


MOBILE UNREST: ASSESSING THE IMPACT OF MOBILE ICTS ON THE
EGYPTIAN SOCIAL MOVEMENT OF 2011

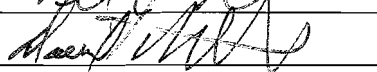
by

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DEDICATION

This thesis is dedicated to all those who work tirelessly for social change.

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LIST OF ABBREVIATIONS

2G.....	Second-Generation Mobile Technology
3G.....	Third-Generation Mobile Technology
BBM.....	Blackberry Messenger
CAR.....	Conflict Analysis and Resolution
CIS.....	Commonwealth of Independent States
ICT.....	Information Communication Technology
ITU.....	International Telecommunication Union
MMS.....	Multimedia Messaging Service
SMS.....	Short Message System

ABSTRACT

MOBILE UNREST: ASSESSING THE IMPACT OF MOBILE ICTS ON THE EGYPTIAN SOCIAL MOVEMENT OF 2011

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In an ever-evolving technological landscape, conflict analysis and resolution (CAR) practitioners are faced with the unique task of working in a rapidly changing landscape that is susceptible to the reliance on and impact of global information communication technologies (ICTs). Within the last few years, mobile ICTs such as Facebook, Twitter and SMS have played a prominent role in social movement activities; providing CAR practitioners with an opportunity to study and to research how collective action is shaped by the purposeful use of mobile ICTs.

This Masters thesis seeks to better understand the relationship and interplay between mobile ICT use and social movements by asking: how does the use of mobile ICTs impact the behaviour of social movement participants? With a focus on social movement activity in Egypt, this research seeks to understand if and how the use of mobile ICTs has

impacted the scale, pace and pattern of the behaviour of participants engaged in social resistance. Informed through an extensive literature review and an interview based quantitative analysis, this research seeks to create a base of understanding that can be built upon through additional research and analysis. Mobile communication and ICT use is a pervasive means of communication throughout the world; its impact on conflict is still a touch elusive which makes this a moment ripe for analysis. The use of mobile ICTs is not a fading phenomenon, and as such, the CAR field is best served to begin understanding the power and implications of these evolving technologies and communication tools as they impact conflict and its resolution.

CHAPTER 1: INTRODUCTION

With increased attention garnered by events such as the Arab Spring and Occupy Wall Street, it has become all the more pressing for the field of Conflict Analysis and Resolution (CAR) to look more closely at the role of mobile information and communication technology (ICT) in conflict emergence and escalation. With a global increase in ICT use and the global penetration rates of such technologies, conflict analysis and resolution practitioners must acknowledge that the Internet, social media, and mobile phone technology are playing a substantial role in the ability of ordinary citizens all over the world to disseminate their views, to communicate with one another, and to organize with likeminded people on a scale that was quite unimaginable only a few years ago.

With an estimated 5.2 billion mobile cellular subscriptions worldwide at the end of 2010, and 90% of the world having access to mobile networks (International Telecommunication Union 2012a), the CAR field cannot ignore the potential impact that mobile information communication technologies are having on conflicts throughout the world. As articulated by Marshall McLuhan, it is important to acknowledge that the affects of technology do not occur at the level of opinions or concepts, the affects alter sense ratios or patterns of perception in a steady manner and without any resistance (McLuhan 1995). As mobile phones – mobile ICTs – replace the partial and fragmentary

nature of older technologies with one that is total and inclusive, this instantaneous communication allows for the calling to action of large groups of people who are not initially tied physically, but are drawn to one another through the mobile network. As communication technology changes, so do the behaviours of those engaged in the use of the technology. It is this fundamental change in the pattern, pace and scale of human behaviour ushered in by the purposeful use of new technologies that is the ‘message’ of the mobile communication medium. It is this ‘message’ that is of great importance for the field of Conflict Analysis and Resolution. Traditionally speaking, the CAR field has been heavily focused on the content generated by communication technologies – the discourse and narrative - however it is the behavioural changes and manifestations that result from the medium that will serve a larger purpose within the field.

For the purposes of this Masters Thesis, the research conducted will focus on the study of how mobile ICTs have impacted the scale, pace and patter of the behaviour of participants engaged in social unrest in Egypt 2011. A more detailed account and reasoning of this choice will be addressed in later chapters.

Understanding Mobile ICT

Definitions and understandings of what constitutes information communication technology are as vast as the number of sources that talk about them. For the purposes of clarity and continuity, when referring to ICTs, the following definition stands:

Information Communication Technology(s) is a term used to describe any and all communication devices and applications encompassing (but not limited to): television, mobile phones, computers as well as network hardware and software, satellite systems; and the various services and applications associated with them

such as, photos, audio, audio-video conferencing, social media, geolocational applications and the Internet.

For the purposes of this research project, the focus is placed solely on mobile ICTs. And as such only those ICTs accessible via mobile phone are being considered.

Mobile ICTs are without a doubt the most rapidly adopted technology of our time, “far outpacing adoption rates of other technologies, including the Internet.” (Livingston 2011, 9) As shown in figure 1, not only have mobile phone subscriptions worldwide increased dramatically between 2005 and 2010, but users are also moving rapidly from second generation (2G) to third generation (3G) platforms in both developed and developing countries. As users move from 2G to 3G, their ability to access the myriad of mobile ICT applications increases dramatically.

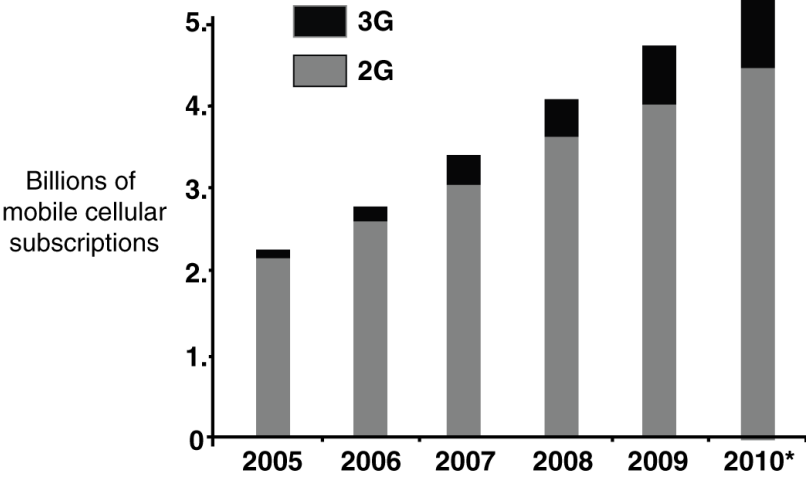


Figure 1. Mobile Cellular Subscriptions Worldwide. Source: International Telecommunication Union 2010a

Now, more so than ever before, individuals are able to use their mobile phones for more than just one-to-one voice calls. Access to, and the utilization of, Short Message Systems (SMS), Multimedia Messaging Services (MMS), the Internet, and other many-to-many services (social media is included as a many-to-many service) has added significant value to communication “by expanding the amount of interaction possible in any given amount of airtime.” (Castells et al. 2007, 24)

It is not difficult to find examples of how mobile ICTs have had an impact on the fabric of society. Take for example, the 2004 demonstrations in Spain, which were organized by SMS technology. These demonstrations, sparked by the wrongful accusation of Basque separatists being responsible for the Madrid transit bombings, were organized through mobile ICTs and contributed to the rapid departure of the now former Prime Minister Jose Maria Aznar (Rheingold 2002). No less than five years later, massive protests were coordinated by SMS, Facebook and Twitter following corrupt elections in Moldova (Shirky 2010). These examples highlight a common misconception about mobile ICTs and social movements; that misconception being that the Arab Spring was amongst the first movements to use mobile ICTs for the purposes of unrest. Highly motivated groups of people all over the world have been utilizing mobile ICTs for their own purposes for many years. This is not a new phenomenon, and heeding to the advice of scholars such as Manuel Castells and William Mitchell, we are best served to begin understanding the importance of mobile ICTs on conflict behaviour and processes, as this has had and will continue to have a direct impact on the field of conflict analysis and resolution (Castells 2004; Mitchell 2003).

The Research Question and Why It Matters to the Field of Conflict Analysis and Resolution

Research Problem

There is no doubt that the increased penetration rates and availability of mobile ICTs is having an impact on the formation of discourse and narrative throughout the world. And while it is an attractive study, we must remember that the content of the messages is far less imperative to the study of conflict behaviours. What is essential to understanding the ways in which the increased use of mobile ICTs has impacted behaviour is the acknowledgment that these technologies are “adopted, adapted, and modified by people to fit their own practices, according to their own needs, values, interests and desires.” (Castells et al. 2007, 125) And as participants engaging in social movement practices adopt and adapt mobile ICTs into their strategies and tactics, these mobile technologies become in and of themselves a determining factor of behaviour. As put by Manuel Castells et al., “it is not that the Internet makes people want autonomy. It is that people searching for autonomy turn to the Internet as their medium of choice.” (2007, 370) As the medium of choice increasingly becomes mobile ICTs, we must look further to find out exactly how this medium is altering, having an impact on, or fundamentally changing, the behaviour of those who use them in contentious activities.

Acknowledging that innovations in communication technologies can and do have a fundamental impact on human behaviour, provides for a unique opportunity to study collective action and the impact of mobile ICTs on the behaviour of those who seek to participate in social movement activities. Looking closely at mobile ICTs, and the

behaviour of social movement participants, we are in a position in which to ask: how has the purposeful use of mobile ICTs impacted the behaviour of social movement participants during the recent unrest in Egypt (2011)? By focusing on mobilizing structures and digital activism, this project seeks to better understand the behavioural changes and implications of mobile ICT use in social unrest.

Conventional Understanding of the Subject Matter

This research project focuses on the impact of mobile information communication technology on actors engaged in social movements during the conflict emergence and escalation phases as they occurred during the Egyptian unrest in early 2011. As a starting point toward building an understanding of the subject matter, it is important to acknowledge the conventional understandings held by the CAR field in terms of social movements and communication.

Much of the conventional understanding surrounding current social movements in the CAR field center around the work of Alain Touraine and his student Alberto Melucci who explored the notion of ‘new social movements’ (Alexander 2006). The new social movement theory approach is one that is open to contingency and to the subjectivities of actors while also having a strong historical sensibility and institutional focus (Alexander 2006). In essence, new social movement theory allows current CAR theorists and practitioners to embrace subjectivity without having to give up an “instrumental and materialist approach to the conditions that foster social movements and ultimately determine their success.” (Alexander 2006, 225–226)

Breaking away from classical models of understanding that relate social movements to “revolutionary movements conceived as mass mobilizations wresting power from an antagonistic state” (Alexander 2006, 214); new social movement theory seeks to update the classical model by acknowledging, and accounting for the fact that in post-industrial, information-based societies there is a new structural arrangement that has created new conflict groups, new forms of stratification and patterns of domination, ultimately leading to new perceptions of the goals and interests at stake (Alexander 2006). In many ways, new social movement theory has, and continues to form the basis from which conventional understandings of social movements within the CAR field are formed and understood.

The events of early 2011 in Egypt were without a doubt, the result of the actions of a large, highly motivated group of people. Because of this, we must also consider the conventional understandings in the CAR field related to the role of groups in social mobilization. Conventional understanding in the CAR field teaches that psychological causes such as relative deprivation and collective grievances form the basis through which group actions are initiated and facilitated (Jeong 2008). Once these causes are identified and collectively acknowledged, the emergence of an organized leadership, communication network and freedom of association all work toward building a groups capacity for sustained action (Jeong 2008). As far as the effectiveness of a chosen groups pursuit of organizational goals; there are a variety of factors to be considered: “the level of consensus on core values within an opposition group, intra-group communication patterns, relationships between the leadership and members, and abilities to adjust to

unpredictable demands.” (Jeong 2008, 96) As such, we can understand that the successful formation and solidarity of groups in conflict situations as understood in conventional CAR understandings is supported not only by communication strategies but also directly tied to technical, political, social and psychological circumstances.

Finally, it is imperative to discuss the conventional understanding in the CAR field of communication and communication technology. For the most part, scholars believe that some form of communicative interaction is fundamental to notions of conflict itself (Oetzel and Ting-Toomey 2006). As a result, communication in the CAR field is treated as both a structural and an interactive variable – “as a process that defines the essence of the conflict, and as sense-making or interpretations of the conflict.” (Oetzel and Ting-Toomey 2006, 12) The treatment of communication therefore tends to cluster into the following categories: communication as a variable, as a process, as an interpretive approach, and as a dialectical relationship (Oetzel and Ting-Toomey 2006). As a variable, communication is conventionally understood as either a structural variable or an interaction variable (Oetzel and Ting-Toomey 2006). As a process, understandings of communication fall into the areas of sequential patterns, phase and stage research and issue development (Oetzel and Ting-Toomey 2006). And as an interpretative approach, communication is treated as discourse, symbolic forms, and negotiated orders (Oetzel and Ting-Toomey 2006).

And while these conventional categories and understandings are one way to look at the role of communications, there has been for the most part, a continued struggle in the field to effectively manage the emergence and rapid evolution of information

communication technologies outside of the communicative product produced through their use. And while these conventional understandings of communication in the CAR field form the base from which much the field views communication in the context of conflict, it is shown, and will be addressed further in later chapters, that this understanding remains at best, limited and in need of expansion.

Importance to the field of Conflict Analysis and Resolution

As the field of Conflict Analysis and Resolution moves through the current landscape of local, international, and global affairs, it is of increasing importance to pay close attention to the role played by communication technology. The current generation of conflict practitioners – the fifth generation known as the universalizers – are working in a rapidly changing landscape that is susceptible to the reliance on and impact of information communication technology (Ramsbotham 2005). Developing a greater and more nuanced understanding of these tools and the role they play in conflict processes will serve the conflict analysis and resolution community for many years to come.

In this ever-evolving technological landscape, we as conflict resolution practitioners need to continue to expand our understanding of the communication tools and communicative practices at work. While it is currently more common for CAR research to focus on the content carried by these technologies, the potentially more impactful focus for the field is the acknowledgment that we shape the communication tools we use and in turn those tools shape our individual and collective behaviour.

The information revolution that has given rise to the on slot of mobile ICT use is potentially influencing the frequency and possible global impact of social resistance. As

portions of society undertake alternative forms of political expression, often in the form of social movements, mobile ICTs become the platform of choice. Facilitated by the use of mobile ICTs, the networks created by a vast and ever expanding connection of like-minded people are geared toward accomplishing specific political goals. As discussed further in Chapter 2, it is the network that has become the focus of many scholars as it relates to contentious activity and an aspect that many scholars believe should become the focus of further CAR research.

To further illustrate the importance of research focused on the impact of mobile ICTs on conflict processes, we need look no further than the myriad of instances where these technologies have played a defining role in conflict processes and contentious activity. To that end, it is important that the field of Conflict Analysis and Resolution also become aware of the many ways in which mobile ICTs have had or are currently impacting social change processes. As a set of brief examples, intended to illuminate the current and past uses of mobile ICTs in conflict processes, we look to the work of Philip Howard, who offers the following:

“Activists in Indonesia effectively used mobile phones to mobilize to topple Suharto in 1998. During Kyrgyzstan’s Tulip Revolution of March 2005, mobile phones were again used to organize activists to join protests at key moments, helping democratic leaders build a social movement with sufficient clout to oust the president. Kuwait’s women’s suffrage movement was much more successful in 2005 than it had been in 2000, in part because it was able to use text messaging to call younger protesters out of school to attend demonstrations. In Egypt, Tunisia and Kazakhstan opposition groups that face state censorship simply move their online content to servers in other countries.” (2010, 3)

It is without doubt that the adoption of mobile ICTs is impacting the emergence, escalation and potential resolution of conflict all over the world. Understanding the

dynamics and behavioural changes brought on by the adoption of mobile ICT use will help the CAR field, as a whole, better understand not only the new technological landscape in which the world and fifth generation CAR practitioners operate in, but will better equip the field to deal with 21st century conflict and its resolution.

Outline of Chapters

Chapter 1 serves as an introduction to the subject matter. Setting the base of the research project, Chapter 1 frames the topic being discussed, provides a brief introduction into the notions of ICTs and mobile ICTs, and then follows with a brief explanation of the research problem and why it is important to the field of Conflict Analysis and Resolution. Supporting the discussion in Chapter 1 is a brief outline of the conventional understandings of the subject matter in the field; which serves to provide a basic starting point from which the discussion will continue.

Chapter 2 addresses the literature review. This chapter discusses the treatment of the subject in the literature and draws out three main topic areas – the Network/ Network Society, social movements and the network, and notions of power and relationships within the network. These three topic areas are derived from the literature review and used a means to frame and organize the works in the review. Chapter 2 concludes with a discussion of the observations made regarding the literature, as they emerged from the literature review.

Chapter 3 serves as the section of this work dealing with methodology. Chapter 3 begins with a discussion of the criteria for case selection, and the case selected for study. Following case selection is a detailed discussion of the research tools, issues of

confidentiality, and the interview process. Chapter 3 finishes with a discussion of the analysis process and a few concluding remarks.

Chapter 4 titled Data Gathering and Analysis includes a discussion of findings as related to digital activism and mobilizing structures. Included in this chapter is a detailed summary of findings as evidenced through a qualitative analysis.

Chapter 5 titled Conclusion begins with a summary of findings as evidenced in Chapter 4. Chapter 5 then proceeds with concluding remarks, and finishes with some recommendations and steps for further research.

CHAPTER 2: LITERATURE REVIEW

A number of scholars have moved away from focusing on conventional understandings of communication and social unrest in the CAR field, and are shifting towards research and scholarship focusing on the importance of studying the immense growth and implications of developments in the information and communication fields. Manuel Castells et al, address the growth of mobile ICTs by acknowledging that: “The fact that most of the world population is entering the electronic communication age in a wireless mode has social and cultural consequences, the importance of which we are only beginning to perceive.” (2007, 38) Echoing Castells et al., is William Mitchell who writes:

“Wireless connections and portable access devices create continuous fields of presence that may extend throughout building, outdoors, and into public space as well as private. This has profound implications for the locations and spatial distributions of all human activities that depend, in some way, upon access to information.” (2003, 144)

Working within the fields of communications and conflict resolution, the work of many scholars has focused our attention to the changes both within the structure of society and the impact of these changes on the landscape on conflict as derived from the information revolution and technological developments.

The purpose of this chapter is to review literature focused on the impact of mobile ICTs on social movements. This chapter seeks to look at literature that moves beyond the

conventional understandings in the field of Conflict Analysis and Resolution and bring to the forefront literature that acknowledges traditional notions with new understandings of the current landscape that is susceptible to the impact of developments within information and communication technology. Taxonomy of the literature review can be viewed in table 1.

Table 1. Taxonomy of Literature Review

Characteristic	Categories
Focus	Theories and Understandings
Goal	Indentification of Central Understandings Integration of Findings
Perspective	Neutral Representation
Coverage	Purposive
Organization	Conceptual

The goal of this literature review is to identify the central understandings of the topic and the integration of findings. The first section of this chapter deals with literature on the concept of the ‘Network Society’ and the ‘Network’. The second section of this literature review deals with the notion of social movements in the network, and is then followed by a discussion of notions of power and the treatment of relationships to ruling structures. After the literature has been discussed, the chapter concludes with a discussion on observations made within the literature review processes.

Network Society and The Network

With the advent of the information revolution, factors affecting interaction patterns such as geography and ecology have given way to the creation of a social structure (identified by empirical research) in which societies perform their activities through a technological paradigm which is constituted around microelectronics-based information and communication technologies (Castells 2011). Understanding this paradigm and its impact on society is identified in the literature as the first step towards understanding the impact of mobile ICTs on social practices. As best described by Manuel Castells: “As information and communication are the most fundamental dimensions of human activity and organization, a revolutionary change in the material conditions of their performance affects the entire realm of human activity.” (2004, 9)

Characteristic of this technological paradigm is the rampant and diffuse use of information and communication technologies to enhance and accelerate the production of knowledge and information in a self-expanding virtual circle - this circle is what theorists’ and authors describe as the Network Society (Castells 2011). Acknowledging that networks are very old forms of social organization, a number of theorists posit that these old forms of social organization have taken on a new life through the information revolution – by becoming information networks. The new life these networks have taken on allows for a co-ordination and management of complexity never before seen (Castells 2011). Essentially, the Network Society is an interactive system featuring feedback effects, and patterns of communication from anywhere to everywhere within the networks (Castells 2011). As scholars address how the structure of society has changed as

a result of the information revolution, the idea and manifestation of the Network Society becomes all the more important to discussions within literature.

As scholars address the notion of the Network Society, there is a renewed call to update conventional understandings of interaction amongst individuals. Whereas, interactions between social groups have been traditionally restricted by geography and ecology, and by the active resistance to interactions with the ‘other’, the Network Society experiences social interaction without the constraints of time and space (Appadurai 1996). In this sense, the Network Society is based on a ‘timeless time’ and ‘space of flows’ (Castells 2004). As it is used in the literature, the term ‘timeless time’ refers to the way in which the use of ICTs compresses traditional experiences of time, while also de-sequencing time by including what is considered past, present and future into a random sequence. Timeless time essentially removes traditional sequencing from social action, by compressing time or randomly ordering the moments of a sequence (Castells 2011); many scholars use the examples of the blurring of the lifecycle under the conditions of new flexible patterns of work and the increased choices for reproduction as a way to illustrate the notion of timeless time (Gleick 1999; Green and Adam 2001). And while their examples focus on notions outside of social movement behaviour, it does serve the purpose of showing exactly how timeless time has had a fundamental impact on the individual choices many people make, and the behavioural changes that result from those choices.

The space of flows, as used in the literature, refers to the possibility (both technological and organizational) of organizing the simultaneity of social practices without geographical continuity (Castells et al. 2007). In essence:

“the space of flows is the material organization of simultaneous social interaction at a distance by networking communication, with the technological support of telecommunications, interactive communication systems, and fast transportation technologies.” (Castells et al. 2007, 171)

The availability of mobile ICTs makes it possible to saturate time with any number of social practices by inserting communication into all moments of our existence (Castells et al. 2007). Identified by Larimer as the ‘in-between’ time, mobile ICTs have taken moments when the physical act of accomplishing a task is not possible and saturated them with communication; for example: waiting in-line, during transportation and the like, are now more so than ever filled with communicative interactions facilitated by mobile ICTs (Larimer 2000).

Understanding the Network Society also calls for an understanding of the network embedded in the Network Society. Within the Network Society, networks have become the most efficient form of social organization because of three features facilitated by the new technological environment. Those features are: flexibility, scalability, and survivability (Castells 2004).

The new technological environment brought about as a result of the information revolution has allowed for an increased level of flexibility in the network of communication. Networks and networked relationships can continually reconfigure themselves in accordance to the changing environments in which they operate (Castells 2004). These networks can go around blocked points in communication channels to find

new connections while maintaining their expressed goals and desires (Castells 2004). The network is also scalable in that they can expand and contract in size with little to no disruption.

Arguably the most important feature of the network is its survivability. Because these networks have no center, or hierarchical authority, they can operate in a wide range of configurations, while still being able to resist attacks. The network configuration, and lack of central authority, means that the network itself is contained in multiple nodes that can reproduce the instructions given and continually find new ways to perform their intended function (Castells 2004). As treated in the literature, the survivability of the network essentially means that the only way to destroy a network is to physically destroy the connecting points between network participants; for example, turning off the Internet, destroying cell phone towers and blocking satellite transmissions. The physical disruption of communication infrastructure is a tactic that many repressive regimes have taken as a means to stop the network from operating long enough to attempt to regain physical control over a digitally networked society (Nancy Gohring and Robert McMillian 2011).

When looking at the concept of the ‘Network Society’, and the ‘Network’ in the literature, the work of Keck and Sikkink stands out: “Part of what is so elusive about networks is how they seem to embody elements of agent and structure simultaneously. When we talk about them as actors, however, we are attributing to these structures an agency that is not reducible to the agency of their components.”(1998, 5) This is the real impact of the network, allowing adaptive systems to operate within the network means that it is not individual humans who decide how the network will operate but an

entangled, adaptive network of humans, and machines (Brockman 2011). To know the network is to know that communication tools are embedded in our lives and in turn, our lives are embedded in the network (Howard and Jones 2004b).

Social Movements and the Network

Drawing on the notion that the information revolution has impacted society, essentially ushering a new societal formation based on networks – the Network Society – theorists have begun to explore how this revolution and resulting societal changes has impacted social movements. Accounting for this change, Mario Diani et al. has defined social movements in the following way: “A social movement is a network of informal interactions between a plurality of individuals, groups and/or organizations, engaged in a political or cultural conflict, on the basis of a shared collective identity.” (1992, 13) In this sense, social movements are now being reimagined in the literature as having gone through a shift in structure. In this sense, the structure of social movements is not an organization, but a network in their own right (Donk 2004). This network, or even network of networks, maintains and rests on a sense of collective identity (Donk 2004). For theorists, the information revolution and the on slot of ICTs has not necessarily changed the logic of collective action in any profound way, but has impacted the structure of movement participants and also had an affect on the kind and speed of political communication and mobilization currently being displayed in many social movements of the last decade or so (Donk 2004).

As the social movement network takes shape, so too does the typology of tactics that the network uses in their efforts towards persuasion, socialization and pressure (Keck

and Sikkink 1998). While often underrepresented in the literature, this typology of tactics is gaining a renewed energy and is becoming a focus of study and research within the field. It is important to note, that these tactics can be traced back many years and are not a distinctly new feature of social movements utilizing ICTs. These tactics are however gaining increased effectiveness through the speed and reach garnered by the use of ICTs. The typology of tactics include, but are necessarily limited to, 1) information politics, 2) symbolic politics, 3) leverage politics and 4) accountability politics (Keck and Sikkink 1998).

Information politics is the ability to utilize the evolution of information and communication technologies to quickly and with credibility generate politically usable information and disseminate it to where it will garner the greatest impact (Keck and Sikkink 1998). Non-state actors use information politics as a means to gain influence by serving as an alternate source of information. In addition to providing facts about events, communication networks are able to provide testimony – “stories told by people whose lives have been affected.” (Keck and Sikkink 1998, 19) Prior to the insurgence of ICT use, networked social movements relied heavily on the use of pamphlets, print material, fax and to a limited extent, email. The use of mobile ICTs has lifted the restrictions of print from the network and provided a somewhat seamless digital platform which activists can utilize to leverage information politics. Twitter offers a great example of this transformation, Witness Bahrain (@witnessbahrain) is a network of international observers who are monitoring and most importantly, reporting on human rights abuses and suppression of Arab Spring democracy activists in Bahrain. Through the use of ICTs

and the Twitter platform, Witness Bahrain is pushing facts, testimonies, audio, and video segments 24 hours a day to over 4, 120 people identified as being part of their network.

Symbolic politics, is referred to as the ability to “call upon symbols, actions, or stories that makes sense of a situation” for an audience that is frequently at a distance (Keck and Sikkink 1998, 16). Activists identify and provide “convincing explanations for powerful symbolic events, which in turn become catalysts for the growth of the networks.” (Keck and Sikkink 1998, 22) Most recently, the self-immolation of Mohamed Bouazizi in Tunisia on December 17th, 2010 was one such event where the symbolic act made by Bouazizi led to the ousting of President Zine El Abidine Ben Ali on January 14th, 2011. This act of defiance by Bouazizi was leveraged by networks, and through the tactic of symbolic politics, this one act was magnified ten fold and incited not only the increased engagement of others in the network, but also in the revolution that led to the ousting of the then President.

Leverage politics is a tactic that draws upon the diversity of the network, and calls upon powerful actors to impact a situation to the best of their ability when weaker members of the network are unable to impose their influence (Keck and Sikkink 1998). To gain influence over more powerful actors, networks seek to gain and utilize leverage over more powerful institutions and actors, which help weaker groups, move beyond their limited ability to influence state practices directly (Keck and Sikkink 1998). An example of leverage politics can be seen through the Facebook campaign titled “We are all Khaled Said”. Khaled Mohamed Saeed was a young Egyptian man who died in disputed circumstances after being arrested by Egyptian police. As news of the arrest and death

spread, the “We are all Khaled Said” Facebook page rose as the primary source of information on not only the death of the young man, but the police and government responses to his death. Due to the immense amount of attention garnered by the Facebook page, heavy international criticism began to be leveraged on the Egyptian government. As a result of this criticism and leverage, the Egyptian government agreed to hold a trial of the two detectives involved in the death of Khaled Mohamed Saeed.

Accountability politics refers to the ability to leverage information and communication technologies in a way that hold powerful actors accountable to their previously stated policies and principles (Keck and Sikkink 1998). Once a government or governmental agency has publically committed itself to a principle or ideal, networks can use those positions, and their command of information networks, to “expose the distance between discourse and practice” that may be in place (Keck and Sikkink 1998, 24). This has been particularly powerful for human rights groups. For example, the use of ICTs has helped Human Rights Watch, provide real time information about human rights crises and developments in 90 countries around the world.

This typology, and the impact that ICT use is having on these tactics shows how the networked social movement is leveraging new information and communication technologies for their own expressed goals, tactics and purposes. While these tactics are not a direct result of the evolution of ICTs, they are forever changed as a result. The slow and confined speeds and reach of print technology are replaced with an all inclusive and global reach that makes these tactics more effective then they ever have been before. While the long term effects of this speed and reach are still as of yet, not covered in the

literature, these information and communication tactics are of great importance to the CAR field.

As a result of the information revolution, and developing technologies, many scholars believe political action is “made easier, faster and more universal” than it has been in the past (Donk 2004, 97). Taking this line of thought one step further, Bruce Bimber argues that the alteration in the structure and tactics of social movements as facilitated by the information revolution, will be of particular benefit to those groups outside the boundaries of traditional public institutions and political organization (1998). As new information and communication technologies dangle the prospect of exposing a groups cause to more and more people, and more and more networks, there is a renewed sense in the literature that opportunities for nonviolent disruption and noncooperation are more plentiful (Ackerman 2000).

But as much as a technological shift of this nature renews the prospect of change, theorists still caution that these changes in communication innovation by no means assure that a fundamental shift is upon us (Bob 2005). In this sense, more work needs to be done in the area of social movements and ICT development so as to better understand at what capacity the shift has, or will take over time.

Notions of Power and Relationships within the Network

A third thread in the literature on the information revolution, social movements and communications, centers on the notion of power and relationships within the network. As they are spoken of in this chapter, networks essentially dissolve the notion of a center of control, they disorganize hierarchy, and make it materially impossible to

exercise hierarchical power without processing instructions through the network (Castells 2011). While there are still relationships in society based on the structure of power, the networks ability to bypass centers of control through the flow of information circulated through the network, shows how a new pattern has immerged where the power of flows takes precedence over the flows of power (Castells 2011). Essentially, more and more decisions are made by the interaction of multiple communicating networks (Brockman 2011). These component systems are constantly changing and adapting, creating a system that is constantly changing and evolving to maintain its separation from the traditional flow and structure of power.

In the Network Society, the construction of shared cultural practices that allow for social groups to live together, now takes place in “the networked, digitized, interactive space of communication” centered around information technologies, mass media and the Internet (Castells 2004, 30). As a result, the relationships between citizens and political bodies, between the represented and representative, depends in many ways on what happens in this digital space that is ever more centered on communication spaces and technology (Castells 2004). According to Steve Coll, in context of the Gulf region:

“The technology also helps democratic organizers who are often over-matched by the Gulf’s authoritarian governments. In a region where formal political parties are banned but loose political societies are often tolerated text messaging allows organizers to build unofficial membership lists, spread news about detained activists, encourage voter turnout, schedule meetings and rallies, and develop new issue campaigns – all while avoiding government-censored newspapers, television station websites.” (2005, 29)

Perhaps the best way to think of the networks created by mobile ICT use, is of a type of networked politics where individualized political thoughts and goals are

connected with that of many other individuals, and through this connection each individual is suddenly identified as a recognized citizen of the whole (Castells 2004). That is to say, through the ever-expanding network, each individual, regardless of their individual circumstances or status within society, is recognized as a citizen of the movement, as having a vested interest in accomplishing the goals set forth by the network.

It has been argued in the literature that in this world of networks, the ability to maintain control of others and to exercise power depends on two basic mechanisms: “the ability to program/reprogram the network(s); and the ability to connect different networks to ensure their cooperation by sharing common goals and increasing resources.” (Castells 2004, 32) Thus, it is argued that the power-holders are the networks themselves. Leaving a very limited, and mostly physical repertoire of tactics left to those who seek power and control of others from outside of the network.

This point needs a touch of clarification. The notion of networks as it is argued in the literature is not in the abstract, it is not a notion of unconscious networks, or better yet automat (Castells 2004). These networks are human organized around projects, interests, goals and the like. These networks are also not single actors, individuals, groups, social classes, religious leaders, political leaders or the like. The exercise of power in the Network Society requires a complex set of joint actions that go beyond simply forming alliances (Castells 2004). The exercise of power in the Network Society requires that joint action essentially becomes a new form of subject, akin to what Bruno Latour

theorized as the action-network actor (1993). In this sense, relationships amongst the network are simultaneously material and semiotic.

As the relationship to, and among power in the Network Society is reimagined, the literature often posits that the question of power, as it is traditionally understood and formulated, no longer makes sense in the context of the Network Society; and that perhaps, other forms of domination and determination will be critical in shaping peoples lives (Castells 2004). While no concrete notions of this newly reimagined notion of power are posited in the literature, it is something that a substantial group of scholars believe is the new task at hand.

Observations

A number of observations were made throughout the literature review process. And while efforts were made to account for the observations, and a concerted effort was made to seek alternatives for the observations, a few key elements remain.

The first observation made regarding literature on the subject matter is that in a disproportionate amount of the literature surrounding this topic, the terms information revolution, and Internet are used interchangeably. It is important to note that the Internet is simply a subset of the information revolution. As a result of this misuse, the majority of the current literature and research is limited to the impact of the Internet exclusively. While it is worth acknowledging the importance of the Internet, it is but one aspect of the information revolution.

In this same light, another observation made is that the majority of literature on the topic ignores the prevalence of mobile phones in favour of the diffusion of fixed

broadband access. This is limiting in that while there has been a strong growth in fixed broadband subscriptions world wide, in developing countries there is only 4.4 subscriptions per 100 people compared to 24.6 in developed countries (International Telecommunication Union 2012a). It is through mobile ICTs, specifically mobile broadband, where the majority of individuals in developing countries are accessing the Internet – this tends to be ignored by the omission of mobile phone use in the research and literature.

Another observation made is that the majority of literature and research in this topic area focuses on the content of Internet pages and political messaging. A large gap exists in the research and literature that focuses on the fundamental shift in behaviour that results from advances in technology and the information revolution. In this same sense a gap exists in the literature dealing with the strategic and tactical uses of mobile ICTs in social movements.

The final observation made is that the literature tends towards studying collective actors as ‘entities’ appearing on a public stage and addressing themselves to others. What this ignores is the internal communication, forms of organization, and activities following the actions on the public stage – these have remained essentially a black box in the literature (Donk 2004).

Conclusion

The goal of this thesis project is to make a meaningful contribution to knowledge in the field of Conflict Analysis and Resolution. The literature review and conventional understandings of the subject matter in the field shows that there is a need for research

and literature that bridges the gap between the traditional notions of social movements and communications with one that accounts for contemporary understandings. Being motivated by a lack of information about the impact of mobile ICTs on the behaviour of social movement participants, this thesis takes steps to acknowledge that the internal communication, forms of organization and behavioural activities of social movement participants are in many ways intertwined with and influenced by technological developments. Bridging the gap between conventional understandings of the subject matter, with contemporary understandings will be a driving force behind this research.

CHAPTER 3: METHODOLOGY

The purpose of this chapter is to outline the methodology of the research conducted. The chapter begins with a discussion on case selection including selection criterion and justification of case selection choice. Included in the discussion of methodology is a detailed account of research tools, and method of analysis. The chapter then finishes with concluding remarks regarding the methodology of the research conducted.

Case Selection

The prevalence of mobile ICT use in contentious situations has grown dramatically over the last few years. With mobile ICTs being used in a myriad of contentious activities in Tunisia, Iran, Kenya, the Philippines, Moldova, Mexico and the United States to name a few, there is a myriad of cases to choose from. Given the number of potential cases to choose from, a number of criteria were chosen to assist with case selection. Those criteria are: a country with consistent levels of social unrest over a designated timeframe; recent uses of information and communication technology in the context of digital activism; and a country with a median range of technological diffusion so as not to skew results on the basis of technological availability alone.

It is important to note that this research project is limited in scope in that a detailed historical analysis will not be included in the qualitative analysis nor will a

comprehensive analysis beyond the specified timeframe be carried out. For these reasons, it is important for case selection purposes that enough data and literature is available to conduct a meaningful analysis within the limitations of the study.

For the reasons stated above, and falling within the designated criterion, the Arab region was identified as the optimal region from which to pick a country for study. The Arab region was chosen as a starting point for case selection due to the prevalence of social unrest in the past year – commonly referred to as the Arab Spring. It was also chosen because the region is rapidly developing in terms of ICTs and shows particularly strong growth in the area of mobile telephony (International Telecommunication Union 2012b). Figure 2 demonstrates the overall development of ICTs in the Arab region between 2006 and 2011 – this figure was used as a guide from which to begin assessing not only the region, but also the selection a country within this region.

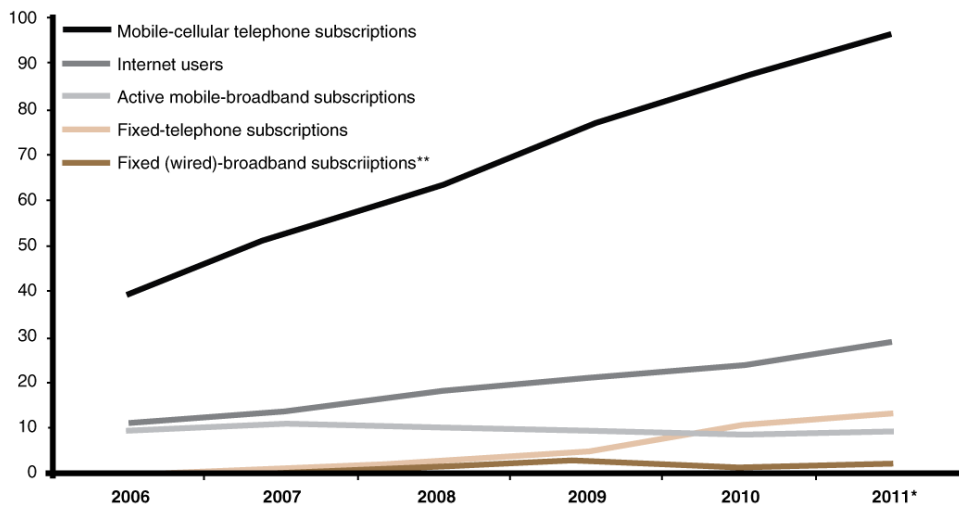


Figure 2. ICT Development, Arab Region 2006-2011. Source: International Telecommunication Union 2010b

Important to this study is the consideration of mobile-broadband use and mobile-cellular penetration rates. These two factors are encompassing of mobile ICT use and cannot be considered as separate to the analysis. In terms of mobile-broadband use, the move towards commercially available 3G networks in the majority of countries in the Arab region has increased the number of mobile-broadband subscriptions and as a result helped bring Internet access to a growing number of the regions population. The International Telecommunication Union (ITU) estimated that by the end of 2011, around 30 percent of the population in the Arab region was using the Internet (2012b) with active mobile-broadband penetration rates in the region estimated at 6.4 per cent in 2010 (2012b).

Also of great importance to this research project is the penetration rates of mobile-cellular service. Mobile ICTs on the whole, are very dependent on mobile-cellular devices. In terms of the Arab region, ITU estimated that by the end of 2011, mobile-cellular subscription rates in the region would have reached close to 350 million, up from 126 million in 2006 (2012b). This translates into a penetration rate of 96.7 percent. While this penetration rate puts the region ahead of the world average of 86.7 per cent, it also puts the region behind the Americans, Europe and the Commonwealth of Independent States (CIS) where levels of mobile-cellular penetration have exceeded 100 percent (International Telecommunication Union 2012b). Figure 3 demonstrates mobile-cellular subscriptions and penetration rates in the Arab region and by region.

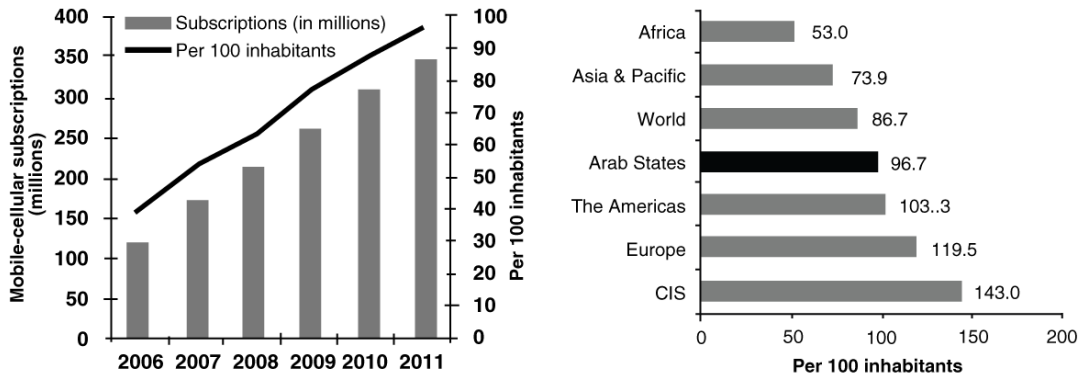


Figure 3. Mobile-Cellular Subscriptions and penetration rates in the Arab region 2006-2011 (left) and penetration rates by region, 2011 (right) Source: International Telecommunication Union 2010b

The Arab region was chosen as a starting point for case selection because, as shown above, the development of ICTs in the region is growing, but still rests in the middle of global growth in the area of mobile ICTs. Within the Arab region, Egypt was chosen as the country of analysis. As per the criteria listed at the beginning of the chapter, Egypt shows consistent levels of social unrest over the period of study and, as a recognized participant of the Arab Spring, shows recent uses of technology in the context of digital activism. Egypt also has a median rate of technological diffusion within the Arab region making it a selection that satisfies all the criteria listed at the beginning of the chapter.

When assessing the case selection of Egypt, it is important to look closely at rates of ICT diffusion and penetration. By the end of 2010, the total number of mobile-cellular subscriptions in Egypt reached 70.661 million, amounting to a penetration rate of 87.1 percent (International Telecommunication Union 2012b). This percentage falls right in the center of subscription rates in the Arab region. As shown in Figure 4, the mobile-

cellular subscription rates amongst Arab countries ranged from 7.0 per 100 inhabitants (Somalia) to 187.9 per 100 inhabitants (Saudi Arabia) (International Telecommunication Union 2012b). Given that the Arab region has a vast range of adoption rates, choosing a country with a median range ensures that the analysis is not skewed by the availability of technology alone.

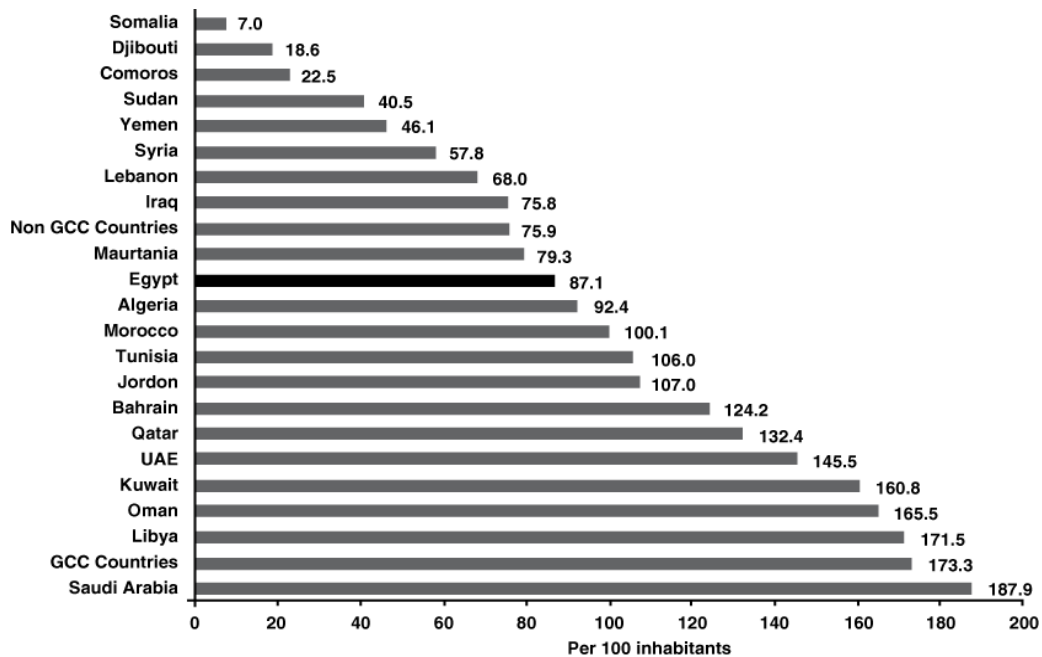


Figure 4. Mobile-Cellular subscriptions in the Arab Countries, 2010. Source: International Telecommunication Union 2010b

As with the assessment of mobile-broadband rates in the Arab region, it is also important to look at these same rates in Egypt. As shown in table 2, active mobile-broadband penetration rates in Egypt reached 6.4 percent. This is a penetration rate far higher than the penetration rate of fixed wired-broadband of 1.8 percent. This difference

lends itself to the acknowledgement that more people in Egypt are accessing the Internet on mobile devices than they are on fixed devices such as desktop computers – an important factor in the assessment of mobile ICT use.

Table 2. Egypt broadband Internet Subscriptions, 2010. Source: International Telecommunication Union 2010b

	2010
Fixed (wired)-broadband Internet subscriptions (000s)	1'450
Fixed (wired)-broadband Internet penetration rates	1.8%
Active mobile-broadband Internet subscriptions (000s)	5'155
Active mobile-broadband penetration rates	6.4%
Internet users (000s)	21'692
Internet user penetration	27%

For the purposes of this research, and within the acknowledged limited scope of analysis, the Arab region, and Egypt specifically were chosen as the best case from which to conduct the study. As shown above, Egypt provides an opportunity from which to gain insight from a country recently experiencing the use of mobile ICTs in social unrest, as well as showing that as a country, it is not positioned on any of the extreme ends of mobile ICT adoption and penetration, which would skew the study in terms of generalizability to the whole.

Methodology

This project aims to identify the impact of mobile ICTs on the behaviour of social movement participants during the unrest in Egypt from January to March of 2011. For the purposes of this research, a qualitative analysis has been conducted utilizing semi-

structured interviews with individuals who have a demonstrated understanding of the technological aspects of mobile ICT use during social unrest, as well as a high degree of knowledge and understanding of these technological aspects in the context of the Egyptian unrest.

The following sections outline in detail, the interview process, including issues of confidentiality, and the informed creation of interview questions. Following a detailed discussion of the interview process and question selection, this section continues with a detailed discussion of the process of analysis as it pertains to the data collected.

The Interviews

For the purposes of this research project, six individuals with knowledge of the use of mobile ICTs by participants in the Egyptian social movement of 2011 were interviewed as a means to seek a better understanding of the subject matter. The interview participants were over the age of 18, and 50 percent of the interviews were conducted with women. Interviewees were chosen on the basis of their level of familiarity and knowledge of events, as well as their availability and willingness to participate.

Participants were identified through intermediaries who shared a connection between the researcher and the interviewees. Given the potential to be (mis)identified as someone having direct knowledge of resistance activities, and the potential risks involved in such an identification, potential interview participants were never revealed directly to the researcher by the intermediary. The intermediary acted to protect the identity of

potential participants and as such, only those willing to contact the researcher directly were ever identified as potential participants.

Each interview was semi-structured and based on a series of questions used as starting points of discussion. Where applicable, and if at all necessary, interviewees were allowed to deviate from the questions and provide input they deemed necessary for the research. Each interview lasted approximately one to two hours, dependent on the amount of information and discussion produced. A detailed description of the interview questions follows in the section titled *Interview Questions*.

When possible, interviews were conducted in-person at a location of the interviewees' choice. In some cases, an in-person interview was not possible, so interviews were then conducted electronically via email and Skype. As per the approval of the Human Subjects Review Board, signed consent was waived. As such, an informed consent form was sent to interview participants in advance for their viewing and understanding, but signatures of these forms were not required. There were no benefits to the participants in this study, and participants were allowed to withdraw from the interview at any point without penalty.

Confidentiality

Potential risks associated with participating in an interview of this nature included: being (mis)identified as having first hand knowledge of events in Egypt, being (mis)identified as a possible participant in social unrest activities, and being viewed by others as representing a group of people engaged in social movement activities. Because of these potential risks, the confidentiality of participants was held in the highest regard.

These risks were deemed reasonable because the study did not seek to transition the data into actionable points, or interventions.

All communications with interview participants was conducted through methods that were satisfactory to the interviewee. All electronic information was stored in a secure manner and no open data formats were utilized. All interview participants were to remain anonymous, as such their personal identifiers were excluded and a participant number identified them in the data. All raw data was permanently deleted from any and all files at the completion of the study.

Interview Questions

Interview questions were informed by and organized into two complementary streams of understanding. The first stream of understanding through which interview questions were derived is ‘Digital Activism’ and draws upon the work of Mary Joyce et al (2010). The second is ‘Mobilizing Structures’ which was derived from a framework that draws upon research by Kelly Garrett (2006) who built upon a framework developed by McAdam, McCarthy, and Zald (1996). Figure 5 illustrates these two streams in their entirety.

The first stream of understanding through which interview questions were derived is that of ‘Digital Activism’. According to Mary Joyce: “The context of digital activism refers both to the digital technology that is used in a given activism campaign and to the economic, social, and political context in which such technology use occurs.” (2010, 2) Drawing on this understanding, digital activism includes the sub-categories of: hardware/software, historical activity, and framing processes.

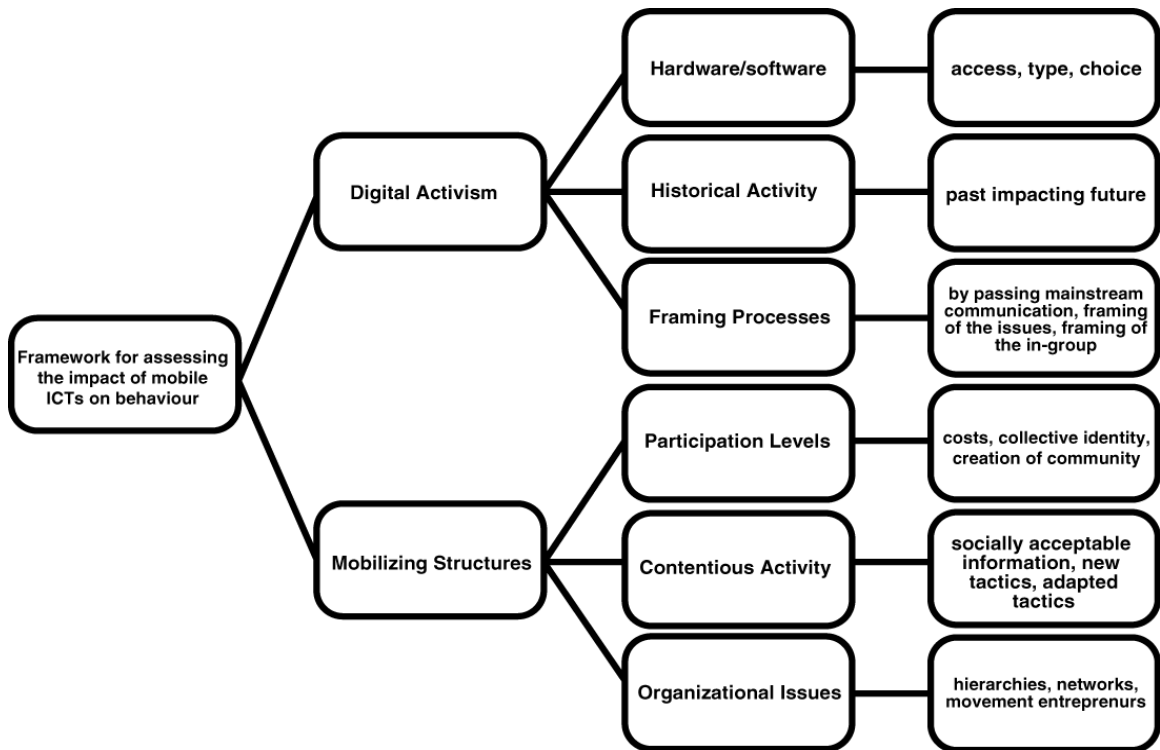


Figure 5. Framework for Assessment

The first subset of digital activism as shown in figure 5, takes a closer look at the hardware and software of mobile ICT use. This is the technological infrastructure – “the combination of networks, code, applications, and devices that make up the physical infrastructure of digital activism.” (Joyce 2010, 2) It is important to think of both software and hardware applications because even though networks send information in 0s and 1s we don’t think of the network in terms of this code (Joyce 2010). We think of the tools of the network in terms of applications (the software that interprets the code) and the end devices (the hardware such as cell phones) that connects us to the network where our code is transmitted. Both hardware and software interact to create the whole of our

experience with ICTs; and while we may not always be conscious of it, we make very distinct choices on how to configure the interaction between hardware and software to optimize their use for our own purposes.

The second subset of digital activism that structured understanding is ‘Historical Activity’. There is no doubt that social norms have an immense influence on how a person uses digital technology for activism (Joyce 2010). A large part of the creation of these norms is the historical context in which they have been derived. In order to understand societal norms, and more importantly the context of digital activism, we need to address the historical perspective of their use. In the context of this study, historical activity is treated as informing new practices and as such, a historical analysis is not conducted – the historical perspective is taken as a means to understand the appropriation of new behaviours as they may have been impacted by previous events.

The third subset of digital activism is the ‘Framing Process’. A number of scholars believe that the Internet in conjunction with mobile phones has in some respects, freed public opinion from being narrowly constituted as the opinion of a small elite. (Zayani 2008; Howard and Jones 2004a) As such, it is important to look at the potential impact that mobile ICTs are having on the ability of its users to bypass mainstream communication and media outlets that have traditionally been monopolized by cultural and political elites. It is also within the framing process that we look at the framing of the issues. In many cases, whether or not the audience chooses to become engaged in social movement activities depends heavily on the frames chosen to justify the social movement activities and the issues at hand. As a prevalent communication tool, mobile ICTs are

very much a factor in how individuals not only frame an issue, but also share the issue with the public. In essence, the development of frames, and the purposeful dissemination of communication are conducted through mobile ICTs; simultaneously allowing users to develop their frames and to determine who is considered as an in-group member worthy of receiving the framed communication. It is for this reason that framing is an important aspect of digital activism.

The second stream of understanding through which interview questions were derived, comes from an overall framework of understanding developed by Kelly Garrett which “explains the emergence, development and outcomes of social movements by addressing three interrelated factors: mobilizing structures, opportunity structures and framing processes.” (2006, 205) – it is from this larger framework that mobilizing structures was adapted and utilized in this research. Drawing from Kelly Garrett, mobilizing structures can be seen as the mechanisms that facilitate collective action and organization – including social structures and tactics (McCarthy 1996). As shown in figure 5, mobilizing structures can be broken down into the component parts of: participation levels, contentious activity and organizational issues.

When thinking of participation levels, it is advocated by Clay Shirky that “new technology enables new kind of group-forming” which leads to an understanding that “we now have communication tools that are flexible enough to match our social capabilities, and we are witnessing the rise of new ways of coordinating action that take advantage of that change.” (2008, 50) Given the acknowledgment that new technologies are enabling group formation, assessing ‘participation levels’ means that we must look

closely at the costs of participation, collective identity, and the creation of community, as these are all factors directly related to the formation of groups and impacted by the use of mobile ICTs.

‘Contentious Activity’ is the second subset of understanding under mobilizing structures. As identified in figure 5, mobile ICTs may influence contentious activities through the spread of socially accepted information, changes in repertoires of contention and the adaptation of previously used contentious tactics. According to Kelly Garrett, ICTs allow actors to “mobilize rapidly and can engage in swarm-like challenges, taking simultaneous action on multiple fronts, and in multiple ways.” (2006, 213) Addressing the role of mobile ICTs on contentious activity as designated in figure 5, is intended to assess the true behavioural impact that mobile ICTs are having on contentious activities as related to mobilizing structures.

The third subset from mobilizing structures is ‘Organizational Issues’. As identified in the literature regarding the Network Society and the network, the information revolution has ushered in a new form of organization not only within society, but also within social movements themselves. To assess the impact of mobile ICTs on organizational structure it is necessary to look at the manifestation of hierarchies, networks, and movement entrepreneurs, as related to mobilizing structures.

As illustrated above, a framework that includes, digital activism and mobilizing structures, informed the creation of interview questions. These complimentary notions, and the resulting interview questions will also be used to inform the analysis to follow in proceeding chapters. A complete list of interview questions is as follows:

Digital Activism

Category: Hardware/Software

1. What were the most popular communication technologies used during the social movement in Egypt in 2011?
2. What was the reasoning behind the choice to use the communication technologies spoken about above?

Category: Historical Activity

3. Have groups used mobile ICTs to organize in the past, and what if anything was different this time around?
4. Have mobile ICTs been critical to the success of controlling resistance activities in the past and what if anything was different this time around?

Category: Framing Processes

5. Did the use of mobile ICTs impact the ability of movement participants to control the flow of information and communication? Why or why not?
6. Did the use of mobile ICTs lead to an increase in access to the group decision-making process? Why or why not and if so how?
7. Would a loss in the ability to access and use mobile ICTs impact the decision making process of collective action participants? Why or why not? And if so how?

Mobilizing Structures

Category: Participation Levels

1. Did access to mobile ICTs influence participation in social movement activities? Why or why not?
2. Was collective action shaped by the use of mobile ICTs? Why or not? And if so, how?
3. Did the prevalence of mobile ICTs impact the likelihood of individual participation in collective action?

Category: Contentious Activity

4. Were participants, in general, better prepared and organized because of the use of mobile ICTs? Why or why not?
5. Did the use of mobile ICTs impact the perception of risk amongst individuals considering participation in collective action? If so how? And if not why?
6. Were the tactics and goals of participants impacted by the use of mobile ICTs? Why or why not. And if so how?

Category: Organizational Issues

7. Would a loss in the ability to access and use mobile ICTs impact the decision making process of collective action participants? Why or why not? And if so how?
8. What underlying recruitment mechanisms were facilitated by the wider availability and use of mobile ICTs?

9. Did the dynamic amongst participants without prior relation to one another change as a result of the use of mobile ICTs? Why or why not?

Method of Analysis

As stated above, a qualitative approach to analysis was sought for this research project. Semi-structured interviews were employed as the primary source of data collection. Once interviews were complete an analysis was conducted through a number of steps. First, the data was organized and prepared. All notes and information gathered during the interviews were prepared for analysis at this stage. The second step of analysis was used to garner a general sense of the data. At this stage, an initial reading was conducted and observations were made. Using the framework discussed above to inform the creation of interview questions, the information collected was organized into meaningful segments that addressed the two main sections and associated subsections of the framework. The third step of the analysis involved generating detailed renderings of the information gathered under each section and subsection as informed by the framework. The fourth stage of analysis involved making interpretations from the data and analysis to that point. At this stage, final observations were made, possible conclusions were drawn and the final analysis was compiled. The framework discussed above was used as a means to provide for a consistent and transparent lens through which to understand the complexities of the subject matter. The framework is also used to inform the steps of analysis so as to move beyond the use of anecdotes and to aid in the identification of underlying dynamics as well as overarching trends. The outcome of the analysis is outlined and discussed further in Chapter 4 on Data Gathering and Analysis.

Conclusion

As shown above, for the purposes of this research, a qualitative analysis was conducted based on the use of semi-structured interviews. For a number of reasons, and following the criteria outlined at the beginning of the chapter, this research study chose to focus on Egypt and the event of early 2011. Accounting for not only the regional and country level characteristics, but also the prevalence and penetration rates of ICTs, Egypt is identified in this chapter as the best possible case in which to garner a greater understanding of the potential impact that the use of mobile ICTs have on the behaviour of social movement participants.

Drawing on the works of Kelly Garrett, and Mary Joyce et al., a framework of understand was compiled and subsequently used to inform the creation of interview questions. These questions seek to go beyond the surface understanding and to find a more nuanced and greater understanding of the research topic.

In literature on the topic, Philip Howard advocates that:

“the disruptive use of ICTs in repressive environments is no longer the unique provenance of isolated, politically motivated hackers. It is instead deeply integrated with contemporary social movements strategy and accessible to computer and mobile phone users with only basic skills: it is a distinguishing feature of modern political communication and a means of creating the élan that marks social change.” (2010, 11)

The research conducted for this thesis project attempts to align with Philip Howard and move beyond the realm of understanding ICTs as the purview of the technologically savvy and understand them and their use in terms of the modern social movement landscape.

CHAPTER 4: DATA GATHERING AND ANALYSIS

As discussed in previous chapters, semi-structured interviews were conducted as the primary means of data collection for this research project. Structured around a framework that includes digital activism and mobilizing structures, interview questions addressed aspects of hardware/software, historical activity, framing processes, participation levels, contentious activity, and organizational issues. This same framework is used in the analysis and while many of the concepts are complimentary, they each point to unique and insightful elements that help explain the impact of mobile ICT use on the behaviour of social movement participants.

This chapter begins with a detailed description of the findings organized around the framework as shown in figure 5; and finishes with a few concluding remarks regarding the outcome of the analysis. For the purposes of clarity, the term ‘network’ when used in this chapter refers to the same ‘network’ as referred to in Chapter 2.

Digital Activism

As identified in the framework discussed in previous chapters and illustrated by figure 5, digital activism looks closely at the specific ICTs used by social movement participants, the potential impact of previous activities on current practices as well as the notion of framing processes. Referring back to the work of Mary Joyce et al, the term

‘digital activism’, includes not only the specific digital technologies being used in a given activism campaign, but also to the context in which its use occurs (2010).

Hardware and Software

“Facebook and Twitter are easy to broadcast on. The better the message you have the more people will listen” (Participant 5)

As a starting point of understanding digital activism, we first look at the specific hardware and software that was utilized during social movement activity in the early months of 2011 in Egypt. A wide array of mobile ICTs were cited by interviewees including: Facebook, Twitter, YouTube, Bambuser, SMS, MMS, Blackberry Messenger (BBM), Flickr, and a variety of micro-blogging sites. Consistent amongst all those interviewed was the acknowledgment that Twitter, Facebook, BBM and SMS were the most popular and widely used ICT applications during social movement activities.

Unanimously, interview participants believe that the choice to use Facebook, Twitter and BBM as the primary source of communication was a direct result of the functionality of the applications themselves. As one activist who was interviewed pointed out, “the youth were already on Facebook and using BBM to communicate, with Twitter being most commonly used for social activities.” Another interview participant is quoted as saying: “Social networking sites are very popular worldwide, especially in Egypt. Egypt is very much considered the heart of the Arab World, and thus has a much more liberal culture. Facebook and Twitter are very commonly used, so it was a platform that made the most sense.” These findings indicate that to the earliest promoters of the movement, it was an organic transition from using these applications and tools for social

purposes to ones of political conversation and calls to action. One interview participant identified as Participant 1 noted that social movement participants could most commonly be seen using “Facebook to schedule protests, using Twitter to coordinate with one another and using YouTube to show everyone what was really happening”; as the movement gained momentum, the ability to stay connected, while remaining mobile, became one of the most attractive aspects of the choice to use these specific mobile ICTs as the primary form of communication.

While many other applications were used including YouTube and Bambuser, it was primarily the combination of Facebook, Twitter and BBM on mobile devices that allowed the movements participants to share information, videos, pictures and messages with one another – which were the primary communicative functions behind the use of such technologies. What this finding confirms is that no matter how ample the choices and availability of mobile ICT applications are, social movement participants make very distinct choices regarding their use based primarily on how to configure the interaction between hardware and software to optimize their usefulness for the purposes of the movement.

Historical Activity

“ICTs are still very young, so this has/is certainly the first time they were used.”
(Participant 2)

In addition to the choice of hardware and software, digital activism considers historically relevant activity as an important factor to consider when assessing the impact of mobile ICTs on the behaviour of social movement participants. There is no doubt that

over the last decade, Egyptians have made continuous attempts to identify the most effective ways possible to insight desired changes. However approximately two thirds of interview participants whom directly participated in social movement activities in Egypt during the early months of 2011 noted that they had not been previously involved in protests in the past. In conjunction with participants who identified themselves as being first time participants, one interviewee, identified as Participant 4 noted: “I have been politically active since 2004 and I have not seen this many participants ever before.” – an indication that there has been a significant shift in participation in social unrest in Egypt. It is important to note that the sample is limited and, as such, so is our ability to draw any conclusions from this finding as they may relate to the impact of mobile ICTs on social movement participation.

Historically speaking, the majority of interviewees noted that traditional Egyptian media outlets such as television and radio were heavily restricted in what they would cover and report. And while many noted that this was always going to be the case with mainstream media, it also taught participants that they needed to find ways around this censorship. It was mobile ICTs and the Internet that became the means through which to circumvent the tight controls of large scale communication systems like state controlled television and radio. There is evidence in the research that shows that the online political sphere in Egypt really started to take hold outside of traditional media in the form of blogs and than transitioned to Facebook, YouTube and Twitter. Participant 5 believes that there is a clear historical distinction that can be made, “in the past SMS was used but not much else, what’s different this time is the fact that the youth have been the most active

members and are characterized by being more updated with the use of mobile devices and the Internet could be accessed by mobile devices.” Thus we can tentatively conclude that the rise and rapid diffusion of mobile ICTs has changed the infrastructure of social connectivity, and in combination with the expanding capabilities of mobile phones, Egyptian society which has had a history of difficulty in accessing politically centered information is rapidly transforming by an explosion of channels of mobile information and communication.

Framing Processes

“On several occasions I read the news on Facebook or Twitter before hearing it on the news” (Participant 4)

As discussed in the previous chapter, many scholars have noted that the use of ICTs, and specifically mobile ICTs, have freed public opinion from being constituted and controlled by a narrowly defined group of elite and political controlled bodies (Zayani 2008). This is a sentiment confirmed by all interview participants. As noted by one interviewee, people simply stopped trusting official newspapers and state controlled television. The primary source of information and communication trusted by social movement participants came from mobile ICTs and applications such as Twitter. As Participant 6 mentioned: "Whether they want it to be or not, Twitter is no longer about status updates, it's the leading global news feed and will continue to serve that function in Egypt for a long time."

In addition to the lack of trust, one Participant 2 cited the “constraints of ethics” that are held by many mainstream news and communication networks (including those

that are internationally owned and operated) as another reason participants favoured news transmitted from mobile ICTs over traditional media outlets. It was noted by four of the participants that in many ways, mainstream media – including those not controlled by the state - often have to consider the choice to broadcast graphic images, and as a result often choose more ‘viewer’ friendly images etc. Using mobile ICTs including applications such as Facebook and Twitter allowed movement participants to spread real time, uncensored and often graphic information to one another. And while this was not intended for shock value, or to garner attention from abroad, it did serve to paint an accurate and timely picture of real time events, in addition to preventing the overt censorship of the true situation as it played out on the ground. For a number of interview participants, it was more important to have a true picture of the situation as it affected them personally than it was, as Participant 2 said, to present a "commodified image of freedom to the outside world." In this sense, the interviewee was pointing to the fact that through the purposeful use of mobile ICTs, social movement participants were able to broadcast in real time the violence and atrocities that were playing out in the streets. There were no filtering mechanisms placed on the broadcasting of images and video that were graphic nature of the pictures with the use of mobile ICTs.

In sum, mobile ICTs were purposefully used during social movement activities to circumvent the restraints placed on more traditional forms of media. As noted by Participant 4: “Traditional media was way less important than Facebook, or Twitter to informing people about the protests.” What these findings suggest is that the use of

mobile ICTs was the most effective means through which social movement participants could impact the messages and images being broadcast.

An element of the framing process, as related to digital activism, is the concept of framing the issues at hand. As discussed in previous chapters, whether or not an audience chooses to become engaged in social movement activities depends heavily on two things: the frames chosen to justify the movement; and who participates in the framing of these issues. As noted by a number of interviewee participants, the framing of the issues came heavily as the result of the access people had to mobile ICTs, the Internet, and to one another. As noted by Participant 2, the Internet whether accessed via mobile phone or laptop had a profound effect on the revolution because the "Internet is where the majority of people go to find information and seek the alternatives". In essence, Participant 2 is advocating that the sheer amount of information available on the Internet forces individuals to be open to all kinds of perspectives and the more perspectives one is exposed to, the more likely they become to challenge their own situation. In addition, Participant 5 remarked: "People started to change their behaviour in accordance to what they learned [through mobile ICTs] – a movement is the result of the change people see that they want." Echoed by Participant 1, this sentiment was advanced in the following way: "Initially the impact was being able to gather information and make information public about the start of the social movement."

What this finding suggests is that the sheer volume of information presented through applications facilitated by the Internet, can and do have a real impact on how people choose to frame the issues at hand; it also directly contributes to how they choose

to frame the issue for others. Being exposed to the vast amount of information, paired with the ability to seek alternatives, are seen as key ingredients in not only the desire for change, but in the many ways that notions of change are framed.

When asked directly if mobile ICT use had an impact on how movement participants framed the issues Participant 1 responded: “what confuses people when talking or trying to communicate is that they always try to find the best way to use a limited number of words to explain themselves – but you need to see it. It’s one thing to talk about freedom, and its another thing to share the experience.” Through the use of mobile ICTs, social movement participants were able to not only communicate verbally the framed issue, but were also able to use photos, videos and audio to create an experience. As Participant 4 noted (with enthusiasm) “It is so easy to simply forward event if one won’t participate! The fact that now one can also check texts and Facebook from mobile phones makes it so easy and accessible.” In fact, all of the interview participants noted that they had on many occasions actively documented and shared images of the protests. In many ways, the variety and speed of communication facilitated through mobile ICTs allowed for the framing of the ‘whole picture’ and the ‘whole experience’.

Mobilizing Structures

Addressing the concept of ‘mobilizing structures’ brings to the forefront discussions of participation levels, contentious activity and organizational issues. While often interrelated and talked about as being part of one another, splitting the larger

concept into smaller subsections allows for a more nuanced understanding of the dynamics at play, without getting lost in the overarching trends.

Participation Levels

“There has been a raise in awareness and interest to know and follow up. If people are not taking part in the movement at least they are starting to talk about it.” (Participant 4)

A subset of the concept of mobilizing structures is participation levels. According to scholars like Kelly Garrett (2006), the use of ICTs may influence participation in social movements through the reduction of participation costs, promotion of collective identity and the creation of community. While this can be used as a starting point for understanding, this research project shows that in many ways, this simplistic view ignores the complex dynamics at play in participation in favour of overarching and generic factors.

Under participation levels, the first area of focus is on the cost of participation. Inherent in this line of thinking is the notion of a cost benefit analysis based on economics and commerce. Many interview participants were quick to point out that in the context of the Egyptian movement, an economic analysis was essentially null and void. As one participant pointed out: "when you don't have a job, a future, the ability to use your education, you have nothing to lose and you don't worry about the cell phone bill." Consistent with this participant's response is the response of Participant 3 who points out that: "People have really had enough with the regime and really wanted it to leave. A lot felt they have nothing more to lose. There has been casualties and they are not living well

so they only risk they saw that the same system might persist.” In this sense, an economic analysis does nothing to further our understanding of the costs of participation. With that in mind, perhaps the best way to understand the costs of participation is in the context of social risks, physical costs, and perceived social and societal costs on a future if action is not taken.

As advocated by Philip Howard, "For individuals with Internet access and regular connection to family and friends over mobile phones, the social risks of non-participation approaches that of participation. News groups, text messages from friends in plight, digital videos with cultural content unavailable on broadcast media- all keep a supply of information open and direct.” (2010, 175) For the majority of interview participants this was the exact sentiment being articulated - the cost benefit analysis was one based on social risks, familial ties and a sense of debt owed to those who had already lost their lives in the fight for freedom. The costs of participation in the social movement were associated with the ties that bound the participants to one another. The use of mobile ICTs created connections between people that spanned more than just familial ties, and as each connection was made, a tie was created that bound movement participants. As each participant received and consumed text, images and audio depicting the experiences of those connected to them through the communication network, the choice to participate diminished, and was replaced with a sense that non-participation was more ‘costly’ than participation. Essentially, it was the immense amount of information and images available that proved to be the 'currency' of participation in the movement.

Assessing participation levels as they relate to mobilizing structures also calls for a closer look at the concepts of community creation and collective identity. The concepts of community creation and collective identity are in their own right multifaceted and often treated as a variable in and of themselves worth studying. For the purposes of this research project, the choice was made to focus on the concept of collective identity and community creation as manifested specifically through the use of mobile ICTs. This is not intended to disregard the vast amounts of scholarship and research on the topics. It is intended to place specific parameters on the study and remain focused on the explicit task of assessing the impact of mobile ICTs on social movement behaviours.

First we look at the concept of community and the creation of a community as impacted by the use of mobile ICTs. As Participant 1 pointed out, "people try to connect with one another all the time - people are social and always want to connect" and in this sense, the constant ability to reach out through mobile ICTs and connect with others regardless of physical distance has allowed its users to manifest this desire for connection in their lives. As another interview participant mentioned, "the Internet is the connection that people have always been seeking." The ability to reach out and connect with other likeminded individuals had been one of the most attractive aspects of mobile ICT use before the onset of the social movement, and once the movement began to take shape and become a force for change, participants began to harness this power even more to connect and reach out to even larger numbers of people.

Unanimously agreed upon by all those interviewed was the acknowledgment that through the use of mobile ICTs, categorical distinctions such as socio-economic status,

religion, gender and race were stripped away and replaced with a new kind of social group, a new kind of community based solely on the mutual desire to seek change in the system that oppressed them all. The use of mobile ICTs allowed for people to connect first to their immediate social group, and then to move beyond the immediate group and connect those groups into clusters with other groups in a highly scalable manner. As Participant 5 pointed out: "people who had never met were now meeting, and sharing and talking politics in a way that they had never done before. Simply being part of the conversation [through ICTs] meant that you were no longer a stranger." The social conventions that once confined the formation of social groups and communities were eliminated through the use of mobile ICTs and replaced with a networked community facilitated by the very ICTs that were once used to communicate only within a narrowly defined group. As one interviewee noted: "Yes, [mobile ICTs] brought people closer on some level. It awakened the feeling of patriotism and sense of belonging especially during the first couple of months of the movement." As evidenced by the research, it is possible to believe that the use of mobile ICTs facilitated the rapid erosion of traditional mechanisms of separation and replace them with notions of inclusivity and collectiveness. Perhaps the most telling of this conclusion is a statement made by

Participant 3:

"There was especially a lot of tension between Coptic and Muslim Egyptians. However, the use of ICTs and the resulting social movement allowed both parties to come together and fight for a common goal. There are widespread images of Coptic Egyptians protecting Muslim Egyptians during prayer from the police. It was truly amazing how this happened, given the tense history between the opposing groups."

Another aspect of the creation of community that was impacted by the use of mobile ICTs came at the international level. For many social movement participants, global reach was not the main intention behind the use of mobile ICTs. That being said, many did find that they began connecting via Twitter, SMS and Facebook to friends and family from abroad. They were also able to use these same tools to send real time updates and calls for support to members of the network who they may or may not have been associated with, and were living internationally. And while the international community and creation of an international network was not the intention, this finding does confirm claims made by Philip Howard et al. that:

"ICTs have the additional role of keeping dissidents in touch with the International Community - foreign journalists, sympathetic members of the Diaspora communities, and international civil society groups. Such linkages are much easier to maintain using networked, digital, communication technologies and such linkages are especially important in times of political or military crisis and during democratic transitions" (2010, 81)

And while this study does not seek to look at the long term affects of mobile ICTs on political transition, the findings from these interviews, paired with the assertions of Philip Howard do suggest that a long term analysis on the impact of international connections between groups through the use of ICTs is one of importance and worth studying.

Connected to the notion of community is the notion of collective identity. Again, it is important to remind the reader that the concept of collective identity, as it is spoken about in this research project, is limited to the scope of assessing participation levels and mobile ICT use. As mentioned in relation to the formation of community, the unrestrained ability to connect with others, paired with the emergent network of connected groups, (fostered by the use of mobile ICTs) has in many ways fundamentally

changed the ways in which social movement participants create and define communities. This is directly linked to, influenced by, as well as had an influence on the notion of collective identity. With the understanding of the Network Society and the network as a whole, we need to look closer at the social outcomes of these networks, because these social outcomes lead to the emergence of a collective identity.

The social outcomes of the network, and Network Society have become popular in literature and research surrounding ICTs and conflict resolution. Perhaps the most influential scholar on the subject matter is Manuel Castells. Castells argues that the social outcome of the network society, and the network is dual one (Castells et al. 2007). From the perspective, and point of view of the individual, Manuel Castells argues that for each individual participant in the network, “his or her social world is formed around his or her networks, and evolves with the composition of the network” (2007, 144). This is evidence from the research by four of the interview participants who noted that even before the movement started, they considered their social world as being one heavily constituted by connections fostered through mobile ICTs and applications such as Facebook and Twitter. Manuel Castells then argues that from the point of view of the network, “its configuration operates as the point of reference for each one of the participants in the network” (2007, 144) which is also confirmed by four interview participants who spoke of the ways in which the network connected smaller groups into a larger collective. As Participant 6 noted: “In every family every young man or woman belonged online to many groups and talked to many people – this had an influence on his or her parents and older members of the family who didn’t use those technologies.” This

duality of outcomes is important to note because when a network is common to a number of its members, it becomes a peer group. For Castells et al., this duality is best understood in the following way:

“networked sociability leads both to an individual-centered network, specific to the individual, and to peer-group formation, when the networks becomes the context of behavior for its participants ... The consolidation of peer groups around shared values and codes of meaning for the members of the group leads to the emergence of collective identity.”(2007, 144)

It can be drawn from the research, and supported by the work of Manuel Castells, that collective identity is, in the case of mobile ICT use in Egypt, a function of networked connections that bring together the individual-centered networks of personal ties and established relationships with the coalescence of the network as a whole. Sharing network connections forms the peer group, and the combining of peer groups through shared points in the network become the basis for collective identity. In this sense, it can be tentatively concluded that it was primarily the youth who first participated in the network connections, however as they expanded their networks and took on more and more connections, they brought those networks and their impact home and eventually brought their older family members into a digital fold that they may have otherwise not been involved with.

This is an important concept to understand, especially in the context of social movements and the impact of the use of mobile ICTs on behaviour. As one activist explained: “we weren’t a group like people traditionally think of groups – we were smaller groups acting in unison because we were constantly in communication even if we

didn't know each other. We had that [network] in common, we were all going to be in it together” The use of mobile ICTs in social movements allows for the consolidation of a collective identity based on the creation of groups and the overlapping of those groups through the network and the Network Society.

As evidenced from the research conducted, it can be concluded that in the case of the Egyptian social movement during the early months of 2011, people truly acted as a Networked Society, even to the extent that collective identities were formed on the basis of overlapping and shared connections of smaller peer-groups formed in what is essentially the communication of 0s and 1s. Perhaps the best way to think of ‘collective identity’ as it relates to the Networked Society and the networked social movement as of networked identity. As evidenced by this research project, mobile ICTs have had a profound impact on the way in which individual groups begin to overlap in the network and start to work as a collective. Those participants in the network identify with one another on the basis of shared points in the network and less on traditional parameters of identity, which further indicates the need to look closer at the possibility that ICTs are generating a form of collective identity that is better identified as ‘network identity’.

Contentious Activity

“When the police attacked people took action” (Participant 6)

The second subset of mobilizing structures is referred to as contentious activity. Kelly Garrett has advocated that through the use of ICTs, “actors can mobilize rapidly and can engage in swarm-like challenges, taking simultaneous action on multiple fronts,

and in multiple ways.” (Garrett 2006, 213) To move towards a deeper understanding of contentious activity, this research project focuses on concepts of socially accepted information, stated tactics, stated goals, and adapted tactics from previous social movement experience.

Socially accepted information was looked at to begin with. Social accepted information is included in the study because the creation, transmission, and consumption of information is a key function of mobile ICTs. It is also the consumption and assessment of information that plays a key role in the decision making process as it pertains to participants and their behaviours in contentious activities.

Some clarification needs to be made surrounding the parameters and terms used in this section of the research project. Generally speaking, when discussing and assessing the notion of information as it is constructed, transmitted and consumed through technology such as mobile ICTs, there is a tendency to think in terms of a binary set of values – in true and false. It is not uncommon to hear people talk about false reporting on Twitter, misidentification on blogs and the like. The truth is that the majority of user-generated content is, and will continue to be, unverified at the point of creation. To be perfectly blunt, user-generated content is the creation of the individual user and is open to their interpretation of events, to their judgment and to their desired goal of releasing that information. So what may be revealed through ICTs one day, could be proven to be inaccurate or false a number of days later. This we cannot ignore, however we can choose to remember that in the moment, as people consume information, there isn't always a clear binary true or false to the information. There is going to be a level of subjectivity, of

‘truthiness’ in all user-generated content which is essentially to say that there is going to be a range within the binary values that blurs the lines between completely true and completely false.

For the purposes of this research project, there is an acknowledgment that the binary values of true and false do not apply so cleanly to user-generated content. And for the purposes of this research project, the choice to use the term ‘socially accepted information’ is purposeful as it shows that regardless of what is later deemed to be true and deemed to be false, it is the socially accepted information in the moment that has the most impact on behaviour.

When asked about socially accepted information transmitted through mobile ICT use, a large portion of respondents point to the fact that the sheer volume of information being created and transmitted through mobile ICTs meant that not all sources were going to be verified and that not all content was going to be unbiased or represent a completely accurate portrayal of the movement and the situation. One interview participant pointed to the fact that the Egyptian Army has their own Facebook and Twitter accounts where they broadcast “whatever they feel like saying”; the point being that mobile ICTs and the information created and transmitted through them is not closed off to anyone – “it’s any everyone in, nobody out system”.

While mainstream media outlets like Al Jazeera could not possibly staff journalists at every location pertinent to the uprising, the increase in the number of movement participants wielding mobile ICTs is of great importance. The sheer volume of citizens with the ability to document important moments ensured that there was at all

times at least some coverage of events regardless of the logistical or situational constraints. As Participant 2 noted: “it was almost a natural reflex to document and send out information about what was happening as it happened.” Given that all participants noted that they, and the majority of people they knew, had participated in the creation and dissemination of user generated content through mobile ICTs, it can be tentatively estimated that perhaps tens if not thousands of people were documenting the protests and events of the social movement, acting in many ways as acting as de facto citizen journalists. Again, this conclusion like the others drawn in this chapter should be tempered by the recognition of the limits of the sample.

With this in mind, the majority of interview participants pointed to the fact that they could, and did, use the power and reach of the network itself to be self-regulating and to exercise a level of media literacy. By being critical, and asking what is in the information that makes it acceptable and what is missing to make it credible, mobile ICT users were better equipped to filter through the immense amount of information being sent their way and to make decisions based on their assessment of the information.

In addition, a number of interview participants pointed out that the movement itself showed a level of self-regulation. As noted by Participants 1, 2 and 5, when the network of users noticed an inconsistency, or overt fallacy in the information being broadcast, they used the very same broadcast tools to dispel the information and were able to provide not only a rebuttal via text but also photos, videos and audio to show a different picture and to combat “falsified statements”. Participant 1 illustrated how this worked with the following story: “they were saying that we were eating [Kentucky Fried

Chicken] in the square, so we all tweeted out photos from our phones to show that all we had to eat was bread, cheese and dates.” And while a conversation around what was being eaten for lunch is somewhat lighthearted, it goes to show that participants in the movement were not just passive consumers of information, they were active participants in the creation, transmission, consumption, monitoring and evaluating of the information.

In addition to the assessment of socially accepted information, a closer look at contentious activity requires looking at the goals, and tactics of social movement participants as impacted by the use of mobile ICTs. The majority of interview participants agreed that the largest overarching goals of the social movement in Egypt in the early months of 2011 were far less a product of, or impacted by mobile ICTs, then they were the result of a highly educated young population seeking to change the political and economic environment in Egypt. Participant 2 noted: “the goals were set outside of the tools of communication. Getting rid of Mubarak and wanting freedom and democracy didn’t come from my phone, it came from my desire to change the world I live in.” Echoing this sentiment is a statement made by another interview participant who can be quoted as saying: “They knew the risks regardless. Egypt has been in a power struggle for a long time in regards to civil rights and police brutality. ICTs did not impact this knowledge or the desire to oust Mubarak.”

As evidenced by the research, what did show as being impacted by the use of mobile ICT was the smaller secondary goals within the larger goal. Throughout the movement, certain subsets of the larger goal were added or dropped and evolved as people used the network to have in-depth conversation and participate in the collective

discourse of the movement. As the conversations occurred, and debates were had, the secondary goals of the movement were shaped and re-shaped, defined and redefined. In this sense, it can be concluded that, from the point of view of those interviewed, the largest overarching goal of the movement was not impacted by the use of mobile ICTs, the goal was set as a result of the desire to seek change and to become a force for change. It was the secondary goals that were impacted through the use of mobile ICTs because these technologies facilitated inclusive conversation and debate, shaping not only the discourse of the movement, but the refinement of what was collectively viewed as being the most important secondary goals as they pertain to achieving the largest goal of a complete change in the political and economic system in Egypt.

As evidenced by the analysis of interviews, there is a very clear distinction made in regards to the impact of mobile ICTs on social movement tactical activities as they pertain to the Egyptian movement. On one hand, was the resounding response from interview participants that indicated that the physical act of resistance was not impacted by the use of mobile ICTs. That is to say that a human blockades, the physical occupation of public space, marches, noncooperation, refusal of compliance and the like are not new tactics in the repertoire of resistance. These physical tactics of resistance were heavily used by social movement participants and were not seen as having been impacted by mobile ICTs.

On the other hand, mobile ICTs were cited as having a great impact on the depth, speed, and frequency with which these tactics were carried out. As groups decided to insight a new tactic, such as a human wall against the encroachment of police, they were

able to quickly turn to the network through mobile ICTs and call for additional support and participation in the chosen tactic, in this example, the human wall. In specific reference to the use of mobile ICTs and tactical decisions, a large portion of respondents noted that the majority of tactical choices were made in Tahrir Square and once a group agreed to carry on with the tactic it was reported quickly through Facebook, Twitter and BBM. Reporting out via these technologies often facilitated a surge in participation by activists and protesters whom were unknown to each other, but who believed that the tactic was one worth participating in. The use of mobile ICTs had a direct impact on the level of speed, scale and flexibility of resistance activities that is not available through one-to-one, or one-to-many technologies such as the radio.

As one interview participant noted: “I think mobilizing large groups of people in a short amount of time was facilitated by the availability of ICTs.” This commentary paired with the evidence discussed above, lends itself to the tentative conclusion that the use of mobile ICTs altered the key tents of collective action and create new vulnerabilities for the Mubarak regime. Authoritarian regimes such as the one in Egypt discourage individual participation by greatly increasing the punishments leveled against those who participate in dissent. Authoritarian regimes also discourage collective action by controlling the communicative infrastructure in ways that make it difficult for citizens to coordinate effective collective action and opposition – including the expression of dissent in a public forum. The use of mobile ICTs eroded the ability of the Mubarak regime to discourage individual participation because the very communication infrastructure that

can be used to stifle this action was used to encourage it and in many ways facilitate the individual becoming part of the collective action.

Mobile ICTs were also cited as being important to the facilitation and timely shifts of tactical operations. Interview respondents reported that the use of mobile ICTs gave them a means through which to make minute-to-minute decisions and choices on tactical participation. As Participant 1 noted:

“Groups were far more aware of the minute to minute activities and were better prepared to make changes in their activities and to know what they were going to face. There is no way to prepare for violence against you, or to be prepared to see your fellow country men and women shot and killed, but [mobile ICTs] prepared each person in the sense they knew very quickly, and with great detail what the events were and as a result were prepared in the sense that nothing was ever a surprise.”

What a statement like this points to is the conclusion that the use of mobile ICTs provided participants with a sense of awareness and the ability to adapt quickly to changing circumstances. The variety of tactical choices and the speed with which they could be enacted was deeply impacted by the use of mobile ICTs.

Further assessment of the impact of mobile ICTs on social movement tactics requires that we revisit the work of Margaret Keck and Katheryn Sikkink. Keck and Sikkink advance a typology of tactics that include information politics, symbolic politics, leverage politics and accountability politics (1998). It is under this typology that mobile ICTs have had the greatest impact on social movement tactics. Tactically speaking, social movement groups use information politics, symbolic politics, leverage politics and accountability politics in their efforts at persuasion, socialization and pressure (Keck and

Sikkink 1998). From the point of view of the Egyptian social movement, these were tactics facilitated and made more powerful through the use of mobile ICTs.

Traditionally speaking, the idea of tactics is treated as the physical manifestation protests and resistance; however the information revolution and the use of ICTs has facilitated a new form of tactic that is based on the purposeful use and manipulation of information and the digital space. Information, symbolic, leverage and accountability politics is best situated and suited for the digital environment. These are tactics that social movements are using that take advantage of the digital space; they are in and of themselves digital tactics and should be considered as part of the repertoire of resistance.

The use of mobile ICTs, provided the means through which social movement participants could quickly and with a level of credibility generate politically useful information and move it to where it would have the greatest impact. As discussed earlier in this chapter, the ability to use mobile ICTs to provide factual information as well as testimonials to the largest amount of people, provided them (tactically speaking) the most advantageous position from which to counter state controlled media and narratives. The sheer volume of Facebook groups and Twitter users overwhelmed the narratives and discourse being advanced by the Egyptian government. As Participant 6 noted: “The fact that it is easy and simple to post so much information and make available to a wide variety [of people] can of course lead to people using information to recruit more people to their cause.” Thus, tactically speaking, it can be concluded from the research that the use of mobile ICTs empowered social movement participants in their efforts to persuade and pressure the government.

In addition to information politics, mobile ICTs had a profound effect on the use of symbolic and leverage politics as a tactical choice. From the standpoint of symbolic and leverage politics, Facebook had the most impact. Many interview participants cited the Facebook campaign titled “We are all Khaled Said” as one of the most effective and powerful campaigns of the social movement. Khaled Mohamed Saeed was a young Egyptian man who died in disputed circumstances after being arrested by Egyptian police. As news of his arrest and resulting death spread, the “We are all Khaled Said” Facebook page rose as the primary source of information on not only the death of the young man, but the police and government responses to his death. In a way, the death of Khaled Mohamed Saeed was turned into a symbolic event that became a catalyst for the growth of the network and the social movement. As the movement progressed, this same Facebook page was used to tactically leverage and gain influence over more powerful actors in the Egyptian government. Three of the participants cited that due to the immense amount of attention garnered by the Facebook page, heavy international criticism began to be leveraged on the Egyptian government. As a result of this criticism and leverage, the Egyptian government agreed to hold a trial of the two detectives involved in the death of Khaled Mohamed Saeed. This finding shows that the use of mobile ICTs has given social movement participants an enhanced ability to engage in digital tactics based on the use of information to persuade and influence others through symbolic and leverage politics. And while not a physical tactic, it shows to have just as much impact as the blockades and noncooperation tactics.

In another tactical move, Twitter was heavily influential at accountability politics. In an effort to hold powerful actors such as the army, and the government accountable to their statements and policies, a large number of Twitter users dedicated their time to publishing information that exposed the distance between the discourse and practice of both the government and the army. As articulated by one interview participant, the Egyptian army also has a Facebook page and Twitter account, and when statements are pushed out through these applications, movement participants took note of discrepancies in the statements made and the practices being carried out in the streets.

Despite being on the same forums as the social movement participants, Egyptian authorities had a very limited impact in their ability to influence the movement and the like in the digital space. Facebook and Twitter created a public record that could be used to hold these State apparatuses accountable for not only their statements, but also their actions. In many ways, their presence on Facebook and Twitter empowered social movement participants to become the monitors of State action. The visibility and public record provided through mobile ICT use was more of a tool of accountability towards the government and the Egyptian army than it was a tool for them to influence the public. Mobile ICT use impacted the tactical repertoires of the social movement by provided the movement participants with the ability to hold those agencies accountable for not only their statements, but for their acts as well.

What these findings show is that mobile ICTs had the most impact on the ability of the Egyptian social movement to tactically use information, symbolic, leverage, and accountability politics. While the physical manifestations of resistance remained the

same, it was the ability to use persuasion, socialization and pressure in a tactical way that had been impacted the most by mobile ICT use. Perhaps this is the most relevant conclusion and lesson of mobile ICT use in social movement participation – it is not the physical expression of tactics that changed in Egypt, but the ability to use mobile ICTs in ways that turned information into a repertoire of tactics in their own right.

Organizational Issues

“The use of ICTs and the resulting social movement allowed both parties to come together and fight for a common goal.” (Participant 3)

Organizational issues are the final subset of mobilizing structures to be assessed in accordance with figure 5. A number of scholars have advocated that ICTs may impact traditional organizational structures through the promotion of the decentralization of highly centralized organizations and the greater centralization of traditional decentralized ones (Ronfeldt and Varda 2008). To assess if this is in fact true in the case of the Egyptian social movement, this research project sought to better understand organizational issues in terms of: hierarchies, networks, and movement entrepreneurs.

As evidenced by the data collected, these three subsets of organizational issues, and their relation to mobile ICTs cannot easily be separated as they are very much related to one another. Literature on the topic of ICTs and organizational structure advocates that the networks created through the information revolution, dissolve the notion of a center of control, they disorganize hierarch, and make it materially impossible to exercise of hierarchical power without processing instructions through the network (Castells 2011). Theorists also advocate that while there are still relationships in society

based on the structure of power, it is the networks ability to bypass centers of control through the flow of information that is circulated through the networks that gives it its strength to resist authoritative control. Speaking from the perspective of organizing structures, more and more decisions are made within the networked social movement by the interaction of multiple communicating networks (Brockman 2011). As evidenced in the research, it can be concluded that it is the components of the system that are constantly changing and adapting, creating a system that is in constant evolution attempting to maintain its separation from the traditional flow and structure of power. These notions were supported by the data collected through interviews.

The majority of participants noted that the Egyptian state was based on a hierarchical organization, and as a result was ineffective in responding quickly to the ever evolving and changing situation. In contrast to the hierarchy of the government, activists were able to take the decentralized organization of the movement, and the availability information transmitted through mobile ICTs, to respond quickly to changes in almost real time since the lines of command were diffuse and adaptable. As Participant 1 noted: “There were several times when a certain group called for a demonstration they would also release the rules of conduct and the necessary information like if there was a meeting point somewhere and then where to head off afterwards and/or what to do if the police showed up.” This quote and the research points to the conclusion that the decentralization of the organizational structure of the networked social movement was able to constantly reconfigure itself in accordance to the changing environment.

The lack of centralized leadership within the social movement meant that the Egyptian government could not systematically break down the organization of the movement. In regards to this topic, Participant 3 can be quoted as saying: “The police went after as many people as they could who had Facebook accounts. Being caught by police was a great fear, as the citizens had very little rights and were interrogated, beaten, and held without due process. But this didn’t change anything, we all have Facebook accounts and they can’t get us all.” As a result of the inability to systematically dismantle a visible leadership structure within the movement, the Egyptian government decided that it needed to target the network as a whole and as a result, communication technology itself. As an attempt to shut the movement down, the government imposed curfews, arrested and detained popular members of Facebook, and then essentially turned off the Internet.

These findings are consistent with Manuel Castells who posits that this type of network configuration, and lack of central authority, means that the network itself is contained in multiple nodes that reproduce the instructions given and continually find new ways to perform their intended function (2004). According to Castells, the only way to destroy a network is to physically destroy the connecting points between network participants (2004); in the case of the Egyptian social movement that meant Facebook, Twitter, the Internet and cell phone towers. What we can conclude from this aspect of the research is that there is a new struggle emerging where the fight for control of social uprisings has moved at a dramatic pace from being a function of physical and

psychological constraint to one of control and command of the digital and communication infrastructure.

Conclusion

Structured around a framework that includes digital activism and mobilizing structures, interview questions were informed through assessments of hardware/software, historical activity, framing processes, participation levels, contentious activity, and organizational issues. This same framework is used in the analysis of the data collected and while many of the notions are complimentary, they each point to unique and insightful elements that help explain the impact of mobile ICT use on social movement activity. As discussed above, a number of the findings from the research can be drawn.

The behaviour of social movement participants is impacted by mobile ICTs primarily through the manifestation of the network that is facilitated by its use. This is not to say that ICTs have completely replaced social interactions with 0s and 1s but to say that the nature of social transactions and relationships have themselves changed as a result of the ease of engagement and participation in the networks. ICTs and in particular mobile ICT use has facilitated the transition of traditional networks as forms of social organization into information networks. These information networks are flexible, scalable and survivable. Association amongst individuals within the network faces next to no restriction. The network is flexible enough to adjust to change and maintain the expressed goals and desires of its members, and most importantly it can expand and contract in size with little to no disruption.

As evidenced by this research, groups that use mobile ICTs and participate in the network are able to have a profound effect on social change processes because they put forward new ways of organizing and new rules of engagement. To borrow from Karatzoglianni, these groups put forward the rules of new technology (2006). Facilitating rapid and unrestrained communication across boundaries (geographical and social) mobile ICTs impact the ability of social movement participants to transform dissatisfaction into mass collective action quickly and efficiently. At a basic level, mobile ICTs provide an endless number of opportunities for the disenfranchised and politically excluded masses to engage in practices that seek social change. The lack of central control facilitated by mobile ICT use facilitates the rapid development of diverse and multimodal social movement networks that are able to organize resistance without the need for formal membership, physical headquarters or identifiable leaders.

And while the physical manifestations of tactical repertoires remain intact, the speed, pace, depth and frequency of tactics has been profoundly impacted by the use of mobile ICTs. In addition to the speed, pace, depth and frequency of tactics, mobile ICT use showed to have an immense impact on information, symbolic, leverage and accountability politics; which have been argued to be digital tactics in their own right.

Traditional, hierarchically organized political structures, are no longer as effective in their response to the network, they can no longer go after the leadership of a movement that is seemingly leaderless and made up of a connection of nodes. Repressive regimes are being forced to adjust to these new technologies and the possibilities they bring, and

this may in fact be the biggest impact that mobile ICTs, and the resulting changes in social movement behaviour are having on the larger political system.

This research project shows that the alteration in the structure and tactical speed of social movements as facilitated by the information revolution is of particular benefit to those groups outside the boundaries of traditional public institutions and political organizations. Small protests, in Egypt and in general terms, have a higher likelihood of being censored, isolated and repressed by authoritarian regimes like that governed by Mubarak. To combat this vulnerability inherent in smaller protests, it becomes even more important that high participation rates are garnered from the outset of a social movement so that it can ultimately cascade into the desired results of the social movement. As evidenced through this research, the use of mobile ICTs, especially for political purposes in Egypt, had an immense impact on the volume of participants willing to participate in the crucial first few days of the uprising. As noted above, a number of those who participated in the interviews had not previously participated in social movement activities, yet found themselves compelled to participate in this movement due to the information and influence they were exposed to through mobile ICTs, Facebook and the like. In essence, mobile ICT use provided the social support needed for many to participate in the protests. The long-term ramifications of this conclusion are still as of yet to be seen, however it does hold enough clout to know that it cannot and should not be ignored in further assessments by the field of conflict analysis and resolution. One Egyptian activist believes that: “The closest thing to God manifested on the earth is the Internet. You can’t go beyond the Internet; it’s the biggest database of information and

human connection. It's only a matter of time until people start agreeing to work together for peace and work for change. Everyone is already connected." And if other activists hold this sentiment, it shows that ICTs have had, and will continue to have a profound effect on social movements and resistance activities for many years to come.

CHAPTER 5: CONCLUSION

For a number of years, communication scholars have advocated that at all stages in the evolution of communication technology, a fundamental shift in the production and consumption of collective consciousness occurs. Take for example, how the printing press amplified private authorship, and encouraged the separation between the composition and performance of public discourse; and how the telephone enlarged the impact and speed of the private voice, and separated physical presence from collective reasoning (McLuhan 1989). Furthermore, electronic Internet based communication has replaced sequential formations of collective conscious (action, information, reaction) with that of a simultaneous production of collective action and reaction (McLuhan 1989). What is unique about current forms of mobile information communication technology is that they replace the partial and fragmentary nature of older technologies, with ones that are total and inclusive. Acknowledging that communication tools can and do have a fundamental impact on human behaviour, we are presented with a unique opportunity to study collective action and the impact that mobile ICTs have had on the behaviour of those who seek to participate in social movements.

This research project, as stated from the outset has sought to better understand if, and in what ways, mobile ICTs have had a fundamental impact on the scale, pace, and pattern of the behaviour of social unrest participants; with a specific focus on social

movement participants in Egypt who engaged in movement activities in the early months of 2011. The fundamental assumption of this project is that: the ‘message’ of any technological shift is not in the use of its features, but in the change of scale, pace and pattern that it creates in human behaviour (McLuhan and Seymour Martin Lipset collection 1965).

A number of scholars have advocated on behalf of the belief that a thriving online civil society and public sphere is an important causal factor in political change – especially in repressive states. Some have gone as far as Philip Howard to argue that: “it is probably a truism to say that no contemporary democratic revolution in the Middle East will happen without the Internet” (2010, 12). Since the Internet is increasingly accessed through mobile phones, this research project sought to focus specifically on mobile ICTs and to ask poignantly, if in fact, social movements are impacted by their use - even to the extent that scholars believe they are.

This chapter begins with a summary of findings from the research. The summary of findings is followed with a few concluding remarks informed by the gathering and analysis of findings as related to the data collected. This chapter then concludes with a few of recommendations for future research.

Summary of Findings and Concluding Remarks

Summary of Findings

From a digital activism perspective, as discussed in previous chapters, interview respondents believed that the choice to utilize Facebook, Twitter, SMS and BBM as the

primary source of communication came as a direct result of the functionality of the applications themselves. Twitter, Facebook, BBM and SMS are applications that were currently being utilized and were widely accepted by movement participants as the most effective means through which to combine text, audio and video messages to the largest portion of participants.

It was also noted that these mobile ICTs were the most affective applications to circumvent the tight controls of large-scale state controlled communication systems like television and radio. Movement participants noted that they were able to bypass State controlled media outlets and were able to formulate their own discourse and calls to action through mobile ICT use. Using mobile ICTs including applications such as Facebook and Twitter allowed movement participants to spread real time, uncensored and at times graphic information to one another – an act that was deemed indispensable to movement participants.

Confirmed through this research project is that the sheer volume of information presented through the use of mobile ICTs can and does have an impact on how movement participants framed the issues. As shown in the research, the combination of exposure to vast amounts of information, paired with the ability to seek alternatives was a key ingredient in the desire that participants felt for change. Mobile ICT use also impacted how participants framed the change they sought to audiences using the same mobile ICT applications and platforms.

While much of the discussion surrounding digital activism focused heavily on the technical aspects of mobile ICT use, unanimously amongst participants was the

confirmation that mobile ICTs have become, and will continue to be the primary source of communication amongst those seeking change in Egypt. According to Philip Howard, in regimes and situations like Egypt where “the possibility of civil disobedience is there, information technologies are the fundamental infrastructure for protesting stolen elections, rallying foreign support, radicalizing student movements, and uniting opposition groups.” (2010, 221) This was all but confirmed by those interviewed for this study. There is no doubt that at least in the case of Egypt, mobile ICTs have and will continue to play an important role in social movement activities.

As evidenced through the research, mobile ICTs had an impact on the participation of movement participants because mobile ICTs provided a constant connection to friends, family and network participants. The cost benefit analysis made by movement participants, as facilitated through mobile ICTs, was one based on social risks, familial ties and sense of duty owed to those who had already lost their lives in the fight for freedom. Association with one another was not dependent on pre-existing ties, but by being part of the larger network and as a result, the social risks of non-participation approached that of participation.

The research also showed that mobile ICT use had an impact on group formation. As evidenced through the research, the social conventions that once confined the formation of social groups and communities was eliminated through the use of mobile ICTs. More traditional types of group formation were replaced with a networked community – a Network Society – facilitated by the very ICTs that were once used to communicate only within a narrowly defined group.

Another finding of the research, one that runs contrary to popular sentiment, is that the use of mobile ICTs was not intended to reach a global audience. The global audience was not the target of information; the movement participants were primarily concerned with their own goals and not the potential to reach out to the global audience. With that being said, it is important to note that ICTs and associated applications are global technologies, and as a result, the global reach of the movement spread with an immense amount of speed and velocity. While not the target of the communication, the global audience was without a doubt included and eventually became a part of the movement from afar.

The research also showed evidence suggesting that collective identity in the case of the Egyptian social movement was impacted by the use of mobile ICTs. The use of mobile ICTs allowed for individual peer groups to combine through shared points in the network, which then formed the basis for collective identity. The use of mobile ICTs allowed for the consolidation of a collective identity based on the coming together of groups and then overlapping the multitude of small groups into an overarching collective identity. In the case of the Egyptian social movement during the early months of 2011, movement participants truly acted as a Networked Society, even to the extent that a collective identity was formed on the basis of overlapping and shared connections formed through what is essentially the communication of 0s and 1s. As suggested in Chapter 4, the concept of collective identity as it is impacted by mobile ICT use is better understood in terms of the network, and as such should be reimagined as a network identity.

Mobile ICT use was shown to have an impact on the goals and tactics of movement participants. From the perspective of the overarching goal of the movement, mobile ICT use was limited in its impact in that it did not play a leading role in the formation of the largest goals; those goals were formed before the movement began. The impact of mobile ICTs came at the level of the secondary goals of the movement. In this sense, mobile ICT use facilitated the production of debate, political conversation, and decision-making and as a result, secondary goals of the movement were often imagined, re-imagined, added and subtracted.

Tactically speaking, the use of mobile ICTs did not have an impact on the physical tactics of the movement. As discussed in Chapter 4, the use of tactics such as human blockades, the physical occupation of public space, noncooperation, the refusal of compliance and the like are not new tactics in the repertoires of resistance. What were impacted by the use of mobile ICTs however were the speed, magnitude, and flexibility in the participation of these tactics. The constant and continual connection of participants through the use of mobile ICTs facilitated a level of collective awareness that resulted in actionable speeds and numbers that eclipsed those that could be facilitated by any other means of communication. In essence, the use of mobile ICTs facilitated the ability to act with scale, flexibility and adaptability in a way that was not previously imaginable. Digital tactics were also impacted by the use of mobile ICTs. The ability to engage in information, symbolic, leverage and accountability politics was facilitated by mobile ICTs and became an explicit tactic of the movement.

The final impact that the use of mobile ICTs had on social movement behaviour, as evidenced in Chapter 4, comes at the level of organizational structure. The use of mobile ICTs created a networked movement configuration with a lack of central authority that challenged the hierarchical structure of the government. As a result, the Egyptian government was unable to identify a viable movement leadership and to systematically target the movement's structure. The decentralization of the organizational structure of the networked social movement was able to constantly reconfigure itself in accordance to the changing environment, which resulted in the ability of social movement participants to maintain consistent pressure against the government.

As the Egyptian government realized that there was no clear way to dismantle the movement through the traditional means of taking down a leadership, they found that the only means through which to target the network, was to target the infrastructure necessary for the use of mobile ICTs. One activist noted that the choice of the government to turn off the Internet and render mobile ICTs useless was perhaps the tipping point in the movement. When the network infrastructure went down, it had the opposite effect that the government desired. Instead of cutting off ties with one another, movement participants coalesced in greater numbers, showed even larger levels of support for one another and were determined even more so to push for the collapse of the Mubarak regime.

As shown above, there are a number of findings that show a positive correlation between the use of mobile ICTs and behavioural changes of social movement participants. Given the limited scope of the research project, no definitive conclusions are

being drawn from the findings of this research. What is shown above and throughout this thesis should be viewed as a starting point for further research and as information that can be used to inform further study of the subject matter. With this acknowledgment, a number of suggestions for future research are posited at the end of this chapter.

Concluding Remarks

From the very beginning, this research project has sought to assess the impact of mobile ICTs on the behaviour of social movement participants; it has not sought to attribute these changes to any one specific technology. This is an important distinction as it would be a grave error to “tie any theory of social change to a particular piece of software.” (Howard 2010, 11) Despite how innovative or popular a particular tool is, social movement participants will only adopt technological devices –software and hardware – if they meet the needs, goals and motivations of its users. Social movement participants will use the tools that are available to them only to the extent that they serve a desired function. When the tools stop meeting the needs of the users a new communicative tool will be sought and the cycle will begin again. This is to say boldly that Facebook and Twitter do not cause revolutions, and while this sentiment was very popular in 2011, it is but a fallacy that detracts from our ability to truly understand the impact of mobile ICT use on social movements.

Manuel Castells et al. believe that we need to acknowledging that communication is the fundamental processes of human activity, which forces the further acknowledgment that a modification of communication processes through the interaction of social structures, social practices and an ever changing range of communication technologies

will indeed have a profound effect on social transformation (2007). Subscribing to this line of thinking results in the need to move beyond viewing technology itself as a tool to facilitate change within a given system, and start to shift our focus on these interactions and social relationships themselves. The adoption and use of communication technology “alters social relations themselves, producing new and unpredictable ‘assemblages of power’ that have little to do with national governments” (Zweiri and Murphy 2011, 110).

The final remark worth making is that once these tools are adopted into the fabric of society, the majority of its users are not going to voluntarily relinquish their technology, and their communication tools – these are going to have to be physically taken away from them. As evidenced through events in Egypt, many governments are now keen to the fact that the only way to squelch the network society is to attack the physical infrastructure itself. As social movements spread globally, there is likely to be an increase in the fight for control over the material elements of ICT networks. As governments like that in Egypt, and now Iran (Gayathri 2012), do their best to block or completely remove access to ICTs, there is likely to be an increased surge in the number of groups fighting to keep control of those channels.

Recommendations for Further Research

Research focused on the relationship between information communication technologies and social unrest is not only pertinent and timely – given the recent upheavals in Africa and the Middle East – but also provides an opportunity for CAR scholars and practitioners to better understand the complexity of the conflict environment in which they work. The diffusion and prevalence of global ICTs is contributing to a

rapidly changing landscape of global affairs, social unrest and collective action, and can no longer be denied nor ignored. Understanding the role played by mobile ICTs in this landscape is pivotal to the practitioners' ability to identify windows of opportunity and modes of intervention to facilitate peaceful transitions from the stages of conflict emergence and escalation, to ones of de-escalation and termination. And while this research project does not make recommendations on interventions, it is a logical step forward for the field to focus on these once a more nuanced and informed understanding is gathered from research on mobile ICTs and the behaviour of social movement participants.

Future research could benefit greatly from an examination of the possible impact of ICT use on the relationship between repressive states and civil society. While a number of such studies exist, they are arguably limited in scope and many focus on the qualitative aspects of research. Quantitative analysis in this context is necessary to garner a better understanding of how the evolution of communication technology is influencing this relationship, including the manifestation and possible frequency of anti-government protests. There is also an opportunity for mixed methods study in this area, and may perhaps be the most useful analytical method for understanding the complexities involved in assessing the impact that ICT use is or is not having on the relationship between repressive states and civil society.

In this same vein, it is important that future research focuses more closely on the relationship between mobile phone diffusion, the Internet and the manifestation of social movements. Clay Shirky has brought attention to the idea that perhaps the Internet and

mobile phone diffusion is an important initial step towards strengthening an online civil society (2008). Echoed by Philip Howard, there is a push to better understand the importance of the online civil society as a potentially key ingredient for democratic change (2010). In this sense, future research would benefit from studying if access to mobile phones and the Internet is associated with an increase in anti-government protests. In this same sense, it would be important to ask: Is a civil society with high levels of mobile-web access more likely to engage in social movement practices than one that is mostly online in terms of fixed access and lacking the mobility of mobile phone access?

Kauffman and Techatassanasoontouron (2005) have empirically identified what they refer to as a ‘regional contagion’ effect, which means that mobile phone subscriber growth in one country is strongly correlated with changes in subscriber growth in its geographical region. Given this empirically identified growth and association, it is also important for future research to focus closely on how the impact of this contagion may be impacting social movements across regions. For example, the events of the Arab Spring provide an opportunity to ask if the ‘regional contagion’ effect is applicable to more than just technological diffusion and if it can also apply to and describe what appears on the surface to be a domino of anti-government protests across regions.

It is also important for future research to look closely at longitudinal data sets to better understand the true potential of ICTs on social movement practices. Clay Shirky (2010) notes that the potential of social media lies mainly the support they offer of civil society and the public sphere and change should be measured in years and decades rather than weeks or months, and what this points to is the need for future research to move

beyond the limited scope of short timeframes and single case analysis (such as the one conducted here) and look at measurements in terms of years. A longitudinal analysis of this kind is needed to gain an understanding of the long-term effects of ICT use, something that is currently being treated as a drop in the pan.

There is no doubt that future research in the area of ICT and social unrest is needed, there is also no blueprint for research moving forward. These recommendations serve not as a mandate for CAR practitioners, but as a series of suggestions from which to draw inspiration. The evolution of information communication technologies moves very quickly, and we must do our best to keep pace with these developments. It is the mandate of CAR scholars and practitioners to work within an ever-changing environment, and as such, we must above all, do our best to keep the evolution of the field on pace with the evolution of contemporary conflict.

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