the organization of such huge protests observed in Teheran's streets. However, Twitter i.e. micro-blogging influenced more than any other web 2.0 tools the Western perception of the protests. The findings above provide hint that those twittering within Iran were well aware of this fact and geared their messages according to a curious audience outside Iran's borders. With successfully circumventing government's censorship the oppositional movement gained the impression of power over the regime. No matter to what extent the circumvention might have helped by organizing protests, the solidarity movement triggered in the Western world was a non-ignorable evidence of their success. With this sense of empowerment they were more likely to feel strong enough to also outperform the government beyond the virtual space. Additionally, the solidarity from outside was an important source of legitimacy for the protestors. With the international awareness gained, protestors as well as the western society tend to overestimate the scope of anti-regime sentiments within the Iranian society and thus perceived the protests as just on behalf of Iran's citizens. But again recalling Goldstone (2001) mobilization and networking has to be beyond class structures, thus has to include the majority of Iran's citizens. Twitter and networking tools alike successfully reached beyond Iran's borders, but it is doubtful if it also succeeded in reaching a wider mass within.²

Beside Twitter, reports suggest that also Facebook played a role especially in the pre-election period for Mousavi as a campaigning tool (Gheytanchi & Rahimi, 2009). Mousavi and other leading reformists as well as the former president Khatami maintain a Facebook page, where they build support against the hardliner regime, post their speeches and invite their followers to discuss political issues. Via Facebook the opposition party successfully organized campaign events during the pre-election time. By searching Facebook for "Mir Hossein Mousavi" or "Iran Election" numerous hits are found. There are 67 pro-Mousavi groups and 7 pro-Mousavi pages alone with the most popular page holding over 110,000 supporters. The information given on the page is written in both Farsi and English, with hundreds of people commenting on Mousavi's statements. Especially the "میر حسین موسوی" "Mir Hossein Mousavi"

² Considering that Iran's population, especially the young generation, is everything else than homogenous (cf. Alavi, 2009; Kreile, 2009) and Iran's parted blogosphere (Berkman Center, 2009) - 2/3 are pro regime and closed 1/3 are oppositional and highly connected with outside Iran – the network has probably failed to include major parts of Iran's society.

page holds lively and informative content. The high degree of text written in Farsi at this page gives evidence that the page is actually used by a majority of Iranians. Scanning the list of supporters, it seems that the majority has Iranian names and writes in Farsi on their own profile pages. Bookmarks of inter alia mousavi1388, MirTweets and mousavifacebook reveal his (or this of his helping hands) activity on Twitter.com, Flickr.com, YouTube.com, Facebook.com and GhalamNews.ir, Mousavi's official news web page. Mousavi certainly used those channels to communicate with his supporters. However, statements made by Mousavi are not designed to organize protests but rather to encourage his followers to go on with their resistance. Tweets like "Tonight & tomorrow night we must be louder and clearer than ever before, chanting "Allahu Akbar" (God is great) from rooftops. #IranElection" or "I am prepared For martyrdom, go on strike if I am arrested #IranElection." Only few actually mentioned precisely protests like: "Please join Mousavi, Khatami and Karoubi tomorrow at 4pm from Enghelab Sq. to Azadi Sq. in Tehran for a crucial green protest #IranElection." Similar to the findings on Twitter, at all social network channels on which Mousavi is active, the dominance of English spoken content is striking. This could imply that also Mousavi respectively his helping hands are aware of the interest of the global community in Iran's possible political change. The support of a wide community outside Iran might have been a source of legitimation and motivation.

Compiling the findings, Mousavi respectively the opposition movement managed to communicate through various social network channels. Even if the mass of information on protest organization was probably distributed through more conventional channels, the communication between the oppositional leader and the people has likely gone through the internet. Messages and speeches posted by Mousavi and his confidants might have heated up and sustained the movement. Additionally protestors triggered an international solidarity movement by messages, tweets, and pictures spread via Twitter, YouTube, Flickr, and alike. This might have lead to an overestimation of the opposition's power within Iran among protestors as well as the Western community. With support from outside, the opposition gained legitimation it might otherwise have lacked.

The media-shift perspective

Communication in the *mass-media culture* is described to be very centralized (Castells, 2001: 279); most of the power in the societal communication process is concentrated in the hands of professional journalists working for media companies, while other members of society only have little chance to share their ideas (with a big audience at least) (Benkler, 2006: 9 & 29). In the process of *mass communication* the flow of information always follows the same

direction: from mass media, e.g. newspapers, radio and television, to their audiences, the members of society. Therefore, only those kinds of media effects are assumed that follow that direction. This assumption also applies to the probably most prominent model of the production of public attention for an issue: *agenda setting*. It is theorized that mass-media audiences recognize the prioritization of issues in media outlets and hence adopt the media agenda of topics as their own agenda of societal relevant problems (Rössler, 1999: 151). The chance of the audience instead to influence the agenda of the media is infinitesimally small. Therefore, the agenda setting function is centralized and monopolized in the hands of mass media (Rössler, 1999: 153). The only actors outside the media who are thought to have a significant influence on the media agenda are societal elites, especially politicians and public relations agents (Rössler, 2008: 368ff.). However, ordinary people in the audience are supposed to be passive consumers of mass media and the agenda constructed through them; agenda setting seems to be a centralized process, in which power is in the hand of professional journalists, who decide upon the relevance of an issue making use of journalistic working routines, e. g. *news values* (Galtung & Ruge, 1965: 71; Schulz, 1976).

In the field of *international* news production, that we are considering in the Iran case, that sort of concentration of power is even stronger than in domestic news, because concentration is not only relevant for the choices of professional journalists in media editorial offices but also for professional journalists in the editorial offices of news agencies. The production of international news in most media outlets highly depends on the input of a few internationally operating news agencies, which compete on a very small, almost monopolized market (Hafez, 2002: 95ff.; Hintz, 2000: 12f.; Franzke, 2000). Additionally, in international reporting news agencies in many cases are dependent on official information published by governments that, consequently, exercise strong control on what information leaves the country and what does not. Hafez (2007: 36) describes the resulting chain of high power concentrations in the communication of information about foreign countries as a *trickling down* of news from official foreign government communiqués to the mass-media audience at home.

The probably most advanced approach to date to describe how the monopolized communication structure in society might be changed through social media was outlined by Yochai Benkler (2006) in his book *The Wealth of Networks*. Benkler's idea is that the use of network technologies enables – especially in the domain of information and culture – a new mode of production, *peer production*, that can replace the traditional industrial, concentrated mass-media processes (ibid.: 5f.). Consequently, a new, *networked public sphere* would be established, in which communication processes are structured much more democratically than in the mass-media public sphere, because each person has the chance to make contributions and utter his or her ideas and opinions, so that the information publicly available is much more diverse (ibid.: 10, 55 & 161). Furthermore, while control on centralized mass media can be exercised quite easily by authoritarian regimes, network technologies can function as a tool

to work around the control of information (ibid.: 266ff.). It is very difficult to fully shut down all communications on a network, in particular if the communication process does not concentrate on static websites (ibid.: 269).

Some scholars argue that in network society mass-media journalism will have to adapt its function to the new conditions, but that it will not disappear completely. For example, journalists could act as people's guides in a media environment that provides them with much more information than before the online revolution (Bruns, 2005: 219ff.; Rössler, 2003: 516). Some scholars even make the point that, from the perspective of the theory of the public sphere, the service of mass media of providing the society with an agenda of relevant problems to be solved can never be replaced by the debate in the online public sphere (Jarren, 2008). The Iran case can give us a hint what the interplay of mass media and social media might look like in the near future.

After attention had been attracted for the Iranian protesters in the global public sphere through worldwide access to peer-produced content covering the demonstrations, the amount of news coverage on the issue grew rapidly, both in traditional mass media and on online social network platforms. However, the Iranian government soon sharply restricted the work of foreign professional journalists in Iran, so that they could not produce their own content any more. Some were even expelled from the country. Under the conditions of traditional centralized mass-media information production, the Iranian government's control over professional journalists would have caused a nearly full abandonment of the flow of information from Iran. But the regime could not manage to control the distributed content on social media platforms (Stelter & Stone, 2009). That is why also Western media still had sources of information to use, which enabled them to continue their coverage on the demonstrations in Iran. Those sources also provided them with photos and videos documenting the protests, that news correspondents in Iran were not able to produce (Schectman, 2009). While professional journalists were prohibited to work in Iran, Internet users collaboratively produced content covering the demonstrations, thus keeping the global public sphere informed about the events. The regime could not manage to shut down the communication flows on network media. That is especially true for online services like *Twitter*, which can be accessed through several gateways. Because of the significance of the social media for receiving information from Iran the U.S. State Department even asked the management of *Twitter* to delay a scheduled maintenance (Palfrey, Etling & Faris, 2009; Schectman, 2009). None the less, the social media information sources also caused special kinds of problems. In contrary to journalistic outlets, in most cases it was not possible to confirm the authenticity and credibility of the content on the Internet (Cohen, 2009; Stöcker, Neumann & Dörting, 2009). Additionally, it is reported that the Iranian regime tried to join

the online conversations, especially on *Twitter*, in order to distribute misinformation (Cohen, 2009; Stöcker, 2009).

Considering that the network public sphere was the first space where information about the protests in Iran were available worldwide, one can conclude that networked peer production did play a significant role for globally raising attention for the demonstrations. The debate about those events in Western countries started on the Web. Traditional mass media reacted to the ongoing online discussions and to the public awareness for the issue already produced such as to the criticism of not reporting yet. That is, social media, especially *Twitter*, could gain an important role in the agenda setting of the Iranian protests – probably because they can distribute information in real-time (Stöcker, Neumann & Derting, 2009). Hence, peer production processes on social media are much faster than the mass-media news cycle. That is why they potentially can be faster in creating public awareness for an issue, too. In the Iran case, in effect, they – or respectively: their users – had a significant effect on setting the mass-media and the societal agenda. As was shown above, one would not assume such an effect of the “audience” on mass media. But through collaboration in social networks ordinary people could exercise power on the choices of professional journalists.

However, one can assume, that journalists would have attributed a high relevance to the issue anyway, applying the concept of *news values* as a working routine. In that approach, it is assumed that each event is attributed a certain news value, which is constituted through the addition of single *news factors*: If an event complies with a high number of single news factors, journalists consider it to be highly relevant for mass-media reporting (Galtung & Ruge, 1965: 71; Schulz, 1976). One of those factors is *negativism*. That is why Western media report about negative events in developing countries, such as natural disasters and civil wars, disproportionally often (Galtung & Ruge, 1965: 83f.; Hafez, 2007: 48ff.). The protests in Iran reproduced a number of classical patterns of foreign news about developing states, such as the news factor *negativism*. Therefore, probably, there would have been news coverage of the demonstrations in Iran also without the network public sphere.³

However, the Iran case gives evidence, that mass-media journalists are more and more sensitive to conversations in the network public sphere and that they are willing to react to those debates by adopting topics to the mass-media agenda. The members of society were able to collaboratively produce relevance for a topic, what was visible on social news platforms for anybody. Mass media are just beginning to take that production of relevance into account when creating their own media agenda, thus giving away part of their power and influence to the collective of members of society online (Rössler, 1999: 154ff.; Holler, Vollnhals & Faas, 2008). But mass media also fulfilled a genuine function in the public debate

³ Interestingly, in the news coverage on the Iranian protests the fact that the demonstrators made use of network technologies constituted a news factor itself, because the well-known pattern of protesting democratization activists was combined with this new and unexpected element (Schectman, 2009; Galtung & Ruge, 1965: 67).

on the demonstrations in Iran: They informed those people in society who are not engaged in newsgathering in online social networks and carried the information to a big audiences quickly. Furthermore, reporting constantly on the Iranian issue and including it into their agenda, mass media confirmed the relevance of the topic for all members of society, not only for those in online networks. One could assume that mass media thereby even strengthened the attention for the topic in the online public sphere. Additionally, journalists were keen to reduce the vast amount of non-confirmed information on the Internet in order to provide their audience with the most accurate image of the situation possible, thus adopting a potential future task of journalism.

Conclusion

Both the power-shift and the media-shift lenses are relevant to understand the impact of social networking technologies on politics in Iran.

Social media were relevant for agenda setting, organization, coordination, and the provision of information and content about the ongoing events in Iran. Traditional Mass media, whose work was prohibited in the country, were dependent on online social media platforms to report about the protests.

However, mass-media journalism is not displaced by the network public sphere. This journalistic processing of the topic hence had added value for the audience. Probably, similar configurations will be observed in other cases during the next years. That is why the development of theories of the public sphere should be promoted in the sense of that coexistence of both mass media and social media with their respective modes of production.

But clearly, we are confronted with complex rearrangement of existing power structures and in need of frameworks that allow us to think these through intelligently. Until we have a fully developed theory of our networked societies, heuristics such as the power-shift or the media-shift perspective can be helpful to describe, explain, and predict collective action.

Bibliography

- Alavi, N. (2009). „Kinder der Revolution - Die iranische Blogosphäre.“ *Aus Politik und Zeitgeschichte*, 49/2009, 33-38. Available at:
<http://www1.bpb.de/publikationen/J1LV2B.0.0.Iran.html>.
- Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven/ London: Yale University Press.
- Berkman Center. (2009). “Interactive Persian blogosphere map.” *Berkman Center for Internet & Society*. Available at:
http://cyber.law.harvard.edu/publications/2008/Mapping_Irans_Online_Public/interactive_blogosphere_map.
- Boyle, A. (2009). “How Iran's Internet works.” - *Cosmic Log*. Available at:
<http://cosmiclog.msnbc.msn.com/archive/2009/06/18/1970353.aspx>.
- Bruns, A. (2005). *Gatewatching: Collaborative Online News Production*. New York et al.: Peter Lang.
- Castells, M. (2001). *Der Aufstieg der Netzwerkgesellschaft: Teil 1 der Trilogie Das Informationszeitalter*. Opladen: Leske + Budrich.
- CIA. (2009). “Middle East: Iran.” *CIA – The World Factbook*. Available at:
<https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html>.
- Cohen, N. (2009). “Twitter on the Barricades: Six Lessons Learned.” *The New York Times*. June 21. Access June 21, 2009
<http://www.nytimes.com/2009/06/21/weekinreview/21cohenweb.html>.
- Corley, A. (2009). “The Web vs. the Republic of Iran.” *Beta Technology Review*. Available at:
<http://beta.technologyreview.com/web/22893/page2/>.
- DW. (2009, July 28). „Blogger helfen Informationen an der Internetzensur vorbeizuschleusen.“ *Deutsche Welle*. Available at:
http://www.dw-world.de/popups/popup_single_mediaplayer/0,,4523167_type_video_struct_12323_contentId_4509659,00.html.
- Ebadi, S. (2006). *Iran Awakening-A Memoir of Revolution and Hope*. New York: Random House.
- Economist.com (2008). “Rioters without frontiers.” *Economist*. Available at:
http://www.economist.com/world/international/displaystory.cfm?story_id=12815678&source=login_payBarrier.
- Economist.com (2009). “Twitter 1, CNN 0.” *Economist*. June 18. Access June 21, 2009
http://www.economist.com/world/mideast-africa/displaystory.cfm?story_id=13856224

- Faris, R. & Villeneuve, N. (2008). "Measuring Global Internet Filtering." In: R. Deibert, J. Palfrey, R. Rohozinski, J. Zittrain, & ed., *Access Denied: The Practice and Policy of Global Internet Filtering*. Cambridge: MIT Press.
- Franzke, M. (2000). "Aber die Agenturen haben nichts gemeldet...: Das Problem, über die Probleme der "Dritten-Welt" zu berichten." In: S. Brüne, ed. *Neue Medien und Öffentlichkeiten: Politik und Telekommunikation in Afrika, Asien und Lateinamerika: Band 1*. Hamburg: Schriften des Deutschen Übersee-Instituts Hamburg, 115-126.
- Galtung, J. and Ruge, M. H. (1965). "The Structure of Foreign News. The Presentation of the Congo, Cuba and Cyprus Crisis in Four Norwegian Newspapers." *Journal of Peace Research*, 2, 64-91.
- Gheyntanchi, E. & Rahimi, B. (2009). "The Politics of Facebook in Iran." *Open Democracy*. Available at: <http://www.opendemocracy.net/article/email/the-politics-of-facebook-in-iran>.
- Goldstein, J., 2007. *The Role of Digital Networked Technologies in the Ukrainian Orange Revolution*. Berkman Center Research Publication No. 2007-14. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1077686.
- Goldstone, J.A. (2001). "Towards a Fourth Generation of Revolutionary Theory." *Annual Review of Political Science*, 4(1), 139-187.
- Granovetter, M. (1983). "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory*, 1, 201-233.
- Hafez, K. (2002). *Die politische Dimension der Auslandsberichterstattung: Band 1: Theoretische Grundlagen*. Baden-Baden: Nomos Verlagsgesellschaft.
- Hafez, K. (2007). *The Myth of Media Globalization*. Cambridge/ Malden: Polity Press.
- Hill, K. & Hughes, J. (1998). *Cyberpolitics: Citizen Activism in the Age of the Internet*. Oxford: Rowman & Littlefield.
- Hintz, A. (2000). "Global media concentration and the rise of alternative media." In: S. Brüne, ed. *Neue Medien und Öffentlichkeiten: Politik und Telekommunikation in Afrika, Asien und Lateinamerika: Band 2*. Hamburg: Schriften des Deutschen Übersee-Instituts Hamburg, 11-35.
- Holler, S., Vollnhals, S. and Faas, T. (2008). "Focal Points und Journalisten – Bedingungen für den Einfluß der Blogosphäre?" In: A. Zerfaß, M. Welker and J. Schmidt, eds. *Kommunikation, Partizipation und Wirkungen im Social Web: Grundlagen und Methoden: Von der Gesellschaft zum Individuum*. Köln: Halem, 94-111.
- ICTRC. (2005). *A Report on the Status of the Internet in Iran*. Iran CSOs Training & Research Center. Available at: http://www.genderit.org/upload/ad6d215b74e2a8613f0cf5416c9f3865/A_Report_on_Internet_Access_in_Iran_2_.pdf.

- Jarren, O. (2008). "Massenmedien als Intermediäre: Zur anhaltenden Relevanz der Massenmedien für die öffentliche Kommunikation." *Medien & Kommunikationswissenschaft*, 3-4, 329-346.
- Kelly, J. & Etling, B. (2008). *Mapping Iran's Online Public: Politics and culture in the Persian Blogosphere*. Berkman Center Reserach Publication No. 2008-01. Available at:
http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Kelly&Etling_Mapping_Irans_Online_Public_2008.pdf.
- Kreile, R. (2009). „Verliert die Islamische Republik die Jugend?“ *Aus Politik und Zeitgeschichte*, 49/2009, 27-32. Available at:
<http://www1.bpb.de/publikationen/J1LV2B,0,0,Iran.html>.
- Mishra, G. (2009). "Updated: The Irony of Iran's 'Twitter Revolution.'" *Gauravonomics Blog on Social Media and Social Change*. Available at:
<http://www.gauravonomics.com/blog/the-irony-of-irans-twitter-revolution/>.
- Morozov, E. (2008). "The Alternative's alternative." *Open Democracy*. Available at:
<http://www.opendemocracy.net/article/email/the-alternatives-alternative>.
- Nyaira, S. (2009). *Mugabe's Media War: How New Media Help Zimbabwean Journalists Tell Their Story*. Shorenstein Center on the Press, Politics and Public Policy - Discussion Paper #D-51. Available at:
http://www.hks.harvard.edu/presspol/publications/papers/discussion_papers/d51_nyaira.pdf.
- ONI (2009). "Iran." *Open Net Initiative*. Available at:
http://opennet.net/research/profiles/iran#footnoteref3_kra08om.
- Palfrey, J., Etling, B. and Faris, R. (2009). "Reading Twitter in Teheran: Sorry, but real revolutions exceed 140 characters." *The Washington Post*. June 19. Access June 19, 2009
<http://www.washingtonpost.com/wp-dyn/content/article/2009/06/19/AR2009061901598.html>.
- ParsTimes. (1986, March 19). *Press Law*. *Pars Times.com*. Available at:
http://www.parstimes.com/law/press_law.html.
- Popkin, H. (2009). "Social networks support Iran election protests." *Tech and gadgets*. Available at:
http://www.msnbc.msn.com/id/31409312/ns/technology_and_science-tech_and_gadgets/.
- Rössler, P. (1999). "Politiker: Die Regisseure in der medialen Themenlandschaft der Zukunft? Agenda-Setting-Prozesse im Zeitalter neuer Kommunikationstechnologien." In: K. Imhof, O. Jarren and R. Blum, eds. *Steuerungs- und Regelungsprobleme in der Informationsgesellschaft*. Opladen/ Wiesbaden: Westdeutscher Verlag, 149-166.

- Rössler, P. (2003). "Online-Kommunikation." In: G. Bentele, H.-B. Brosius and O. Jarren, eds. *Öffentliche Kommunikation: Handbuch Kommunikations- und Medienwissenschaft*. Wiesbaden: Westdeutscher Verlag, 504-522.
- Rössler, P. (2008). "Themen der Öffentlichkeit und Issues Management." In: G. Bentele, R. Fröhlich and P. Szyszka, eds. *Handbuch der Public Relations: Wissenschaftliche Grundlagen und berufliches Handeln*. Opladen/ Wiesbaden: VS Verlag für Sozialwissenschaften, 362-377.
- Schams, M. (2009). „Über Irans aktuelle Lage im Blog.“ *Deutschlandfunk*. Available at: <http://www.tagesschau.de/multimedia/audio/audio39994.html>.
- Schectman, J. (2009). "Iran's Twitter Revolution? Maybe Not Yet." *BusinessWeek*. June 17. Access June 19, 2009
http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm.
- Schulz, W. (1976). *Die Konstruktion von Realität in den Massenmedien: Analyse der aktuellen Berichterstattung*. Freiburg/ München: Verlag Karl Alber.
- Stelter, B. and Stone, B. (2009). „Web Pries Lid of Iranian Censorship.“ *The New York Times*, June 23. Access June 24, 2009
http://www.nytimes.com/2009/06/23/world/middleeast/23censor.html?_r=1&hpw.
- Stöcker, C. (2009). „Propagandakrieg um Twitter.“ *Spiegel Online*. June 16. Access June 17, 2009
<http://www.spiegel.de/netzwelt/web/0,1518,630845,00.html>.
- Stöcker, C., Neumann, C. and Dörting, T. (2009). "Ahmadinedschads Angst vor dem Netz." *Spiegel Online*. June 18. Access June 18, 2009
<http://www.spiegel.de/netzwelt/web/0,1518,631030,00.html>.
- Sullivan, B. (2009). "Twitter 1, Censors 0: Why it's still working." *The Red Tape Chronicles*. Available at:
<http://redtape.msnbc.com/2009/06/twitter-1-censorship-0-why-its-working.html>.
- Sysmos (2009). "A Look at Twitter in Iran." *Sysomos Blog*. Available at:
<http://blog.sysomos.com/2009/06/21/a-look-at-twitter-in-iran/>.
- Zittrain, J. (2009). "Could Iran Shut Down Twitter?" *The Future of the Internet*. Available at:
<http://futureoftheinternet.org/could-iran-shut-down-twitter..>