The Social Media and the Arab Spring:

Politics Comes First

Gadi Wolfsfeld

IDC, Herzliya

Elad Segev

Tel Aviv University

Tamir Sheafer

The Hebrew University of Jerusalem

Abstract

The goal of this article is to place the role of the social media in collective action within a more general theoretical structure using the events of the Arab Spring as a case study. Three theoretical principles are put forth all of which center around the idea that one cannot understand the role of any media in a political conflict without first considering the political context in which they are operating. The first principle states that: "Political variables are likely to be more important in explaining the extensiveness of a popular uprising than the overall penetration of the social media in a particular country". The second principle is referred to as the "principle of cumulative inequality". It states that: "Citizens who most need the media are the ones who find it the most difficult to exploit them." The third and final theoretical principle states that: "A significant increase in the use of the new media is much more likely to follow a significant amount of protest activity than to precede it." The three principles are examined using political, media, and protest data from 22 Arab Countries. The findings provide strong support for the validity of the claims.

One of the more important debates among those who study political protest and violence focuses on the role of the social media in the ability of challengers to mobilize for collective action. It is difficult to deny that something significant has taken place in recent years. Millions of people around the world have been connected through Facebook and other social media and this has made it easier for people to mobilize for collective action. There are however quite a few skeptics who accuse their more enthusiastic peers of exaggerating the impact these technological changes have had on movement success. This debate became especially intense with regard to the dramatic events that have come to be known as the "Arab Spring". The goal of this essay is to put forth and empirically demonstrate a number of theoretical principles that are intended to move the discussion forward.

The major argument that will be made is that one cannot understand the role of any type of media in collective action without first considering the political context in which they are operating. Protests, especially massive protests, are always rooted in some type of political grievance and any attempt to either ignore or downplay this dimension will lead to an extremely limited and problematic view of such events. Taking political context into account is also important because the nature of the political regime has a significant influence on dissidents' access to the Internet and on the level of government control over digital content. Yet another reason to start by examining the political environment is that, for reasons detailed below, an increase in the social media is more likely to *follow* collective action than to *precede* it. All of these points are summarized in the title of this essay: Politics comes first.

This underlying concept also guides the way the literature review is structured. The first section provides a brief look at the literature that deals with the relationship between political grievances and protest. The purpose of this section is not to go into depth about the myriad of

political and social causes of collective action; the point is to focus on one major cause in order to demonstrate why the nature of the political environment is so critical. The second part of the literature review will look at research that deals with the role the social media can play in collective action. The third set of literature provides details of recent studies that looked specifically at the role of the social media in the Arab Spring. One of the important conclusions that emerge from this last group of research is that the role of the social media in these uprisings was far from uniform. This sets the stage for the theoretical principles that provide the conceptual basis for the study.

Political Grievances and Protest

A vast literature attempts to explain the causes of political instability. Given the theoretical focus of this study, we shall confine ourselves to the most obvious cause for dissent: political grievances. There are a number of studies that deal with political grievances, although not all use that term. One argument that may be relevant to many of the Arab countries is that in anocracies (non-democracies that are not full autocracies) institutions are not capable of adjusting government policies to peoples' demands quickly enough, and hence the risk of instability increases (Gates et al., 2006; Hegre et al. 2001; Huntington, 1968; Jaggers & Gurr, 1995; King & Zeng, 2001). Another approach to explain instability is known as the cultural incongruence hypothesis, which focuses on the gap between the level of democratic values desired by the people and the country's actual level of democracy: the larger the gap, the higher the potential for instability (Almond, Powell, Strom & Dalton, 2000; Inglehart & Welzel, 2005). Sheafer and Shenhav (2012) have measured the level of cultural incongruence in more than 80 countries and found that this gap is especially high when governments perform poorly in areas such as providing people with a decent standard of living and in controlling corruption.

A related set of political variables that have been found important are those that explain the overall legitimacy of a particular state. Gilley (2008) collected data from 72 countries and found three variables to be especially helpful for explaining the level of legitimacy: good governance, democratic rights, and welfare gains.

There is another important set of political variables that is worth mentioning even though it cannot be tested in this more macro-oriented study: political opportunities. The notion of political opportunities refers to the extent to which political dissidents believe that their actions have at least some chance of succeeding (Alimi 2003, 2007; Gamson & Meyer, 1996; Goodwin & Jasper, 1999; Meyer & Minkoff, 2004; Tarrow 2011). Bellin (2012) argues that watching the rapid fall of Zine El Abidine Ben Ali in Tunisia had an important influence by convincing Arabs living in other countries that they too might succeed. Given how quickly the wave of protests spread to other Arab countries this certainly makes sense. This is yet another reason why examining political context is so important.

The Social Media and Protest

It is not at all surprising that there is so much interest and excitement about the potential impact of the social media on collective action. At first glance the new technology provides movements with powerful, speedy, and relatively low-cost tools for recruitment, fundraising, the distribution of information and images, collective discussions, and mobilizing for action (Bennett, 2004; Bimber, Flanagin, & Stohl, 2012; Bimber, Flanagin, & Stohl, 2005; Earl & Kimport, 2011). While a good deal of this literature deals with the role of the social media in Western democracies, here more emphasis will be placed on the debate concerning less-democratic environments.

Perhaps the first serious amount of public attention on this issue can be traced to what was frequently referred to as the "Twitter revolution" that took place in Iran in June of 2009. The Western news media were filled with reports of savvy protesters using Twitter and other forms of new media to organize and to get their message out. While this was no doubt good for the company's brand, it is unlikely that Twitter played a major role in those activities. As pointed out by Schectman (2009), there were only about 8,600 people registered with Twitter at the time out of an Iranian population of 70,000,000 (Schectman, 2009).

Although it is certainly an oversimplification it is helpful to refer to the two sides in this debate as the "cyber-enthusiasts" and the "cyber-skeptics". The cyber-enthusiasts express a good deal of optimism about the ability of the new media to empower people living in non-democratic societies. The cyber-skeptics either downplay the significance of the new technology or go so far as to argue that the new media are better seen as tools of repression (for an excellent review of this dispute see Joseph, 2011).

The three most vocal representatives of this debate are Clay Shirky who often speaks on behalf of the enthusiasts, Evgeny Morozov, and best-selling author Malcolm Gladwell who can be seen as representing the skeptics. Shirky (2011) published an important article that appeared in Foreign Affairs (written before the Arab Spring began) where he pointed to a number of cases in which digital media appeared to be critical in organizing significant oppositional movements in both democratic and non-democratic countries. In a different article where he debates Gladwell about this issue (Gladwell & Shirky, 2011) he summarizes his position by asking and answering two questions: "Do social media allow insurgents to adopt new strategies? And have those strategies ever been crucial? Here, the historical record of the last decade is unambiguous: yes, and yes."

The most provocative cyber-skeptic is Evgeny Morozov. In his book *The Net Delusion: The Dark Side of Internet Freedom* (2011) he argues that what he calls the "Cyber-utopians" are completely wrong in their optimistic views of the Internet. In fact, he states, the Internet is more a tool for repression than liberation. As is his wont, Morozov makes this point dramatically: "In the past, the KGB resorted to torture to learn of connections between activists; today, they simply need to get on Facebook" (p. 156). Morozov also makes a second point along this line by talking about "authoritarian deliberation". This concept, which was apparently first used in a study by He and Warren (2011) about China, suggests that using the Internet gives people a false sense of participation and keeps them from actual protest. This discussion can be linked to a similar concern about digital participation in the West that some have given the pejorative name of "Slacktivism" (Christensen, 2011; Morozov, 2009b).

The Role of the Social Media in the Arab Spring

A number of studies have been published that look specifically at the role of social media in the uprisings that came to be known as the Arab Spring. Almost all of this research focuses on questions about the centrality of the social media in the outbreak and contagion of protests in the different countries. While popular commentators had no problem talking about the "Facebook Revolution", it is fortunate that social scientists who studied this issue were far more circumspect.

If one had to choose a single theme that runs through this literature it is that the impact of the social media on the protests varied among the different Arab countries. As Howard and Parks (2012) put it, while the digital media certainly played a role in the wave of protests that spread through the region, the role it played in each country was "complex and contingent"

(p. 360). Samin (2012) carried out an in-depth comparison of what happened in Saudi Arabia with the better-known events in Egypt. The Saudis have extremely high levels of internet penetration and Facebook use, especially when compared to the other Arab countries. Yet, there were almost no protests in that country against the monarchy. Revealingly, a number of calls for protest that did appear in the social media were either ignored or actively opposed by a large number of respondents. In Egypt, on the other hand, it was clear that the social media, together with other media including Al-Jazeera and mobile phones, played important roles in facilitating the protests.

Other researchers who have studied specific countries also emphasized the importance of political context in understanding this issue. Hussein and Howard (2012) point to the example of the Gulf States, which also exhibited high levels of social media and low levels of protest. Khamis, Gold and Vaughn (2012) compared the role of the social media in the uprising in Egypt and Syria. Syria had for years severely censored Internet use, blocked access to social media platforms such as Facebook and YouTube, monitored, arrested, and tortured bloggers, filled the blogosphere with pro-Assad messages, and even used computer viruses against dissidents. This put dissidents in that country at a severe disadvantage when compared to their Egyptian counterparts in their ability to exploit the Internet. Anderson, (2011) in an article titled "Demystifying the Arab Spring", concludes that the important story about the protests in the different countries was not technology but rather how the technology resonated in the various local contexts. Bellin (2012) also takes a more context-based approach to this issue. She talks about four different factors that were important in explaining the outbreak of violence in Tunisia and Egypt: long-standing grievances, an emotional trigger, a sense of impunity, *and* access to new social media. Equally importantly, she finds

that as one moves to other Arab countries there are considerable variations for both the causes and the extent of protests.

Norris (2012), who also studied this issue, reminds us that social networking was important long before the invention of the Internet. Radical pamphlets served this purpose in the American and French Revolutions, and the printed posters and mass petitions were important in mobilizing English Chartists and working men's associations. The samizdat activity on the part of Soviet Union dissidents included leaflets, novels, poetry and magazines. Norris provides a very useful summary of this more conditional approach to the issue. The social media "may function to sustain and facilitate collective action, but this is only one channel of communications amongst many, and processes of political communications cannot be regarded as a fundamental driver of unrest compared with many other structural factors, such as corruption, hardship, and repression" (p. 5).

To summarize, while all of these researchers agreed that the social media did sometimes play an important role in Arab protests, they also point to significant variations that are apparently linked to cross-national differences. This literature provides a perfect stepping stone for the theoretical discussion that follows.

Three Theoretical Principles

The goal of this work is to put forward a number of principles for explaining the role of the new media in political conflicts. All three propositions are rooted in Wolfsfeld's Political Contest Model (Wolfsfeld 1997, 2004, 2011). The major thrust of the political contest mode centers on the same major theme: one cannot understand the role of media in any conflict without first taking into account the surrounding political context. Till now this model has been applied to the role of the traditional news media in conflicts, but there is good reason to

believe that it can also prove useful for understanding the role of the new media. Using a

more general theoretical approach to this issue should facilitate an integration between these

two lines of research.

Principle 1: Political Variables are More Important

The first theoretical principle states: *Political variables are likely to be more important in*

explaining the extensiveness of a popular uprising than the overall penetration of the social

media in a particular country. The underlying logic of this claim should be clear to most

researchers in the field. It tells us that the extent to which social media are present is neither a

necessary nor sufficient condition for extensive protests to break out. The fact that it is not a

necessary condition can be demonstrated by simply reminding ourselves that the history of

uprisings and revolutions did not begin with Facebook. As discussed, the tools that

challengers use to communicate with one another and with the outside world are constantly

changing and each era brings different tools for both challengers and leaders. The social

media are also not a sufficient condition for bringing about collective action because there

are numerous countries with an abundance of social media and little protest.

What then is the role of the new media in such uprisings? Our argument is that they

should be considered important tools for protest if and when there is sufficient motivation

and opportunity for action. They are important because they can provide information and

images that motivate people, they allow groups to organize and mobilize much more

efficiently than in the past, and they allow protesters to convey messages to the outside world

- which has the potential of mobilizing third parties into the conflict.

There is a useful metaphor that can be used to describe this process: the impact of wind on

fire. In a physical environment with no fire the state of the wind is unlikely to have much of

an effect on what happens in a particular time and place. However, should a fire break out

then the strength and direction of the wind can have a major effect on how the fire develops

and the impact of the fire on the area. Similarly, in societies with a relatively low level of

discontent and violence the extent to which people use the social media is unlikely to have an

impact on political protest. When, on the other hand, the level of anger and violence rises is

a particular time and place, all forms of media can serve as important accelerators for

increasing the speed and intensity of protest.

Thus the role of the media should be seen as secondary to the political context in which

they operate. The more people in a given society are content the less likely they are to use

the Internet for political purposes. Contrary to what was said about the social media, political

factors can provide both the necessary and sufficient conditions for an uprising to erupt.

Principle 2: The Principle of Cumulative Inequality

The second theoretical claim has been referred to as the "principle of cumulative

inequality" (Gamson and Wolfsfeld, 1993; Wolfsfeld, 2011, 1997). It states that*: citizens who

most need the media are the ones who find it the most difficult to exploit them*. The principle

was initially developed to explain the difficulties resource-poor political challengers face in

their attempts to gain access to the traditional news media. Weaker political groups find

themselves extremely dependent on the news media but lack any inherent news value. More

powerful groups enjoy both lower levels of dependency (due to alternative channels of

political influence) and are considered significant "players". As in many other areas of life,

when it comes to exploiting the media the rich get richer and the poor remain poor.

The principle of cumulative inequality should also be true when we compare the ability of

challengers in different countries to exploit the social media (see also Dalen, 201X;

Herkenrath & Knoll, 2011). Citizens who live in poorer, more repressive regimes are less

likely to have access to the Internet. In addition even when citizens in these countries do gain

access to the Internet they are much more likely to be monitored, harassed, and censored.

This means that here too those populations who have the greatest need to mobilize and

organize against their governments find it the most difficult to exploit the media to achieve

their political goals.

   This principle leads to a somewhat surprising hypothesis. When looking at the issue cross-

nationally, there is likely to be a *negative* correlation between the level of communication

technology available in a particular country and the amount of protest. People who live in

relatively open societies, especially those enjoying a certain amount of economic prosperity,

will have greater access to the Internet and the social media. Assuming their relative level of

political discontent is lower we would also expect less protest, especially violent protest. In

less politically-charged environments there might be more use of the social media, but the

proportion of non-political content is likely to rise.

   This does not mean that the social media cannot be useful tools for organizing collective

action even in repressive environments. It also does not preclude the possibility of a political

correlation between social media use and protest on the individual level. Indeed it is perfectly

consistent with the principle of cumulative inequality that those who have the material and

cognitive resources to become frequent users of the social media are more likely to

participate in protests. Norris (2012), who looked at this question on the individual level,

indeed found a positive correlation between participating in protest and *all* forms of media,

including the mainstream media. Nevertheless, one is likely to get a very different

perspective on this issue when one compares countries rather than individuals.

Principle 3: Political Change Precedes Media Change

The third and final theoretical principle deals with the chronology of political and media variables: *A significant increase in the use of the new media is much more likely to follow a significant amount of protest activity than to precede it*. Think about it in this way: if an increase in the use of social media was the best predictor of social unrest and political instability, then one would expect to find high levels instability in the wealthiest countries in the world because they have the highest Internet penetration.

When significant political events take place people do turn to the media in order to find out what is happening. This has always been the case when it came to the traditional news media (see for example Carey, 2002) and there is every reason to believe that the same is true for the use of the social media. This dynamic is likely to be especially prevalent in non-democratic states where citizens have less faith in their domestic media. They are likely to turn to their social media friends, to blogs, and to the foreign news media in order to find out what is happening, especially when such events can have a major impact on their lives.

The idea that media changes follow political changes is part of another general principle that also comes from the political contest model. It is called the Politics-Media-Politics (PMP) principle and it states that the role of the media in a political process is best seen as a cycle in which changes in the political environment lead to changes in media performance, which leads to further political changes in the political environment (Rahat & Sheafer, 2007; Sheafer & Wolfsfeld, 2009; Wolfsfeld, 2011, 2004). The claim is that the news media are much more likely to react to changes in the political environment than to initiate them. While there are exceptions (e.g. investigative reporting), the media mostly respond to what is

happening in the political world. The response itself, say, an increased emphasis on a

candidate or an issue, will often have a subsequent influence on the political environment.

The claim should remain valid with regard to the social media, although instead of talking

about the behavior of journalists, it would be applied the behavior of media *users.* The

argument being made here is that political change (the initial protests associated with the

Arab Spring, for example) leads to changes in both news media performance (news coverage

of the protests) and social media use (an increase in the use of social media), which leads to

further political change (including the spread of protest). In this first study the focus will be

restricted to examining the first half of the PMP cycle. We intend to show that the increase in

social media use is more likely to occur after the outbreak of protest than before.

These are the three major theoretical principles that will be applied to explaining the role

of the social media in the events known as the Arab Spring.

Methods

We collected data that examined the political situation and extent of digital, broadcast, and

social media penetration in 20 Arab countries and the Palestinian Authority: Algeria,

Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman,

Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

Certain data in some of the analyses are not available for all countries.

The major dependent variable is the *Protest Index*, which is the extent of protest in each

country (we did not have protest data for four countries: Mauritania, Somalia, Sudan, and the

Palestinian Authority). The idea was to construct the best possible measure for determining

the level of *significant protests* in each country during the most important weeks of the Arab

Spring. After considering a number of options it was decided to focus on the most active

week of protests in each country and on protests that involved at least 1,000 participants. Given that protests in the Arab world sometimes take place on a weekly basis (especially Fridays) it was decided to examine a total of eight days from the first significant protest of the week chosen. The justification for focusing on a single week of activity was that we wanted to examine the *initial mobilization for collective action* in each country. It was felt that a longer time period would make it difficult to control for the myriad of factors that could have a major impact on whether the protests continued or ended, especially how each government responded.

The search for the amount and size of the protests in each country was carried out in a number of stages. The first stage involved looking at three "timelines" about the Arab Spring that were available in order to determine the most intensive period of protest in each country. The three timelines were produced by the British newspaper *The Guardian* (2011), by The Department of Peace and Conflict Research at Uppsala University (2012) and by Wikipedia (2012).[1]

The second stage was to perform a Google search by typing in the name of the country, the key words "protest", "demonstration", or "riot" and the dates in question. We then looked at two full pages for every search to see if any significant protests took place on that day.[2] While the vast majority of articles gave details of the approximate number of protesters there were some cases where it was necessary to decide whether the protest was significant based on the terminology used ("sporadic", "massive"). If there was still doubt about the number of protesters it was decided that any protest that was recorded in three or more news media would be considered significant. Once a significant protest had been recorded in a particular country on a particular date the search for that date was considered complete. The third and

final stage was to perform a second Google search using the same parameters based on

sources in Arabic.

While it is impossible to know whether this procedure found every date of significant

protest in every country, the scale certainly provided a reasonable measure of the differences

in protest activities among the various countries. The final scale ran from 0-8, indicating how

many days significant protests took placing during the most intense week in every country.[3]

All of the political variables were taken from well-known sources. The level of

democracy, the control of corruption, and the GDP per capita all tell us something about the

extent of political grievances in each country. The *Democracy Index* of 2010 is based on the

Economist Intelligence Unit's annual survey,[4] and comprises five indicators: electoral

process and pluralism, civil liberties, the functioning of government, political participation,

and political culture on a scale of 0 (non-democratic) to 10 (full democratic). The *disrespect*

for human rights is used as a second measure of the level of democracy and is based on the

Global Peace Index 2010 report and uses a scale of 1 to 5.[5] The *Control of Corruption* index

comes from the 2009 Worldwide Governance Indicators published by the World Bank

(Kaufmann, Kraay, & Mastruzzi, 2010) and employs a scale that ranges from –2.5 (no

control) to 2.5 (full control over corruption). *GDP per capita* is calculated in US dollars and

is based on the data provided by the International Monetary Fund.[6] It is seen as the best

measure of economic prosperity.

Internet Penetration is the percentage of internet users in a country based on 2011 Internet

World Stats.[7] *Facebook Penetration* and *Twitter Penetration* are the percentages of Facebook

and Twitter users respectively out of the entire population in a country. These variables are

based on the reports published by the Dubai School of Government (Salem & Mourtada,

2011). Al Jazeera audience in the various Arab countries is based on data available from

Allied Media Corporation.[8]

   The third principle makes claims about the amount of social media use before and after

significant political events. Unfortunately, no direct measure of social media use is available.

However, we were able to assemble two reasonable proxies. We looked at the growth rate of

Facebook registration in various Arab countries (available in Salem & Mourtada, 2011),

divided into three periods. The "Early" period runs from August 1, 2009 to April 30, 2010

and represents a considerable time before the protests erupted. The "Proximate" period runs

from May 1, 2010 to November 30, 2010 which is meant to represent the time immediately

before the first protest broke in the Arab world. The "Protest" period refers to the dates

between December 1, 2010 and April 30, 2011 which refers to the period after the breakout

of protests.

   The second proxy employed Google Insights for Search[9] in order to track the extent to

which relevant key words changed over three periods for the registration data and four

periods for the search terms data. In addition to the three periods noted above it was decided

to add a fourth period ("After") for this analysis because we were interested in seeing how

long any changes in search terms would continue, especially in countries with high levels of

protest. The "After" period ran from May 1, 2011 to December 31, 2011. The underlying

assumption was that we would find relatively less searches for political and current events

terms before the outbreak of protests and relatively more after the protests erupted. In

addition we assumed that this would be especially true for countries with higher levels of

protest and that such changes in search patterns would also last longer in those countries.

Results and Discussion

The first theoretical principle states that *political variables are likely to be more important in explaining the extensiveness of a popular uprising than the overall penetration of the social media in a particular country.* In order to test this proposition we looked at four different indicators of political grievances and four indicators of media penetration and observed which provided a better explanation for the extent of collective action (the Protest Index) in the 17 Arab countries for which this data was available. Due to fairly broad goals of this part of the study it was decided to present the results graphically using simple correlational analyses. As can be seen in Figure one, the results are unequivocal.

[Figure 1 about Here]

Starting with the political variables, it is very clear that the higher the level of political grievances the higher the level of protest. The four political factors are the level of democracy, the level of disrespect for human rights, the extent to which the various countries have some control over corruption, and the GDP per capita of each country. With the exception of the democracy index, the correlations are also fairly strong: the more difficult the political environment is in a country, the higher the protest index. Although these indicators are not intended to provide a full catalog of all possible political grievances they do give a good sense of the relationship between the overall levels of grievances and the extent to which people in a particular country took to the streets.

The findings concerning the relationship between the penetration of media and protest may surprise many readers. It is a consistently *negative* relationship: the more access citizens have to the digital, satellite, and social media, the *less* they are likely to go out and protest.[10] Interestingly, the strongest negative correlation was found between protest and the most

general measure of digital access: internet penetration. This finding tells us that an increasing

level of internet penetration in a country not only does not automatically lead to more

participation, it could - theoretically at least - lead to less. One intriguing, albeit

unconvincing possibility is that Morozov (2011) is correct when he talks about authoritarian

deliberation: letting people participate virtually makes them less likely to actually take to the

streets.

A more likely explanation emerges when one looks at *which* countries have the most

media penetration and the least protests. As anticipated, the countries with the higher levels

GDP and the least amount of repression are also the ones with the most amount of social

media penetration. We shall discuss this point in greater detail when talking about the second

principle.

It is critical to again stress that these cross-country findings do *not* contradict all of the

commentators who have claimed that the social media were important tools for helping Arab

protesters. One cannot draw conclusions about individual or group-level differences based on

country-level comparisons. This is what is referred to as an ecological fallacy (Freedman,

2004). In fact, it is very possible - given the evidence from other studies – and even probable

that if one looked at changes over time in each of these countries one would find that many

groups found it much easier to protest after the advent of the Internet and the social media.

Nevertheless, examining the issue across countries provides important insights that have not

been discussed in previous research.

The Principle of Cumulative Inequality

The second principle states that citizens who most need the media are the ones who find it

the most difficult to exploit them. This was referred to as the principle of cumulative

inequality. We can now look closer at the relationship between regime characteristics and digital media penetration. In Figure 2 we show the relationship between the four political grievances and two separate indicators of digital media use (Internet penetration and Facebook registration).

[Figure 2 about Here]

In general, we find, as expected, that citizens who suffer from the worse regimes are the ones who have the least access to the Internet and Facebook.[11] The exception is again the democracy index where the correlation is weak.

Here too it is instructive to look at the countries where there was very little or no protests during the Arab Spring. With the exception of Bahrain, the monarchies have fared far better during this period in comparison to the other Arab countries (see also Ghanem, 2011; Sakbani, 2011). As pointed out by other scholars (Davidson, 2007; Ehteshami, 2003; Howard 2011; Henry & Springborg, 2010), the constitutional monarchies enjoy more legitimacy partly because of tradition, partly because they tend to provide more freedom and prosperity, and also because they are seen as protectors of Islamic culture. These are also the countries with the highest level of digital media penetration. This suggests that people in these countries are likely to be using the Internet and social media for purposes that are not related to political discontent and protest. This is yet another important demonstration of why it is so important to consider the political context before attempting to explain the role of any media in political conflicts.

These results demonstrate that the principle of cumulative inequality can be applied to countries as well as groups.[12] The citizens who need the social media the most find it the most difficult to gain access to it.

Political Events Precede Social Media Use

The third principle states that a significant increase in the use of the new media is much more likely to follow a significant amount of protest activity than to precede it. The fact that an increase in the availability of social media does not necessarily lead to protest should already be clear from the negative correlation that was found between the amount of media penetration and the amount of protests.

As discussed, we used two different proxies to test this proposition. The first looked at the correlations between the outbreak of protests and the rate of Facebook registration before and after the eruption of violence. The second was based on an examination of the most frequent key word searches used during different historical time frames.

Starting with the rate of Facebook registrations we looked at data from three different periods. The periods were labeled the "Early" period (August 2009 through April 2010), the "Proximate" period (May through November 2010) and the "Protest" period (December 2010 through April 2011).[13] In the Protest period we have excluded from the analysis countries in which the government actively blocked Internet access during the Arab Spring events (Egypt, Iran, Libya, and Syria).[14] The reason was that we were interested in how users behaved when they were given the freedom to choose.

Results show that the growth in Facebook penetration actually *slowed* between the Early period (mean growth= 2.03%) and the Proximate period (mean growth= 1.49%) (Paired sample t-test= 3.05; p= .01). During the protest period, on the other hand, there was a statistically significant *increase* in the rate of Facebook registration (mean growth= 2.78%) when compared to the Proximate period (paired sample t-test= -2.554; p= .03).[15] This tells us

that the increase in Facebook registration took place after the outbreak of violence in these countries, not before.

Further evidence on this point comes from a study conducted by the Dubai School of Government (Salem & Mourtada, 2011).Their report showed a rapid growth in the number of users and uses of Facebook and Twitter during the first four months of 2011 – *after* the onset of the Arab Spring. In many countries that experienced uprisings such as Tunisia, Egypt, Yemen, and Bahrain the growth rate of Facebook users was twice as high when compared to the growth rate a year earlier.

The second approach to examining principle three involved looking at the ways in which Google search words changed during four different periods. The assumption was that there would be relatively fewer searches for social media and current event terms before the outbreak of protest and a rise in such searches once the protests broke out. It was further assumed that there would be a difference in search patterns between countries where there was a high level of protest and violence (e.g. Egypt and Syria) and a low level (e.g. Oman and UAE). In keeping with what was said about politicized and non-politicized environments, we expected the changes in searches to be more intense and long-lasting in the high protest countries. The most frequent searches were mostly in Arabic, but in some cases also in English (for example "Facebook" was mostly searched in English rather than in Arabic).

In Table one we present the English translation of the top ten search terms for two high protest countries (Egypt and Syria) and two low protest countries (Oman and UAE). Given the size of these tables it was not possible to present the results for all of the countries analyzed but the findings for high and low protest countries are similar. Search terms that

were most closely related to current events have been highlighted. Some of the search terms

(e.g. You Tube and Google) are more ambiguous in nature in that they could be linked to

either political or non-political searches. It was decided however to focus on those terms

more directly linked to social media and politics.[16]

[Table 1 about Here]

The findings clearly support Principle 3. In the early and proximate periods there is

relatively little search for media and current events in any of the four countries. It seems

especially noteworthy that at the time that Egypt was on the verge of exploding the most

popular search term was "Games" (although Facebook does come in second). Norris (2012),

using survey data, came to a similar conclusion about this pre-protest period. She found no

indication that the culture of the social media was particularly conducive towards

dissatisfaction or discontent.

In the Protest period and especially the "After" period one sees a growing gap between the

number of current event searches in the two high protest and the two low protest countries.

Among the top searches of high protest countries (Egypt and Syria), there are more queries

related to news and social media during the protest period than among the top searches of

low protest countries (Oman and the UAE). While the top searches in low protest countries

did not show different patterns over time, top searches in high protest countries, and

particularly in Yemen and Libya (not shown), focused more on social media and news during

and after the protests. These results provide a helpful complement to the data presented on

the increase in people registering for Facebook.

It is worth reiterating, however, that these proxies are far from perfect. It would have been

helpful to have some survey data that looked more directly at how people's use of various

media changed over time and among the different countries. Yet, when considered together with the other research discussed it does provide pretty good evidence that, at least when it comes to the broad public, political change was more likely to precede changes in the use of the various media than to follow them.

Conclusions and Perspectives

The final remarks will be devoted to suggesting four ways in which this study can contribute to a better understanding of the role of the social media in collective action. The first is that the results should persuade researchers working in the field of the critical importance of considering political context before attempting to analyze the role of the social media. The fact that political variables were found to be more important and to predate the use of social media tells us that it would be unwise for researchers to ignore this dimension or, as is often done, to make do with a passing reference to the importance of political context. Whenever possible, researchers should try to fully integrate political variables into their analyses.

This does not mean that political variables are always more important than media variables in explaining the eruption of protest. There are surely circumstances in which a relatively small event becomes exponentially more important because either the traditional or social media provide a disproportionate amount of attention. A good example is the decision by the international (and probably social) media to give an enormous amount of publicity to the threat of a relatively obscure U.S. pastor to burn a Koran on September 11, 2010. While one would not want to ignore the political context of the increasing tensions between the West and the Muslim world, the fact that so many different types of media turned this into a

major political event certainly contributed to the subsequent violence that erupted in many

Muslim countries.

Despite this qualification, looking at what has transpired since the eruption of the Arab

Spring it is hard to avoid the conclusion that politics not only comes first, but also last. The

case of Egypt is instructive in this regard. The Muslim Brotherhood had little to do with

initiating the initial protests and they were probably not the most frequent users of social

media. However, they had the best political organization available and in the end were able

to win both the Parliamentary and Presidential elections. This also reinforces an important

lesson for dissidents around the world: media success is very different than political success.

A second contribution that emerges from this study has to do with the novel insights

provided by the cross-national perspective. While studies that look at this issue using

individual level analyses and through case studies are indeed crucial, it is clearly important to

also think about national and cultural variations. The fact that we found a consistently

negative correlation between the extent of media penetration and the amount of protest in the

different Arab countries vividly demonstrates this point. The long term goal of research in

this area should be to integrate these various perspectives into a more cohesive whole.

A third possible contribution would be if the findings persuade researchers in this field to

develop a more dynamic approach to this issue. While few scholars in this field can be

considered pure enthusiasts or skeptics with regard to the social media, many do seem to be

making rather sweeping claims about the importance of the social media in collective action.

As always the "real" question is not whether or not this type of media plays a major role in

protests but rather how the impact of these media varies over time and circumstance.

The fourth way in which this research could make a contribution to the field is the attempt to link the three principles to a more general theory in political communication. Here, the link was made to the political contest model and to the PMP principle. This was not meant to suggest that other theoretical frameworks could not be found that are equally or more useful. The point to bear in mind is that in order to build theory in this field we need to think about both the similarities and differences in the role different media play in different political processes.

Further research in this field entails a plan to go both wider and deeper in studying the role of the social media in collective action. We need to go wider by moving beyond the Arab world in an attempt to replicate these findings, using a much larger and more heterogeneous sample. We need to go deeper by carrying out more in-country studies that allow researchers to better understand who uses the digital media for political purposes, what leads them to do so, and how those uses have an effect on both political attitudes and behavior.

References

Alimi, E. Y. *Israeli politics and the first Palestinian Intifada: Political opportunities, framing processes and contentious politics.* New York: Taylor & Francis, 2007.

Anderson, L. (2011). Demystifying the Arab Spring. *Foreign Affairs*, 90(3), 2-7.

Bellin, E. (2012). Reconsidering the robustness of authoritarianism in the Middle East: Lessons from the Arab Spring. *Comparative Politics*, 44(2), 127-149.

Bennett, L. Communicating global activism: Strength and vulnerabilities of networked politics. In W. van de Donk, B.D. Loader, P.G. Nixon & D. Rucht (Eds.), *Cyberprotest: New media, citizens and social movements* (pp. 123-146). London: Routledge, 2004.

Bimber, B., Flanagin, A. J., & Stohl, C. *Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change*. New York: Cambridge University Press, 2012.

Bimber, B., Flanagin, A. J., & Stohl, C. (2005). Reconceptualizing collective action in the contemporary media environment. *Communication Theory*, 15(4), 365-388.

Carey, J. (2002). Media use during a crisis. *Prometheus*, 20(3), 201-207.

Davidson, C. M. (2007). The United Arab Emirates: A study in survival. *Middle Eastern Studies*, 43(6), 1012-1014.

Earl, J. & Kimport, K. *Digitally enabled social change: Activism in the Internet Age*. Cambridge, Mass: MIT Press, 2011.

Ehteshami, A. (2003). Reform from above: the politics of participation in the oil monarchies. *International Affairs*, 79(1), 53-57. DOI: 10.1111/1468-2346.00295

Freedman, D. A. (2004). Ecological inference and the ecological fallacy. *International encyclopedia of the social and behavioral sciences*, 4027-4030.

Gamson, W. A., & Meyer, D. S. Framing political opportunity. In D. McAdam, J. D. McCarthy & M. N. Zald (Eds.), *Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings*. New York: Cambridge University Press, 1996.

Gamson, W. A., & Wolfsfeld, G. (1993). Movements and media as interacting systems. *Annals of the American Academy of Political and Social Science*, 528, 114-125.

Gates, S. Hegre, H., Jones, M. P., & Strand, H. (2006). Institutional inconsistency and political instability: Polity duration, 1800-2000. *American Journal of Political Science*, 50(4), 893—908.

Ghanem, A. (2011). The tragedy of contradictions: The spring of the Arab peoples and the inevitable democracy. *The Arab World Geographer*, 14(2), 128-133. Retrieved from http://arabworldgeographer. metapress.com/content /k83553017w135kr0 /fulltext.pdf

Gilley, B. (2006). The determinants of state legitimacy: Results for 72 countries. *International Political Science Review*, 27(1), 47.

Gladwell, M., & Shirky, C. (2011). From innovation to revolution: Do social media make protests possible? *Foreign Affairs.* Retrieved from http:// www.foreignaffairs.com / print/67189

Howard, P. N., and Parks, M. R. (2012). Social Media and Political Change: Capacity, Constraint, and Consequence. *Journal of Communication*, 62(2), 359-362.

He, B., & Warren, M. E. (2011). Authoritarian deliberation: the deliberative turn in Chinese political development. *Perspectives on Politics*, 9(2), 269-289.

Hegre, H., Ellingsen, T., Gates, S., & Gleditsch, N. P. (2001). Toward a democratic civil peace? Democracy, political change, and civil war, 1816-1992." *American Political Science Review*, 95(1), 33-48.

Henry, C. M., & Springborg, R. *Globalization and the Politics of Development in the Middle East* (Vol. 1). New York: Cambridge University Press, 2010.

Herkenrath, M., & Knoll, A. (2011). Protest events in international press coverage: An empirical critique of cross-national conflict databases. *International Journal of Comparative Sociology*, 52(3), 163-180.

Howard, P. N. *The digital origins of dictatorship and democracy: Information technology and political Islam*. N.Y.: Oxford University Press, 2011.

Huntington, S. P. *Political order in changing societies*. New Haven: Yale University Press, 1968.

Hussain, M. M., & Howard, P. N. (2012). Democracy's Fourth Wave? Information technologies and the fuzzy causes of the Arab Spring. Paper presented at the International Studies Association, San Diego, California.

International Monetary Fund (2011). World Economic Outlook Database-April 2011. *International Monetary Fund*. Retrieved from http://www.imf.org

Jaggers, K., & Gurr, T. R. (1995). Tracking democracy's third wave with the Polity III Data. *Journal of Peace Research*, 32(4), 469-82.

Joseph, S. (2011). Social media, human rights and political change. Available at SSRN: http://ssrn.com/abstract=1856880

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The Worldwide Governance Indicators : A summary of methodology, data and analytical issues. *World Bank Policy Research Working Paper No. 5430*. Retrieved from http://ssrn.com/abstract=1682130

Khamis, S., Gold, P. B., & Vaughn, K. (2012). Beyond Egypt's "Facebook Revolution" and Syria's "YouTube Uprising": Comparing Political Contexts, Actors and Communication Strategies. *Arab Media and Society*, (15). Retrieved from: http:// www. arabmediasociety.com/?article=791

King, G., & Zeng, L. (2001). Improving forecasts of state failure. *World Politics*, 53(4), 623-58.

Morozov, E. *The net delusion: The dark side of internet freedom*. Jackson, TN: Public Affairs, 2011.

Norris, P. (2012). The impact of social media on the Arab uprisings: The Facebook, Twitter, and YouTube revolutions? Paper presented at the 'Advancing Comparative Political Communication Research: New Frameworks, Designs and Data,' European Consortium Joint Workshops, Antwerp, Belgium.

OpenNet Initative. *Internet filtering in the Middle East and North Africa*, *2009*. Retrieved from http://opennet.net/sites/opennet.net /files/ ONI_MENA_2009.pdf

Rahat, G., & Sheafer, T. (2007). The personalization of politics: Israel, 1949-2003. *Political Communication,* 24(1), 65-80.

Sakbani, M. (2011). The revolutions of the Arab Spring: are democracy, development and modernity at the gates? *Contemporary Arab Affairs*, 4(2), 127-147.

Salem, F., & Mourtada, R. (2011). *Arab Social Media Report (May, 2011)*. Dubai:

Dubai School of Government. Retrieved from: http://www.dsg.ae/ PUBLICATIONS/

PublicationDetail.aspx?udt_826_param_detail=3179

Samin, N. (2012). Saudi Arabia, Egypt, and the Social Media Moment. *Arab Media &*

Society, (15). Retrieved from: http://www.arabmediasociety.com/?article=785

Schectman, J. (2009). Iran's Twitter revolution? Maybe not yet. Retrieved from:

http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm

Schlozman, K. L., Verba, S., & Brady, H. E. *The Unheavenly Chorus: Unequal*

Political Voice and the Broken Promise of American Democracy: Princeton University

Press, 2012.

Sheafer, T., & Shenhav, S. R. (2012). Political culture congruence and political

stability: Revisiting the hypothesis with prospect theory. *Journal of Conflict Resolution*.

DOI: 10.1177/0022002712446127

Sheafer, T., & Wolfsfeld, G. (2009). Party systems and oppositional voices in the

news media: A study of the contest over political waves in the United States and Israel.

The Harvard International Journal of Press/Politics, 14(2), 146-165.

Shirky, C. (2011). The Political Power of Social Media: Technology, the public

sphere, and political change. *Foreign Affairs*, Retrieved from:

http://www.foreignaffairs.com/print/66987

Tarrow, S. *Power in movement: Social movements and contentious politics*. New

York: Cambridge University Press, 2011.

The Department of Peace and Conflict Research, Uppsala University (2012). Timeline

Arab Spring. Retrieved from: http:// www.pcr.uu.se /digitalAssets/87/87711_

chronologic_timeline_arabian_spring.pdf

The Guardian (2011). Arab Spring: an interactive timeline of Middle East protests.

Retrieved from: http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-

protest-interactive-timeline

Wikipedia (2012). Timeline of the Arab Spring. Retrieved from: http://

en.wikipedia.org /wiki/Timeline_of_the_Arab_Spring

Wolfsfeld, G. *Making sense of media and politics: Five principles in political

communication.* New York: Routledge, 2011.

Wolfsfeld, G. *Media and the path to peace.* Cambridge, U.K.: Cambridge University

Press, 2004.

Wolfsfeld, G. *Media and political conflict: News from the Middle East*. Cambridge,

U.K.: Cambridge University Press, 1997.
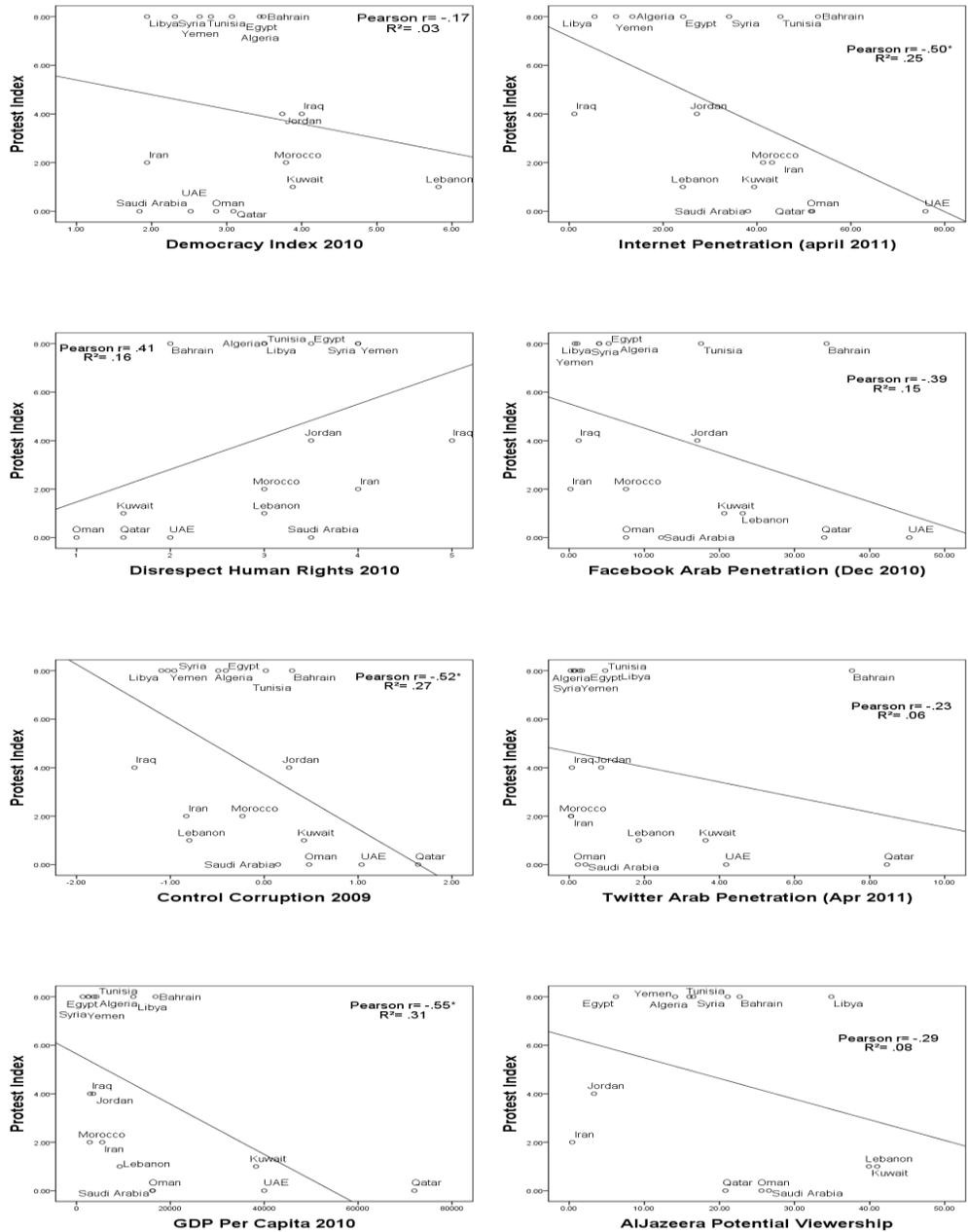
* p< .05

Figure 1. Number of Events in the First Month of the Arab Spring in Each Country as a Function of Structural Factors and Social Media

Note: Solid lines represent regressions' fit line.
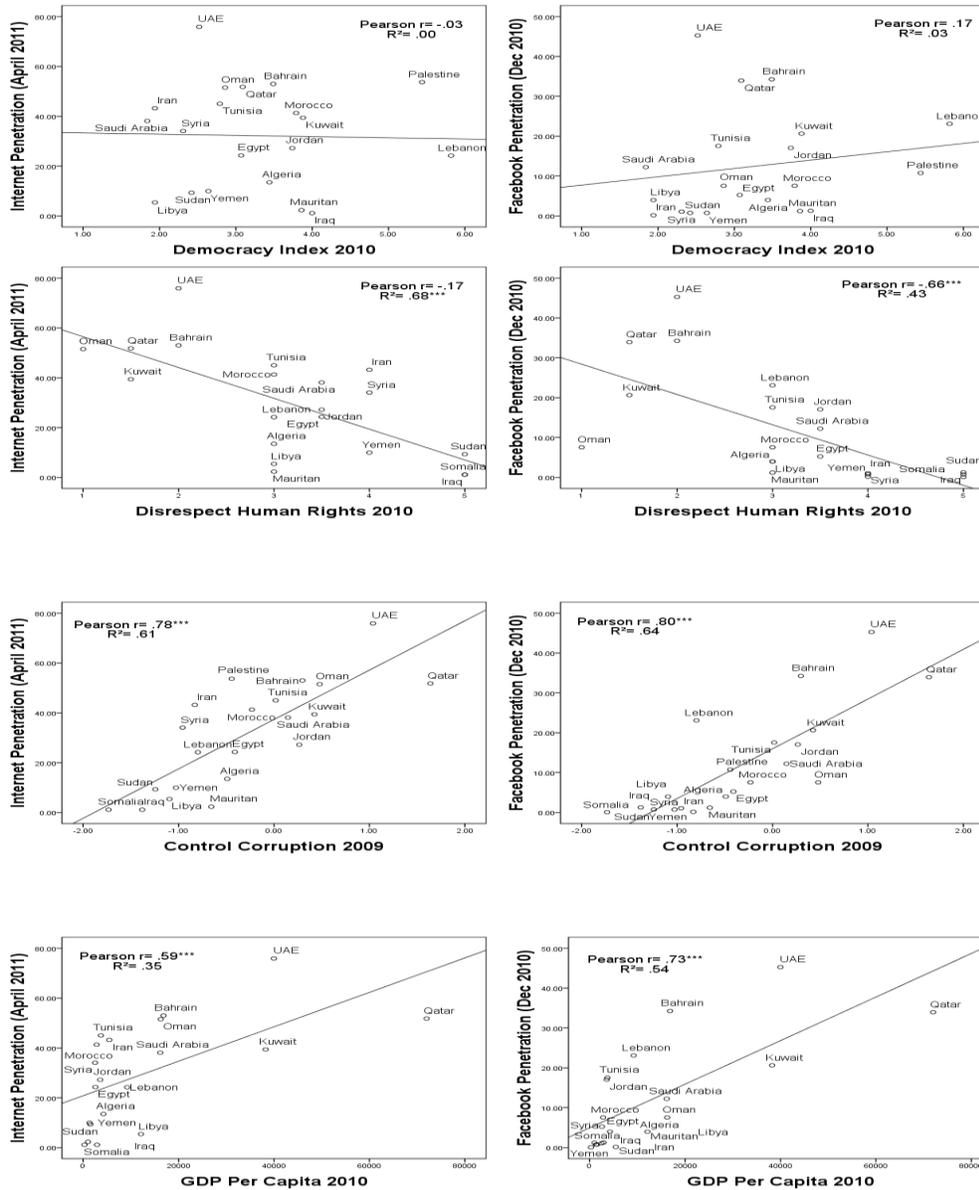
*** *p*< .001

Figure 2. Cumulative Inequality in the Availability of Social Media

Note: Solid lines represent regressions' fit line.

Table 1. The ten most popular search queries (translated to English) in Egypt, Syria, Oman and the UAE in four different periods

		Early (Aug. 2009-Apr. 2010)*	Proximate (May 2010-Nov. 2010)	Protest (Dec. 2010-Apr. 2011)	After (May 2011-Dec. 2011)
E **g** **y** **p** **t**		Games	Games	Facebook	Facebook
		Movies	Facebook	The Seventh Day (News)	Egypt Today (News)
		Egypt Today (News)	Picture	Games	Games
		Picture	Movies	Egypt Today (News)	Picture
		Download	Download	Picture	The Seventh Day (News)
		Music	YouTube	Movies	YouTube
		Facebook	Music	YouTube	Movies
		YouTube	mp3	News	Music
		MyEgy (Entertainment Portal)	MyEgy (Entertainment Portal)	MyEgy (Entertainment Portal)	News
		Chat	Egypt Today (News)	MP3	download
S **y** **ri** **a**		Syria Today (News)	Syria Today (News)	Syria Today (News)	Syria Today (News)
		Picture	Picture	Picture	Picture
		Download	Download	Facebook	Facebook
		Music	Ministry of Higher Education	Download	Download
		Chat	Music	Al Jazeera	Hotmail
		Hotmail	Girls	Hotmail	Ministry of Higher Education
		Forums	Hotmail	Aks Alser (News)	Al Jazeera
		Games	Games	Al Arabiya (News)	Games
		Yahoo	Chat	Music	4Shared (File sharing)
		Al Arabiya (News)	Aleppo	YouTube	Al Arabiya (News)
O **m** **a** **n**		Oman Daily (News)	Oman Daily (News)	Oman Daily (News)	Oman Daily (News)
		Picture	Picture	Picture	Picture
		Games	Download	S-Oman (News)	Facebook
		Forums	Forums	Download	Download
		Google	YouTube	YouTube	YouTube
		YouTube	Google	Forums	Forums
		Music	Hotmail	Facebook	Hotmail
		Video	Facebook	Hotmail	Google
		Hotmail	Games	Google	Games
		Muscat	Video	Games	Muscat
U **A** **E**		Dubai	Dubai	Dubai	Dubai
		YouTube	Facebook	Facebook	Facebook
		Facebook	YouTube	Download	Download
		Yahoo	Yahoo	YouTube	YouTube
		Games	Games	Yahoo	Yahoo
		Google	Google	Google	Google
		Video	Emirates	Abu Dhabi	News
		Emirates	Hotmail	Games	Movies
		Hotmail	Nokia	Emirates	Games
		Music	Gulf News	Video	Abu Dhabi

* The period runs from the first day of the first month to the last day of the last month

Endnote

---

[1] Many researchers are understandably skeptical of any data emanating from Wikipedia. It is worth noting however that of all the different data sources on this topic, Wikipedia provided the most details of the daily events in each country. The entries for each country concerning the Arab Spring were based on an extremely large number of independent sources.

[2] It was important to always focus on the day the protest took place and not when it was reported.

[3] An alternative measure of protest that was considered was the Kansas Event Data Systems (KEDS). Unfortunately the data set (which is now being housed at Penn State University) was only updated until 2010. For more information see: is http://eventdata.psu.edu

[4] The full 2010 *Index of Democracy* published by the Economist Intelligence Unit can be found at http://graphics.eiu.com/PDF/Democracy_Index_2010_web.pdf

[5] www.visionofhumanity.org

[6] The World Economic Outlook Database from April 2011 is available from http://www.imf.org

[7] http://www.internetworldstats.com/stats5.htm

[8] Available at http://www.allied-media.com/aljazeera /al_jazeera_viewers_ demographics.html

[9] It is important to note that data provided by Google Insights for Search should be treated with caution. It cannot tell why people search for each term and how they eventually used the information they obtained. Similarly, since the data Google publishes is standardized it can be used only to get an initial idea of the relative trends in each country separately, and not to compare the interests in news or uses of social media between countries. See Baram-Tsabari and Segev (2011) for the validity and limitations of this method.

[10] In spite of the low N we also conducted several multiple regressions with one political and one digital media variables, with the protest index as the dependent variable. These regressions resulted in similar conclusions. Results will be provided upon request.

[11] Similar correlations were found with regard to the grievances and the other media variables.

[12] The principle can also be applied to individuals. Although they don't use this term, Schlozman, Verba and Brady (2012) come to the same conclusion.

[13] Periods are not exactly equal in length due to availability of data.

[14] As obtained from OpenNet Initiative (http://opennet.net), Reporters Without Borders (http://en.rsf.org) and Sepanova (2011).

[15] It is also worth noting that Norris (2012), who based her findings on survey data, found no indication that the culture of the social media was particularly conducive towards dissatisfaction or discontent.

[16] One could make the same argument about searching for the term "Facebook". People could certainly be attempting to connect with friends to talk about issues having nothing to do with the protests. However, when one looks at the increase in news related searches and the figures concerning the dramatic rise in people registering for Facebook, there is a good reason to believe that these changes are part of the more general trend.