The Role of New Media for the Democratization Processes in the Arab World

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“If your government shuts down your Internet, it’s time to shut down your government.”

-- Message on social networks during the 2011 Egypt revolution

Introduction

The year 2011 has seen a number of revolutionary political movements in the Arab world. Today, these movements, which had shared root causes, shared values, and shared strategies for civil resistance, are sometimes collectively referred to as the “Arab Spring”. Over the course of these events unfolding, and from a perspective of media reporting, they have also been called by the catchy-sounding terms “Twitter Revolution” or “Facebook Revolution”. This suggests a strong role of the respective Internet services, and indeed they have been used in a number of ways by both authoritarian, oppressive governments and by the oppositional popular movements that challenged them. Right from the start, we should leave no doubt that these terms can be very misleading and exaggerating the role of technology, and that the Arab revolutions would most likely still have taken place without the Internet, just like previous revolutions have also taken place with the respective communication technologies that were available at their time. Early media reports tended to celebrate Facebook & Co. as inherently liberating technologies, however, one must be careful not to fall into the trap of techno-utopism by overlooking adverse aspects of technology, and by overestimating its overall potential. After all, revolutions are not started and executed by technologies, but rather by people, by their burning desires and their fearless ingenuity.

Despite this risk of overstating their potential, the so-called “new media” such as the Internet or mobile phones have certainly played a major role in the way modern political revolutions and democratization processes take place, and in the way these events are witnessed and supported by external actors. The purpose of this article is to evaluate the actual potential of new media for such democratization processes, to take a more detailed look at a few concrete cases such as the revolutions in Tunisia and Egypt, to evaluate the involvement of the West, and to examine some deeper technological aspects of the events.
New media for democratization processes

“We had no freedom of assembly in the streets of Cairo, so we assembled in cyberspace instead.”

--- Egyptian activist

The use of terms such as “Twitter Revolution” in early media reports during the Arab Spring suggested that new media have suddenly emerged as omnipotent weapons for easily overcoming authoritarian regimes. However, the use of modern information and communication technologies by political movements is not new: In 1994, the Zapatista Army of National Liberation (EZLN) in Chiapas, Mexico pioneered the use of new media for political goals by communicating its motivations and demands through a public network of sympathizers and supporters all around the world. In 2000, the Serbian Otpor! movement against the socialist regime of Slobodan Milošević was famous for having a website for recruitment and political outreach even before it had an office. In 2008, hundreds of thousands of people, organized through Facebook, held a march in the Colombian capital Bogotá to protest the continuing, violent activities of the Revolutionary Armed Forces of Colombia (FARC). Although the use of new media during the Arab Spring has been portrayed as a novelty, it appears to be in fact only a logical continuation of their uses by earlier political movements. What is different today is that new media have played a more prominent role than before, that they have been used in more effective and determinate ways, and that the movements’ protagonists were able to draw from previous as well as from each other’s experiences. For example, actors in Egypt used similar new media techniques as their “predecessors” in Tunisia.

Before evaluating the amount of influence new media really had in the Arab Spring revolutions, it appears useful to take a look at the extent to which they were actually available and used by the general population. The “Arab Social Media Report” by the Dubai School of Government provides penetration and usage data of some new media services within the respective region. For example, according to this report, in spring 2011 Facebook had a penetration rate of 22.49% in Tunisia, and 7.66% in Egypt. Twitter had a penetration rate of 0.34% in Tunisia, and 0.15% in Egypt. This means that even though these Internet services have been hailed as having greatly influenced the revolutions of the Arab Spring, a majority of the population was not actually connected to them, and is therefore likely to have received news of the events through more traditional media or through word-of-mouth communication.
So how exactly can the Internet or mobile phones influence the initiation, execution and outcome of revolutionary movements? According to a report by the United States Institute for Peace on “New Media in Contentious Politics”, there are several levels of new media influence that can be distinguished. While these levels are complex and interrelated, and they are all difficult to research empirically when applied to concrete cases, they provide a useful framework:

- **Individual Transformation**: New media can affect politics via the effects they have on individuals, their competencies and their political views, e.g. new participants can be recruited to a movement.
- **Intergroup Relations**: New media can promote or undermine the bonding of group members to one another, and the bridging of members of different groups.
- **Collective Action**: New media can be used to initiate and organize collective action, such as marches or demonstrations.
- **Regime Policies**: New media can help established regimes to maintain their power in various ways, such as through censorship or counter-propaganda.
- **External Attention**: Information about a movement such as its ideologies and goals can be published to a wide audience, both domestically and internationally. This can happen in the form of manifestos, statements, demands, images or videos on web sites or social networking services. As a consequence, political sympathy or hostility from outside actors can be mobilized.

In Tunisia for example, Facebook as well as Youtube were used to spread images of the riots in the town of Sidi Bouzid following the self-immolation of Mohamed Bouazizi on December 17th 2010. Even though long-term resentments against the government such as unemployment, corruption and restricted civil liberties have existed for some time, it was the publicity around the events in Sidi Bouzid that laid the emotional foundation for the outbreak of the revolution. One user stated in a message on the Twitter micro-blogging platform: “Let's hope that this event in Sidi Bouzid isn't limited to Bouazizi's health ... this is only the beginning!!”. One Facebook group that has generated significant support is “Nhar 3la 3ammar” (“Day of Ammar”), which has criticized the restricted freedom of speech in the country.

Similarly, in Egypt, a famous Facebook group named “We are all Khaled Said” was set up by activists to raise awareness and generate sympathies for Khaled Mohamed Saeed, who was beaten to death by

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1 For example, see (Abouzeid, 2011)
2 Arabic: سعيد محمد خالد, different transliterations to the Latin alphabet exist
police on June 6th 2011, which is generally considered to be the single most decisive event that led to the 2011 Egyptian Revolution. One leading Facebook activist who was involved in setting up this group and who has emerged as a public face of the protests in Egypt was Google executive Wael Ghonim³, which has led to the company celebrating itself as promoting democracy. Another important Facebook group that contributed to the uprising was the “April 6 Youth Movement”⁴. Twitter was also used by the protesters to organize their collective actions, primarily through the #jan25 hashtag, which on the Twitter platform acts as a keyword that can be searched for and subscribed to. The Facebook event titled “The Day of the Revolution Against Torture, Poverty, Corruption and Unemployment” which called for mass protests on January 25th 2011 was advertized through Twitter and received more than 80,000 clicks.

Countermeasures

“Unfortunately, I have to get out of Egypt, to be able to speak about the plight of the Egyptians.”

-- Mohamed El Baradei

One important and inevitable aspect of the use of the Internet and other media in revolutionary political movements is that they are naturally not only available to members and supporters of such movements, but also to governments and their supporters in at least the same way. In fact, some of the key institutions responsible for operating communication infrastructures (telecommunications companies and Internet service providers), are typically easily controlled by the governments of the countries where they operate. Therefore, movements that are directed against an established governmental authority will often find themselves confronted with an imbalance of power not only in the form of control over traditional media, the police force, the army and other institutions, but also on the Internet, which governments can easily monitor, analyze, manipulate, slow down or turn off altogether. Historically, attempts by established authorities to control and manipulate information and communication have a long tradition, from the Catholic Church’s early attempts to control Gutenberg’s printing technology to the fearsome propaganda machine of German National Socialism. In this tradition of “knowledge is power”, it is not surprising that today, authoritarian regimes attempt to maintain their power to a great

³ For example, see (The Telegraph, 2011)
⁴ For example, see (Wired Magazine, 2011)
extent by controlling the dissemination of information, and that information and communication
technologies become powerful weapons for both the government and the governed. While some
countries provide Internet services in a very free and unrestricted manner, others exert tight control in the name of security\(^5\).

In Tunisia, censorship of traditional media as well as of the Internet has existed well before the beginning of the uprising. All control over the Internet was centralized within the government, which has not hesitated to filter and shut down websites at will\(^6\). During the 2011 revolution, Internet services such as Youtube, Wikileaks, human rights web sites and activist blogs were censored, and the government has even gone as far as stealing its citizens’ passwords on Facebook, in order to invade, manipulate and delete content on their social networking accounts\(^7\). And countermeasures by the government were not limited to the online world – dissident bloggers such as Slim Amamou and Azyz Amamy, who had covered the events in Sidi Bouzid, were identified, threatened and imprisoned\(^8\).

In Egypt, among a whole array of countermeasures, the regime has gone as far as blocking Internet access entirely\(^9\), both for domestic users and for incoming international requests, which is a move that is unprecedented in Internet history. The rationale behind such measures is clear: Movements relying on the Internet for organization and public outreach can be hurt by infiltrating or disabling the communication infrastructure which they rely on.

Apart from simple censorship of communication infrastructure, popular movements relying on the Internet may also face more severe difficulties, which was demonstrated most effectively by the failure of the 2009 Iran Green Movement to achieve its goals. Just like the technology can be used by protesters to disseminate their political positions, to spread images such as the one of Neda Agha-Soltan, and to organize themselves, it can equally be used in at least the same ways by their opponents in the political establishment, for example to undermine the movement’s outreach efforts, or to monitor and then effectively combat its organizational structure, which can be as simple as analyzing suspected activists’ Facebook pages or the lists of their followers on Twitter. This is precisely what happened in Iran; In addition to censoring the Internet and shutting down mobile phone services, the government turned to

\(^5\) For a report on Internet freedom and censorship world-wide, see (Freedom House, 2011)
\(^6\) For example, see http://anarcat.koumbit.org/censuretunisie
\(^7\) See (O’Brien, 2011)
\(^8\) For example, see (Reporters Without Borders, 2011)
\(^9\) For example, see (Kanalley, Egypt’s Internet Shut Down, 2011)
the Internet to mobilize its own supporters online, to identify its opponents\textsuperscript{10} using Flickr or Youtube, and to subsequently execute a devastating police crackdown on the movement. As a consequence, the 2009 Iran Green Movement is often used as an example to dispel the utopian myth of omnipotent new media for political freedom, and to illustrate the limits of their potential. After millions of Twitter users colored their profiles green in support of the Green Movement, one tweet pointed out the futility of such actions, stating: “Note to would-be revolutionaries: you can remove the green tint from your pictures now; it didn’t work.”\textsuperscript{11}

During the 2011 Libyan civil war, the government also attempted to use its control over the Internet against the uprising. Soon after the first protests, individual social networking services were censored, and later Internet access was shutdown entirely\textsuperscript{12}. The government also used the Internet to learn about the rebel movement’s organizational structure and about individual actors’ identities. One famous Libyan blogger and media activist, Mohammed Nabbous, founder of the first private TV station in rebel territory, was killed by a sniper of loyalist forces in Benghazi on March 19\textsuperscript{th} 2011, indicating the government’s awareness of the threat that both classic and new media can pose to it.

In the 2011 Syrian uprising, new media such as weblogs and social networks were also used to organize protests and to communicate human rights violations to an audience both within and outside of Syria. However, activists seem to have learned lessons from events in other countries. Reportedly, opposition actors in this particular conflict were afraid that government hackers were browsing the Internet to search for dissidents and track them down via social media websites. Also, it appears that even though access to Facebook had been blocked access for some time, it was later reopened as the government discovered that it was useful for identifying and tracking down dissidents\textsuperscript{13}.

From all these examples, governmental countermeasures in the online world can be summarized as falling into four broad categories: Selective censorship of certain web sites and services, shutting off connectivity altogether, online counter-propaganda, and the identification and tracking down of activists and sympathizers. One of the best-known critics of new media’s potential for supporting political revolutions, Evgeny Morozov – known for coining terms such as “digital dictatorship” – suggests that the

\textsuperscript{10}See (Morozov, Internet in Iran, 2011)
\textsuperscript{11}See this Twitter post: http://twitter.com/evgenymorozov/status/3489960834
\textsuperscript{12}See (Kanalley, Libya Internet Shut Down Amid Protests, Later Restored, 2011)
\textsuperscript{13}See (Reuters, 2011)
Internet may actually be more useful to authoritarian regimes than to the popular movements that oppose them. And even if a society had unlimited access to online information and communication systems, it might still not be able to overcome an authoritarian regime.

**Involvement of the West**

“Both the American people and nations that censor the Internet should understand that our government is committed to helping promote Internet freedom.”

— Hillary Clinton

The developed nations of the West have often been criticized for having shown political support to leaders such as Zine el-Abidine Ben Ali, Hosni Mubarak and Muammar al-Gaddafi for a long time, justifying this support with security interests and with the fight against terrorism. What is less known is that Western support for authoritarian governments in the Arab countries occurred not only politically, but also on the technological level. For example, the filtering technology that had been used by the Tunisian government for Internet censorship – SmartFilter – came straight from American security company McAfee.

Despite their original support for the established regimes, actors from Europe and the U.S. have also more and more aided the opposition and contributed to the success of the Arab Spring uprisings in numerous ways, for example in the form of American financial assistance, or through the training of activists by former members of the Serbian Otpor! movement and by their Centre for Applied NonViolent Action and Strategies (CANVAS). When it comes to the use of new media, Western nations, individuals and organizations have also made noteworthy contributions. For example, the blogging platform “Global Voices” runs a so-called bridge-blogging service where volunteer authors, translators and editors attempt to provide reports from a local perspective that cannot normally be found in the mainstream media, therefore raising awareness in the West for events in the Arab world. For example, on this platform it is possible to read English translations of Egyptian blog posts that had originally been written in Arabic.

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14 For example, see (Morozov, 2010)

15 For example, see (Morozov, Does the Internet spread democracy, 2009)
As another example for Western involvement, the self-proclaimed hacker collective “Anonymous” – known for numerous online actions of civil disobedience and for using hacking techniques in the interest of achieving political goals (“hacktivism”) – attempted to support the Tunisian opposition by initiating so-called Distributed Denial of Service (DDoS) attacks against institutions of the government, e.g. the offices of the president, the prime minister and the ministry of the interior. Also, companies in the West helped people in the Arab world to circumvent Internet censorship and other restrictions imposed by authoritarian governments. For example, the Dutch service provider xs4all set up special dial-in phone lines for Egyptian Internet users after their government had shut down all Internet connectivity. While slow and expensive, this provided at least a minimal opportunity for activists for sending e-mails, blog posts, etc. to the world. In a similar effort, Google also assisted the Egyptian opposition by setting up the speak2tweet service, which made it possible to leave voicemail messages under certain telephone numbers. These messages were then picked up by specially designed software and automatically converted to messages on the Twitter micro-blogging platform. According to the Google corporate blog, by providing the service the company hoped to enable more Egyptians to be heard “at this very difficult time”.

During the 2009 Iran Green Movement, the U.S. State Department urged Twitter to delay a planned upgrade that would have hindered Iranian opposition activists in their communication. This incident resulted in a discussion on whether interventions like this constitute illegitimate interference with Iran’s internal affairs. Since Hillary Clinton’s speech “Remarks on Internet Freedom” in January 2010, it is obvious that the promotion of a world-wide, free and open Internet has become a high-level U.S. political objective. The logic behind this speech is that the spreading of technology will also result in the spreading of democracy, freedom and human rights, and that the Internet is a new tool in the arsenal for the West’s ambitions to promote its values. One modern term for this strategy is “Digital Diplomacy”, however again the idea is not new: Already in 1993, media entrepreneur Rupert Murdoch said “Advances in the technology of telecommunications have proved an unambiguous threat to totalitarian regimes everywhere.” And in 1999, George W. Bush told us to “Imagine if the Internet took hold in China. Imagine how freedom would spread.”

Apart from a discussion whether this strategy of spreading democracy with the help of technology actually works, one question that has to be asked in this context is whether such ambitions are based on

16 See http://scorpio.home.xs4all.nl/egypt.txt
17 See http://googleblog.blogspot.com/2011/01/some-weekend-work-that-will-hopefully.html
altruism and sincere empathy for oppressed and disadvantaged people in certain nations, or whether there are also good old-fashioned political interests involved. On one hand, the defense of civil liberties online has to be applauded and supported. On the other hand, the close cooperation of Western governments with Silicon Valley tech companies also fuels speculations that the spreading of Facebook, Twitter, Youtube and similar services around the world might over time function more and more as an extension of the U.S. state and a tool of its foreign policy and diplomatic efforts, leading to a form of cultural hegemony or imperialism, rather than being independent and neutral technologies.\textsuperscript{18} As another indication of the increased integration of new media companies with the political landscape, Facebook has recently founded a political action committee (PAC), whose purpose is to raise money for supporting politicians with positions favorable to the company’s goals, namely “promoting the value of innovation to our economy while giving people the power to share and make the world more open and connected”\textsuperscript{19}.

What should also not be left out when discussing the role of the West is that Facebook, Twitter & Co. have not only played a role for political movements “far away” in the Arab world, but also in European countries. In Moldova, after the 2009 parliamentary elections, citizens used the Twitter #pman hashtag to organize protests, which were answered by the government shutting down cell phone service on the biggest square in the capital Chisinau\textsuperscript{20}. In Belarus, after the 2010 presidential elections, as well as after the 2011 independence day, protests were organized through VKontakte (a Facebook-like social networking services popular in post-Soviet countries), and the government responded with censoring certain communication on the Internet\textsuperscript{21}. And even in stable democracies deep within Europe, where no revolutionary movements are challenging the government, there is a tendency to more and more Internet control, using similar methods as authoritarian regimes did during the Arab Spring\textsuperscript{22}.

\textsuperscript{18}See (Morozov, The Digital Dictatorship, 2010)
\textsuperscript{20}See (Morozov, Moldova’s Twitter Revolution, 2009)
\textsuperscript{21}See (Albert, 2011)
\textsuperscript{22}See (Morgan, 2011) for a discussion on such parallels. The most prominent example for Internet control in the West might be the highly controversial Data Retention Directive (Directive 2006/24/EC) of the European Union, which requires member states to store sensitive telecommunications data for a period of six to twenty-four months.
About Technology

"Here we don't really have Internet, we have a national Intranet."

-- Tunisian Activist

The information and communication technologies that played the biggest roles during the Arab Spring revolutions were the social networking service Facebook, the micro-blogging platform Twitter, and the video hosting platform Youtube. Besides Internet services, mobile phones also played a major role, for example when they were used for taking pictures during a riot, or for sending SMS text messages. In an analysis of how useful these technologies can potentially be for governments and oppositions, it is necessary to also take a closer look at how exactly they function and how they are architected. Basically, communication on the Internet consists of a hardware layer (routers, modems, fiber-optic cables, wireless adapters, satellites, etc.) and a software layer (the actual Internet services we use, such as Facebook, Skype, E-Mail, etc.)\(^\text{23}\). Initially, the Internet had been designed by its inventors as a decentralized, redundant network that is highly resistant against manipulation and disruption. In practice however, today many aspects of the network both on the hardware and software layer are highly centralized and therefore easily controlled. For example, the reason why the Egyptian government succeeded in shutting down the country’s Internet connectivity was that almost all of its connections were controlled by only four major companies, which implemented the shutdown in a concerted action within only 15 minutes\(^\text{24}\). Also, social networking services such as Facebook or Twitter are centralized on the software layer, making it easy to monitor and manipulate all communication that takes place on such services. These patterns of centralization on the Internet have made it possible in the first place for authoritarian regimes to implement shutdowns and censorship and to use new media to their advantage.

During the Arab Spring, online repressive measures such as censorship or service shutdown were common weapons in the arsenal of governments. There are technical approaches to circumventing such obstructive measures, for example proxy servers, anonymizing peer-to-peer networks, alternative DNS root name servers and private alternative network devices.

\(^{23}\) This is of course a simplification. For a more comprehensive description of the various layers of the Internet and other communication systems, frameworks such as the OSI model or the TCP/IP model are used.

\(^{24}\) See (Cowie, 2011)
A number of technology projects are underway that promise to make access to information, social networking and other interaction on the Internet more free, open and democratic, more empowering for individuals, and less vulnerable to manipulation or restriction. The most common recipes to achieve these goals are to deploy both hardware and software that is inherently decentralized and supports anonymous and encrypted communication, in order to make it hard to identify individuals and control their communication.

- One of the most popular projects is Tor, which has been used extensively during both the Tunisian and Egyptian revolutions. It allows users to transmit messages and access websites in an anonymous way, by sharing and disguising their communication with other participants in a distributed network.

- Psiphon is a so-called proxy server software, which enables users to access censored websites by establishing connections through an intermediate, non-censored system. The project views the Internet as a “global commons” that should not be

- FreedomBox is a software project initiated by Columbia University law professor Eben Moglen, who has frequently criticized the Internet’s ability to monitor people’s behavior. The project’s stated purpose is to “facilitate free communication among people, safely and securely, beyond the ambition of the strongest power to penetrate”, and the project’s website explicitly describes itself as a “platform that resists oppression and censorship”, and “an organizing tool for democratic activities in hostile regimes”.

- Tonika promises social networks based on principles that human societies implement organically in daily life, with robust security, anonymity, resilience and performance.

- Similarly, Diaspora is also a decentralized social networking software that tries to provide Facebook-like functionality without being dependent on a single entity which controls all participants.

25 http://www.torproject.org/
26 According to (Niiler, 2011), downloads of the Tor software have increased significantly when Egypt’s Internet connectivity was shut down.
27 http://psiphon.ca/
28 http://freedomboxfoundation.org/
29 http://5ttt.org/
30 http://join diaspora.com/
• The Serval project\(^{31}\) (“uniting the world through communication”) goes as far as stating that communication should be a human right. It focuses on mobile phones and tries to develop software that makes them work under any circumstances and without infrastructure.

• The Commotion wireless project\(^{32}\) specifically references the protests in Tunisia, Egypt and Libya, and argues that “democratic activists around the globe need a secure and reliable platform to ensure their communications cannot be controlled or cut off by authoritarian regimes”.

• Wireless community networks such as Freifunk\(^{33}\) attempt to provide Internet connectivity for everyone in a grassroots effort independent of commercial providers.

• OpenBTS\(^{34}\) in conjunction with the Asterisk\(^{35}\) open-source software can enable classic telephone devices to function in an environment where no commercial, centralized infrastructure is available.

The list of such projects is growing, as is public awareness of the deficiencies and technical vulnerabilities of current highly centralized infrastructure. Political, financial and academic resources are also more and more devoted to such efforts, for example by the New America Foundation\(^{36}\), which supports projects to build technology for a distributed, open-source telecommunications system, by MIT’s Center for Civic Media\(^{37}\), which researches and invents “new technologies that support and foster civic media and political action”, by the University of Toronto’s Citizen Lab\(^{38}\), or by the Harvard Berkman Center for Internet & Society’s “Internet & Democracy project”, an initiative with an explicit focus on the Middle East\(^{39}\).

\(^{31}\) http://www.servalproject.org/
\(^{32}\) http://tech.chambana.net/projects/commotion
\(^{33}\) http://start.freifunk.net/
\(^{34}\) http://openbts.sourceforge.net/
\(^{35}\) http://www.asterisk.org/
\(^{36}\) http://newamerica.net/
\(^{37}\) http://civic.mit.edu/
\(^{38}\) http://citizenlab.org/tag/internet-freedom/
\(^{39}\) http://cyber.law.harvard.edu/research/internetdemocracy
Conclusion

Since the early days of E-Mail and the World Wide Web, new media have always been accompanied by great utopist hopes of bringing more peace and democracy to the world. Today, as terms such as “Twitter Revolution” are used to describe recent events in Arab countries, this vision is again popular; however, the role of technology is complex. Any popular narratives that portray new media as powerful weapons, citizens as inherently organized and technologically empowered, and authoritarian regimes as vulnerable, are dangerous oversimplifications of reality. A more accurate statement might be that Youtube, Facebook, Twitter & Co. merely constitute new weapons for both sides of an old fight. It is wrong to say that social networks can start a revolution. It is equally wrong to say that they did not play a significant role during the Arab Spring. Also, the use of social networking platforms and other Internet services for political struggle has not been invented during the Arab Spring, and it will not end with it.

It is interesting to note that the various uses of new media for political struggle and civil disobedience can to some extent be traced back and related to Gene Sharp’s classic 198 methods of nonviolent action. For example, setting up a website or Youtube channel fits into the “Protest and Persuasion” category, the use of firewall and censorship circumvention technologies is a form of “Noncooperation”, and the hacking into government infrastructure constitutes an act of “Nonviolent Intervention”.

It is certain that in future comparable events, their use will become more natural and more sophisticated, as will counter-measures. Technologies evolve, and lessons are being learned from the way they have influence political movements in recent years. The general utopian vision is one of a world where communication technologies are people-centered and open, and where they support free and democratic societies. In order to make the Internet function for this vision and for a more peaceful world altogether, it will be necessary to work on more decentralized and pluralistic social networking technologies, to have an infrastructure that is more resistant to surveillance and disruption, to find a reasonable balance between anonymity and veracity, and to encourage women, marginalized group and minorities to play more active roles in the development and use of such future new media technologies. In a globalized and highly interconnected world, these are topics that concern more than just the Arab world.

See (Sharp, 1973)
Currently no technologies exist that are inherently peaceful and democratic, and that are resistant against uses that counteract such ideals. But at the same time it is certainly not unreasonable to believe that we can work toward creating them.

Another question for the future will be how new media can be used not only for having a revolution, which is the “sexy” part that the mainstream media usually focuses on, but also for the hard challenges that follow – for reconciliation and peace-building, for establishing democratic state institutions, for supporting an active civil society, and for strengthening human rights. In the Arab world as well as in other places, it is likely that new media will be one important factor in transforming and stabilizing countries, just as they were one important factor out of many during the revolutions.

Bibliography


Morozov, E. (2011, February 10). *Internet in Iran*. Retrieved from Youtube: http://www.youtube.com/watch?v=gISloRrMr1g


