ROLE OF ICTS IN SOCIAL MOVEMENTS: A CASE STUDY OF ARAB SPRING

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ABSTRACT

The proliferation of ICTs has impacted economic, social, cultural and educational aspects of human life. However, over past few years it has been observed that ICTs are being exploited by activists to provide impetus to social movements. The use of social media, subset of (ICTs) by activists in social movements in different parts of world (Arab Spring, the Occupy Wall Street)etc has generated lot of debate among scholars and academicians (Espinoza-Vasquez, 2013) and at the same time ICTs acts as an alternative media which allows activists not only to disseminate information but to organize, discuss, debate political issues bypassing the traditional forms of communication.

In other words, activists bypass the regulation and censorship especially in authoritarian regimes. Since ICTs are cost effective when compared to traditional forms of communication because "mass-media communication required centralized means of information production and large investments in physical capital, networked media are based on relatively cheap personal computers interconnected through the internet" (Enjolras, Steen-Johnsen, & Wollebæk, 2012). It gives activists a necessary advantage to lower down the barriers needed for mobilisation in social movements. ICTs reduce the cost of participation because political activity "puts demand on the people's scarce resources" (Rosenstone & Hansen, 1993).

With Arab Spring as case study, this paper underlines how ICTs including social media played a role in the Arab Spring. The very nature of ICTs is such that they tend to a amplify the spread of information "by allowing users to forward information to their followers and those to their own followers, and so on" (Kang, VIP: Incorporating Human Cognitive Biases in a Probabilistic Model of Retweeting, 2015). At the same time diffusion of ideas happen not only happen in real time but it allows activists to organize events, protests by ensuring visibility (Kang, 2015) b) ICTs are not limited to a certain place, therefore, the message can virtually reach anywhere which enhances the rate of discussions because participants can pitch their ideas from any part of world.c) Not only it builds opinions "but also to give a shape to the way in which people come together and act together (Gerbaudo, 2012), in other words – participation. d) ICTs connects people which allows individual to influence each other's behaviour and in the process creating cascades and "thus produce population-wide, collective outcomes" (Easley & Kleinberg, 2010).

Key Words: ICT, Culture, Arab Spring, social movements, Mobilization, Social media

Introduction

The mass protests have taken place in the every epoch of human history. But there are some mass protests which take world by storm and other protests simply become a local affair. In early 2011, Middle

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East and North African countries (MENA) witnessed protests of unprecedented nature which were termed as "Arab Spring". These protests were able to topple few ageing dictators but more importantly these protests were able to attract global attention. One of the reasons was the use of Information and Communications Technologies (ICTs) including social media by the protestors giving rise to new form of mass protest movement. The use of ICTs in protests movements has generated a lot of debate providing window of opportunity to academicians, researchers to understand how socio-political protests are facilitated by the use of digital technology.

The diffusion of ICTs across the globe has resulted in rich literature wherein focus is to understand facilitation role of ICTs in social movements. But before delving upon the role of ICTs in facilitation in social movements, it is imperative to highlight the underlying concept of these movements. The concepts underlying social movement theories have evolved in late nineteenth century. The definition of social movement theory varies from one theorist to another because of "competing frameworks" and each theory being "conceptualized differently" (Aldon Morris, 1984). But the general consensus among scholars are that social movements are "networks of informal interaction between a plurality of individuals, groups and/or organisations, engaged in a political or cultural conflict on the basis of a shared collective identity" (Diani, 1992). With the introduction of technology, the on-going social movements in present times have taken new direction and such historical structures have also changed.

Humans have evolved over a period of time and in the process it has led to various kinds of transformations which have changed the dynamics of the society. These changes whether "social, technological, economic, and cultural transformations came together to give rise to a new form of society, the network society" (Castells, 2010) p-xvii. This network society has given rise to a new form of communication which Castells calls as "mass self-communication" which is different from traditional forms of communication in sense that it has global reach and "it is self-generated in content, self-directed in emission, and self-selected in reception by many that communicate with many" (Castells, Communication, Power and Counter-power in the Network Society, 2007)p- 248. This "mass self-communication" has provided an excellent forum to social movements and rebellious people because as it allows "to build their autonomy and confront the institutions of society in their own terms and around their own projects" (p-249). Contrary to traditional social movements, "the social movements of the information age, and the new forms of political mobilization are widely using the means of mass self-communication, although they also intervene in the mainstream mass media as they try to influence public opinion at large" (p-249).

According to Melucci, conflict now "tend to arise in those areas of the system that are most directly involved in the production of information and communicative resources but at the same time subjected to intense pressure of integration" (Melucci, 1994). Givan et al. argues that diffusion of social movements in a particular period of time takes place via two dimensions: behavioral and ideational. "The behavioural dimension involves the diffusion of movement tactics or collective action repertoires", whereas, ideational involves "the spread of collective action frames that define issues, goals, and targets" (Givan, Roberts, & Soule, 2010). Behavioural dimension is directly related to ideational because when "people make collective claims, they innovate within limits set by the repertoire already established for their place, time, and pair" (Tilly & Tarrow, Contentious Politics, 2007)

Garrett identifies three mechanisms "that potentially link technology and participation: reduction of participation costs, promotion of collective identity, and creation of community" (Garrett, 2006). He argues

that activists have used technology in various ways to "mobilize", cease "new political opportunities" and "shaping the language" but it should not mean the social change is inherited to technology alone, "used in different contexts, technologies yield different effects" (p-224). On similar lines, Lynch asserts that new media (both television and Internet-based social media) has potential to impact collective action through reduced "transaction costs, increased costs of repression, scale and diffusion effect" (Lynch, 2011). He argues that since new media reduces transaction costs not makes even a small-scale protest visible but allows like-minded people a common space and at the same time new media helps to overcome social isolation created by authoritarian states (p-304). Lynch contends that tidal waves which were seen in Tunisia and Egypt are clue to what we term as informational cascade -the ouster of Ben Ali in Tunisia led to perception of successful regime change can take place in Egypt (p-304). New media, according to Lynch further gives impetus to collective action as it's able to garner international attention which raises cost of repression as far as authoritarian regimes are concerned (p-305).

Role of ICTs in Mobilization

Mobilization:

According to Rosenstone and Hansen mobilization is "the process by which candidates, parties, activists and groups induce other people to participate" (Rosenstone & Hansen, 1993). By this very definition people get involved in the "process". Therefore, the question is why does people get involved in the "process" or why do they get mobilized? There are different reasons as to why people get mobilized. Rosenstone categorised them into benefits, interests and beliefs. Furthermore, Benefits can be classified as material benefits which are "tangible" in nature. Solidarity benefits come into the category of "intangible rewards". Purposive benefit, it is an "intrinsic reward" that provides satisfaction. Similarly, interests of people can lead to mobilization. More the stakes, more it generates the interest. Also, preferences lead to different interests. People with stronger "psychological attachments" are more active than others. And finally, belief in a cause makes to fulfill the "obligation".

Mobilization can be achieved in two ways:

Direct Mobilization: In this process activists or leaders rely on interpersonal communication and persuade people to participate in particular activity. Direct mobilization allows people forum for "political action" and at the same time allows them to receive information at subsidised rates and ultimately it reduces cost of activism. (Rosenstone & Hansen, 1993).

Indirect Mobilization: Rosenstone says that direct mobilization turns into indirect mobilization via social networks: "Membership in social networks makes people available to politicians, organisations and activists." This is similar to Lazarsfeld's "two-step flow of communication" where opinion leaders first receive the information and then they pass same information to the members who are not politically so active (Katz, 1957). Social networks not only reduce the cost but it also helps to "multiple the effects of mobilization" (Rosenstone & Hansen, 1993).

Since ICTs by its very nature provide space for networks, therefore, the "opinion leaders" which Katz talks in "two-step flow of communication" will be also available in social networking sites. But one needs to understand who these opinion leaders are? Opinion leaders should not be confused with some politician

or an actor who is known to the people but "rather their influence is direct and derives from their informal status as individuals who are highly informed, respected, or simply connected" (Duncan Watts, 2007). One may identify these "opinion leaders" in small groups but it becomes very difficult to find the same "opinion leaders" in the complex structure of social media. It however, cannot be ruled out that "they do not play an important role" (Duncan Watts, 2007).

Apart from providing platform for networks, ICTs reduces the cost of participation because political activity "puts demand on the people's scarce resources" (Rosenstone & Hansen, 1993). If we compare, ICTs with traditional forms of media it is extremely cost effective. "Whereas mass-media communication required centralized means of information production and large investments in physical capital, networked media are based on relatively cheap personal computers interconnected through the internet" (Bernard Enjolras, 2012). The properties such as 'network functionalities and affordances' associated with ICTs not only reduce the cost of political activity but it adds new dimension to the concept of mobilization.

Social Network Functionalities:

In sociology, social network is the association of people connected to each other through family, union, clubs, church, friendship or religious organization. Similarly, in ICTs(social media), networks are structures made up of nodes, ties and flows. In his book, 'The Network Society', (Barney, 2004) apart from defining these important elements in the network defines their characters:

- a) Nodes: "A node is a distinct point connected to at least one other point, though it often simultaneously acts as a point of connection between two or more other points."
- b) Tie: "tie connects one node to another."
- c) Flows: "are what pass between and through nodes along ties".

Ties in the Network:

One of the elements in social network which is of prime concern is ties in the network. It is due to the fact that 'two step flow of communication' or for that matter diffusion theory by Rogers give importance to opinion leaders which can only formed by ties. Traditional media can inform or educate the opinion leaders about the issue and then only they discuss it with their immediate environment (ties). Therefore, we can deduce two things, one is that ICTs not only provides information like traditional media but at the same time because of ties it provides opinion leaders which are necessary condition at least for nascent mobilization.

ICTs may be a decade old but the concept of ties had been laid way back in the year 1973 in the ground-breaking research paper in the field of Sociology – "The Strength of Weak Ties" by Mark Granovetter. According to Granovetter strong ties cost time and energy because it involves emotional attachment, interpersonal communication and intimacy between the individuals and as such people with strong ties will also have overlapping networks (Granovetter, 1973). In other words, strong ties which include family and friends have common circle which usually results in having same information due to repeated interactions.

In weak ties, where investment in terms of time and energy are minimal because emotional quotient is extremely low and there are not regular interactions (Granovetter, 1973). Thus, weak ties are acquaintances in the network. Granovetter argued that weak ties on contrary are important in the network as

they allow information transmission. "Whatever is to be diffused can reach a larger number of people, and traverse greater social distance (i.e.' path length), when passed through weak ties rather than strong" (p-1366). Weak ties act as bridges in the network and as such enhance the speed of the information. This is due to the fact that without bridges there is information barrier. Since in weak ties there is hardly any emotional bias as such it allows user opportunity for "diverse opinions" and new information (Cheng-Jun Wang, 2013). The more the ties in the network, the "higher expected potential mobilization feedback loop" or in other words the actors in the network themselves trigger the reaction which allows amplification of message (Sean Costigan, 2012). Also, "Collective action often diffuses via weak ties carrying the news of what others have done" (David Strang, 1998). But the author of the "Tipping Point", Malcolm Gladwell in his article in the NewYorker argued that ICTs are not only "messy" but lack "centralized leadership authority" resulting in lack of "clear goals and consensus" (Gladwell, 2010).

Informational Cascades:

Once people receive information about an event whether it's through network or through opinion leaders they develop certain kind of perception either in favour or against it. And in the process this information passes successively to others resulting in cascades. Economists Sushil Bikhchandani, David Hirshleifer, and Ivo Welch while writing for "Journal of Political Economy" defined informational cascades as process in which, "it is optimal for an individual, having observed the actions of others ahead of him, to follow the behavior of the preceding individual without regard to his own information" (Sushil Bikhchandani, 1992). Information cascade is similar to the bandwagon effect in politics wherein people follow other people irrespective of their own beliefs.

In a political turmoil, there is uncertainty in the atmosphere; therefore, according to Drezner informational cascade happens "when individuals acting in conditions of uncertainty strongly condition their choices on what others have done previously" (Drezner, 2005). An informational cascade model is based on the assumption that regime in question either goes for political reforms or responds by crushing the uprising (Susanne, 1994). If information cascade model resembles "the reality of the situation" there are great chances actors in the process will not only initiate cascades but will play an important role (Frank Baumgartner, 2002). Cascades with them bring collective action to pursue shared interests. "In time of social turbulence, we observe cascades of collective action: people speak their mind in public, undertake acts of civil disobedience, attend demonstrations, and participate in violent riots" (Lohmann, 2002). However, the success of the cascade depends on two things. One participants have meagre choice between the alternatives and second, when there are chances of successful outcome (Frank Baumgartner, 2002).

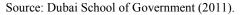
Role of ICTs in Arab Spring

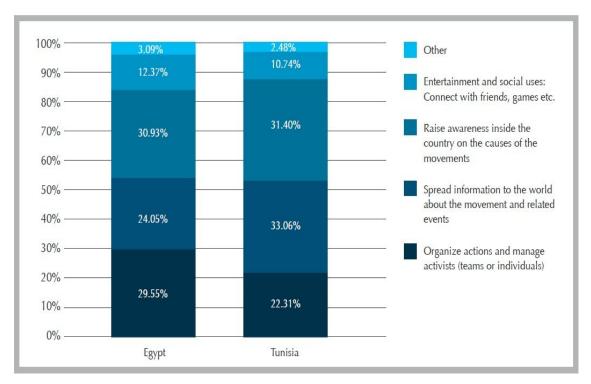
Social media played a role in the Arab Spring because the very nature of networks is such that they tend to a) amplify the spread of information "by allowing users to forward information to their followers and those to their own followers, and so on" (Kang, 2015). At the same time diffusion of ideas happen not only happen in real time but it allows activists to organize events, protests by ensuring visibility i.e "process of information discovery in social media" (Kang, 2015), ensuring message relevant to users. b) social media are not limited to a certain place, therefore, the message can virtually reach anywhere which enhances the rate of discussions because participants can pitch their ideas from any part of world. Not only

it builds opinions "but also to give a shape to the way in which people come together and act together (Gerbaudo, 2012), in other words – participation. c) social media not only gives space to alternative voices by allowing them to bypass traditional forms of communication. "People share links to news stories by email, post articles on their Facebook and other networking feeds and tweet them on Twitter -- often following up by discussing the articles on message boards and other sites" (Gross, 2010). d) social media connects people which allows individual to influence each other's behaviour and in the process creating cascades and "thus produce population-wide, collective outcomes" (Easley & Kleinberg, 2010).

Information Spread/ Organization

A survey done by Dubai School of (Government, 2011) substantiates the fact that in societies with limited freedom of expression use of ICTs(social media) from being entertainment media takes the role of an organizational tool to promote and create awareness. According to the survey, 85% of respondents in Egypt believed that Facebook had a critical role to play in spreading information, subsequently creating information and finally organizing protests. And on contrary only 15% respondents believed Facebook had entertainment role during Egyptian uprising. Similarly, 86% respondents in Tunisia believed apart from spreading information, it helped activists to organize actions. Again 15% respondents believed Facebook had entertainment role during Tunisian protests.

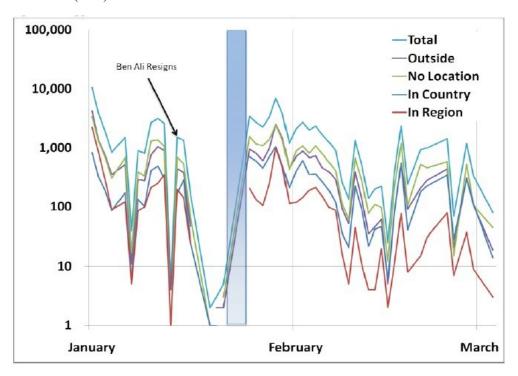




There is no denying in the fact that number of tweeter users has been less when compared to Facebook. For example in Egypt there 7 million users Facebook users while Twitter users were 130,000. However, that doesn't mean that twitter had no role to play as far as coordination and organization is concerned. "Need more protesters on the salahsalem side. There are only 1000 there with thousands on the roxy side. Pl retweet #jan25" (Idle & Nunns, 2011). This gives an idea how activists exploited twitter to overcome loopholes in organising and coordinating protests on streets.

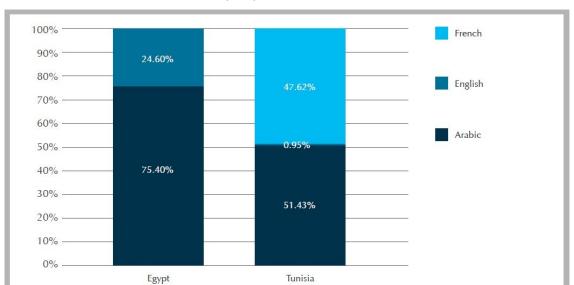
Another figure maps the tweets on political change. It also shows the correlation as twitter traffic peaked online; street protests swelled drawing thousands on the streets.

Source: PTPI (2011).



Discussion/Participation

The other interesting thing found in the Dubai School of (Government, 2011) survey was the use of language. According to the survey, the primary language used on the Facebook during the protests was Arabic. In Egypt 75% mainly used Arabic and rest that is 25% used English. While, in Tunisia there was split between Arabic (51.43%) and French (47.62%). The survey shows that users preferred local language over foreign language. In order to coordinate and organize protests it is important to be well versed with local dialect because firstly it allows average citizen to discuss political happenings in his own language and secondly "more the political debate takes place in the vernacular, the greater the participation" (Kymlicka, 2001) p-214

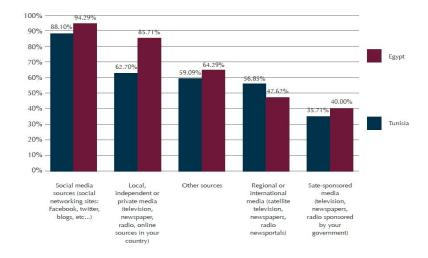


Source: Dubai School of Government (2011).

Alternative Media

Naturally when quotient of social media as an entertainment platform decreases, it performs the role of an alternative media. Facebook had become a major source of information during the protests. "94% of people in Tunisia said they got their news from these tools, while 88% of people in Egypt did" Dubai School of (Government, 2011). Clearly, people relied less on traditional forms of mass media.

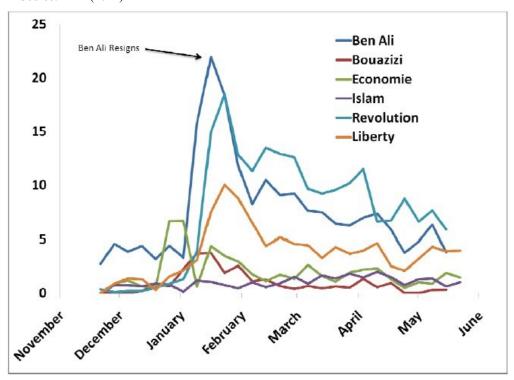
Source: Dubai School of Government (2011).



The empirical study done Howard et al (2011) on the role of social media during Arab Spring examined political conversations in Arab blogosphere and also analysed 3 million tweets based on key words. The extensive study reveals main interesting facts, it talks about the thriving blog culture prevent in Arab World and simultaneously notes the frequency with which blogs were uploaded with keywords. "Analysis of the structure of content and links in the Tunisian blogosphere between November 2010 and May 2011 indicates direct parallels between online political conversations and offline events" (Howard & etal, 2011). As the demonstrations on streets intensified in numbers at the same time volume of online traffic reflecting sentiments of public peaked.

Percent of Tunsian Blogs with Post on Politics, By Keyword

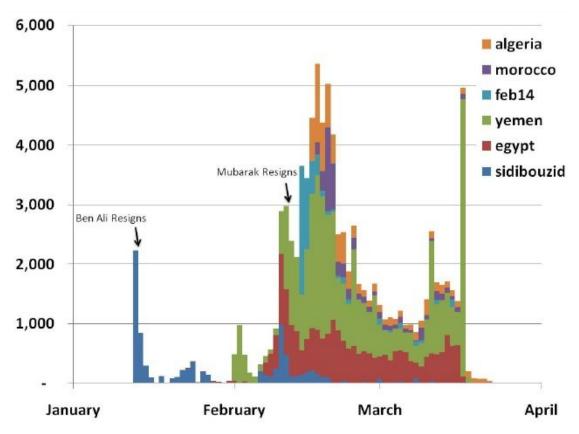




Informational Cascades

The figure below "reveals how the success of demands for political change in Tunisia and Egypt led individuals in other countries to pick up the conversation and talk about how it was relevant to their own lives" (Howard & etal, 2011). In other words, informational cascade happens when "an individual, having observed the actions of others ahead of him, to follow the behavior of the preceding individual without regard to his own information" (Sushil Bikhchandani, 1992).

Source: PTPI (2011)



Conclusion

The very nature of ICTs allows activists to exploit technology at various levels to initiate a social movement. However it will be naïve to even think technology alone can trigger a social movement; there are multiple factors that provide impetus to social movements. From purely technological point of view, ICTs' play facilitation role by allowing dissemination of information at an accelerated pace, overcomes barriers for mobilization, and finally for collective action. The Arab Spring as case study highlights the fact ICTs played a multi-dimensional role by first creating awareness which subsequently allows participation which is essential in order to achieve mobilization. Greater the participation, greater are the numbers of networks available for activists to carry forward their messages within and outside networks. This allows information to reach to international audience and simultaneously dependency on traditional media gets reduced drastically. And finally, the collective outcome which is ultimate goal as far as social movements are concerned, gets reflected by way of cascades.

References

- Aldon Morris, C. H. (1984). Theory and Research in Social Movements: A Critical Review. *Political Behavior Annual*.
- Barney, D. (2004). The Network Society. Polity Press: Cambridge.
- Bernard Enjolras, K. S.-J. (2012). How do social media change the conditions for civic and political mobilization? *academia.edu*, 4.
- Castells, M. (2007). Communication, Power and Counter-power in the Network Society. *International Journal of Communication*, 238-266.
- Castells, M. (2010). The Rise of the Network Society. United Kingdom: Blackwell Publishing Ltd.
- Cheng-Jun Wang, P.-P. W. (2013). Discussing Occupy Wall Street on Twitter: Longitudinal Network Analysis of Equality, Emotion, and Stability of Public Discussion. *Cyberpsychology, Behavior and Social Networking*.
- David Strang, D. S. (1998). DIFFUSION IN ORGANIZATIONS AND SOCIAL MOVEMENTS:From Hybrid Corn to Poison Pills. *Annual Reviews*, 273.
- Diani, M. (1992). The concept of social movement. The Sociological Review, 1-25.
- Drezner, D. W. (2005). WEIGHING THE SCALES: THE INTERNET'S EFFECT ON STATE-SOCIETY RELATIONS. *University of Chicago*, 9.
- Duncan Watts, P. S. (2007). Influentials, Networks, and Public Opinion. Journal of consumer research.
- Easley, e. D., & Kleinberg, J. (2010). *Networks, Crowds, and Markets: Reasoning About a Highly Connected World*. Cambridge: Cambridge University Press.
- Easley, e. D., & Kleinberg, J. (2010). *Networks, Crowds, and Markets: Reasoning About a Highly Connected World.* Cambridge: Cambridge University Press.
- Enjolras, B., Steen-Johnsen, K., & Wollebæk, D. (2012). How do social media change the conditions for civic and political mobilization? *academia.edu*.
- Espinoza-Vasquez, F. (2013). More Than Tools: ICTs Influencing Social Movement's Opportunity Structures. *The 41st Research Conference on Communication, Information and Internet Policy*.
- Frank Baumgartner, B. J. (2002). Policy Dynamics. Chicago: University of Chicago Press.
- Garrett, R. K. (2006). Protest in an Information Society: A Review of Literature on Social Movements and New ICTs. *Information, Communication and Society*, 204-224.
- Gerbaudo, P. (2012). Tweets and the Street: Social Media and Contemporary Activism. London: Palgrave Macmillan.
- Gerbaudo, P. (2012). Tweets and the Street: Social Media and Contemporary Activism. London: Palgrave Macmillan.
- Givan, R. K., Roberts, K. M., & Soule, S. A. (2010). *The Diffusion of Social Movements*. Cambridge: Cambridge University Press.
- Gladwell, M. (2010, October 4). *Small Change*. Retrieved January 8, 2014, from NewYorker: http://www.newyorker.com/magazine/2010/10/04/small-change-3
- Government, D. S. (2011). Civil Movements: The Impact of Facebook and Twitter. Dubai.
- Granovetter, M. S. (1973). The Strength of Weak Ties. American Journal of Sociology, 1361.

- Gross, D. (2010, March 1). Survey: More Americans get news from Internet than newspapers or radio.

 Retrieved December 13, 2014, from CNN: http://edition.cnn.com/2010/TECH/3/01/social.network.news/index.html
- Howard, P., & etal. (2011). *Opening Closed Regimes: What Was the Role of Social Media During the Arab Spring?* Project on Information Technology and Political Islam.
- Idle, e. N., & Nunns, A. (2011). Tweets from Tahrir: Egypt's Revolution as it Unfolded, in the Words of the People Who Made it. New York: OR Books.
- Kang, J.-H. (2015). VIP: Incorporating Human Cognitive Biases in a Probabilistic Model of Retweeting. In
 N. X. eds Agarwal, Social Computing, Behavioral-Cultural Modeling, and Prediction (pp. 101-110). Washington DC: Springer.
- Kang, J.-H. (2015). VIP: Incorporating Human Cognitive Biases in a Probabilistic Model of Retweeting. In
 N. X. eds Agarwal, Social Computing, Behavioral-Cultural Modeling, and Prediction (pp. 101-110). Washington DC: Springer.
- Katz, E. (1957). The Two-Step Flow of Communication: An UpTo-Date Report on an Hypothesis. *Political Opinion Quarterly*.
- Kymlicka, W. (2001). Politics in the Vernacular. Oxford: Oxford University Press.
- Lohmann, S. (2002). Collective Action Cascades: An Informational Rationale for the Power in Numbers. *Journal of Economic Surveys*.
- Lynch, M. (2011). After Egypt: The Limits and Promise of Online Challenges to the Authoritarian Arab State. *Perspectives on Politics*, 304-305.
- Melucci, A. (1994). A Strange Kind of Newness: What's "New" in New Social Movements? . In E. Laraña, H. Johnston, & J. G. (eds), *New Social Movements: From Ideology to Identity* (pp. 101–130). Philadelphia: Temple University Press.
- Rosenstone, S., & Hansen, J. M. (1993). *Mobilization, participation, and democracy in America*. New York: Macmillan Publishing Company.
- Rosenstone, S., & Hansen, J. M. (1993). *Mobilization, Participation, and Democracy in America*. New York: Macmillan Publishing Company.
- Sean Costigan, J. P. (2012). Cyberspaces and Global Affairs. Ashgate Publishing.
- Susanne, L. (1994). The Dynamics of Informational Cascades: The Monday Demonstrations in. Leipzig, East Germany, 1989-91. *World Politics*, 49.
- Sushil Bikhchandani, D. H. (1992). A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades. *Journal of Political Economy*, 1.
- Tilly, C., & Tarrow, S. (2007). Contentious Politics. Boulder, CO: Paradigm.