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Bridges of the Revolution Linking People, Sharing Information, and Remixing Practices

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by Augusto Valeriani

The "Arab Spring": A "2.0" Phenomenon?

Academics, journalists, pundits and even revolutionaries themselves disagree about the relationship between the so-called "Arab Spring" and the internet. The crux of the issue is whether or not social media have unleashed the "domino effect" that is behind the success of the uprisings against the regimes in Tunisia (December 2010) and Egypt (January 2011), and other revolutionary events in the entire MENA (Middle East and North Africa) region.

By focusing on actors and strategies rather than simply on tools, this article takes a position on the topic, arguing that the Arab Spring has been intrinsically a "2.0" phenomenon. Such a bold statement should not be read as an endorsement of the idea that what happened online has been more important than what happened down in the squares. Nor am I claiming that all the subjects involved in the uprisings were "geeks" or even internet connected actors. On the contrary, the Arab Spring has been characterized by a high degree of diversity among participants, even in term of competence with web tools and platforms.

The pivotal idea of this article,[1] which directs its attention to Egypt and Tunisia, is that the architecture of the "revolution" was shaped according to some of the main

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[1] See the Appendix, *infra*, for a methodological note. All web links were accessed on February 10, 2012.

features of web 2.0 as a cultural milieu. This applies both to what happened online and to what happened offline.

I will show how linking, sharing, and remixing – key features of the web 2.0 as a network of social relationships – have been among the core practices behind the organization of the social movements that were successful in confronting the regimes in Egypt and Tunisia in early 2011. This has been made possible by the emergence of a new and heterogeneous élite fully embracing what has been defined as the "culture of the net" [see Castells 1996; Tapscott 1999; Tapscott 2008] or, more specifically, the "remix culture" [Lessig 2008]. This new élite has developed what could be defined as the connective tissue of social movements. I am referring to people commonly defined as "techies" or "tech-savvies": subjects sharing a high degree of familiarity with the web milieu, frequently, but not necessarily, based on technical skills. Tech-savvies in fact not only dominate technology, but they are used to thinking, building relationships, developing ideas and solving problems within the web 2.0 ecology. These skills have been crucial in creating and maintaining the networks connecting the already existing and stronger, but often isolated, social networks (factories, universities, unions, mosques, families etc.) representing the real, immediate engine of the "revolution."

Bridge Leadership and Social Movements: Linking, Framing, and "Bricolaging"

Within the vast literature on social movements, there is an expanding component dealing with the issue of leadership. Most of these works ascribe the peculiarity of this kind of leadership to the uniqueness of the movements as social and political entities. According to Della Porta and Diani [1999, 16], social movements "are not organizations, not even of a peculiar kind"; on the contrary they are "networks of interaction between different actors which may either include formal organizations or not, depending on shifting circumstances." Melucci [1996, 344] stressed the fact that, because contemporary social movements assume the shape of segmented and "polycephalous" networks, "it is difficult to identify once and for all a set of stable leadership functions, which would concentrate themselves into a single entity."

Starting from these premises it might be argued that if the decentralized and networked structure of movements implies segmentation in the functions of leadership, developing and cultivating the network is possibly the most important among such functions. This means that, in contemporary movements, subjects working as "brokers" of connectivity play a crucial role within the leadership élites [Diani 2003].

As Campbell [2005] writes, building on Keck and Sikkink [1998], the structure of movements as sets of "networked social relationships" is what shapes and constrains people's behavior and opportunities for action.

Stressing the importance of a connective leadership within contemporary social movements does not imply an underestimation of the increased facility with which groups are able to organize themselves today. On the contrary, it allows a better understanding of the dynamics of the organization of contemporary social movements, avoiding the adoption of the univocal and misleading distinction between "leaders" (playing an active role) and "followers" (playing a passive role). According to the literature [e.g. McAdam, McCarty and Zald 1996; Melucci 1996; Della Porta and Diani 1999; Diani 2003; Snow, Soule and Kriesi 2004], the main tasks for the leadership of social movements, as regards connection and organization, are the following: developing and expanding the network of the movement, circulating information (inside and outside the movement) and framing it in ways that might generate support, and defining incisive strategies in order to confront the opponents.

Within ecosystems where constituents might also play these roles, how exactly is a connective leadership still and even more crucial? The concept of "bridge leadership," discussed by various authors [e.g. Robnett 1997, Goldstone 2001, Morris and Staggenbord 2004] in social movement studies is helpful in addressing such a problematic issue. Most of such literature nevertheless explored the "vertical" dimension of the bridging process: "Bridge leaders are those neighborhood and community organizers who mediate between top leadership and the vast bulk of followers, turning dreams and grand plans into on-the-ground realities" [Goldstone 2001, 158]. On the contrary, the same function is relevant also within the "horizontal" dimension of the network, where weak ties and strong ties coexist. Moreover, the bridging activity is crucial in establishing and cultivating relationships with stakeholders: activists of similar movements around the world, "diasporic" activists, slacktivists, the mainstream media, etc. [Morris and Staggenbord 2004].

Even in the management of so called "information politics" [Keck and Sikkink 1998], the role of a bridging élite is crucial. Information politics is the process of collecting information about issues of interest, the activity of the movement, the misbehaviors of the opponents, and consists in deploying such information in strategic ways in both national and transnational public arenas [Smith 2004]. It is what in the literature about social movements [e.g. Snow and Benford 1992; Zlad 1996; Benford 1997; Jasper 1997; Benford and Snow 2000; Oliver and Johnston 2000; Williams and Benford 2000; Westby 2002; Snow 2004] is usually called the "framing process." As Zlad [1996, 266] wrote: "Social movements exist in a larger societal context. They draw on the cultural stock of images of what is injustice, for what is a violation of

what ought to be." This means that, while producing and sharing information (texts, pictures and videos), inventing slogan, engaging in dialogue with the media and organizing performances, movement constituents are involved in a symbolic bargain in order to generate consensus for their action and to discredit opponents.

Traditionally only top leaders have been in charge of such symbolic work because of their access to mainstream media. Within the ecosystem of the contemporary media, on the contrary, such a production of content has become a participative process where key contributions might come even from peripheral constituents [Meikle 2002]. In activating "framing devices" able to order, tag, organize and add details to crowd-sourced material, bridge leaders coordinate such a collective symbolic effort.

"Bricolage" is often evoked in social movement literature [Clemens 1996; Keck and Sikkink 1998; Morris 2000; Campbell 2005], also referring to the definition of the best strategies, tactics and practices to be adopted: "Change in practices generally results from a blending of bits and pieces from a repertoire of elements. This may entail the rearrangement of elements that are already at hand, but it may also entail the blending in of new elements that have diffused from elsewhere" [Campbell 2005, 56].

From this excursus on leadership and contemporary social movements, the relevance, within the "leadership team" [Disney and Gelb 2000], of a group of connectors – or bridge leaders – has clearly emerged. What I am claiming here is that, during (and before) the Tunisian and Egyptian "revolutions," such a bridging role was played at its best by a diverse élite of "tech-savvies," increasing the strategic capacity of the movements they were involved in.

Remix Culture and the Revolution: Build Up Your Community!

Before explaining how such an élite managed to accomplish its tasks, it is important to stress which features its members share and what kind of community they have been able to develop. Analyzing the biographies[2] of Tunisian and Egyptian activists playing – as will be shown- bridging functions during the "revolution," it is impossible to ignore the fact that a large majority of them have a background, in many case even a professional one, dealing with ICT. Here I will call them "tech-savvies" (Tech Savvies): Web engineers, developers, ICT start-up entrepreneurs, online marketing strategists, web editors and lawyers on the for-profit side; tech-oriented animators of NGOs, open software advocates, administrators of collective blogs on the non-profit side.

[2] See first and second columns of tables 1 and 2 for selected examples.

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As already observed in other Arab contexts, within the Tunisian and Egyptian tech-communities there is a consistent overlapping between people involved in for-profit and non-profit ICT initiatives. This hybridization is often reflected in a common representation of the role that technology might play in society: the development of new infrastructures supporting people in connecting each other, sharing ideas and implementing common projects is seen as one of the main contributions ICT might give to societies [Della Ratta and Valeriani 2011]. This idea fits with many of the features and values characterizing the *Net Generation* as theorized by Don Tapscott [1999; Tapscott 2008]. However, even if we might talk about a "net culture" globally shared by a generation, it is impossible to ignore that within each generation just a small group might really embrace "the spirit of the time." Despite their different non-profit or for-profit orientations, tech-savvies may be said to best represent this vanguard because of the appropriation of the "net norms" which are intrinsically connected to their socialization and, in some cases, to their professionalization.

According to this approach many of the bridge leadership's areas of competence resonate in some ways with the norms of the "net culture." To better understand these proximities I suggest using, instead of "net culture," a different term, which is "remix culture" [Lessig 2008], narrower yet dense enough to grasp the most ground-breaking elements of such a culture. Remix culture is a theorization by Lawrence Lessig and it is mostly related to the production, circulation and protection of intellectual goods within internet dominated economies and ecologies. Remix culture is defined by Lessig as a "read and write" environment where all members are "prosumers" continuously consuming, mixing, and producing new material. Within such a remix culture everybody is free to add, change, influence, and interact with his or her cultural milieu.

This idea has important implications also for social relationships, something that has been intriguingly theorized by Isaac Mao[3] under the concept of "sharism": "Sharism is an ideology for our Internet Age. It is a philosophy piped through the human and technological networks of Free and Open Source software. It is the motivation behind every piece of User-Generated Content. It is the pledge of Creative Commons, to share, remix and give credit to the latest and greatest of our cultural creations. (…). The more open and strongly connected we are, the better the sharing environment will be for all people. The more collective our intelligence, the wiser our

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[3] Isaac Mao is a venture capitalist, blogger, software architect, entrepreneur and researcher in learning and social technology. Mao has written extensively about on-line journalism, and advises Global Voices on Line and several web 2.0 businesses (http://en.wikipedia.org/wiki/Isaac_Mao). He has been a fellow of the Berkman Center for Internet and Society at Harvard; while at Harvard, Mao developed his ideas on sharism (http://www.sharism.org).

actions will be."[4] It is thus evident that "remix culture" and "sharism" are based on connecting, (re)-framing and bricolaging. Remix, however, is even more than bricolage (which is a simple "cut and paste"): it implies the establishment of a relationship with a community of peers based on sharing, discussing and learning from results, strategies and common practices.

In our vision, what made Tunisian and Egyptian Tech Savvies – especially those most committed to free and open software, Creative Commons[5] advocacy, copyleft, net-neutrality, freedom of the net, and so on – the perfect "potential" bridge leaders for the movements that have been successful in toppling their countries' regimes was their confidence in and adherence to a specific system of values, practices and representations of reality: in a word, their culture.

How could such a connective tissue develop? In other words, how have the communities of "bridge leaders" established themselves and their regional and global outreach? The community of "revolutionary" Tech Savvies came together over the years around specific initiatives and events, often related to freedom of the web, open technology and Creative Commons promotion.[6] This is not to say that these communities were not politicized at all; on the contrary some of the seminal activities through which these communities have been built were related to important political events.

Although the pioneers started political activities online in the late 1990s, it was not until 2005, on the occasion of the World Summit on the Information Society in Tunis, that a group of Tunisian Tech Savvies (among them Sami Ben Gharbeia, Howeida Anwar, Riad Guerfali) created the "Tunisian association for the defense of cyberspace"[7] (ATPD- Cyberspace), in order to call national and international attention to the issue of web censorship in their country and organized the *Yezzifock!* (Enough is enough) online campaign, which was immediately crushed by the regime. During the same period in Egypt the *Kifaya!* (Enough!) movement, which was coordinating the protests against the regimes before and during the 2005 presidential elections, had a group of Tech Savvies (among them Alaa abdel Fattah, Manal Hassan, Ahmad Gharbeia) among its animators.

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[4] http://wiki.sharism.org/Main_Page.

[5] Creative Commons is a non profit organization promoting a new approach to copyright. It is organized around the work of a community of peers. From the official website (www.creativecommons.org): "Our tools give everyone, from individual creators to large companies and institutions, a simple, standardized way to keep their copyright while allowing certain uses of their work – a "some rights reserved" approach to copyright – which makes their creative, educational, and scientific content instantly more compatible with the full potential of the internet. The combination of our tools and our users is a vast and growing digital commons, a pool of content that can be copied, distributed, edited, remixed, and built upon, all within the boundaries of copyright law."

[6] See third column of tables 1 and 2.

[7] http://tounis.blogspot.com/

However, it has been mainly around tech-events and campaigns that these communities have grown up and tested their ability. To mention just a few of these occasions: in Egypt the first Linux Install Fest was organized in 2004;[8] since 2007 Arab Digital Expression Youth Camps[9] have taken place; in September 2010 the first Creative Commons Iftar[10] took place in Cairo. In Tunisia since 2007 Software Freedom Days[11] have been held and, since 2008, the Ubuntu Tunisian Team[12] has been organizing Install Parties. From the research done on the accounts written by participants, programs of events, lists of speakers, transcriptions of talks, blog posts[13] and even pictures,[14] it clearly emerges that during these gatherings and initiatives the communities of Tech Savvies were structuring themselves, and that the Tech Savvies who later acted as bridge leaders during the Arab Spring were starting to develop common initiatives.[15]

Free/Open Software and Creative Commons events, within authoritarian contexts where freedom of expression is limited, become by default occasions for discussing political issues as well. However, the fact that the main framework for the discussion was a common commitment to an open web environment and that the unifying "grammar" was a good competence in the values and practices of remix culture had important consequences. It facilitated the building of relationships between people with different political backgrounds and between political activists and people with no political background. In this regard, there is no doubt that the development of these communities has been helped also by repressive policies adopted by the regimes. As mentioned by various sources,[16] when the Ben Ali regime cracked down on the web, blocking platforms used by everyone to share videos and pictures (YouTube and Dailymotion were blocked beginning in 2007, Facebook just for 10 days in 2009), new relationships between political and non-political Tech Savvies emerged in order to develop common strategies to circumvent censorship through proxies and other devices.

Building communities around Remix Culture is also about sharing and remixing contents. Here two elements have been crucial: the creation of blog aggregators

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[8] http://zgp.org/pipermail/linux-elitists/2004-May/009837.html

[9] http://arabdigitalexpression.com/

[10] http://arabic.creativecommons.org/cciftar

[11] http://sfdtunisia.freehostia.com/sfd06/index.html

[12] https://wiki.ubuntu.com/TunisianTeam

[13] See notes from 8 to 12.

[14] http://www.flickr.com/photos/oso/4181510990/in/photostream, http://www.flickr.com/photos/joi/3358995749/ and http://www.flickr.com/photos/arabcrunch/3410795440/.

[15] See third column of tables 1 and 2.

[16] Among them Malek El Khadraoui, personal interview (together with Zeynep Tufekci) Doha, March 2011.

and collective blogs (like the Tunisian http://www.nawaat.org created in 2004 and the Egyptian http://www.manalaa.net created in 2005) and the emergence of "power bloggers" functioning as information hubs, highlighting also the work of "niche bloggers." In Egypt, in particular, some blog personalities, like Wael Abbas or Nora Younis, have been able, by linking, sharing and remixing the work of other bloggers, to bring attention to many sensitive issues during recent years [Faris 2010].

Bridge leadership is also crucial in the development of transnational relationships in order to make possible the exchange of information and strategies. Tunisian and Egyptian Tech Savvies have been involved (together with their fellows from the whole region) in developing a regional network of peers at least since 2008. We might talk of a new "pan-Arabism from below" [Della Ratta 2009], where remix culture has worked as the common ground to favor the virtual and physical encounter between Tech Savvies from all over the Arab world. Also in this case Tech, Free/Open Software and Creative Commons events have been crucial in the establishment of a regional community: since 2008 Arab Techies Meetings have been held in Cairo, with a girls's subgroup, Arab Women Techies, gathering since 2010 in Beirut. Quoting from the online presentation[17] of the group: "While their social role is not always recognized by their communities and sometimes even by the techies themselves, they play a pivotal role, they are builders of communities, facilitators of communication between communities, they offer support, hand holding and transfer of skills and knowledge and they are transforming into gatekeepers to an increasing diversity of voices and information. Hence the need for an event to bring those isolated techies together and build a regional community, to share experiences and knowledge, learn from each other and collaborate on solving common problems [sic]." Again in Cairo, in June 2010, the first "Free/Open Software in the Arab World" meeting was organized, addressing also the question of how censorship has negatively affected the spread of Open Software in the region.

In Beirut, since 2008, the global network of bloggers *Global Voices on Line* (GVL)[18] together with Heinrich Böll Foundation and with the economic support of the Dutch Humanist Institute for Cooperation in Full (HIVOS) and Open Society Institute[19] have organized the Arab Blogger Meetings, another crucial event for the

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[17] http://www.arabtechies.net/node/5

[18] Also Global Voices on Line is a product of Berkman Center for Internet and Society at Harvard.

[19] The analysis of the economic and organizational support given to Arab Tech Savvy communities by different non-Arab governmental and non-governmental actors exceeds the goals of this article. However, as the example of the Arab Blogger Meetings clearly shows (http://www.arabloggers.com),

development of the regional Tech Savvies community. Analyzing Arab Blogger Meeting schedules and lists of participants,[20] as well as considering the Arab "contributions"[21] to GVL is crucial also in order to understand how global relationships have been developed.[22] During the second meeting, in 2009, Jacob Applebaum, a prominent figure of the global hacktivists's community and the security expert behind the *Wikileaks* security system, was invited to give a workshop on cyber-security. Nasser Wedaddy, a Mauritanian Washington-based blogger, leading figure of the American Islamic Congress (one of the organizations lobbying for American Muslims in Washington, DC) and "master networker" highly connected with American mainstream media and officials, also attended the meeting.

The fact that some Tunisian and Egyptian Tech Savvies (e.g. Rami Raoof, and Ahmed Gharbeia) were (and are) Global Voices Bloggers (GVL), while the Tunisian – but Holland based as a political refugee – Sami Ben Gharbeia acts as a general coordinator for the Advocacy Section of GVL, put them in contact with a global network of bloggers. Under the umbrella of GVL, thus, relationships of trust and friendship have been forged: this was a crucial "reputation capital" during the revolutions, allowing them to globally circulate information. Moreover, the fact that some of the Tunisian and Egyptian Tech Savvies were expatriates[23] to Europe, the USA, South Africa or the Persic Gulf for political or professional (or both) reasons put them in privileged positions for establishing transnational contacts.

"Sharing the Spring"[24]

Facebook was not the engine of the Tunisian and Egyptian revolutions. The most important social networks have been the traditional ones: universities, factories,

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US and European funds have been important in the establishment of regional communities of Tech Savvies, mainly through events and organization of workshops.

[20] The programs of Arab Blogger Meetings can be found at http://www.arabloggers.com. For full participant list in Arab Blogger Meeting 2009 I should give credits to D. Della Ratta (Creative Commons), for other information on the organization of Arab Blogger Meetings to D. Khoury (Böll Foundation). Some of the pictures analyzed can be found at http://www.flickr.com/photos/oso/sets/72157622956406520/with/4190723273/

[21] In term of blog posts and advocacy activities over the years.

[22] See table 3 for selected examples of Arab and non-Arab Tech Savvies who played bridging functions during the Tunisian and Egyptian revolutions.

[23] See first column of tables 1 and 2, indicated as "expat."

[24] The title of this section, "Sharing the Spring", was the slogan of the third Creative Commons Arab Regional Meeting held in Tunis in May 2011. The fact that the Creative Commons Arab Community, at its first meeting after the Arab Spring, chose to allude to the importance of sharing the seeds of the revolution even through creativity and arts, might be considered a proof of the thesis proposed in this article.

unions, mosques, political parties, and kinship ties. Moreover it is a fact that, for a large majority of Egyptian and Tunisian people, mainstream media – especially Al Jazeera, – and not Twitter, were the main news sources and producers of symbols during the events leading to the fall of Ben Ali and Mubarak. However it should be observed that all these traditional agencies and agents have functioned – in themselves and in their mutual relationships – in new and different ways. This happened due to alterations in patterns of social relationship and action, for which the web 2.0, as information and relational ecosystem, is responsible.

In this sense, among the effects described in the literature [see Lovink 2002: Lovink 2003a; Meikle 2004; Weinberger 2007; Shirky 2008], two were crucial. Alaa Abdel Fattah[25] and Zeynep Tpfeuci[26] (respectively a protagonist of the Egyptian uprising and one of the most promising sociologists of the web), speaking at Personal Democracy Forum[27] 2011 in New York, described these effects as the deconstruction of the "isolation" and "saturation" paradigms.

Deconstructing the isolation paradigm means understanding how, within a context where the web 2.0 tools facilitate the development of a many-to-many network of relations, it becomes more difficult to hinder the diffusion of information outside of the place or the group within which they have been produced. This means that for an authoritarian government it becomes increasingly difficult to isolate an uprising at its seminal level. On the other hand, the end of the saturation paradigm refers to the idea that web 2.0 and social media modify the essential conditions required to mobilize an institution, an agency or a structured group. When some of the constituents might develop relationships, share information and be involved in actions even if the whole institution they are members of is not fully mobilized, it means that you do not have to saturate such a space to "shake" it. Our thesis is that Egyptian and Tunisian Tech Savvies have worked as multipliers for such effects.

Information Communities and Their Managers

The development of information communities has been the key element characterizing information flows during the Tunisian and Egyptian revolutions. According to MacKinnon [2004, 6]: "Interactive participatory media transforms a one-way conversation between media and 'audience' into a conversation with an information community. While information flows through traditional media in a linear fashion,

[25] http://www.youtube.com/watch?v=BfVVk2_T9AY
[26] http://www.youtube.com/watch?v=67XXm-RukKg&feature=youtu.be
[27] http://personaldemocracy.com/

information flows through online participatory media in a multidirectional, self-replicating viral fashion." Information Communities are communities developing themselves around the circulation of information, where members earn trust and reputation on the basis of the quality of the information they have shared. Although in Information Communities everybody might play an active role, not every member has the same function and power.

Tunisian and Egyptian Tech Savvies in their bridging function have been crucial in this sense. The different information communities they have contributed to managing made information flows possible at different levels, contrasting the "isolation strategies" adopted by regimes. Information communities have in fact allowed multidirectional information exchanges at least at three levels: between the center of the events and the rest of the country; between the national blogosphere and transnational info-activism; between citizen journalists and professional journalists (mainly at a transnational level). Sami Ben Gharbeia[28] talking about the role played by the Nawaat team used the term "curators." This concept stresses the fact that whether the "isolation effect" has been circumvented through a "micro-pipeline system" in which people multiplied the directions of the flows using social networks, blogs, text messages and telephones, it has been crucial that someone with connections, reputation and skills checked, edited and organized the information in order to make it easily accessible.

Most of the platforms used to collect and organize information were already operative before the uprisings, used with different or broader purposes, but with active communities around them. *Nawaat.org*, Facebook pages like "we are all Khaled Said"[29] in Egypt, but even the personal accounts of some Tech Savvies became the places where a narrative of what was happening in the streets was developed. Keeping such a narrative collective but, at the same time, organizing it, Tech Savvies facilitated a process of appropriation of the same story also by people with completely different backgrounds.

Tech Savvies, in fact, are familiar with the idea of protecting sensitive information, but at the same time attributing work to original sources (linking), tagging

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[28] During his speech at the 3rd Creative Commons Arab Regional Meeting, Tunis 30th June-2nd July 2011.

[29] http://www.facebook.com/ElShaheeed. The Page was created after Khaled Said, a young computer developer, was beaten to death by Egyptian Police in a Cyber Cafe of Alexandria (Egypt) on 6 June 2010 after refusing to show his ID card. The picture of the brutalized body of Khaled went viral on the web, starting a wave of indignation that mounted also among non-activists. The Facebook page created to mourn Khaled become Egypt's biggest dissident Facebook Page and was administrated by the then famous Wael Ghonim. Ghonim is a Google Marketing Executive based in Dubai, arrested by Mubarak security service when was back in Egypt to join the 25th of January mobilization.

(framing), viralizing and developing multi-voice stories (remixing). When sharing and remixing is a constituent element in the usual approach to the web, it becomes easier and natural to do the same thing when one is "bridging" an uprising which is happening in different cities, squares, and villages. When Alaa Abdel Fattah said[30]: "We used technology because technology is intrinsically part of our life," he was not just referring to tech-tools, but also to tech-culture.

In order to develop such a common narrative, the relationships established over the years by Tunisian and Egyptian Tech Savvies have been crucial to making the sharing process faster and more accurate. When Zouhair Makhlouf[31] started covering what was happening in Sidi Bouzid on December 17, his relationship with *nawaat.org* was already strong, and the same was true for Howeida Anouar[32] and for many bloggers covering events from different perspectives and locations.

Long-standing relationships among Tech Savvies communities around the Arab world have been crucial also in developing common narratives and sharing information at regional and global levels. This was important both for the development of multidirectional flows of information and in sparking a regional snowball effect. As shown[33] also by the computational analyst Kovas Boguta, most of the information shared on Twitter about Egypt during the hottest days in January 2011 was produced by users that are part of the regional community of Tech Savvies and its global appendices. Moreover, according to our interviews with participants, some Google Groups,[34] created over the years to prepare and to follow up on tech-gatherings, together with Skype conference calls, have been used to share information and coordinate communication strategies at a regional level.

Moreover, considering that shutting down the web has been one of the first strategies tried by regimes in order to carry out a strategy of isolation, it should be noted that the bridging function played by communities of Tech Savvies has consisted also in the development of technical devices and solutions for circumventing web

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[30] In his talk at the PDF, Washington 2011, see note 23.

[31] Zouhair Makhlouf is a well known Tunisian opposition journalist persecuted by the Ben Ali regime. According to our interview (Tunis, June 2011) with Malek Khadraoui, one of the http://www.nawaat.org administrators, Makhlouf was the first to cover the clashes in Sidi Bouzid on 17 December 2010.

[32] Howeida Anwar is a Tunisian Tech Savvy and blogger, she has worked with different collaborators on projects revolving around Advocacy and Citizen Journalism, among them http://www.reveiltunisien.org. She was active as an information hub before and during the revolution.

[33] http://www.kovasboguta.com/1/post/2011/02/first-post.html

[34] Google Groups is a Google tool that can be used for forming discussion groups based on common interests.

blockages. A good example might be the "Alivein" project[35] managed by a group of Tech Savvies including Habib Haddad, a Lebanese web entrepreneur, and the *meedan.net* team[36] – all of them "veterans" of the Creative Commons Arab community – in order to transform (and translate) landline phone calls into tweets. Moreover, an alternative web, working on the old dial-up system, was established by Alaa Abdel Fattah, Manal Hassan and Mona Sosh to keep internet communication alive during the three day shutdown imposed by Mubarak. In this really "geeky" project they were advised from abroad by Jacob Applebaum, as already said, in touch with the community since the 2009 Arab Blogger Meeting.

Transnational cooperation, coordination and information sharing to achieve common goals were practices already tested by Tech Savvies on previous occasions. This experience was important for winning a supportive coverage from global mainstream media. National Tech Savvies were in charge of collecting, checking, adding context information to texts, photos or videos, while their regional and global counterparts used their popularity and credibility to reach a wider transnational audience, including also professional journalists and officials. On Twitter and Facebook regional "power users" worked as hubs and in some cases re-framed information in order to adapt it to a wider or to a specific target. To accomplish their function, in particular in the relationship with journalists and officials, it was crucial protect their credibility by avoiding mistakes, hoaxes, and rumors. As emerged in many of our interviews,[37] regional Tech Savvies like Amira Al Husseini and Nasser Wedaddy had frequent emails and text message exchanges, phone call conversations, Skype conference calls with Tunisian and Egyptian Tech Savvies in the field, to double check and define common strategies to disseminate information.

The function of Nasser Wedaddy was crucial in this regard. Being based in Washington, DC, he was "in charge" of a crucial node: appearing frequently on American 24hour news channels, participating in public debates in universities and think tanks, he played an important framing role in the American public representation of the Arab Spring.

In analyzing the role played by a common ground in "remix culture," it is important to consider that some professional journalists have also been socialized to it

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[35] http://alive.in/ The project, tested in Egypt has been later extended to other countries, among them Libya, Bahrein and Syria.

[36] Meedan.net is a social network where a multi-language community shares conversations and links about world events. Everything that gets posted on meedan.net is mirrored in Arabic and English. The system is based both on automatic translation and on the grass-roots work of the members of the community.

[37] Both Nasser Wedaddy and Amira Al Husseini were interviewed at the Al Jazeera Forum, March 2011, Doha (Qatar).

and, also for this reason they were naturally inclined to establish relationships with Tech Savvies, sharing and using material produced by them. Moreover, the presence of journalists advocating for remix culture might, in some cases, bring a whole news organization closer to remix values and practices. Al Jazeera is the most interesting example in this sense. Putting aside the political aspects and implications of the editorial line followed by Al Jazeera in covering Tunisian and Egyptian revolutions and focusing on the way it worked on information and material produced by citizens, it should be noted that cooperation with Tech Savvies has been intrinsically part of Al Jazeera news making. This cooperation has been based on relationships developed over the years and rooted also in the adherence of part of the Al Jazeera editorial board to remix culture and to initiatives that Al Jazeera has undertaken to connect itself to remix culture. Within the Al Jazeera new media team, in fact, many people are Tech Savvies themselves: they are familiar with, advocate and use open software and participate in regional and global Tech and Geek events. People like Mohamed Nanabhay (head of online), Moeed Ahmad (head of new media), Muhammad Bashir (New Media Planner) or Bilal Renderee (new media producer) are highly connected to Tech Savvy communities, and are actively involved in online discussions. Moreover, they have been crucial in persuading the management to establish and develop a relationship between Al Jazeera and the Arab Creative Commons community. In December 2008 Al Jazeera was the first professional news organization to launch a Creative Commons repository[38] and in 2009 the annual Al Jazeera Forum hosted the first Creative Commons Arab Meeting.

Both from content analysis and interviews it clearly emerges that Al Jazeera coverage of the Tunisian and Egyptian "revolutions" was based on a strong cooperation between national and regional Tech Savvy communities and Al Jazeera journalists in a process of linking, framing and remixing information. Tech Savvies gave Al Jazeera journalists contacts of witnesses, suggested stories and participated in programs, but also have been able to include material produced, shared or re-framed by them within Al Jazeera news flow. This was particularly evident from a content analysis of *Al Jazeera live blogs* coverage of the events[39]; *Al Jazeera live blogs* are organized as diaries copiously using material produced and shared by other sources, also on social networks.

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[38] http://cc.aljazeera.net/
[39] For Egypt: http://blogs.aljazeera.net/liveblog/Egypt; For Tunisia http://blogs.aljazeera.net/liveblog/tunisia

It was thus also by cooperating with all these different and overlapping information communities that Tunisian and Egyptian Tech Savvies have been able to function as bridge leaders of the "revolution."

Communities of Practices and their Facilitators

The values and practices of the Remix culture have been very important in the definition of action strategies adopted by the Tunisian and Egyptian movements to oust their dictators. In this regard Tech Savvy communities have played an important role, working as a unique connective tissue, enabling exchanges and appropriations between subjects different in structure, aims, and orientation or simply distant in space.

Remixing heterogeneous practices and making them easily available for everybody, as well as organizing or facilitating self-organization, is easier when one is used to considering cultural products as platforms that can be modified by users. Moreover, it should be noted that within remix culture, developing new communities on the basis of a common project is a frequent practice: it is through collaboration that people previously linked by weak ties (or even by no ties) establish the community. Community building or community reinforcing through collaborative work, where new solutions are found by capitalizing on the different experiences and competence of the members, is at the foundation of communities of practice [Wenger 1998].

The cultural competences of Tech Savvies in dealing with these kinds of collaborative structures, together with their diverse networks of relationships (Tech Savvies come from different social, political, and religious backgrounds), enabled them to play a bridging role even during the Egyptian and Tunisian "revolutions." Also in this regard we should look at global, regional and national levels to find out how the remix culture of the Tech Savvies helped to establish the definition of the "miscellaneous" [Weinberger 2007] repertoires adopted by Tunisian and Egyptian movements. Among the elements that helped Tunisian and Egyptian movements in gaining support within western media, public opinions and from officials, the choice of an almost completely "non-violent" struggle was definitely the most important.

As already said, in 2005 Tunisian Tech Savvies led an initiative against censorship online, in which people were invited to publish on a website pictures of themselves holding a "Yezzifock!" (enough!) banner. During the following years, other similar "creative" initiatives were realized by the same community and were

occasion to test the use of tools like Google Groups and Google Docs[40] for organizing actions online and offline, while Facebook and Twitter were used to enlarge the base of support for the mobilization. According to the organizers, involving the artistic community in creatively working on the theme of censorship through the creation of songs, cartoons etc. or the remix of existing ones was considered a crucial point.

The season against online censorship culminated in the organization of "Nhar 3ala 3ammar,"[41] a rally against online censorship to be held on May 22, 2010 in Tunis: two activists and members of the Tech Savvy community, Slim Amamou and Yassine Ayari, gave their names as the "official organizers" and were arrested just a day before the rally. After a quick transnational email exchange, a "plan B," was organized: a new call was circulated asking supporters to walk around or sit in the cafes in Avenue Burghiba simply wearing white. This experiment, with dozens of "people in white" going around in downtown Tunis, was the first flash mob organized in Tunisia. Similarly in Egypt, on April 6, 2009, an unusual demonstration was organized online, mainly using a Facebook page, asking people to stay at home for a day to show solidarity with textile workers striking and occupying factories in the region of the Delta.

Non-violent tactics, artwork, advertising tools, viral marketing and even irony have been widely employed by social movements during both the Tunisian and the Egyptian "revolutions." Some western mainstream media[42] excessively emphasized the similarities between these practices and those adopted by the Serbian movement *Otpor!* opposing Milosevic's regime in 2000, arguing that Arab revolutionaries have been trained and advised by their senior East European homologues who have now become "revolutionary coaches" within the framework of the US funded NGO *Canvas.*[43] Although it is true that both Tunisians and Egyptians have been in touch at some points with *Canvas,* it is highly reductive to describe the elaboration of these strategies as a pure "taking process": on the contrary, it is more appropriate to speak of a remix between different practices re-adapted to a particular context and goal.

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[40] Google Docs is a Google tool allowing users to create and edit documents online while collaborating in real-time.

[41] "Day against censorship."

[42] See as an example the article "Egyptians and Tunisians collaborated to shake History" by David Kirkpatrick and David Sanger published on February 13th 2001 in The New York Times (http://www.nytimes.com/). While acknowledging the importance of a cooperation across countries which started well before the uprisings, the article exaggerates the "Otpor! Effect."

[43] Canvas (Centre for Applied Nonviolent Action and Strategies), www.canvaspedia.org, is an NGO created in 2002 by former members of the Otpor! Serbian movement. The NGO organizes workshops around the world to train pro-democracy activists in non-violent tactics. Many US foundations and organizations have sponsored Canvas training sessions, among them: United States Institute for Peace, Freedom House and the International Republican Institute.

In Amman, in 2007 and 2008, Nasser Wedaddy with the American Islamic Congress organized two training sessions, attended also by Tunisian and Egyptian Tech Savvies, with *Canvas* and *Otpor!*. Moreover, some members of the *6th of April*[44] Egyptian movement travelled to the USA to attend *Canvas* training sessions[45] and Canvas Manual for non-violent resistance (released under Creative Commons license) circulated in both countries. However, many other different inputs and practices have been re-framed and re-used by these movements. To offer some examples, during the Arab Blogger meeting in 2009 material about different approaches to non-violent resistance was shared; some of the practices adopted during the Iranian uprising in 2009 to face the police and basiji attacks circulated online and were known by Tunisian and Egyptian activists; "no-global" movement know-how was familiar to the more politicized members (Alaa Abdel Fattah in Egypt) who have been in touch with European "antagonism." But the professional experiences in marketing, management, human resources and even journalism also seem to have been important in the definition of the movements' praxis. It should be also mentioned that the idea of a "tactical use" of the media for counter-hegemonic purposes developed by Lovink [2003b] and by Lovink and Schneider [2003] is highly congruent with the values and practices of remix culture and, also for this reason, often familiar at least to the more politicized ones among Tech Savvies. "Tactical media," as defined by Lovink, in fact has to be understood as a critical use – in many cases through a remix- of mainstream media's culture (slogans, images, music or even characters) to gain space within mainstream media, frequently virally or even through hoaxes.

From our interviews and conversations, it has emerged that the establishment of ad-hoc Google Groups, conference calls, direct messages (DM) on Twitter and phone calls between transnational network members were occasions to discuss strategies, share feedback on tested practices, re-adapt, remix and enlarge repertoires of action. This means that already existing networks cooperated to accomplish a task that, while not affecting everybody at the same time in the same way, was perceived

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[44] The 6th of April is a youth movement originally developed around a Facebook page created to call for a strike on the 6th of April 2008 in support of textile worker mobilization in the Upper Delta region. The creators of the page asked people to stay at home and wear black for a day to show solidarity with workers. In a few weeks the popularity of the page grew to 60,000 members and on the day of the "stay at home" protest a team of bloggers was out in the streets with mobiles and cameras to report on the effect of the mobilization and on regime reactions (Faris 2008). After this first action the movement kept increasing in popularity, mostly among Egyptian youths and some of its leaders (Ahmed Maher, Asma Mahfouz and Esraa Abdel Fattah) were among the organizers of the 25th of January 2011 demonstration which started the "Egyptian Revolution."

[45] Mohamed Adel, one of the coordinators of the 6th of April movement declared he was in Belgrade in Summer 2009 to attend Canvas seminars (Rosenberg 2011).

as a common goal to be achieved through the work of the whole community of practice.

However, with the crumbling of the saturation paradigm, the most important and decisive bridging function played by Tech Savvies in the area of praxis organization was in helping to establish "weak" relationships of cooperation between individuals and subgroups linked to a wide spectrum of "stronger" organizations within the national system. In this regard the management of information flows regarding different initiatives, strategies, tools and resources was crucial. According to our interviews and observations, Tech Savvy networks were already in touch with members of many traditional organizations: because some of them are Tech Savvies themselves (i.e. among Egyptian Muslim Brothers there are some influential and connected bloggers; some active members of the Tunisian General Labor Union have been in close touch with the *nawaat.org* community) or because of previous cooperation (i.e. the solidarity and the attention given by the Egyptian bloggers to the mobilization of textile workers starting from 2010 created many connections).

These connections, mediated by Tech Savvies through online activities, guaranteed circulation of information on the streets. Moreover, when constituents of traditional organizations joined the protests before leaderships had endorsed the uprisings – as in the case of young Egyptian Muslim Brothers (MB) joining Tahrir Square starting from January, 24 – the existence of an "alternative" system for communication and mobilization shown its power. Developing and expanding "loosely joined groups" [Weinberger 2002] Tech Savvies helped in the coordination of actions and in the establishment of virtuous cooperation where everybody was able to devote to the cause his/her own areas of competence and those of his/her organization. According to the protagonists' narratives, competence in organizing square demonstrations, keeping the order in a camp, establishing a security service, confronting the police – which were within the experience capital of traditional groups like Tunisian General Labor Union and Egyptian Muslim Brotherhood – were fundamental, in particular during the first phase of the uprisings, to make things work. Some of these practices have been socialized, online and offline, with other groups and individuals, becoming part of the repertoires of the whole movement. This does not mean that differences disappeared: in Tahrir square different groups occupied precise sectors of the square and, particularly after the fall of Mubarak, tensions emerged even on how to celebrate the event. However, the level of connectivity between groups was greatly increased.

The "Community Managers" of the Revolution

Our research shows that the idea that communities relying on self-organizing tools do not need organizers or managers is overly simplistic. Even within ecosystems where leadership functions are highly distributed among constituents, some subjects or sub-groups, because of the time they can dedicate to the common concern, because of their skills in using and developing tools or because of their "culture," become, de facto, "power" constituents or, in other words, leaders.

Considering what emerged from our work, I suggest that, in order to define this kind of leadership, "community management," a concept taken from the vocabulary of web communities [Sica and Scotti 2007], might be useful. Within online communities, a community manager is someone who is in charge of the community start up, assisting its development and coordinating its growth. Moreover, he is responsible for taking care that all the efforts made by members to self-manage the community are not frustrated.

Adopting this concept, I want also to re-emphasize the fact that this article is not aimed at suggesting a deterministic explanation of the relationship between the web 2.0 and the Arab Spring, nor am I claiming that the whole credit for the success in confronting the regimes in Tunisia and Egypt is due to the work of Tech Savvies. The community management they have been responsible for was not in fact the only action of coordination; on the contrary, various actors from cultural, political, religious and non-governmental fields played roles in mobilization, in some cases with a deeper grass-root reach. Crucial in this sense was also the function of some mainstream media, with Al Jazeera as a powerful enabler of unifying narratives [see Valeriani 2011] at national and regional levels.

However, as shown, the specificity of Egyptian and Tunisian Tech Savvies in their bridging function was that they adopted community management as their main task, supported by a common cultural ground in "remixing" values and practices. Being a good "community manager" [Sica and Scotti 2007], in fact, is not simply a matter of skills; it is also something strictly related to competence and expertise within a peculiar milieu. When connection on line becomes the easiest and cheapest gateway for coordinating information and organizing action, the "experts of the net" necessarily acquire a new social function. But, as shown, this function might overstep the net and become crucial even in coordinating offline activity.

Introducing the concept of "community management" is useful in understanding the different outcome of the work of the Tunisian and Egyptian Tech Savvies as compared to other scenarios of the Arab Spring. In fact, although it is impossible to ignore the fact that the Tunisian and Egyptian communities of Tech Savvies were,

and are, among the most active and connected (internally and externally), it should be pointed out that also in other Arab countries currently in turmoil Tech Savvy communities are present, with transnational connections and trying to play bridging functions. However, as stressed also by Bunce [2011], the situations in Egypt and Tunisia, as well as the strength of the different opposition forces, were similar and, although segmented, less "balkanized" compared to other countries of the region where, as in the cases of Syria and Bahrein, sectarian divisions are stronger and deeply affect social and political life [Owen 2004]. This observation is important in understanding that not only does the technological infrastructure not make the difference, but not even the work of the "managers" alone makes the difference: the composition of the community, and the social, political and economical context are still relevant.

As predictable in fact, political divisions emerging within the national political space after the revolutions both in Tunisia and Egypt, are making it more complex for Tech Savvies to have the same bridging function they had during the "Spring." However, as proved by Alaa Abdel Fattah with his idea of the *Tweetnadwa* meetings, Tech Savvies and remix culture are still at work in this sense. *Tweetnadwa* are open debates, organized in public places, tackling sensitive issues related to the future of Egypt and adopting some of the "tweet-sphere" rules: the speakers and all the participants are only allowed a 140-second response to each question (in a clear reference to the 140 characters of Twitter updates) and instead of clapping for speakers, participants wave their hands to simulate the act of "retweeting."

Appendix: Methodological Note

The methodological grounds of this research might be found in various arrays of qualitative analysis. Interviews with members of Regional Arab Tech Community were collected, in different periods, from 2007 to 2010. After the "Arab Spring" events in Tunisia and Egypt erupted (December 2010-February 2011), a new round of interviews and conversations with key figures of the Community having played active roles during the uprisings was conducted between March and May 2011.

A monitoring of selected Blogs as well as Facebook and Twitter profiles and of popular Twitter "hashtag streams" has been conducted, starting from 2009, through participating in conversations, information sharing and advocacy actions online. This approach was not aimed at carrying a traditional content analysis, but at developing an ethnography of online activities, useful to track down relationships and common projects among participants.

Analysis of schedules of meetings, lists of participants, written records, documents and pictures of tech events organized in the Arab region (with particular attention to Tunisia and Egypt) from 2006 onwards have been conducted. (For a relevant sample of the analyzed corpora, see notes 7 to 12, 15 to 17 and 20). Participant observations in events attended by Arab tech savvies; in particular the Al Jazeera Forums in Doha from 2006 to 2011 and Creative Commons Regional Meetings 2008 (in Doha) and 2011 (in Tunis) have been undertaken. Interviews, informal conversations, observations of online activities and participation in meetings and gatherings during and after the uprisings were carried out to understand how the already monitored communities acted within the movements involved in the Arab Spring.

Such an ethnographic approach was primarily aimed at investigating the process of the establishment of relationships (at local, national, regional and global levels) among Arab tech savvies. In the third column of tables 1, 2, 3, results of the network analysis are presented with reference to selected examples.

Also Wasserman and Faust [1994], just to mention one of the most quoted references, describe interviews, observation and work on archived records as proper qualitative methodologies for network analysis. Moreover the chosen methodology was considered fruitful to investigate the definition of shared values and practices defining the unifying culture of such communities, following an approach that is common in Cultural Studies [Pickering 2008]. Most of the stories, opinion and memoires were collected during informal conversations or gatherings attended by the researcher acting as a participant observer and, for this reason, direct quoting has been avoided. Precise reference (in note) to interviews has been introduced in the article just when the interviewee is a well-known public person and the researcher had previously disclosed the scholarly aim of the conversation.

Donatella Della Ratta, Creative Commons regional manager for the Arab World, should be acknowledged for her generosity in sharing with me a treasure of information, written records and material.

Appendix: Tables

T AB. 1. *Egypt (selected examples)*

Name	Web expertise	Communities
Alaa Abdel Fattah (expat.)	New media trainer, Open Software Developer, Blogger, Manalaa co-admin	Manalaa.org, Arab Techies, Arab Blogger Meetings, Foss National and Regional Events
Manal Hassan (expat.)	Open Software Developer, Blogger, Manalaa co-admin	Manalaa.org, Arab Techies, Women Techies meetings, Arab Blogger Meetings, Foss National and Regional Events
Ahmed Gharbeia	Online security expert, ICT consultant, online community manager, blogger	Creative Commons, Arab Techies, Arab Blogger Meetings, Foss National and Regional Events, Global Voices online
Rami Raoof	Digital security, Online media consultant, blogger	Creative Commons, Arab Techies, Global Voices online
Mona Sosh	Photo Blogger	Arab Techies
Nora Younis	"Power Blogger," web journalist	Arab Techies
Wael Abbass	"Power Blogger"	Arab Blogger Meetings
Wael Ghonim (expat.)	Marketing regional Manager Google, Admin "We Are All Khaled Said" Facebook page	"We are all Khaled Said" Movement
Ahmad Mekkawy	Open Software Developer	Foss National and Regional Events, Linux Community

Tab. 2. *Tunisia (selected examples)*

Name	Web Expertise	Communities
Sami Ben Gharbeia (expat.)	Advocacy Director at Global Voices online, nawaat.org co-admin, blogger, cyber security expert	Creative Commons, Arab Techies, Arab Blogger Meetings, Global Voices online, Nawaat.org, ATPD
Malek El Khadraui (expat.)	nawaat.org co-admin	Creative Commons, nawaat.org, Arab Blogger Meetings
Riad Guerfali	Lawyer expert in cyber law, blogger, nawaat.org co-admin	Creative Commons, nawaat.org, ATPD
Lina Ben Mhenni	Blogger, teaching assistant in Linguistics	Nawaat.org, Arab Blogger Meetings, Global Voices on Line
Howeida Anouar	Social media strategist, websites admin, blogger, photographer	Arab Techies, Women Techies meetings, nawaat.org. ATPD
Slim Amamou	Open Software developer, Pirate Party Member, ICT start up founder	Arab Techies, Arab Blogger Meetings, Foss National and Regional Events, Hackers' community, Pirate Party, TEDxCarthage
Yassine Ayari	Cyber security expert, manager ICT company, blogger, open software developer	Foss National and Regional Events, Hackers' community, Pirate Party
Houssem Aoudi	Digital strategist, Digital Marketing expert, TEDxCarthage organizer	Creative Commons, TEDxCarthage,

Tab. 3. *Regional and Global outreach (selected examples)*

Name	Country	Expertise	Community
Amira Al Husseini	Bahrein	Blogger	Global Voices on Line
Habib Haddad	Lebanon	ICT entrepreneur, ICT NGO	Creative Commons, Meedan
Nasser Wedaddy	Mauritania/ USA	Blogger, NGO, Lobbyist	Arab Blogger Meetings
Jacob Appelbaum	USA	Cyber Security expert, hacker, former Wikileaks security expert	Arab Blogger Meetings, Hackers community, Tor Project

References

Benford, R.D.

1997   "An Insider's Critique of the Social Movement Framing Perspective." *Sociological Inquiry* 67: 409-430.

Benford, R.D., and Snow, D.A.

2000   "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26: 611-639.

Bunce, V.

2011   "The Diffusion of Popular Mobilizations against Authoritarian Rule: Comparing 1989, the Color Revolutions, and the Ongoing Protests in the Middle East and North Africa" paper presented at Princeton University, April 21, 2011.

Campbell, J.L.

2005   "Where do we stand? Common Mechanisms in Organizations and Social Movements research." In *Social Movements and Organization Theory*, edited by G. F. Davis, D. McAdam, W. R. Scott, and M. N. Zald. Cambridge: Cambridge University Press.

Castells, M.

1996   *The Rise of the Network Society. The Information Age: Economy, Society and Culture Vol. I.* Cambridge (MA)-Oxford: Blackwell.

2007   "Communication, Power and Counter-Power in the Network Society*." International Journal of Communication* 1: 238-266.

Clemens, E.S.

1996   "Organizational Form as Frame: Collective Identity and Political Strategy in the American Labor Movement, 1880-1920." In *Comparative Perspectives on Social Movements*, D. McAdam, J. D. McCarthy and M. N. Zald. New York: Cambridge University Press.

della Porta, D., and Diani, M.

1999   *Social Movements. An Introduction.* Oxford-Malden (MA): Blackwell.

Della Ratta, D.

2009   "Second Arab Blogger Meeting over." www.arabbloggers.com, 19 Dec. 2009.

Della Ratta, D. and Valeriani, A.

2011   "Working on Technology, Working for Society: ICT Startups and Social Activism in Lebanon and Jordan." Paper presented at the workshop *Between Everyday Life and Political Revolution: The Social Web in The Middle East,* Università degli Studi di Napoli "L'Orientale," 21-22 March.

Diani, M.

2003   "'Leaders' or 'Brokers'? Positions and Influence in Social Movement Networks." Pp. 105-122 in *Social Movements and Networks*, edited by M. Diani and D. Mc Adam. Oxford: Oxford University Press.

Disney, J.L., and Gelb J.

2000   "Feminist Organizational ''Success'': The State of US Women's Movement Organizations in the 1990s." *Women and Politics* 21: 39-76.

Faris, D.

2008   "Revolutions Without Revolutionaries? Network Theory, Facebook, and the Egyptian Blogosphere." *Arab Media and Society* (www.arabmediasociety.com) 6.

2010   "(Amplified) Voices of the Voiceless." *Arab Media and Society* (www.arabmediasociety.com) 11.

Goldstone, J.A.

2001   "Toward a Fourth Generation of Revolutionary Theory." *Annual Review of Political Science* 4: 139-187.

Jasper, J.M.

1997   *The Art of Moral Protest*. Chicago: University of Chicago Press.

Keck, M.E., and Sikkink, K.

1998   *Activists Beyond Borders*. Ithaca: Cornell University Press.

Lessig, L.

2008   *Remix, Making Art and Commerce Thrive in the Hybrid Economy.* New York: The Penguin Press.

Lovink, G.

2002   *Uncanny Networks*. Cambridge (MA): MIT Press.

Lovink, G.

2003a   *My First Recession*. Rotterdam: NAi/V2_Publishing.

2003b   *The Dark Fiber. Tracking Critical Internet Culture.* Cambridge (MA): MIT Press

Lovink, G., and Schneider, F.

2003   "A Virtual World is Possible: from Tactical Media to Digital Multitudes" in *Journal de l'Archipel des Revues*, November. http://multitudes.samizdat.net/Virtual-world-is-possible-from

MacKinnon, R.

2004   "The World Wide Conversation. Online Participatory Media and International News." *The Joan Shorenstein Center on Press, Politics and Public Policy,* Working Papers Series n. 2.

McAdam, D., McCarty J.D., and Zald, M.N.

1996   *Comparative Perspectives in Social Movements.* Cambridge: Cambridge University Press.

Meikle G.

2002   *Future Active: Media Activism and the Internet*. New York: Routledge.

Melucci, A.

1996   *Challenging Codes. Collective Action in the Information Age.* Cambridge: Cambridge University Press.

Morris, A.

2000   "Reflections on Social Movement theory: Criticisms and Proposals." *Contemporary Sociology* 29: 445-454.

Morris, A.D., and Staggenborg, S.

2004   "Leadership in Social Movements." In *The Blackwell Companion to Social Movements,* edited by D. A. Snow, S. A. Soule, and H. Kriesi. Oxford-Malden (MA): Blackwell.

Oliver, P.E., and Johnston, H.

2000 "What a Good Idea! Ideology and Frames in Social Movement Research." *Mobilization* 5: 37-54.

Owen, R.

2004 *State, Power and Politics in the Making of Modern Middle East*, 3rd ed. London-New York: Routledge.

Pickering, M.

2008 *Research Methods for Cultural Studies.* Edinburgh: Edinburgh University Press.

Robnett, B.

1997 *How Long? How Long? African-American Women in the Struggle for Civil Rights*. New York-Oxford: Oxford University Press.

Rosenberg, T.

2011 "Revolution U" in *Foreign Policy*, February 16 http://www.foreignpolicy.com/articles/2011/02/16/revolution_u

Shirky, C.

2008 *Here Comes Everybody: The Power of Organizing Without Organizations.* New York: Penguin Press.

Sica, R., and Scotti, T.

2007 *Community Management. Processi informali, social networking e tecnologie Web 2.0, per coltivare la conoscenza nelle organizzazioni.* Milano: Apogeo.

Smith, J.

2004 "Transnational Processes and Movements." In *The Blackwell Companion to Social Movements*, edited by D. A. Snow, S. A. Soule, and H. Kriesi. Oxford-Malden (MA): Blackwell.

Snow, D.A.

2004 "Framing Processes, Ideology and Discursive Fields." In *The Blackwell Companion to Social Movements*, edited by D. A. Snow, S. A. Soule, and H. Kriesi. Oxford-Malden (MA): Blackwell.

Snow, D.A., and Benford, R.D.

1992 "Master Frames and Cycles of Protest." In *Frontiers in Social Movement Theory*, edited by A. D. Morris and C. M. Mueller. New Haven: Yale University Press.

Snow, D.A., Soule, S.A., and Kriesi, H. (eds.)

2004 *The Blackwell Companion to Social Movements,* Oxford-Malden (MA): Blackwell.

Tapscott, D.

1999 *Growing Up Digital: The Rise of the Net Generation*. New York: McGraw-Hill.

2008 *Grown Up Digital: How the Net Generation is Changing Your World*. New York: Mc-Graw-Hill.

Valeriani, A.

2011 "Al Jazeera e la rivoluzione si sono aiutate a vicenda." *Limes* 1.

Wasserman, S., and Faust, K.

1994 *Social Network Analysis. Methods and Applications.* Cambridge-New York: Cambridge University Press.

Weinberger, D.

2002   *Small Pieces Loosely Joined: A Unified Theory of the Web*. Cambridge (MA): Perseus

2007   *Everything is Miscellaneous. The Power of the New Digital Disorder.* New York: Holt.

Wenger, E.

1998   *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.

Westby, D.L.

2002   "Strategic Imperative, Ideology, and Framing." *Mobilization* 7: 287-304.

Williams, R.H., and Benford, R.D.

2000   "Two Faces of Collective Action Frames: A Theoretical Consideration. Current Perspectives." *Social Theory* 20: 127-151.

Zald, M.N.

2000   "Ideological Structured Action: An Enlarged Agenda for Social Movement Research." *Mobilization* 5: 1-16.

Bridges of the Revolution

Linking People, Sharing Information, and Remixing Practices

Abstract: The article investigates the organizational structure of the social movements that were successful in beheading the regimes in Egypt and Tunisia in early 2011. It argues that such a structure is consistent with some of the main features of the web 2.0 as a network of social relationships and shows how linking, sharing, and remixing have been the core practices behind those movements' organization. The article shows that this specific organization has been generated by the emergence of a new and heterogeneous élite of tech-savvies fully embracing what has been defined as a "remix culture." Tech-savvies acted as "bridge leaders" creating and maintaining networks connecting already existing and stronger – but often isolated – networks within society: factories, universities, unions, mosques, and families.

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