JANUS.NET
e-journal of International Relations

SOCIAL NETWORKS: COMMUNICATION AND CHANGE

Gustavo Cardoso

Coordinator of the Master Degree in CCIC of the University Institute of Lisbon (IUL), researcher at CIES-IUL and lecturer in Media and Society at ISCTE-IUL. He works with the Department for Communication and Performance Studies of the University of Milan. His research path has taken him to cooperate with European research networks, namely IN3 (Internet Interdisciplinary Institute) in Barcelona, WIP (World Internet Project) at USC Annenberg, COST A20 "The Impact of the Internet on Mass Media", COST 298 "Broadband Society", and COST 609 "Transforming Audiences". He was an advisor in Information Society and Telecommunication Policies for the Presidency of the Republic of Portugal (1996-2006), and in 2008 he was selected by the World Economic Forum as "Young Global Leader". Alongside Manuel Castells, he is the co-editor of the book "The Network Society: From Knowledge to Policy" and Associate Editor of the journal IJOC at USC Annenberg and of the IC&S journal published by Routledge. He is also a member of the evaluation panel of the European Research Council and of the European Science Foundation.

Cláudia Lamy

Student in the Master Degree Programme in Communication, Culture and Information Technologies (ISCTE-IUL), and a law graduate from the Faculty of Law (University of Lisbon). Over the past few years she has carried out research in the fields of Political Communication and New Media at institutions such as OberCom (Communication Observatory), Lini-ISCTE (Lisbon Internet and Networks Institute), CIES-ISCTE (Centre for Research and Sociology Studies), CIMDE-IPL (Research Centre for Media and Democracy), and ERC (Regulatory Authority for the Media). Her published works include approaches to Pluralism in the Media, Media Literacy, and Online Political Activism.

Abstract

Virtual social networks have brought about the possibility for open and plural debate, where all those with the necessary literacy skills and means are able to participate in the creation and dissemination of information. By pressing political agents and determining the "agenda" of a lot of the media, users demonstrate that we stand at an ideal platform for creating both real social movements and more or less fleeting events, as manifestos or virtual campaigns. Nonetheless, in order to understand the role of virtual social networks in today's world, we need to answer some prior questions. Are we facing a new communication model, whereby the product of "disinterested" interactivity creates an aura of confidence in disseminated information, often quite higher that that seen in the "old media"? Will that interactivity be a chance to fight-off citizens' growing detachment with regard to the "res *publica*"? Will we find in citizen-made journalism, transmitted through virtual social networks, the consecration of a true fourth power? On the other hand, can we call the distinct collective movements we have seen emerging true "social movements"?

The present article aims to examine this and other issues that come to the fore in the intricate social world of cyberspace.

How to cite this article

Cardoso, Gustavo; Lamy, Cláudia (2011). "Redes sociais: comunicação e mudança". *JANUS.NET e-journal of International Relations*, Vol. 2, N.º 1, Spring 2011. Consulted [online] on date of last visit, observare.ual.pt/janus.net/en_vol2_n1_art6.

SOCIAL NETWORKS: COMMUNICATION AND CHANGE

Gustavo Cardoso e Cláudia Lamy

Introduction

Communication and the media in general are not only windows to the world. Rather, they are sources of change, values, attitudes and ways of viewing the world, ideologies, views about the "other", possible worlds, and futures.

Television was, and still is, the box that changed the world; newspapers have launched the seeds of change from old to new regimes, and even at a time closer to us, newspapers, radio and the television did contribute, from Portugal, to change in East Timor (Cardoso, 2006). The Internet, blogs and social networks have given us distinct form of looking at Iran; in the U.S., the choice of a candidate for vice president was announced via SMS; in Mozambique, the popular uprising in September 2010 was organized via SMS and followed up in Maputo and the world via Facebook.

We waited about 50 years to see the emergence of a new communication technology that would question the importance of television in our society: we called it Internet. The reason why it has challenged the idea of supremacy of the TV as media has much to do with the way it provides information, entertainment, communication, and advertising space. However, there is more to it than that. Like television, the Internet has also evolved and this evolution eventually became a formidable instrument of communication and change. No two countries are alike, only the same technologies, and although the Internet has always been a social space for communication - not just an information space – by adopting the term Web2.0 we put ourselves in a position whereby our biggest motivation for using the Internet could be communication.

This new view about the role of communication in information societies (Castells, 2009) allowed us to see the role of communication in multiple events of social change, which we have witnessed over the past years in various geographical and social spaces.

Although there are many examples of appropriation of the so-called "social networks" in changing contexts, we chose to focus our analysis in the election of Mahmoud Ahmadinejad in Iran and in the protests around the "Green Movement". The choice of this example was due to the fact that we wanted an event that might be paradigmatic of the social appropriation of the media in social networks, but that also allowed comparison with other examples, as were the September 2010 protests in Mozambique and the election of Barack Obama in 2008. The reason is that change can be made not only via an electoral campaign through daily TV spins and social networks, because there are other contexts in addition to North American and European society where change takes place. There are many other possible communication practices leading to social change. However, if, in theory, we can all use Internet communication to change the practices and attitudes about what surrounds us, in practice there are a number of

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

previous choices to make. These choices are essentially choices on how to think about our relationship with the mediation mechanisms, and what degree of intervention we want to have. As Jonathan Taplin shows us in his blog[1], the way we want to relate with the world depends on us, and we can choose to merely observe or rethink the world and our role in it. However, whether we want to play an active role in change or not, change is underway, as explained by Manuel Castells (2009). For this author, the relationship between power and communication has never been so direct, and the first step to exercise that power today is to understand how it works. This analysis seeks to be a contribution to this exercise.

I. Networked communication and social networks

All societies are characterized by patterns of communication and not just by information models (Wolton, 1999, Colombo, 1993; Himanen, 2006, Castells 2006, Cardoso 2006). Our information societies have seen the emergence of a new communication model. This is a fourth model that can be added to the three previous ones and that can be placed in chronological order in terms of its social statement cycles (Ortoleva, 2004). The first model has been defined as interpersonal communication, which takes a bidirectional form between two or more persons within a group. The second model, also deeply rooted in our societies, is based on a one-to-many type of communication, whereby an individual sends a single message to a limited group of people. The third model, with which we have less experience in historical terms, boils down to the mass media, whereby, thanks to the use of specific mediation technologies, a single message can be sent to a mass of people, i.e. forwarded to an audience of unknown size, which, as such, is unlimited from the start (Cardoso 2008, Thompson 1995).

The fourth communication model, which seems to characterize our contemporary societies, is formed by the capacity for globalization of communication, along with the networking of the means for mass and interpersonal communication and, consequently, by the emergence of networked mediation under different patterns of interaction. These patterns may take the form of *Self-Mass Communication* (Castells, 2009), which takes place when using Twitter, blogs or SMS; *Interpersonal Communication Multimedia,* which happens when we use MSN or Google Chat or even Skype; *One-to-Many Mediated Communication,* when we use Facebook with our "friends" and, of course, the cases of non-mediated mass communication and interpersonal communication. All these patterns are based on the above-mentioned communication models and which, through the evolution of mediation, allow them to reconfigure a new communication model.

The organization of the uses and networking of the media included in this new communication model is directly related to the different degrees of interactivity allowed by the today's media (Cardoso 2008).

If it is true that we have built communication models in our societies, it is equally true that the main communication paradigms have shaped what the *media* of a given system can be (Cardoso 2008). Our current communication paradigms seem to be built around a rhetoric based mainly on the importance of the moving image, combined with

---

[1]   See.: http://jontaplin.com/

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

the availability of new ways of accessing information, and with new and innovative roles, which are now also delivered to users, and which has brought about profound changes in information and entertainment patterns.

Our contents - be it news, information or entertainment - seem to have changed thanks to the presence of content provided by actual media users and not just by the media *per se*, giving rise to the co-existence of different information models for different people. However, not only newsworthy information has changed, so has entertainment.

The innovation in entertainment models is reflected both in the availability of user-generated content, and in the amendments made by media companies on their search for new content and "shapes" of their experiences with the blurring of boundaries between traditional genres programming and new approaches to social values (such as privacy and private life), along with changes within the social appropriation of time, space and ethics, as reflected in the way stories are told and scripts are written.

The communication model developed in information societies, where the predominant paradigm of social organization is based on the network (Castells, 2002) is called *Networked Communication* (Cardoso, 2009). This model does not replace previous ones, but tends to link them together, producing new forms of communication, and enabling new ways of facilitating capacity, therefore communication autonomy.

In information societies, where the network is a central element of the organization, a new communication model is taking shape: this is a model characterized by a new interpersonal network, a one-to-many, which connects audiences, participants, users, broadcasters, and publishers in a single array of network media.

In a networked communication environment, mediation (Silverstone, 2006), media diets (Aroldi & Colombo, 2003), media matrixes (Meyrovitz, 1985), and the communication system itself (Ortoleva, 2004) have been transformed. These transformations in the relations between distinct media, which currently experience more of a networking interconnection than a true convergence - either in terms of hardware*,* services or networks – turn mediation into an integrated experience, combining the use of different media: from the telephone to TV, the newspaper to the video game, from Internet to the radio, from movies to mobile phones, placing users, their practices and necessary competences once more at the centre of analysis (Livingstone, 1999; Cardoso, 2007; Cardoso, 2008).

It is in this context that the use of social networking evolves, sometimes as *self-mass communication,* as in the case of Twitter, others as *mediated communication from one-to-many,* as with Facebook.

II. Are the internet "social networks" social networks?

"The purpose and potential of these large virtual social networks has not yet been t unveiled, but no doubt they affect and promote ways of relating"

(Machado & Tijiboy, 2003).

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

The study of networks, which started in the field of Exact Sciences with Ëuler's Graph Theory, translated into the field of Social Sciences in three models: the *random networks model,* the *small-world model* and the *scale-free networks model* (Recuero 2004: 4).

Erdös and Rényi's *random networks model* explains the workings of social networking through the party metaphor*: a mere connection between each of the guests at a party would be enough for everyone to be connected by the end of it* (Recuero, 2004: 4). Thus, from an individual common to all, a cluster is formed by a group of interconnected people, and this connection allows a future relationship between various clusters*.*

Granovetter's *small-world model* distinguishes social ties, separating strong ties (among close friends) from weak ones (between mere acquaintances): if the former bring together people who have shared interests, creating clusters or communities, the latter allow not only the interaction between individuals belonging to different clusters, but also between the communities to which they belong, thereby creating a social network (Recuero, 2004: 5-6). From this theory, Watts and Strogatz demonstrated how easy it is to establish a connection among members of different communities: the average distance between any two people on the planet does not exceed a small number of others, and their interaction simply requires that some random links between groups take place (Buchanan, 2002).

The *scale-free networks model* emerged as a critique to Watts' vision: networks do not have an inherent randomness but specific laws, such as the preferred connection *("rich get richer")* (Barabási, 2003). Moreover, the networks are not equal and the worlds are not small, given the existence of highly connected factors (hubs). Accordingly, any individual will prefer to connect to another who has a large number of connections, as this will allow him to access them all. This is evidence of the existence of a preferred connection: the hubs are "the rich that get richer", given that, as they have an immense range of contacts, they will also be the most sought after by those around them (Recuero, 2004: 6).

However, can we transfer these models on to online social networks?

In the *random networks model*, there seems to be added value in explaining the connection between hubs and other participants through randomization - after all, the former only contact others to promote their own profiles, ignoring the characteristics and interests of the latter. However, not all invitations in social networks are based on this premise, as many are justified by personal interests, such as reconnect with friends, establish business contacts or find a love relationship (Recuero, 2004: 7 et seq.).

In the *small-world model*, the degree of separation between members of an online social network is very small, it is true, but not because this is a rule based on two types of ties (weak and strong): it is so because there are individuals who see accumulating contacts as an end in itself, even if they never interact with those whom Recuero calls "friends around the world" or Barabási describes as hubs*, "people who are highly connected, with a vast number of friends, and who contribute significantly to the disappearance of distance between individuals in the system "(Barabási,* 2004: 7 et seq.).

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

As for the *scale-free networks model,* Recuero advocates that it is impossible to apply it to its full extent in the absence of a preferred connection: the hubs are the ones that randomly invite other users to their contact list and not the reverse, to serve their sole purpose (the *"collection of profiles.")*. In the absence of any interaction other than the original, can we really take these elements as belonging to a true *social* network? (Recuero, 2004: 7 et seq.).

The analysis and explanation of how virtual networks work just from the models applied to non Internet-mediated networks is difficult, because many of its features do not fit or even contradict the premises of the models presented. However, this does not invalidate the existence of social networks in the online medium, as they exist from the moment in which individuals are active in this context. We are just facing a reality that fits to its own context the limitations and advantages of the interests of social ties shared by all users, (Cardoso, 2003; Schroeder, 2005: 2). To speak of forms of social relationship on the Internet is to discuss how citizens use the new communication possibilities, and how they stand up to their advantages and difficulties. Or, as Bennett affirms, *it is the interaction between the Internet and its users - and, in turn, their interactions in material social contexts - that constitute the matrix within which we can find the power of new media in creating different spaces for discourse and coordination of actions* (2003:18).

Some authors see nothing exceptional in these new networks, which will be just ways of sociability transposed to new platforms: it is, for example, the opinion of Wellman, for whom *"Computer-Mediated Communication is just one of many technologies used by people and through which existing community networks communicate* "(Hamman, 1998). It is clear that Wellman bases his views on the premise that the purpose of most virtual contacts is to be transposed to life offline*,* which is not always the case: many virtual links tend to be kept in those spaces, and may never translate into to face-to-face contact, not least due to geographical distance (Recuero, 2004: 9).

In the discussion about the territoriality of communities on the Internet, a distinction between online communities and virtual communities is advanced. Online communities are associated with the recreation, in cyberspace - the area without the size and characteristics of physical space – of places which were already associated with offline communities. In turn, virtual communities are associated with the establishment of communities in cyberspace without any correspondence with a pre-existing physical space, that is, meeting points for all who share a common set of interests, but whose meeting in the same cybernetic location is not possible given the geographic distance or other constraints (Cardoso, 1999).

From the cross analysis between the network theories and the empirical dimension associated with sites called Social Networking Sites (SNS) like Facebook, Hi5, Orkut, or microblogging like Twitter, it seems clear that we have social networks in the sense of social interaction spaces and creation of autonomy.

III. Networked social practice on the internet

There is a basic question in the analysis of social networks on the Internet: what do we do with social networks? Between the technological potential and actual use lies a whole domestication process (Silverstone, 1994) that marks where the technology had

evolved in terms of its use. The figure below shows the kind of diverse SNS uses in Portugal

Fig I – "Which tools do you use most on your social network account?"
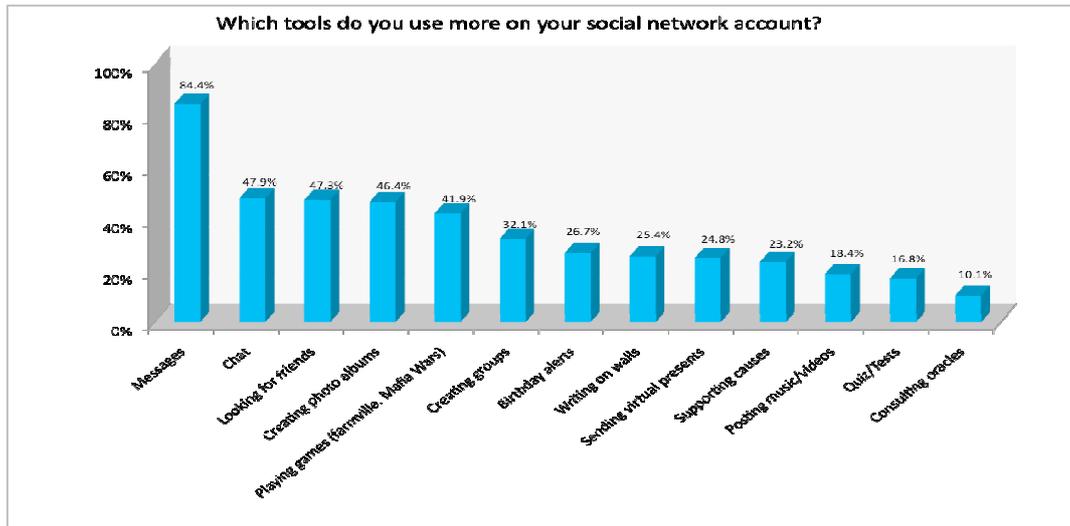
Source: CIES ISCTE, *A Sociedade em Rede*, 2010

N=1255 (total responses); n=35 (users of the Internet and social network platforms)/ 25% of total respondents; 56% of Internet users.

From these uses, a possible division stands out in the activities aimed at strengthening social ties with friends and acquaintances (Messaging, Chat, Birthday Alerts, Writing on the Wall), managing social capital (Search for Friends, Sending Gifts, Games, Group Creation), entertainment *(*Quizzes and Tests), identity expression (Video Posting), and social intervention (Supporting Causes). This article will focus primarily on social intervention in Internet networks. There are very significant developments with regard to online social networks, especially in relation to the spread and reliability of information: for example, CNN has said it fears more competition from networks like Facebook or Twitter than from other television broadcasters[2]. Trust in this type of sources appears to have been encouraging their use, supplanting the search for information in other media. Of course we can never forget that we are analyzing the cyber world and not world reality - as we know, television and its contents are still the medium citizens give priority to, in particular due to their easy access to the technology used and the fact they do not need immediate specific literacy. Given the exponential growth of networks promoted by Facebook and Twitter, we need to better understand what they offer.

Like other social networks, Facebook allows one to create a profile, whereby the user enters information ranging from name, age or marital status, to data such as ideological and political views, or causes espoused. There are mechanisms for maintaining privacy, if not anonymity: the use of nicknames and the non-placement of photos or personal information, although not the most common options, are real

---

[2]   See.:   http://www.agenciafinanceira.iol.pt/empresas/media-cnn-facebook-twitter-hi5-agencia-financeira/1146270-1728.html

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

possibilities. Users can support causes, institutions or people, and they also have the opportunity to join debate forums. They can also communicate through asynchronous messages (*a priori*, only visible to them), chats*,* and through public posts, accessible to all their contacts. In the case of the latter, users' direct contacts (or indirect, if so determined) may comment on content and have the possibility to share it.

Currently, Facebook is the social network on the Internet that brings together a greater number of supporters (517.480,460 users worldwide, and 149.976,980 individuals registered in Europe alone[3]), giving rise to such devotion as to elicit the emergence of pathological behaviours[4][5]. As a result of this success, its advertising revenues have been increasing exponentially, surpassing the highest expectations: in 2009, they reached $ 800 million, with net income of tens of millions[6]. Thus, Facebook becomes a "mediated communication from one-to-many", since each user knows who his/her "friends" are, as he/she authorizes their "friendship." Only after acceptance by the friend can he start being a "friend" to the person who invited him.

Twitter has other characteristics, because it is a form of microblogging[7] based on the instant publishing of text of up to 140 characters. Twitter allows the use of instant text messaging, primarily to share experiences and opinions among communities of citizens (Java, Song, Finin & Tseng, 2007: 2; Miard, 2009: 2). However, not everyone uses it in the same way: whereas some are constant sources of information and commentary, others just watch the dissemination of opinions, without active participation.

According to a study conducted on these microbblogers*,* the most common posts focus on the daily routine, on what the user is doing at the moment and on his/her particular mood (Java, Finin, Song & Tseng, 2007: 6/7). In what regards talks, there is no possibility for direct response to a message posted by a third person, as with Facebook, which is why users have chosen to use the "@" symbol followed by the username of the user with whom they want communicate.

The dissemination of constantly updated daily information is also one of the most interesting applications of Twitter, and has already proven to allow a very rapid awareness of the user population, apart from being a simple way for those who do not have other ways of communicating their indignation with regimes that are dictatorial or restrictive of freedom of expression[8] (Correia, undated: 4). In fact, due to the media convergence *,* it is now possible to use mobile phones for text messaging instead of accessing the homepage*,* enabling the dissemination of a variety of content from any location.

Of course all this ease of access and unrestricted content has less positive implications: the danger of misinformation, especially if propagated by the strongest hubs. Rumours

---

[3]   See.: http://www.facebakers.com/countries-with-facebook/
[4]   Obsession medical clinics: http://www.ionline.pt/conteudo/52583-viciados-no-facebook-ja-ha-clinicas-tratar-obsessao.
[5]   See.: http://www.facebakers.com/countries-with-facebook/
[6]   See:http://www.tvi24.iol.pt/media-e-comunicacoes/facebook-redes-sociais-media-internet-agencia-financeira/1171052-5239.html.
[7]   It differs from blogging, particularly because it only allows a small number of characters and because it is related to a rate of updates that is much greater than blogging (Java, Song, Finin & Tseng, 2007: 2)
[8]   The organisation *Reporters Sans Frontières* (v.g. http://en.rsf.org/) fights for press freedom. It has headquarters in Paris and offices in several countries. Its site, built in three languages, maps out the aggressions of authoritarian governments against journalists and the media (Moraes, 2001: 8).

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

are quickly repeated and amplified through this network, especially if generated or shared by members with more contacts.

Between supporters and pessimists, both with strong arguments on the matter under consideration, the truth is that social networking on the Internet and in other mediation areas, such as telephone networks, force us to rethink the social and political societies of the 21st century. What motivates individuals to participate in new forms of social relationships through mediation?

The idea of a platform in which all citizens are invited to rationally discuss the issues of the society they belong to, facilitating the flow of information and knowledge, is the ideal fourth estate: the media in general should act like that, allowing grassroots voices to reach decision makers (Hartley, 1992) - the materialization of Habermas' concept of public sphere, the *Agora* of Athens or New England's town-hall*,* something that does not seem to occur today (Cardoso, 2003). This challenging but desirable view of the media was heavily criticized, especially because it would never be equalitarian: if, in the past, only the literate bourgeoisie could access the contents of newspapers in order to foster the exchange of ideas, nowadays only an elite could participate fully in such an occurrence.

Given this state of the art, some authors see in new media in general, and in online social networks in particular, not just one way of achieving the debate that has not taken place in traditional media*,* but a means for civic participation, where common interests allow soliciting opinions, decisions and interventions in specific areas. In part, this seems to find some echo: as Castells points out, *"in the international arena, new transborder social movements, rising to defend women's causes, human rights, environmental preservation and political democracy, are making the Internet an essential tool for disseminating information, organizing, and mobilizing "(2002:* 475).

This possibility is even more relevant if we look at the general disappointment with political life and the increasing distrust in democracy[9] and its institutions. Discussing, deciding, and implementing decisions would be transposed or shared between modern institutions and the public through the Internet (Cardoso, 2003). To the extent that the mass media and political elites, in their eagerness to regain new audiences and supporters, have already expressed their interest in joining computer-mediated communication, especially social networks. As Castells argues, the study of the transformation of power relations in the new communication space should consider the interaction between political actors, social agents and the media business (2007:254).

The use of these networks have proven a skilful way of communicating without trace, which is useful in countries where communication is still open to explicit censure, as in China or Myanmar (Ekman, 2007: 39). In fact, censorship or manipulation of information by political groups or lobbies becomes more difficult: horizontal transmission of information, often live, by citizens creates an aura of truth very different from the one that currently fills the political world (Castells, 2007:251).

---

[9]   According to Eurobarometer, in relation to Portugal, *"only 40 percent of respondents consider themselves satisfied with the functioning of national democracy, compared with a European average of 53 percent. The levels of satisfaction with the functioning of national democracy are superior only to those expressed by the new Member States (NMS-12) like Slovakia (40%), Slovenia (37%), Hungary (23%), Latvia (21%), Bulgaria (21%), Romania (18%) and Lithuania (18%)* (Executive Summary, 2009, p. 4).

This form of "citizen journalism" is further simplified by the current convergence of platforms[10]: the possibility of placing any information in the web world via mobiles or by transferring content through online networks lends itself not only to increased globalization of social interaction through virtual networks, as it allows almost simultaneous circulation of any event that deserves the attention of its transmitter. Moreover, the use of mobile phones to spread images and consequently raise the awareness of the international community has proved essential in situations as diverse as Seattle, or in the case of the Iranian and Mozambicans protests.

In the Internet arena, organizations and people gather together to change something in many different themes and perspectives, fighting for visibility and projecting the consequences. As Moraes writes, *"The Internet is fostering the struggles of civil society groups to promote social justice in a world that globalizes inequalities of all kinds. (...) Most of these entities aim to strengthen civil society in the process of universalizing values and democratic rights. They bring together concrete or symbolic interests and needs, promoting actions in favour of citizenship* "(2001:2).Therefore, social networks play an extremely important role with regard to socially, economically or politically excluded groups, giving voice to minorities or enabling the raising of resources and the setting up of and networks that share their aims.

Organizations have been using the Internet for a long time to spread their purposes and actions more easily at no cost, and to raise the largest number of members. These practices led to the creation of intervention tools, such as virtual campaigns, discussion groups, online manifestos, and links murals*, creating an *arena for further mobilization.* The possibility of a reaching a range of people without the limitations imposed by gatekeepers (as happens in television or in the press) makes Computer-Mediated Communication (CMC) extremely relevant to all citizens and NGOs whose objectives include denouncing, exercising pressure and raise political awareness[11] (Moraes, 2001: 3; Bennett, 2003: 3). Virtual NGOs have also begun to make full use of their interconnection with the aim of sharing expertise, resources, costs, and space, and each node incorporates new users who potentially become producers and transmitters of information (Moraes, 2001:3). There is no doubt that social networks have allowed a more open and pluralistic debate, becoming promoters of a civic and political participation that otherwise appears to be fading away (Cardoso & Neto, 2003).

Even if the globalization phenomenon means we run the risk of uniformity of thought and critical analysis, it is also this phenomenon that allows once-distant regions become accessible to all: their problems, victories, and movements are not only broadcast but can find supporters in remote locations around the globe. Accordingly, we have a conjugation of individual matters conceived for local use and a global world: in fact, people think in the context of their own realities, but use virtual media for its diffusion, thus acting globally (Castells, 2007:249). For this reason, the Internet and other technologies, such as mobile phones and digital video, enable people to organize politics in a way that overcomes the limitations of time, space, identity and ideology,

---

[10]   Over 70 million Europeans already access the Internet via their mobile phones, and do it once a week for one hour a day on average - Study of the European Interactive Advertising Association (EIAA), see http://dn.sapo.pt/inicio/ciencia/interior.aspx?content_id=1512132&seccao=Tecnologia.
[11]   Take the case of Amnesty International, one of the first NGOs to use the Internet: in 2001 it had one million members in 160 countries and 50 websites (Moraes, 2001:7).

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

resulting in the expansion and coordination of activities, which possibly would not occur by other means (Bennett, 2003: 6).

Activist networks on causes have been addressed differently by distinct authors, and some see an "army on the net" (Holstein, 2002, unpaged) or a "smart mob" (Rheingold, 2002) in them. However, Bennett points to the difficulty in accepting such warlike or close to interest groups views when the non-institutional organization and the absence of a hierarchy to respect are essential to understand the networking work of activist communities (2003: 9 et seq.). As such, the author proposes the approach presented by Gerlach and Hines, called SPIN: we are talking about *segmented, polycentric* and *integrated* networks:

- *segmented,* given the fluidity of its borders in relation to formal organizations, non-institutionalized groups and individual activists and individuals, where cooperation is constant;

- *polycentric,* since there are no leaders but centres to coordinate the activities of networks;

- *integrated,* due to its horizontal structure, assuming activism is carried out by all members.

The first case study of a popular movement organized through the Internet took place in Seattle in 1999, at the meeting of the World Trade Organization. The world saw not only the demonstration of some fifty thousand people filling the streets of Seattle in a protest against Neoliberalism, but also protests in 82 cities in the U.S., Europe and South America (Bennett, 2003: 25; Moraes 2001: 9).

In these cases, the Internet proved to be important both for the organization of demonstrations and for the global transmission and dissemination of events. Thus, the protest gained a global force, determining the agenda setting of the media and, accordingly, of public opinion. As a result, the political authorities were forced to cancel the meeting, showing that the "losing" forces of the economic system had managed, through a conflict relationship, to seize the power they claimed (Della Porta and Diani, 2006: 167).

IV. Networked communication and social movements

A social movement is a collective attempt by a certain number of people to change individuals or institutions and social structures

(Zald and Ash, 1966).

Nowadays, activism seems a regular practice that is well received by users of social networks: environmental causes, defence of human rights or reaction to political facts are subject to frequent attention. However, does this reflect social movements, or is it simply the sum of a set of shared acts of individual protest? Many authors have tried to define what, among various possible collective actions, is commonly called *social movement.* This debate has generated both demand for greater rigour in the

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

description of the aspects that make up this reality (creating more or less open notions), and the denial of the actual concept[12].

For Della Porta and Diani (2006: 20), social movements necessarily comprise three components: *conflict relationships;* intricate *networks among the actors involved,* and a lasting *collective identity* that goes beyond individual will and the mere event limited in time. Let us examine these aspects.

At the outbreak of a social movement, individuals are involved in conflict relationships with clearly identified adversaries, both seeking to control the same object. Thus, those directly involved in social movements should be considered to be challengers/defenders of existing institutional authority, whether of political, corporate, religious, or educational nature (Snow, Soule & Kries, 2007: 8/9).

The definition of strategies, coordination of initiatives and regulation of individual behaviour depends on ongoing negotiations between individuals and the organizations involved, developed through contacts made through informal networks. This organization can be of various types and levels, but in no case an individual, by himself, represents a move, because the latter assumes the existence of shared ambitions by different actors.

Finally, these actors share a collective identity that reflects a commitment to the cause beyond a certain number of protests or the total of specific campaigns (Snow, Soule & Kriese 2007: 10/11). Thus, as stated by Della Porta and Diani (2006: 23), *the dynamics of a social movement is taking place when individual episodes of collective action are perceived as components of a more enduring action, rather than discrete events* (...). Even if a representative democracy presupposes that the interests of citizens are represented, the disappointment of the latter with regard to institutionalized political organizations cannot but be noted, leading to the development of new forms of participation (Cardoso & Neto, 2003: 108). Along with institutional tools that have long been used, such as the work provided to political parties or attending political meetings, new means of conducting politics are emerging, like signing petitions, boycotts, occupations, demonstrations, cutting off traffic, and non-trade union strikes (2006: 166), some of which are initiated, and certainly disseminated, through social networks.

The concept of *protest* is, itself, controversial. Being a form of collective action, it is not the only one, and it does not necessarily have a radical or conflict intent. Rather, it is an unorthodox course of action aimed at mobilizing public opinion to exercise pressure on policy makers (Della Porta and Diani, 2006: 165).

This takes us back to the question on the origin of social movements: given the influence they already hold, organizations standing close to power do not resort to this kind of strategy. Rather, *protest is the political source of the non-powerful* (Lipsky, 1965): those committed to a common cause and who intend to press their institutionalized "opponents" need their actions to have visibility to garner the sympathy of public opinion.

---

12   For example, this is the position of Dieter Opp, when he states he prefers the notion of protest group to that of social movement, defining it as a community of actors who want to achieve their goal or shared objectives, influencing the decisions of a target (2009: 41)

Support given to causes in the context of social networks typically arises as a result of the action of formal or informal groups with ability to mobilize others, because its success depends on the capacity to get the word out and get third parties to trigger an action which, at least, results in public support for a given position. The argument that we can leave here is that support to causes in social networks have characteristics of conflict relationships, of smaller or larger networks among stakeholders, and of formation of a collective identity. This last point, which we may consider to be more controversial, is echoed when membership starts to be listed in the individual profiles of those who lend their support and, as such, becomes a shareable part of the personal identity with regard to third parties. Therefore, it can be argued that social movements also are forged on the Internet's social networks.

V. From Washington to Tehran, passing through Maputo: Networks between symbolism and action

"We can see that virtual social networks are major circulation channels in the flow of information, links, values and social discourse, which expand, delimit and fuse territories

" (Machado & Tijiboy 2003).

Internet use during the election campaign of Barack Obama in 2008 has often been cited, being mentioned as one of the main reasons for the electoral success of the current U.S. President. The campaign website*,* Obama's appearance at various social networks - particularly on Facebook - the mailing list of supporters, among other things, left a strong imprint on this campaign, which became somehow an inspiring model for several candidacies that have since taken place almost everywhere in Europe. (Plouffe, 2009).

One could argue that the model for the Obama campaign was appropriated and reinvented in the 2009 Iranian post-election context, in the form of a social movement generated in social networks and brought to the streets of Tehran. Given the election results of June 2009 – with Mahmoud Ahmadinejad declared the winner two hours after the close of the polls - the Iranian population uprised because it believed the result to be fraudulent. Supporting the main opposition leader, the reformist candidate Mir Hussein Mousavi, citizens organized themselves in what is called the *Green Movement*[13,] which is still active today despite all state police efforts to end it[14].

Given the popular reactions and feelings shared in them, we aim to demonstrate not only the existence of a genuine social movement developed and implemented through online social networking, but also the existence of virtual communities that use it as a protest tool. Moreover, the essentiality of CMC is so obvious that those targeted by the movement not only censor the information conveyed as they even derail the network connections in key moments of domestic politics.

---

[13]   See.:   http://translate.google.pt/translate?hl=pt-PT&sl=en&tl=pt&u=http%3A%2F%2Fwww.cbsnews.com%2Fstories%2F2010%2F06%2F10%2Fopinion%2Fmain6568553.shtml&anno=2

[14]   The International Federation of Human Rights (FIDH) said that about two thousand people were arrested in just 15 days of protests: http://aeiou.expresso.pt/musavi-insiste-em-novas-eleicoes-no-irao=f523600

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

First, the conflict relationship between those who have institutionalized power and authority (in this case the government of Ahmadinejad and the Guardian Council that validated his alleged victory) and those who want to remove such power from those hands towards a change of regime (which includes, of course, not only Mousavi and all his political supporters, but also citizens who, in the streets of Tehran and in online social networks, require a new ballot.)

The organizational format of all those who wish to contest the elections is in fact based on an informal network. Without any pre-established hierarchy or original vertical relations, citizens defend their common interests in a democratic relationship of equality that, of course, never questioned the power of initiative that is more or less present in each of the existing links. Mousavi may incite protest, but the initiatives associated with the Green Movement do not all depend on him. At best, he may be a hub, but he can never be regarded as a leader in the relations among the communities that profess the common interest of democracy and pluralism in Iran.

As important as the previous references, we are in the presence of a collective identity: we are not talking about a fleeting protest, a one-off demonstration: we have a collective feeling shared by the masses that justice behind a political process should occur. To this end, efforts are brought together, forms of communication are created among all supporters (individuals or collective), personal accounts are developed so that, globally, everyone can follow the progress of political and social developments in Iran.

The growing awareness of the essentiality of the virtual world of politics has a place not only among citizens: the actual traditional media are starting to pay attention to content published by virtual communities, to petitions circulating through them, and to peaceful demonstrations that are being organized in this way. Indeed, the former do not pay much attention to demonstrations: as they focus on the "now" ignoring the information context, activist actions that not translate into violent demonstrations or protests seldom capture media attention, which means, not infrequently, that the media receptors have complete ignorance of the purposes or intentions of the organizations involved (Bennett, 2003: 3).

The fact that Twitter was the channel that warned about the poor coverage of the Green Movement by traditional media strikes us as an example of what has been said before. In fact, *"on 13 June 2009, when protests began to escalate, which was ignored by the Iranian media, information on Twitter flowed in real-time*[15.] Referring specifically to CNN, the network created a gate watching movement in which citizens questioned the quality and the true intentions of the information conveyed by the media.* Influenced by this warning or not, the truth is that this company has redoubled its attention (De Tolledo, undated: 5). Thus, the agenda setting of the activists with the media in general can produce changes in how priorities are established in the media (Web, undated: 4 /5) - how to *"encourage" forgotten "stories", marginalized sources and the return to civil society and its informal dynamics at the expense of prefabricated and selected information focused on institutional mechanisms* "(undated: 5 et seq.). In addition, there is the fact that political and economic interests do not always turn away from the media, and even match those shared by opponents of social movement (Moraes, 2001: 4; Castells, 2007: 250). This is the case in Iran: by manipulating the

---

15   See.: *Twitter: A window to Iran*: http://aeiou.visao.pt/twitter-uma-janela-para-o-irao=f513147

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

national media*,* which can only convey expressions of support for Ahmadinejad, the current leader has even prohibited the coverage of protests by international media[16]. Zuckerman believes that the *reason why social media is so interesting is that international media do not have correspondents on the ground*[17].

Aware of the dynamism shown by these communities that use the new media as a major interaction vehicle, Ahmadinejad's supporters operated in two distinct ways: they not only censored content and hindered the use of sites, blogs[18], virtual social networks, and even mobile telephone network, but also imprisoned those responsible for transmitting information not seen as being favourable to the regime[19]. Moreover, this awareness did not start just after protests had began, otherwise the suspension of Twitter hours before the elections would not be justified[20]. With regard to this type of censorship, users of CMC have been trying to warn about ways to disseminate information, especially when using the two most common tags: *iranelection* and *gr88* (Reference to the Green Revolution and the current year in the Persian calendar: 1388)[21] [22]. In these cases, Twitter users were advised not to reveal their IP address, not to reveal in any manner the name or location of a genuine source of the Green Movement, or even rushing to respond, since the security forces were using the same social network[23].

Thus, it seems undeniable that the Iranian Government of Mr. Ahmadinejad is afraid of the media in general and online social networks in particular: in fact, there is no point in censuring spaces that have no power at home or abroad. Although censorship does not advocate the essentiality of social networks, it seems undeniable that censorship, especially in key political occasions, shows it finds them important, even if only potentially.

As in other social movements or collective actions, in the case of Iran, online social networks have also been heavily used. If we examine them, we will see a wide range of virtual communities sharing a common purpose, their members sharing a relationship of equality and fairness not using any hierarchies; in these social networks, space is often exceeded as national issues are transposed to international reality, and joint determination is often accomplished through cybernetic mediation. With this type of communication (many-to-many), citizens and NGOs have succeeded in mobilizing supporters around the world, aligning global protests and collecting signatures for petitions, giving global visibility to a national issue.

---

[16] At the announcement of a demonstration, the professional licences of journalists working for foreign media were declared invalid for a period of 48 hours: http://aeiou.expresso.pt/gen.pl?p=stories&op=view&fokey=ex.stories/551691

[17] See.: http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm

[18] When a student protest was organised, "authorities blocked most student websites": http://aeiou.expresso.pt/gen.pl?p=stories&op=view&fokey=ex.stories/551691

[19] "Following protests against the reelection of Mahmud Ahmadinejad, four thousand people were detained, and, of these, over fifty bloggers and journalists": http://aeiou.expresso.pt/gen.pl?p=stories&op=view&fokey=ex.stories/541076

[20] See.: http://boingboing.net/2009/06/15/iranian-election-upr.html

[21] *The* only two *hashtags considered to be legitimate used by bloggers in this context are #iranelection and #gr88; all others may induce the thinning out of conversation* http://www.boingboing.net/2009/06/16/cyberwar-guide-for-i.html

[22] An example is: when acceding Mousavi's page on Twitter, one reads: *#iranelection In case of the arrest of any of the Green movement's leaders, take to the streets in Tehran: Enghelab to Azadi. Tell everyone. (10:50 PM Dec 30th, 2009)*

[23] See.: http://www.boingboing.net/2009/06/16/cyberwar-guide-for-i.html

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

An example illustrating the importance of the Twitter online social network took place on 15 June 2009, when the possibility of suspending the network for maintenance purposes was advanced. Faced with the concern of Iranians users and followers throughout the world, given that only two days had elapsed since the release of the elections results and the start of protests, those in charge of Twitter opted to defer the procedure[24]. This concern seems plausible when we note that one of the most popular pages on Twitter, with more than 25,631 followers, is about the reformist candidate[25]. Out of curiosity, it must be noted that Mousavi also has a Facebook profile[26] with 3,966 contacts, a YouTube channel[27] with almost 70,000 views, and a Flickr page where he collects pictures of the protests against him[28].

Fig. II – Profile of Mir Hossein Mousavi on Facebook

Source: http://www.facebook.com/home.php?#!/mousavi?ref=search

Nevertheless, several authors defend that we do not face a real revolution in the means for coordinating social movements, but a utility for increasing global visibility, sometimes merely the result of a particular international context.

We believe it is impossible to justify all the development and coordination of a social movement through online networks. Mishra argues that the number of citizens using such networks is too small when compared with the size of the protests that we have seen[29]. And if it is true that citizens have the means to give their personal account of experiences and to access to all sorts of information and values shared by certain communities (Castells, 2007: 256), the fact remains that not everyone will have access to these platforms. However, the peculiar Iranian case should be pointed out: with a very young population (average 26.4 years of age[30]), more than 23 million Iranians had

---

24   See: http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm
25   See: http://twitter.com/mousavi1388
26   See: http://www.facebook.com/mousavi1388
27   See: http://www.youtube.com/mousavi1388
28   See: http://www.flickr.com/photos/mousavi1388
29   See: http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm
30   See.: http://www.middleeastdirectory.com/cs_iran.htm

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

Internet connection in 2007 and 29.77 million had mobile phones[31] - these are relevant numbers considering that Iranian population in 2008 was just under 66 million (From Tolledo, undated: 4).

Any such analysis must be tempered by the fact that, as in other online communities, many of the participants are mere spectators who belong to a Facebook group or have a host on Twitter without actually materializing this support in the political world offline (Chong, 2009: 18). It is more reasonable to say that only some citizens use Twitter to organize protests in Iran, with blogs, SMS and even offline communication media being the most common means used for internal organization.

We must not forget that not everyone involved may be interested in active participation in online social networks: the "profile collectors", who rarely seek interaction with their contacts, are examples of this. Conversely, there are also real "promoters of public debate", as already noted by some authors: "*there are strategic agents in the networks who act as facilitators of links and information flow, and who stimulate debate, propose, challenge other members of the group to participate and generate or relieve tension in the articulation of differences"(Machado* & Tijiboy, 2003:4).As it happens in a society that is not mediated by the Internet, not all citizens are interested in active participation, for which reason we should not expect interaction and interest from everyone involved in social networks. We must not forget that people are the ones using digital platforms to achieve their purposes, not the reverse: through them, curiosity may be raised, and it may be possible to inform and even educate. But networks can never override the human will to use it: we need to show the possibilities and be aware that they are basically just that. In essence, the real question is whether the users of virtual communities use them as a means to make their voices heard when no other means permit it, if they only reproduce online the attitudes they have offline, or if all those with no previous interest in public debate develop new interests and skills to be socially involved.

However, mobilization and the international publicity of events already owe a lot to that social network, which also allows connection with political exiles (Chong, 2009: 18): as Correia states, "*one of the most important features of computer-mediated communication is its ability to allow the many-to-many dialogue and its capacity to facilitate communication among geographically dispersed groups and individuals* "(Correia, undated: 4).

Still, not all results in the use of this and other virtual networks are positive: the unlimited proliferation of information runs the risk that, instead of informing, it will create information chaos. Basically, we speak of a general confusion and the emergence of certain forms of autism (Rheingold, 1993), of the multiplication of personal visions, little reliable information or with less clear intentions that might lead to what Correia calls the "*lack of reflexivity paralyzed by the new fetish value that is speed in real time*" (undated: 6). Public sphere as a democratic achievement faces, in fact, an obstacle: the so-called digital divide, the critical stance that allows us to disentangle information from noise or knowledge from "readings based solely on any common sense" become more essential to the realization of democracy through online networks (ibid, 2006: 401; Correia, undated: 6 et seq.) However, it seems safe to consider the possibility that information survives outside the context of news and the

---

[31]   See.: http://www.middleeastdirectory.com/cs_iran.htm

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

exclusive mediation of journalists. We do not live in a reality of mass communication or in a context where it is totally irrelevant. Networked communication (Cardoso, 2009) presupposes coexistence and interdependence not only of communication models but also among many different actors, be they users, journalists or participants (Silverstone, 2006).

VI. How Far Do The Voices Get To?

As we have seen, debate and information flow seem to be, in itself, a big plus. Despite the fact that many of the views advanced in social networking sites wish to change the *status quo,* and wish to be heard by the powers in general, will they be consequential?. Silveirinha believes not: *"in cyber-organizations, due to the fact that people do not develop face-to-face actions, strong bonds of 'affinity groups' can be limited to maintaining a kind of 'virtual public' without power for action and influence, simply replacing political battle with cyber-fighting, which is more or less inconsequential "* (undated: 12). Boyd also argues that there is no direct link between the information conveyed through new technologies and those who should be its recipients: although technology provides a public forum in which people can express different political views, this does not guarantee that such views are heard" (2005: 3). According to the author, although the population has been enticed to participate politically through virtual networks, the truth is that, as a rule, new technologies have not allowed those raised voices reach higher levels of political decision (2005:7). In this specific case, the analysis is not easy and the results are not peaceful. First of all, this is because we have to analyze what results are expected and, ultimately, what political participation means to each of us. Should information and debate, without an end other than themselves, be disregarded? The fact is, this way the Iranian authorities are questioned, the power of "insiders" is undermined and the opponents lose sympathy. However, are the outraged voices attaining their prime objective – i.e., to recover the freedom to vote and disintegrate the Ahmadinejad government? According to Chong, the current regime begins to reveal some cracks: the release of some prisoners to demonstrate the good will of Islam, or even the way it has fought so ineffectively against the international dissemination of information, showing some weakness before rebel citizens and their supporters. All this may lead to future political and social change in Iran. However, this is mere speculation, given the fact that Ahmadinejad holds a military regime behind him (Chong, 2009:24). On this aspect, Boyd recalls that democracy can not be looked at in purely quantitative terms, or based on institutions seen as political agents *per se,* the process itself being of utmost importance: *it is important to encourage contact and influence among different groups, but without crushing the individual. People should be able to find individual meaning in the process* (2005:11).

The Iranian Green Movement also represents a practical example of the adoption of a networked communication model, where multiple mediation technologies are interconnected and around a given objective. Thus, we can say that in the context of protest, there are representations about the role that each media can have – i.e. the media matrixes (Meyrovitz, 1985) - in achieving the goals of political autonomy. In addition to these representations, there are communicative autonomy strategies based on media diets (Colombo, 1993) that combine different technological networks with the

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

aim of managing social networks, either through Bluetooth, mobile phone networks or the Internet. The Iranian case discussed here also shows the prevalence of social networking over networked technology, as exemplified by the adoption of Bluetooth for using SMS after the telephone network was cut off. In this context, the population resorted to Bluetooth to distribute digital flyers and videos in public places such as cinemas, parks and public transport. Somehow, the same procedures can be detected in Mozambique's protests in September 2010 where, after the announcement of price increases of essential goods, like bread, an SMS was circulated calling for protest. These messages led to protest, which was followed by conflict with the authorities on the streets of Maputo and other areas of the country, resulting in several deaths. As a means to manage this conflict, and before announcing that prices would not increase, either the government or the actual companies blocked the sending of SMSs for several hours, only allowing voice communication and data access to the Internet. The Mozambican protests also allowed the emergence of information practices based on the relationship between newspapers and social networks, such as the newspaper @*verdade*. During the times of greatest tumult in the streets of Maputo, a journalist from @*verdade* and Facebook friends of both the newspaper and the journalist, exchanged information on safe places and on the scale of protest in different parts of the city from the street, via Blackberry or home and office computers. This journalist also mediated, certified and validated incoming information to people on Facebook. In turn, this sharing space on Facebook led to the rise of a campaign for peace in Mozambique and was also through @*verdade* on Facebook that questions were posed on who had a given operator and could send messages or not.

Somehow, the Mozambican case shows us a dual reality when it comes to social networking. On the one hand, some have access only to mobile phone networks and not to mobile Internet – due to the cost of equipment and of data connections. Those are the ones who protested in the streets against the cost of living. On the other hand, there are those who use other social networks, Facebook in this case, to understand what is happening around the protest and not be caught by it. Finally, we have the government and the telecommunications companies that can handle what type of use can be permitted in terms of access and control of access gateways to communication.

What all three geographically and socially different examples (U.S., Iran and Mozambique) show us is a present where, regardless of where we are or where we look, an area of *Networked Communication* is germinating. We need to bear this paradigm in mind to be able to understand how causes are supported and how protests are carried out in our times.

Bibliography

AROLDI, P. & COLOMBO, F. (2003). *Le Età della Tv*, Milano:VP Università

BARABÁSI, A. (2002). *Linked. How Everything is Connected to Everything else and What it means for Business, Science and Everyday Life* in Raquel da Cunha Recuero (2004), *Comunidades virtuais na Internet: Considerações iniciais*, available at www.bocc.ubi.pt, [viewed on 20-09-2010]

BENNETT, W. (2003). *New Media Power: the Internet and global activism* in *Contesting Media Power*, Nick Couldry and James Curran, Rowman and Littlefield, available at http://depts.washington.edu/gcp/pdf/bennettnmpower.pdf, [viewed on 20-09-2010]

BOEDER, P. (2005*). Habermas's Heritage: The Future of the Public Sphere in the Network Society*, Magazine First Monday, Volume 10, No. 9, available at http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1280/1200, [viewed on 20-06-2010]

BOYD, D. (2005). *Sociable Technology and Democracy*, available at http://www.danah.org/papers/ExtremeDemocracy.pdf, [viewed on 20-06-2010]

BUCHANAN, Mark (2002). *Nexus: Small Worlds and the Groundbreaking Theory of Networks* in Raquel da Cunha Recuero (2004) *Comunidades virtuais na Internet: Considerações iniciais*, available at www.bocc.ubi.pt, [viewed on 21-09-2010]

CARDOSO, G. & Neto, P. (2003). *O Movimento por Timor: mass media e os protestos online* in *Novas Formas de Mobilização Popular*, Porto: Campo das Letras

CARDOSO, G. (1999). *A Internet Enquanto Comunidade: uma caracterização qualitativa e quantitativa da realidade portuguesa,* in *Internet, Telecomunicações e Sociedade de Informação – 2000-2010*, Lisbon: Instituto de Comunicações de Portugal;

CARDOSO, G. (2003). *"Internet"*, Lisbon: Quimera

CARDOSO, G. (2006). *Os Media na Sociedade em Rede*, Lisbon: Fundação Calouste Gulbenkian

CARDOSO, G. (2007). *The Media in the Network Society: Browsing, News, Filters and Citizenship*, Lisbon: lulu.com and CIES-ISCTE, available at http://www.obercom.pt/en/content/mPublications/35.np3, [viewed on 20-09-2010]

CARDOSO, G. (2008). *From Mass to Network communication: Communicational models and the Informational Society* in International Journal of Communication, available at: http://ijoc.org/ojs/index.php/ijoc/article/view/19/178, [viewed on 20-09-2010]

CASTELLS, M. & CARDOSO, G. (2005). *The Network Society: From Knowledge to Policy*, DC: Johns Hopkins Center for Transatlantic Relations

CASTELLS, M. (2002). *A Sociedade em Rede*, Lisbon: Fundação Calouste Gulbenkian

CASTELLS, M. (2006). *Observatorio global: crónicas de principios de siglo*, Barcelona: La Vanguardia Ediciones

CASTELLS, M. (2007). *Communication, Power and Counter-Power in the Network Society*, available at http://www.itu.dk/stud/speciale/specialeprojekt/Litteratur/Castells_2007%20-%20Communication%20power%20in%20the%20network%20society.pdf, [viewed on 20-09-2010]

CASTELLS, M. (2009). *Communication Power*, Oxford: Oxford University Press;

CHONG, S. (2009). *Social Media and the Social Movements in Contentious Politics: Understanding New Movements in Iran and Egypt,* available at *www.scribd.com,* [viewed on 20-09-2010]

COLOMBO, F. (1993). *Le nuove tecnologie della comunicazione*, Milan: Bompiani

CORREIA, João Carlos (undated). *Cidadania, Comunicação e Literacia Mediática*, available at http://www.bocc.uff.br/pag/correia-joao-carlos-Media-Publico-Literacia.pdf, [viewed on 20-09-2010]

DE TOLLEDO, G. (2009). *Conflitos Pós-eleições no Irão e Ciberactivismo no Twitter*, available at http://www.scribd.com/doc/17882410/Conflitos-poseleicoes-no-Ira-e-Ciberativismo-no-Twitter, [viewed on 18-09- 2010]

DELLA PORTA, D. and DIANI, M. (2006). *Social Movements – an introduction*, USA: Blackwell Publishing

DIETER OPP, K. (2009). *Theories of Political Protest and Social Movements*, New York: Routledge

EKMAN, C. (2007). *Cyber Activism and SMS Propaganda,* available at http://kiosk.nada.kth.se/utbildning/grukth/exjobb/rapportlistor/2007/rapporter07/ekman_carolin_07101.pdf, [viewed on 18-09-2010]

HAMMAN, R. (1998). *The Online/Offline Dichotomy: Debunking Some Myths about AOL Users and the Effects of Their Being Online Upon Offline Friendships and Offline Community*, in Raquel da Cunha Recuero (undated), *Comunidades virtuais - Uma abordagem teórica*, available at www.bocc.ubi.pt, [viewed on 20-09-2010]

HARTLEY, J. (1992). *The Politics of Pictures: the creation of the public in the age of popular media* in Pieter Boeder (2005*), "Habermas's Heritage: The Future of the Public Sphere in the Network Society"*, Magazine First Monday, Volume 10, No. 9, available at http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1280/1200, [viewed on 20-06-2010]

HIAMANEN, P. (2006). *Challenges of the Global Information Society* in Manuel Castells, M. & Gustavo Cardoso (2005), *The Network Society: From Knowledge to Policy*, DC: Johns Hopkins Center for Transatlantic Relations

HOLSTEIN, W. J. (2002). *Online, the Armies Have No Borders*, New York Times, available at http://www.nytimes.com/2002/04/28/business/business-online-the-armies-have-no-borders.html, [viewed on 20-09-2010]

JAVA, FININ, SONG & TSENG, *Why We Twitter: An Analysis of a Microblogging Community*, available at http://www.springerlink.com/content/5jx017u8158r7q14/, [viewed on 20-09-2010]

LIPSKY, M. (1965). *Protest and City Politics*, Chicago: Rand McNally & Co

LIVINGSTONE, S. (1999), *New Media, New Audience?* New Media & Society 1 (1): 59-66

MACHADO, J.R. & TIJIBOY, A. V. (2003). *Redes Sociais Virtuais: um espaço para efectivação da aprendizagem cooperativa*, available at http://www.cinted.ufrgs.br/renote/maio2005/artigos/a37_redessociaisvirtuais.pdf, [viewed on 20-06- 2010]

MEYROVITZ, J. (1985). *No sense of Place. The impact of Electronic Media on Social Behavior*, New York: Oxford University Press

JANUS.NET, e-journal of International Relations
ISSN: 1647-7251
Vol. 2, n.º 1 (Spring 2011), pp. 70-92
Social networks: communication and change
Gustavo Cardoso e Cláudia Lamy

MIARD, F. (2009). *Mobile Phones as a Tool for Civil Resistance*, available at http://www.digiactive.org/wp-content/uploads/research3_miard.pdf, [viewed on 20-09-2010]

MORAES, D. (2001). *O Activismo Digital*, available at http://www.bocc.ubi.pt/pag/moraes-denis-ativismo-digital.html, [viewed on 20-09-2010]

ORTOLEVA, P. (2004). *O Novo Sistema dos Media*, in Paquete De Oliveira, J.M.; Cardoso, G.; Barreiros, J., *Comunicação, Cultura e Tecnologias de Informação*, Lisbon: Quimera

PAQUETE DE OLIVEIRA, J.M.; CARDOSO, G.; BARREIROS, J., *Comunicação, Cultura e Tecnologias de Informação*, Lisbon: Quimera

PLOUFFE, D. (2009). *The Audacity to Win – The Inside Story and Lessons of Barack Obama Historic Victory*, New York, Viking

RECUERO, R. C., (2004). *Comunidades virtuais - Uma abordagem teórica,* available at http://www.bocc.ubi.pt/ , [viewed on 20-09- 2010]

RHEINGOLD, H. (1993). *The Virtual Community: Homesteading on the Electronic Frontier* in João Carlos Correia (undated), *Cidadania, Comunicação e Literacia Mediática*, available at http://www.bocc.uff.br/pag/correia-joao-carlos-Media-Publico-Literacia.pdf, [viewed on 20-09- 2010]

RHEINGOLD, H. (2002). *Smart Mobs: The Next Social Revolution,* New York: Perseus;

SCHROEDER, S. (2005). *The Internet as a Tool for Political Activism in China,* available at

http://globalmon.civiblog.org/_attachments/1774557/Chinainternettoolforpoliticalactivism2.pdf, [viewed on 20-09-2010]

SHIHAO, C. *Social media and social movements in contentious politics: Understanding new movements in Iran and Egypt*, www.scribd.com

SILVEIRINHA, M. J. (undated). *Novos Media, Velhas Questões*, available at http://bocc.ubi.pt/pag/silveirinha-maria-joao-novos-media-velhas-questoes.html, [viewed on 20-06-2010]

SILVERSTONE, R. (1994*). Television and Everyday Life*, London: Routledge

SILVERSTONE, R. (2006). *Media and Morality: on the Rise of Mediapolis*, Oxford: Polity;

SNOW, SOULE & KRIESI (2007). *The Blackwell Companion to Social Movements*, Oxford: Blackwell Publishing

THOMPSON, J. B. (1995). *The Media and Modernity*, Cambridge: Polity Press;

WOLTON, D. (1999). *Internet et Après? Une Théorie Critique des Nouveaux Médias*, Paris: Flammarion

ZALD and ASH (1966). *Social Movement Organizations: Growth, Decay and Change* in Dieter Opp (2009), *Theories of Political Protest and Social Movements*, New York: Routledge

Reports and news stories:

Department for Communities and Local Government, UK. *On Line Social Networks, Research Report*, available at http://www.communities.gov.uk/documents/communities/pdf/1000435.pdf, [viewed on 18-09-2010]