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The impact of social networks and mobile technologies on the revolutions in the Arab world - a study of Egypt and Tunisia

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Abstract

Revolts in Tunisia and Egypt have led many observers to speak of the "first digital revolution" in the Arab world. Social media sites, such as Twitter and Facebook, are now recognised as the important tools that facilitated the "Jasmine Revolution". In fact, the willingness of the Mubarak government to block all internet connection in Egypt has demonstrated the concern over the power of new technologies in facilitating political change. The tenacity of the social movements that are still on-going in the Arab world continues to demonstrate the important role that networked technologies—such as the internet, satellite channels and social networking sites—play in revolutions. The revolutions demonstrate an effective use of social media and other network technologies as an organisational tool, and as a means of asserting pressure on current rulers and future governments. Accordingly, this article seeks to expose freedom of expression as a fundamental democratic principle and the internet network as a vehicle driving the demonstrations in the Arab countries of Tunisia and Egypt.

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The Impact of Social Networks and Mobile Technologies on the Revolutions in the Arab World—A Study of Egypt and Tunisia

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Abstract: Revolts in Tunisia and Egypt have led many observers to speak of the "first digital revolution" in the Arab world. Social media sites, such as Twitter and Facebook, are now recognised as the important tools that facilitated the "Jasmine Revolution". In fact, the willingness of the Mubarak government to block all internet connection in Egypt has demonstrated the concern over the power of new technologies in facilitating political change. The tenacity of the social movements that are still on-going in the Arab world continues to demonstrate the important role that networked technologies—such as the internet, satellite channels and social networking sites—play in revolutions. The revolutions demonstrate an effective use of social media and other network technologies as an organisational tool, and as a means of asserting pressure on current rulers and future governments. Accordingly, this article seeks to expose freedom of expression as a fundamental democratic principle and the internet network as a vehicle driving the demonstrations in the Arab countries of Tunisia and Egypt.

"The regime of Hosni Mubarak has committed the greatest curtailment of freedom in its blocking all access to the Internet. Neither Burma in 2007, China in 2008, or Iran in 2009 would have gone as far as Egypt to rewrite the pages of history."

<div align="right">Libération, 28 January 2011 [1].</div>

1. Introduction

New communication technologies have significantly changed the way in which individuals interact and have created a new space for freedom of expression. They have allowed individuals to freely express themselves and disseminate their views and opinions to a wide global audience. From a political viewpoint, the internet has provided a significant opportunity for human rights advocates to defend civil liberties, which is particularly valuable to nations where freedom of expression is suppressed. At the same time, technologies have also been used to repress free speech, and curtail online political dissidence.

Revolts in Tunisia and Egypt have led many observers to speak of the "first digital revolution" in the Arab world. Social media sites, such as Twitter and Facebook, are now recognised as the important tools that facilitated the "Jasmine Revolution". In fact, the willingness of the Mubarak government to block all internet connection in Egypt has demonstrated the concern over the power of new technologies in facilitating political change. The tenacity of social movements, that is still on-going in the Arab world, continues to demonstrate the important role that networked technologies—such as the internet, satellite channels and social networking sites play in revolutions. The revolutions demonstrate an effective use of social media and other network technologies as an organisational tool, and as a means of asserting pressure on current rulers and future governments. Accordingly, this article seeks to expose freedom of expression as a fundamental democratic principle, and the internet network as a vehicle driving the demonstrations in the Arab countries of Tunisia and Egypt.

2. Freedom of Expression and Democratic Principles

Freedom of expression has two main aspects: the passive aspect and the active aspect. The former belongs to the listener and consists of the ability to receive information, while the latter supports the interests of the speaker and is concerned with the ability to communicate information [2]. Notably, the passive aspect was recognised by the drafters of the European Convention of Human Rights, which considered the right of the public to receive information under Article 10. Thus, as a recognised freedom, any interference with this freedom would affect a public right. Freedom of expression not only includes the right of an individual to disseminate his or her opinions, but also the right for members of the public to access this information.

The second aspect is concerned with the right to freely communicate ideas or information so as to make them known. This aspect follows logically from the first aspect in that, in order for a person to

develop their opinions to share with others, he or she must have had free availability and unlimited access to information and ideas [2]. This will be explored in more detail in the following section.

2.1. Freedom of Expression

The history of the law of freedom of expression and of its judicial application is a result of a succession of breakthroughs and setbacks. In analysing freedom of expression, courts and academics have advanced two major theories to explain the rationale behind the protection of freedom of speech: the utilitarian theory and the libertarian theory [3–5]. The utilitarian theory of free speech espouses the idea that speech is a tool to advance truth, democracy, and the exchange of ideas. For instance, this theory has been used in some American decisions. Justice Brennan of the United States Supreme Court in *Roth v. United States* wrote, "[t]he protection given to speech and the press was fashioned to assure unfettered interchange of ideas for the bringing about of political and social changes desired by the people" [6]. Libertarian theory, meanwhile, maintains that the protection of speech is an end in itself, which secures dignity by protecting an individual's right to develop intellectually and spiritually through expressive means [5]. The libertarian model seeks to protect individual self-determination rather than any specific right.

It is important to note that freedom of expression does not operate in isolation but, rather, it is tied to the right to strike, the right of association, the rights of protest and demonstration, and freedom of the press. These five indicators are generally used to determine the political nature and democracy of a society [7]. Therefore it is appropriate to consider the two most influential international treaties on the matter, the *Universal Declaration of Human Rights (Declaration)* [8] and the *International Covenant on Civil and Political Rights (ICCPR)* [9]. Both Egypt and Tunisia have signed the *Declaration*, and both have signed and ratified the *ICCPR*.

The *Declaration* is a milestone document, which reflects an attempt to promote fundamental rights and freedoms, and to promote liberal democratic societies. It is a document intended to set an international standard of human rights, though the *Declaration* is non-binding and has no enforcement mechanisms. The United States was the first democratic State to recognise the importance and value of freedom of expression, but the United Nations was the first to give this right a universal character by the adoption of the *Declaration December 1948*. Of particular importance is Article 19, which provides that:

> Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

The ICCPR was adopted in New York on 16 December 1966 by the General Assembly of the United Nations in its resolution. It came into force on 23 March 1976. It is binding on each of the State signatories. Egypt ratified the treaty in 1982 while Tunisia ratified in 1969.

Freedom of expression plays a fundamental role in democratic societies. It is guaranteed under Article 19 of the ICCPR, which provides:

(1) Everyone shall have the right to hold opinions without interference.

(2) Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.

(3) The exercise of the rights provided for in paragraph 2 of this article carries with it special duties and responsibilities. It may therefore be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:

    (a) For respect of the rights or reputations of others;

    (b) For the protection of national security or of public order (ordre public), or of public health or morals.

Article 19(2) specifically recognises that everyone has a right to freedom of expression by any means of media of his or her choice. This anticipates the emergence of new technological advancements. Thus, although the internet did not exist in 1966, it is undeniable that "any other media" includes the internet and is not restricted to the types of communication available in that era. Article 19(3) recognises that freedom of expression is qualified in that it carries with it duties and responsibilities. Accordingly, the right of expression is subject to certain restrictions imposed by law, such as where national or public security is threatened. The *ICCPR* therefore limits freedom of individuals to express themselves where it would interfere with the fulfilment of his or her duties towards others and the community. New technological communication, as will be seen later, may also be affected by these restrictions.

2.2. Freedom of Expression in Egypt

Egypt signed the ICCPR in August 1967 but did not ratify until January 1982. Thus, it is legally bound by its provisions and is obligated to give effect to the treaty through its domestic laws. Egyptian freedom of expression, however, has vacillated between relatively strong protection to relatively weak protection. In recent times, Egypt's freedom of expression has been significantly weakened by a series of laws, and exceptions outlined in the nation's various Constitutions.

Egypt has had several Constitutions in its history. The most recent have been the *Constitution of the Arab Republic of Egypt 1971* [10], and the *Constitution of 2012* [11] that succeeded it. Under the former, freedom of expression was protected under Article 47, which guaranteed freedom of opinion, stating that "[e]very individual has the right to express his opinion and to disseminate it verbally, in writing, illustration or by other means within the limits of the law". The *Constitution of 2012* was referred to informally as the "*Muslim Brotherhood Constitution of 2012*" with reference to the then President Morsi's association with the Muslim Brotherhood group. Under the *Constitution of 2012* freedom of expression was highly problematic in that it placed broad restrictions on certain speech. Most problematic was the provision that stated a person cannot "insult a human", which meant that, for example, a person could be censored for criticizing the president [12]. This hurriedly drafted Constitution was also criticized for being "undemocratic" [13] and given its limited protection of the expression rights of minorities, such as women and religious minority groups [12].

In 2011, Egyptians took to the streets to protest their gross dissatisfaction with the dictator Mubarak who later resigned. In the lead-up to the election following Mubarak's resignation, the Egyptian army

temporarily held power. In a democratic election of 2011, the Muslim Brotherhood was elected with the extremist Morsi coming into power. Dissatisfaction continued amongst the Egyptians with millions of Egyptians taking to the street on 30 June 2013 and occupying critical locations such as Tahir Square to protest against the Morsi government [14] though as the movement progressed, the numbers lessened to tens of thousands remaining at protest sites. The army once again intervened, issued a 48 hour ultimatum for Morsi to resign, and then later placed Morsi under detention as he refused to resign. Adly Mansour, head of Egypt's highest court, became the interim President. Under Adly Mansour, a draft Constitution was negotiated between political parties in 2013, with a referendum in early 2014 [15]. According to the Egyptian website Aswat Masriya, over 98% of Egyptians voted in favour of the new Constitution with a 38.9% turnout [16]. The new Constitution that has recently been adopted by the Egyptian Assembly contains a number of important changes that are hoped to prevent the effects of future dictators, extremists and excessive foreign interference on future Egyptian governments [17]. The last two Presidents, Mubarak and Morsi, have both been tried on criminal charges. Very little information about the trials has been made public, instead it has been very much controlled by the state [18].

Some of the key features of Egypt's new Constitution include the secularization of politics by banning religious political parties, the enshrining of freedom of religion and freedom of expression, and the strengthening of the army. While the new Constitution greatly strengthens religious freedom under Article 64, it has removed a former provision that would allow political parties to adopt law adopted from Shariah or the Muslim legal code. Article 65 guarantees freedom of thought and opinion. Article 70 establishes freedom of journalism and Article 71 prohibits censorship, confiscation, suspension, or closure of Egyptian media. In spite of these strongly worded provisions promoting human rights, there have been a number of controversial aspects to the new Constitution which undermine how "free" the new Constitution is, or will be. Television, for instance, will still be regulated by the State. Censorship is also still allowed during times of war or public mobilisation. While the new Constitution abolished the former police state provisions forbidding private meetings without permission, a newly passed law forbids demonstrations without a police license. As one commentator has written, "It is ironic that the provisions banning censorship and establishing freedom of speech were passed on a day when dissident Ahmad Maher was arrested for thought crimes (his criticism of the anti-protest law)" [19]. Although freedom of expression is protected under Egyptian law and Egypt is bound by the provisions in the ICCPR, legal rules and norms do not protect freedom of expressions in times of unrest as illustrated in many events *post coup*.

Al Jazeera journalists, Baher Mohaed, Mohamed Fahmy, and Peter Greste, were arrested for their coverage of the military's removal of Morsi. These journalists were held for more than 200 days [20] and were each sentenced from seven to ten years of imprisonment for allegedly aiding a terrorist organization. Part of the contention lies in the current government's classification of the Muslim Brotherhood as a terrorist group. In December 2013, the Egyptian government officially classified the group as a terrorist organization according to news accounts of the events [21]. Not all journalists agreed with the classification including those arrested as well as a number of other journalists [22]. These arrests and sentences have been highly criticized internationally to the point where the situation is being called "the war on free speech". The journalists were charged with producing false news reports, thereby aiding the Brotherhood. It is a difficult leap in logic, and one can certainly see why the

characterization of Egypt's last three governments, has done little to protect freedom of expression in Egypt. The war on free speech continues to rage in spite of the new Constitution.

2.3. Freedom of Expression in Tunisia

Tunisia signed the ICCPR on 30 April 1968 and ratified it on 18 March 1969. Thus, by ratifying the ICCPR, Tunisia is legally bound by its provisions and is obligated to give effect to the treaty through its domestic laws. Despite this, Tunisians have historically been subject to an array of repressive laws that violate freedom of expression. It is these repressive laws and authoritarian conditions that led to the uprising and the subsequent removal of President Ben Ali in 2011. Article 121(3) of the Tunisian Penal Code was frequently used to restrict speech. The Code made it an offence for anyone to distribute, sell or display in public any material that would "disturb public order or undermine public morality" [23]. While the ICCPR, as well as the Tunisian Constitution of 1959, protect freedom of expression Tunisians were unable to avoid the continuous violations on this freedom [24].

The internet, which was originally free from censorship, was introduced in Tunisia in 1991, but it was not commonly accessible to the public ([25], p. 486). Under the presidency of Ben Ali, Tunisia was regarded as one of the most strictly censored countries in the world. The internet was perceived as a threat to Ben Ali's regime and, therefore, websites and keywords were blocked and filtered [26]. Emails were also monitored and intercepted if they were suspected of endangering public order [26]. Among the websites blocked were included those of political dissidents, human rights agencies, and news websites, such as *Al-Jazeera* in Arabic [26]. Those who attempted to access these websites received the ubiquitous "Error 404—page not found" message, which was later nicknamed as the "Ammar 404" [26]. The repressive laws under Ben Ali's dictatorship are also reflected by Tunisia's rank as 184th of 196 countries examined on freedom of print and broadcast media [27].

While censorship did not completely disappear in Tunisia after the *Jasmine Revolution* [28] freedom of expression did significantly improve if only for a short period [26]. Under the new regime, journalists, bloggers and other members of the public were able to disseminate their ideas and participate in political discussion. Filters were also removed on social networking sites such as Facebook and YouTube [29]. Notably, under Ben Ali's regime, Tunisia was placed on the Reporters Without Borders' "Enemies of the Internet" list. In 2011, both Tunisia and Egypt were removed from this list. With recent arrests and prison sentences of bloggers and journalists, it is likely that both Tunisia and Egypt will find themselves once again on the "enemies of the Internet" list in 2014.

Although Tunisia is presently in a transition towards democracy, the National Constituent Assembly has shown a commitment to protecting freedom of expression under its new constitution. This is particularly important given the recognition of the role the internet played in facilitating the revolution [30]. On 6 January 2014, freedom of expression was formally included in Tunisia's new Constitution, which has been said to "send a strong message in favour of freedom of expression and freedom of information in Tunisia and in the rest of the Arab region" [31]. Yet, some have observed that free reporting remains an issue, particularly when it comes to the religion of Islam [24,32,33].

Importantly, Tunisia's new Constitution provides a legal framework protecting freedom of expression. The significant provisions in the new Constitution are: Article 31 on freedom of expression; Article 32 on access to information; and Article 127 on the Broadcasting Communication

Agency. While these provisions are not considered to be wholly satisfactory, they indicate a positive step towards democracy in Tunisia and in the establishment of a legal framework that seeks to conform to international human rights law [34]. It should be noted, however, that it was only due to vigorous lobbying by Tunisian activists that amendments were made to the constitution to safeguard the independency of the media [35].

Optimism, however, for the newly protected right of freedom of expression in the new Constitution was short-lived. In May 2014, Tunisian revolutionary blogger Azyz Amami and Sabri Ben Mlouka were arrested for possession of drug charges [36]. There has been outcry over these arrests and many view them as false charges to disguise censorship and the thwarting of political dissidents. These incidents once again highlight that while legal rules and norms are important, they do not ensure the violation of human rights both in times of conflict and in their application post-conflict.

3. The Internet and Related Technologies in Arabic Countries

The Arab world is constituted by a set of similar states that have historical, religious and ethnic commonalities. However, from an economic and policy point of view, these countries constitute heterogeneous regions that consist of a succession of partitioned space. In effect, these countries vary by their size, as well as by their natural environments and energy, their income levels, their skills and human capital, their social and political structures, and their institutions. Consequently, the use of the internet in Arab countries is evolving disparately from one country to another. However, generally most of these countries appear to be relatively disadvantaged in terms of access to the internet in comparison with Western nations, with the exception of the United Arab Emirates (UAE), Qatar and to a lesser extent, Kuwait and Bahrain [37].

The digital divide is a problem in Arabic countries. In some Gulf countries, the rate of internet penetration has reached between 40% and 50% [37]. In these countries, this high rate of penetration has existed for a few years. For example, in the UAE, Qatar, and even in Lebanon, the streets are beginning to increasingly resemble those of many developing countries in Asia, where internet cafes are flourishing more and more by day. Although in some Arab countries, the rate of internet usage has not reached even one per cent [38].

The internet was introduced to the Arab World in the mid-90s by larger institutions such as banks and oil businesses. By 1999, these networks became very popular among the middle and lower classes, despite the regulatory restrictions present in several countries. Today, the majority of internet users are young, educated, and speak English. In fact, several studies conducted on internet users living in an Arabic speaking country show that the average age of users is 30 years old, 70% have a university degree, and 88% could speak English [37]. In Lebanon, young people have also recognised the benefits of the internet as a low cost communication tool to interact with their family and friends. In other countries, such as Tunisia, the internet was mainly seen as a means which allowed them to express themselves freely [37].

Social networking sites, as well as online blogs, have played an important role in rallying support against oppressive regimes in Arab countries. New technological devices have also disseminated information to the public about where events will be held and other information usually censored by governments. This section will consider the blogosphere in Egypt and Tunisia.

In both Tunisia and Egypt, the internet has been considered as the key in facilitating wide public debate. It is estimated that 3.6 million of the 10.5 million Tunisians have an internet connection. In Egypt, it is estimated that of the 80 million people of the population, 17 million have an internet connection, which is more than 20% of the population [38]. The Egyptian government was subsidizing internet access, seeing it as an important vector of economic development. In Egypt, many internet users are young people, the majority of whom have integrated social networking sites in their daily life. Approximately five million Egyptians use Facebook [38].

Before specifically analysing the importance of the internet during the lead up to the revolution, it is important to consider internet use in Arab countries prior to this period.

3.1. Egypt

3.1.1. Pre-Revolution

In a report conducted by an organisation focused on internet censorship and new media, *Reporters Without Borders* [26], Egypt was ranked as 148th (out of 169) among the countries that do not respect media freedom. The document, which is published on the organisation's website, has since denounced the "censorship practiced by the security apparatus on the electronic sites in Egypt". It further states that:

> "If you go to an internet café in Egypt, you will find no difficulty to seek out and explore the sites, because the network is not subject to a massive filtering. The authorities monitor however almost any electronic publication of a political nature, and some sites, especially that of the Brotherhood of Muslim Brothers, are the subject of a very strict control" [26].

Some Egyptian bloggers are self-censoring their online speech, becoming aware that what they publish online could have consequences. As such, they voluntarily close down their blogs, having learned from other online incidents where people were arrested and detained. For instance, the Egyptian police arrested Kareem Amer for publishing articles on this blog that were considered to be anti-religious and an insult to the then Egyptian President Hosni Mubarak. Among the topics covered in his blog, Amer criticised the State's discriminatory policies against women, and in particular, his criticism of the *Charter of Ethics of Satellite Channels* (regarded as a censorship tool), and other arbitrary measures taken against the Facebook activists. He was detained for 600 days for these comments [39].

Despite the arbitrary and severe treatment given to those who dare to freely express their anti-policy and anti-government views online, Egyptians continued to boldly use social network tools in hopes of spreading information, and to eventually act as a catalyst for change. The popular social networking site Facebook was a useful tool used by activists to facilitate the revolution. For example, Esraa Abdel Fattah, a young Egyptian girl, used Facebook to co-organise the "6 April 2008 Youth Movement", a political movement that encouraged a workers' strike against low wages and high food prices [40].

Another Facebook group "We are all Khaled Said", was created to gather attention about the death of Khaled Said, who was allegedly dragged from an internet café and beaten to death on the streets of Alexandria by Egyptian police in June 2010. This group called for the organization of several events to protest against corruption, the widespread use of torture, the practices of authorities to enforce law and order, fraudulent elections, and the attack on the Church of the Saints in Alexandria.

Internet users showed an impressive mastery of social networking sites by disseminating messages and uploading pictures to show their support. While President Mubarak was being stripped of his powers, the group proudly published in March 2009 a balance sheet of the impact that it had on Egypt. According to one source, the posts of the group "We are all Khaled Said" had been viewed as many as 1.3 billion times. The number of comments on the articles reached a little over 11 million [40].

In addition, the activist group "April 6 Youth Movement" used online networking sites to mobilise the Egyptian people to rise against the regime in place. As its name indicates, the group was constituted by young people, most of whom were aged between 20 and 30 years. Thousands of workers in the textile factory Misr Spinning and Weaving (a jewel of the Egyptian industry), located in Mahallah Al-Koubra, north of Cairo, were then mobilized to organize a strike. They had demanded better wages and were protesting against poor working conditions [41].

A group of young people also used Facebook and other new media (such as text messages) to show their support of the labour movement and call for a national strike on the 6 April 2008. It was estimated that the number of members of this Facebook group was 60,000 and had attracted 65,000 comments on the articles it had uploaded on its page [42].

The watchword of strike, heavily relayed on the internet, had been widely followed throughout Egypt. Several Egyptian cities were paralyzed during this social movement; a movement that was regarded as the most important one experienced by the country in decades. In response, the authorities were quick to arrest hundreds of activists, and had beaten and injured many of those caught. Internet users were able to capture this event on Twitter and Facebook and disseminated numerous images depicting the suppression of the demonstration. Users also used these sites to publish the names of those arrested and advocated for their release.

However, the Egyptian authorities were not only repressing people on the street, but soon began to block sites on the internet, including any sites containing material posted by the April 6 Youth Movement. Table 1 below shows the participation of the internet users uploading videos to Youtube about the suppression of the revolution in Egypt, since 28 January 2011.

Table 1. Uploaded videos to Youtube by region [43].

Government	Uploaded Videos
Cairo	86
Mansourah	34
Alexandria	19
Suez	17
Damietta	12

3.1.2. Post Revolution

Given that new technological devices were being used as tools for protest and mobilization, the Egyptian government responded quickly. Some mobile phone companies cancelled the subscription of any person who did not disclose their personal information (such as their name, address *etc.*) on their identity cards [43]. Approximately 50,000 telephone lines were deleted as a result of this decision. Users of internet cafes were also required to submit an identity card and personal information in order to be able to access the internet [39].

On 28 March 2011, another Egyptian blogger Maikel Nabil Sanad was arrested and sentenced to three years imprisonment for having criticised the transparency of the Egyptian army. He was judged by a military court on 10 April 2011, who condemned this young revolutionary for having blogged an article entitled: "The army and the People were Never One Hand" [44]. In this very detailed article, the blogger argued that although the revolution had managed to eliminate the dictator Hosni Mubarak, it had not eliminated the dictatorship in Egypt. He supported his arguments by documents, photos and specific events, which stressed that the Egyptian army would have protected its own interests throughout the revolution and that it would have never been on the side of the people either before or after the revolution. According to the blogger, the army did not really support the revolution in Egypt. Nawras-Univers also accuses the Egyptian army not only of torturing activists after the overthrow of Mubarak, but also of continuing to manipulate the media, resulting in a new form of censorship following the revolution that sought to protect the interests of the army.

Ahmad Maher, one of the key members of the April 6 Youth Movement, has protested against both the Mubarak and Morsi governments, and is a blogger, activist and civil engineer. Maher was detained on 29 November 2013 for holding a demonstration against a new Egyptian protest law. He was sentenced (together with opposition leaders Ahmed Douma and Mohammed Adel) in December 2013 to three years in prison as a punishment for protests against recent steps by the Egyptian military government. He recently wrote an opinion piece for the Washington Post stating:

> After the coup, I wrote an op-ed in The Post expressing my deep concerns about the military's intervention in the political arena and the dawn of a new era of terror in Egypt. The regime has arrested or tainted the reputation of anyone who criticizes its oppression or killings under the umbrella of "fighting terrorism". I feared that I would be arrested and charged with terrorism because I voiced my unhappiness with the regime's actions and its human rights abuses.

> Unfortunately, this is exactly what happened. I was arrested November 30 and sentenced in December to three years in prison—solitary confinement, along with a fine of 50,000 Egyptian pounds—because I spoke out against a new law banning protest. Two other activists, Mohammed Adel and Ahmed Douma, have been jailed with me. This is blatant revenge by the regime over the revolution that I and other members of the April 6 Youth Movement had the honour of helping to spark in 2011. The military seeks vengeance against any group that had any role in the 25 January 2011, revolution that led to the end of the Mubarak regime.

> Perhaps my arrest could be beneficial. It says a lot about the military regime; it has confirmed citizens' fears of a military dictatorship. Egypt's military authorities do not know or respect freedom, democracy or human rights. Slowly, the Mubarak regime is coming back to power, and the networks of corruption and oppression are returning. In Egypt today, it is as though there had not been a revolution at all [45].

Tensions ride high in Egypt on the issue of arrests of protesters. Maher lost his case on appeal and is now appealing to the Egyptian Court of Cassation.

3.2. Tunisia

3.2.1. Pre-Revolution

Tunisia is among the countries most repressed with regard to the media. This was particularly true during the presidency of Zine el-Abidine Ben Ali. Considered as a threat to the stability and the image of the country, Zine el-Abidine Ben Ali sought to censor the internet by a strict filtering system, harassment of opponents and monitoring. Some URL addresses as well as key words were blocked. The filtering was conducted via software such as Smartfilter and Websense, which also allowed the surveillance and interception of emails. Filtering and surveillance was performed lawfully under Tunisian Penal Law Code whereby "disturbing public order" is an offence [46].

However, the authorities claimed only to have blocked terrorist sites or sites of a pornographic nature. Yet the censorship applied also to sites of political opposition, independent sites of information, and the sites of organisations that defended human rights. This constituted a long list of blocked sites, such as: Tunisnews, Nawaat, the sites of the Democratic Progressive Party PDPinfo.org, Al-Nahda (Renaissance), Tunisonline, Assabilonline, Reporters Without Borders, and Al-Jazeera in Arabic. Internet users who attempted to access these sites received the following message: "Error 404: page not found" [47]. This message was given the nickname "Ammar 404" to refer to the authority responsible for internet censorship in Tunisia.

The Facebook accounts of protesters were also hacked by the Tunisian Government [47,48]. Other methods used against dissidents included: preventing their internet access, port blocking, the transmission of viruses and malware, and the infiltration of discussion forms [49].

In societies where individual and collective freedoms are suppressed, the virtual space, which is accessible to many people, momentarily replaces the public space. Of importance is that the internet offers a model of participatory governance that allows people to engage more deeply in political issues. This engagement is not limited to those of high social status and is particularly a preferred place for the participation of women in the public debate. Of concern is the inferior treatment of women in many Arabic countries where women are often hampered by their family responsibilities.

3.2.2. Post-Revolution

In Tunisia, the uprising has been hailed as the internet revolution. Given their ability to connect with foreign networks, Tunisian bloggers were able to upload and share events of the revolt in real time. Journalists and internet users around the world were able to connect to sites such as Facebook, YouTube and the Twitter pages of Slim Amadou, Lina Ben Mhenni as well as many others, in order to obtain the latest news on the revolts. While there are still laws prohibiting religious comments contrary to Islam, the courts have been reluctant to enforce these laws. There has also not been a move to censor or silence opposition, and dissenting views.

4. Evaluation and Concluding Remarks

The events that led to the fall of President Hosni Mubarak in Egypt show that social networks are, on the political level, much more powerful than was previously assumed. The drivers of the revolution

had little means, but with the aid of social networking sites, in particular Facebook, they were able to rally support for the revolution. This is because the citizens appreciated the importance of the internet to obtain uncensored news. While the Tunisian Government was closely monitoring the use of the internet and attempted to limit access, this did not prevent the circumvention of these restrictions by a number of internet users who succeeded in concealing their identity from government authorities.

Similarly, the internet was an important source to access uncensored news for many people throughout the Arabic world. Although these countries have a significant amount of television channels and independent newspapers, there has always been a limit on the information that could be made publicly available, but at the same time there was no limit on the scope of information that could be restricted. As one astute political dissident, Steve Ghan, once said, "In Malaysia we have the right to freedom of expression. The problem is that we have no rights once we freely express our opinions" [50]. The same could be said to be true in many Arabic countries.

It is also clear that both text messaging and Internet access were suspected by the Egyptian authorities of being major causes of the earlier revolt in Tunisia, as the Egyptian government chose to shut down mobile networks and Internet access at the end of January 2011, including networks majority owned by UK-based multinational Vodafone. This was regulation of censorship by private actors: "Companies can find themselves under duress from governments to operate in ways that go beyond legally accountable law enforcement activities" [51]. Vodafone and others were following direct government censorship orders under the terms of their licenses. The position of mobile ISPs is crucial in this respect, as the number of broadband mobile users is expected to exceed that of fixed broadband users by 2013, with an especial imbalance in favour of mobile users living under dictatorships and in emerging democracies [52].

A common thread in the revolutions that occurred in Tunisia, Egypt, and the revolutions that progressed in Yemen, Libya, and Syria is the use of social networking sites, especially Facebook and YouTube, as a tool for social change [53]. The same use of social networking sites can be seen in the repressed uprising that occurred in Bahrain, Morocco, Algeria, Jordan, Oman, and Saudi Arabia [38]. In addition to being a place to socially interact with others on a global scale, these sites were used as an instrument of incitement to revolt, and for construction of a model policy alternative to the existing one.

The Arab world is constituted by a set of similar states that have historical, religious and ethnic commonalities. However, from an economic and policy point of view, these countries constitute heterogeneous regions that consist of a succession of partitioned space. In effect, these countries vary by their size, as well as by their natural environments and energy, their income levels, their skills and human capital, their social and political structures, as well as their institutions. Consequently, the use of the internet in Arab countries is evolving disparately from one country to another. However, generally most of these countries appear to be relatively disadvantaged in terms of access to the internet in comparison with Western nations, with the exception of the United Arab Emirates (UAE), Qatar and to a lesser extent, Kuwait and Bahrain.

Can social networks play the same subversive role in other poor countries subjected to authoritarian regimes?

In many developing countries, internet users have shown the same enthusiasm towards social networking sites as users in Tunisia and Egypt. The rate of adoption of social networks is extremely high. Unlike other technological developments that emerged in the past, which tended to emerge in

developed countries first and then spread to poor countries, social networking sites spread rapidly everywhere and not just in developed countries. On 10 December 2010, Facebook's second largest market following the United States was Indonesia, with 32 million users. This was then followed by the United Kingdom, then Turkey, France, the Philippines, Mexico, Italy, Canada and India—all within the top ten places [53].

However, some governments have sought to undermine the potential of social networking sites as a tool for social change.

The concerns of some users on the impact of social networking sites may also limit the impact of the potential of these sites. These sites, notably Facebook, do not allow dissidents to remain anonymous, which could therefore limit their value as a tool in mobilizing the masses. Nonetheless, people continue to risk identification and prison. For instance, the Muslim Brothers, an important opposition movement officially banned in Egypt, have already launched their own Facebook page.

Surveillance of online networks, and in particular of social networking sites, remains a challenge and a threat to freedom of expression and democracy in many Arab countries. In Freedom House report on Internet freedom, the author of the Egyptian chapter states that:

> Restrictions on anonymity and the use of encryption devices make it easier for these activists to be monitored and singled out by the authorities. Under Article 64 of the 2003 Telecommunications Law, the use of encryption devices is prohibited without the written consent of the NTRA, the military and national security authorities. In addition, cybercafé customers must provide their names, e-mail addresses, and mobile numbers to receive a personal identification number (PIN) to access the internet. Further, the Telecommunications Law allows the offices of the Presidency, Security, Intelligence, and the Administrative Control Authority to obtain citizens' online information without prior consent for cases that concern national security. In 2013, disputes between the military and the presidency, controlled by the Muslim Brotherhood, led to a politicization of intelligence sharing.

> In December 2013, high-level intelligence officials from Egypt and Iran reportedly met in Cairo to discuss the development of new Egyptian surveillance and security capabilities similar to Iran's Islamic Revolutionary Guard Corps (IRGC). The meeting took place between Essam al-Haddad, an advisor to President Morsi, and Qassem Soleimani, Commander of the IRGC Quds Force responsible for external clandestine operations. Observers noted that Egypt's Muslim Brotherhood may have been looking to the IRGC as an example to follow; the IRGC was created in the wake of the 1979 Islamic Revolution as a counterweight to the power of Iran's traditional military, which the late Supreme Leader Ruhollah Khomenei saw as a threat to his power. Similarly, the creation of separate security and intelligence structures, independent from the Egyptian military and under the direct control of the president, would be an important victory in the ongoing power struggle between the military—Egypt's strongest institution—and the Muslim Brotherhood.

> Regarding cooperation between state security structures and the private sector, ISPs and mobile operators are obliged to maintain a database of their customers and to allow the government to access their databases. After the ending of a grace period issued by the

MCIT, customers who do not have their National ID numbers registered with their phone companies will have their phone lines cut. The NTRA suggested that it would suspend additional phone numbers for mobile operators who fail to abide by the new rules. In the past, details emerged that mobile operators Vodafone, Mobinil, and Etisalat had to sign terms of agreement that bound them to cooperate with government officials when requested to tap any conversation or monitor any discussion. In an interview, Mobinil founder Naguib Sawiris stated that under the company's terms of agreement, the government had the right to cancel any or all mobile services in the absence of cooperation [54].

While the Muslim Brotherhood is no longer in power, there is no indication that these same surveillance methods have been abandoned by the new government. Monitoring of discussions and cancelling mobile services is likely to be a factor in Egyptian life.

The same report on Tunisia gave a somewhat more optimistic view of censorship and online tools in comparison with Egypt. The Tunisia report states:

Censorship has drastically reduced since the overthrow of the Ben Ali regime, which employed one of most repressive internet censorship apparatuses in the world. Over the past year, there was no evidence of politically-motivated filtering. Popular social media tools such as Facebook, YouTube, Twitter, and international blog-hosting services are freely available in the country. Crucially, the judiciary did not issue any further verdicts in favour of blocking, despite dozens of complaints lodged against the ATI to filter "defamatory" Facebook pages.

Indeed, since the revolution, the judiciary has quickly found itself at the centre of many censorship debates, in great deal due to its role of enforcing many of the country's not-yet-reformed laws. For example, in May 2011, the Tunis Permanent Military Tribunal ordered the blocking of five Facebook pages on charges of defamation against the military and its leaders. The ATI could only implement the verdict for a short period of time, citing "technical issues" that occurred as a result of a 15 GB increase in internet traffic and a breakdown of filtering machinery. That same month, a Tunis-based primary court ordered filtering of X-rated content based on a complaint lodged by three lawyers, who argued that the sites were a threat to minors and the country's Muslim values. After the ATI lost an appeal, the verdict was eventually overturned by Tunisia's highest appeal court, the Cassation Court, in February 2012 on the grounds that the ATI lacked the technical capacity to implement the mandated filtering. Explaining the reasoning behind the ATI's move to appeal the court verdicts, ATI president Moez Chakchouk stated, "This is not about pornography; it's a matter of principle. In post-revolutionary Tunisia, we are determined to break with the former regime's censorship practices." Interestingly, although the ATI was obliged to practice filtering during the former regime, there is no law that formally requires this filtering [55].

Given the fact that social networking sites and mobile technologies are economic and practical and can be more effective that other forms of communications, they have a great capacity to be used in order to affect social change. It appears that social networking sites in Arab countries are going to stay

provided that they are not blocked—a possible reality in many of these countries. In March 2014, for example, the Turkish Prime Minister threatened to ban Twitter altogether [52]. Turkey joins countries such as China, Iran, and Vietnam who routinely block Facebook, Twitter and Youtube during times when incidents would indicate a likeliness of outrage and dissent. The blocking of social media in these countries has been off and on since 2009. While it is true that restrictions of social media attract public outcry, the reality is that these blockings are not becoming obsolete. It remains to be seen how governments will deal with social media in the wake of new incidents.

Author Contributions

Part of this paper was originally written in French by Mohamed Chawki and Yassin el Shazly in 2011 and was translated in English by Alana Maurushat. Alana and Hadeel Al-Alosi were responsible for updating the research, adding new sections, managing the writing, editing, and revising the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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