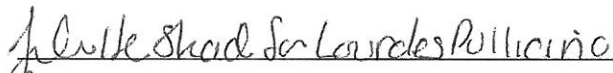
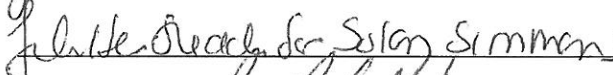
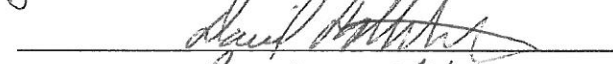




COMMUNICATION, REVOLUTIONS AND CONFLICT RESOLUTION - ICTS AS  
INSTRUMENTS OF THE DEMOCRATIZATION PROCESS

by

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A Thesis  
Submitted to the  
Graduate Faculty  
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Communication, Revolutions and Conflict Resolution - ICTs as Instruments of the  
Democratization Process

A thesis submitted in partial fulfilment of the requirements for the degree of Master of  
Science at George Mason University, and the degree of Master of Arts at the University  
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## **LIST OF ABBREVIATIONS**

Communication Information Participation .....	CIP
Information and Communication Technologies .....	ICTs
Online Dispute Resolution.....	ODR

## **ABSTRACT**

### **COMMUNICATION, REVOLUTIONS AND CONFLICT RESOLUTION - ICTS AS INSTRUMENTS OF THE DEMOCRATIZATION PROCESS**

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George Mason University, 2012

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This thesis is presented as a preliminary and explorative endeavor about the role Information and Communication Technologies have, or may have, in the field of Conflict Prevention and Conflict Resolution. Even if this field hasn't been strengthened by years of academic research, its relevance is increasingly emerging in relation to social and political contexts where processes – more or less conflictual – are characterizing new forms of civic and political participation, encouraging democratization movements in public life. Relying on a selected body of literature on the topic, this thesis work begins by a socio-political perspective on the impact of ICTs as new forms of information, communication and participation. It then develops an analysis concerning different uses of these technologies by social actors holding different levels of power, and finishes with the focus on the potentialities ICTs have in relation to the Conflict Resolution field.



## **INTRODUCTION**

When thinking about communication in the field of conflicts, peace building and peace enforcing, the shared awareness is that any further development in the field of communication technologies, particularly for the societies that are in the condition to use these new media effectively, will have many and relevant implications compared to past discoveries. The media revolutions that are affecting our daily interaction with the external world have implications on all the fields related to the study on the human being. From anthropology and psychology, to social studies, politic sciences and economy studies, many theories are dealing with the spread of technological tools as a means for a new type of communications. Therefore also the Conflict Resolution and the Peace studies have been recently involved in this topic.

The hypothesis underlying the thesis is that populations involved in conflicts, and specifically people of developing countries, can strengthen their social and political expectations and make them effective, thanks to the contribution of these new technological media, specifically if considered with their three attributes of communication, information, and participation (CIP).

This dissertation will be focused on these three elements, and from the result of the analysis on the relation between these elements and the conflict resolution's field, several projects will be presented in the effort to frame where and how these media have been included. Two main guidelines will follow the presentation of this dissertation, two movements that have been distinguished between bottom-up and top-down directions of the participatory inclusion of civil societies in the decision-making processes.

The implications about the ICTs in the broad field of Conflict Resolutions (CR) are many and these are often related to the different branches on which CR's studies are divided. One of these 'branches' is the Online Dispute Resolution (ODR). This field has been developed in recent years on disputes that can be quickly resolved through the web. Compared to the uses of ICTs on broader and more meaningful levels, ODR is however a start from which analyze the relations between these new media and the CR field. Considering a dispute between two individuals, an exemplificative case is the one offered by eBay, which allows users to overcome issues related to payments and shipping of objects without involving instruments other than virtual spaces. This example has been studied by Colin Rule, former director for the Online Dispute Resolution at eBay and PayPal, now CEO at Modria.com, an online website that follows the classical steps of Conflict Resolution (diagnosis, negotiation, mediation, and arbitration) to resolve web-based disputes.

In a recent interview by Julia Wilkinson for eCommerce Bytes web site,<sup>1</sup> Colin Rule has underlined how these instruments resulted in effective and positive outcomes when an issue between sellers and users was raised for payments and/or not received objects. Another website, odr.info which is the ‘home of the National Center for Technology and Dispute Resolution’<sup>2</sup>, directed by Ethan Katsh,<sup>3</sup> has the purpose of studying and expanding the knowledge about digital dispute resolution in a short time space. This dissertation is not only oriented toward this issue, but it involves other fields, fundamentally political science and sociology, a comprehension of which is necessary to understand and define effective roles and the potentiality that ICTs have in conflict or in crisis situations.

The question arises regarding the use that people can make of ICTs to build nets of relations between them and the institutions, them and the other people, them within the society. This shows how education and culture, together with technologies and communication instruments can improve or even resolve a situation of conflict. New media are subjected to the different destination in the use; as entertaining tools these technological instruments can be used for information, awareness, culture, but also for manipulation, control and violence.

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<sup>1</sup> Available online at: <http://www.ecommercebytes.com/cab/abu/y211/m06/abu0289/s05> (Last visited on 4 September 2012).

<sup>2</sup> As cited on the homepage. Available online at: <http://www.odr.info/> (Last visited on 8 August 2012).

<sup>3</sup> A brief bibliography about Ethan Katsh is available at the following website: <http://odr.info/katsh> (Last visited on 8 August 2012).

The power and effectiveness of ICTs, this being the instrument used to spread messages, has historically revealed its enormous and effective outcomes. The introduction of the printing press in the mid-XV Century by Johannes Gutenberg was a revolution in all the fields concerning 'mass communication' for informative and participative purposes like the religious, political, commercial, and academic ones. Considerations about the printing press, and how it began to be available for everyone and that the knowledge could be shared among all the people provided by education, and by printing shops, can be made under many perspectives that interested the development of different outcomes.. Under the religious perspective, for example, it is important to mention Luther and his work of translating the Bible into the German language, overcoming the necessity of an interpretation by qualified individuals. In addition, printed books started to gain more relevance, for the accessibility and the interpretation of many materials, thereby questioning the concept itself of culture. In other words, the introduction of the printed press, other than just being a technological improvement, soon became the reason for an irreversible shift in the culture and in the structure of the society. The reaction of the 'legitimate holders' of the knowledge, which at the time were represented basically by the Church, had negative outcomes in the approach that this revolution has been welcomed. Banned books that were spreading other interpretations that deviate from those imparted by the Church were burned, along with books about scientific discoveries, translations of religious books, and all the books related to imaginary worlds where the figure of God was not considered.

However, the use of these media and their diffusion in societies around the world could not be stopped by the institutions that were unwilling to lose part of their power.

The transformative process of the society, as well as the reaction of the political and economic powers to the technological innovation of the mid-XV Century have many common characteristics with the introduction of ICTs in sociopolitical, economic and cultural environments of our time. If it is true that the revolution created by the internet was quicker and more radical than the printed press, the telephone, the radio or the television, the mechanisms related to the social impact of this media, and their consequences on the many aspects that characterize societies are yet to be defined. There are several examples of how the internet has twisted the way people were living only 15 years ago. For the purpose of this dissertation, it is important to underline how the process of including the internet in societies of a globalized world is a process in itinere, it is not possible to state conclusive assumptions about the outcomes of this inclusion. The use of the internet for social, mass-oriented purposes is still a recent discovery and its outcomes are different depending on the many implications that will be discussed in the following pages. In relation to Gutenberg's innovation, the way the political power is reacting to the use of social media in today's conflicts, it may even be compared to the mechanisms behind the redefinition of the people's identities. In other words, the informative character of the web can lead to an active involvement of people in their communities, challenging political powers in the pursuit of more participation and transparency. Information and communication are two aspects that will lead us to an

understanding of how a global awareness, like the conditions citizens of ‘underdeveloped countries’ are living in, will contribute in the development of local or regional NGOs. Working with the ICTs toward a process of self-consciousness/awareness for these citizens will help these populations in the democratization process in regard of a more transparent and inclusive participation of them in the decision-making process.

The Arab Spring are the socio-political revolutions from which my interest for this subject began to be translated into research, involving essentially considerations about the effects of the so called eParticipation, or political participation through the ICTs.

The thesis is divided into four main sections, which are useful to define and understand the relations between the use of the ICTs and the conflict resolution field.

Chapter I will provide a theoretical background to the five concepts of ICTs. These are as follows: eParticipation, Continuous Democracy, eGovernment, eGovernance, and eDemocracy. These concepts need to be defined because it is often unclear what the exact distinction among them is. In order to see how these new forms of communication can be useful to the CR field, classic situations of conflicts and how they can be resolved or eased will be described in detail. In addition, as an integration between these concepts in the CR field can reveal a form of violence, there will be a reference to classic forms of violence as defined by several authors of the CR field (a.o. structural, direct and cultural violence – Galtung, 1969). After a broader definition of the concepts

that will be used for the analysis of the dissertation, the first chapter will also identify those technologies that can be defined properly as ICTs. With regard to the common meaning, in fact, it will be presented as a personal conceptual interpretation that will aid in simplifying the analysis itself. Therefore satellite televisions, radio and the internet will be considered in their influences in the civil society, in the democratization process, and in the participative role that these instruments implied under a CR perspective.

Once the theoretical framework is defined, Chapter II will focus on the ICTs as instruments directly related to the democratization process. In other words, the analysis will cover the three main elements of communication, information, and participation (CIP) that are characterizing the different uses of ICTs in socio-political movements and, broadly speaking, in the CR field. Therefore CIP implications within the two different bottom-up and top-down participatory movements are going to be analyzed in a way to understand the different mechanisms in which ICTs can positively contribute in the democratization process.

This is fundamental to understand how ICT tools used by both representative institutions and civic societies can ease or even resolve situations of conflict. In particular, CIP and bottom-up and top-down movements are related with each other and are synthetized in the concept of eParticipation. Theorists and scholars agree that, once an individual is informed about his condition, he is able to communicate and share this perception freely with others. There will be a participation of a collectiveness of actively

involved citizens, which, thanks to the ICTs, can produce outcomes unbelievable in the past decades. This is because of the globalized environment in which information and ideas are shared, where local episodes of violence, political involvements of civic societies or even uprisings, are not only a matter of internal socio-political situations, but become part of a globalized society that can contribute and help for a definition of positive outcomes.

But the analysis proposed in this dissertation is not oriented only toward over-positive considerations about ICTs. There are several elements that can impede this kind of perspective, obstacles that are even part of the technology itself. Digital divide, for example, is the generic term that has been used to describe the limits about the applicability of these technologies on a global scale.

This will be described specifically in Chapter III, where social media is going to be analyzed both as a tool and as a space. These are virtual spaces, where and thanks to which people can build opinions and ideas in a virtual environment that is capable of positive outcomes in a situation of conflict. The interpretation about digital divide developed in this dissertation will be presented in Chapter III, where an understanding of the limits of ICTs is going to be the subdivision between digital divides in the access and in the uses.

This distinction is necessary when related to technological developments that are evolving faster than the theories related to them. In other words, what the main theories



about digital divide were assessing a decade ago are, following the interpretation of this dissertation, no longer reflecting the actual development of this concept. What emerged in recent years was, even where the access to new technologies was becoming a reality, that digital divide cannot be reduced to a technological impediment deriving from the availability of technologies or economic resources. Therefore digital divides have to be distinguished between those related to the access and those that more actual if related to their usage in Western societies.

Once this distinction has been defined and contextualized, Chapter IV will consider that application of ICTs in the field of Conflict Resolution. After a historical introduction about the different theories that characterized the evolution from the role of states to the role of NGOs in the International Relations arena, several sources, considered as the pillars of the relations between ICTs and CR, will be presented in relation to those projects that interest different categories of ‘information dissemination’, ‘networking and learning’, ‘early warning and Conflict Prevention’, ‘operations and support’, and ‘Post-Conflict Reconstruction’: focusing therefore on the analysis that stands more in relation to the field of Conflict Resolution.

The conclusion will be briefly summarizing the main findings that have been reported and discussed in the thesis. It will further underline the hope that theoretical and operational fields of CR and IR will increasingly include a critical and deep consideration of the contribution of ICTs to the democratization processes and political participation.

## **CHAPTER ONE**

Before entering in the specific of the relevant elements of this dissertation, this chapter is intended to present the conceptual content of Information and Communication Technologies (ICTs) in relation to the field of politics, sociology and conflict resolution. Some examples from the field are going to be presented using the contexts of the Arab Spring and of the Middle East area in general, as sociopolitical environment in which to analyze the rise and the development of internet-based tools in society.

As general as it may sound, the purpose is to define the path that will begin with a broader definition and conceptualization of the ICTs, to describe and understand the context from which key concepts like eParticipation and continuous democracy are to be found.

Technological progress is the storyline through which users shifted their uses of, and their relationships with, the media. Communication science has studied this process, where new technological improvements in the media have influenced the whole essence of human's life. Italian professor Massimo Baldini in his book *Storia della Comunicazione* (Baldini, 2003), provides several insights on the different stages in the way people communicate, which shaped our society as we know it today. The author argues that human history can be described as a series of different ensembles in which the

dominant technology of communication had an effect upon people's perceptions at a given time.

Another Italian professor, Giovanni Boccia Artieri, stated that,

[...] communication is the emerging form of the coevolution media/society. Communication is the emerging dimension of the combination between society and technological media, which, turning into a system, develops their function of making visible to the same society, beyond the theory, that combination. (Boccia Artieri, 2004, p. 18)<sup>4</sup>

Under the perspective of technology as a fundamental divider for different eras, Baldini defines three main moments of human history: 'oral culture and power of the memory', 'manuscripts or chirographic culture', and 'typographic culture'.

The introduction of electrical technologies opened the door to the 'electrical and electric media culture', characterized by radio, television, mobile phones, and the internet.<sup>5</sup> Baldini cites Marshall McLuhan when he argues that the telegraph was the first instrument through which messages could be transmitted faster than the 'messenger'. Baldini further underlines how the telegraph has enabled human beings to enter, albeit inconspicuously or perhaps unconsciously, in a new culture characterized by electric and

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<sup>4</sup> Original in Italian. '*[L]a comunicazione è la forma emergente della co-evoluzione media/società. La comunicazione è la dimensione emergente dell'accoppiamento fra società e tecnologie mediali le quali costituendosi in sistema svolgono la propria funzione di rendere visibile alla società stessa, oltre che alla teoria, tale accoppiamento.*' (Boccia Artieri, 2004, p. 18). *My translation.*

<sup>5</sup> As examples of instruments used mainly in recent time, other examples of electric and electrical inventions are of course the telegraph, photography, movies, typewriters, printers, and all the XX Century technological discoveries that characterized the passage between societies confined to geographical spaces and the so-called *global community* (McLuhan).

electronic media (Baldini, 2003. p.84). This shows that the first characteristic of electrical technology, namely that of the immediacy by which the message is transmitted.

The historical contextualization of this shift, between the ‘typographic culture’ and the one of ‘electric and electronic media culture’, is the XX Century in which many events contributed to the definition of that environment where societies today are using the internet and virtual spaces. The internet is a consequence of the Cold War’s internal security program of the US government that developed a project, called ARPANET, directly financed by the Defense Advanced Research Projects Agency (DARPA), an agency dependent by the US Ministry of Defense. The purpose was to link all computers and all systems of time-sharing<sup>6</sup> to a continental net, that began with the major US universities but soon reached a global scale, and from the 90s became open to the public.

The development of technology, as we will see, followed also the rules of the international economy and the global markets, of the international relations and world politics, of wars and dictatorships, and of poverty and corruption. The increasing displacement of people around the world however, in their desperate attempt at finding a decent job which would bring about improved sense of lifestyle, conditions and expectations, has made our societies in need of a high level of movements. This is after all a symptom of globalization. The technological development in the communication field that began with the radio and ended with the internet, soon reiterated its

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<sup>6</sup> Time-sharing was the use of a single CPU by many users, since the price of the technology was still prohibitive. It is still used today for those operations that requires computer out of budget for many users, for operations such as 3D renderings or servers’ hosts.

improvements in the former tools. For instance, mobile phones have now internet access available at low prices, television can be streamed over the internet, and satellite communications, like phones, can provide internet access without the inference of external, mostly political actors and factors. The internet, in other words, became the main category in which the technological development is moving, offering to the public new ways of communicating and the place where to get information. There are two distinctions between the improvements that were made possible after the introduction of the internet. One is related to the adaption of former technological tools to the WEB environment, while the other is about spaces that were built on the internet's platform, and new virtual spaces where new forms of communications were developed. Examples included in the latter case are blogs, chats, forums, posts, video-sharing, podcasts, streaming sites, and all the elements ascribable to the third main category, namely, social media. The latter two passages are often defined with Web 1.0 and Web 2.0.<sup>7</sup>

To be more precise it could be helpful then to refer to 'New Information and Communication Technologies', since this development defined a type of tools for communication that are different from the ones we were used to consider 'technological'. To avoid any confusion, whenever the term ICTs is expressed in this dissertation, the

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<sup>7</sup> Web 1.0 may refer to the first use of the internet as a simple webpage where the direction of the communication was 'one-to-many', similar to other former media, such as television or radios. In other words, users were able to visit sites where information was written by the author of the webpage. Owning a personal web-space was not for everyone as well as participating in a television's debate was something possible only for some selected guests. With the Web 2.0 this changed. Social media were introduced and places like blogs and forums soon became the place for social (virtual) debate on the most different topics. This web activism then developed in other forms of communication (some defines this already Web 3.0, an outcome of social media communicative experiences), trough video-sharing (YouTube), photo-sharing (Flickr), and other social media channels, all characterized instead of written, by visual communications.

author is essentially referring to the type of technologies that interact with internet, or are settled on a virtual space, when the 'many-to-many' communication's direction is expressed. Satellite's televisions present a situation apart, since if it is true that they are part of the new ICTs, the message is still characterized by the classical direction 'one-to-many'. Radio, television, fax machines and phone are then excluded by this definition and are going to be considered as classical modalities of communication. This is a necessary choice, given that the multitude of channels diffused after the introduction of the internet are defining a new set of ICTs that is far different from the older ones.

The progress in the technological field, as we have already stated, developed also in the television, in the radio and in the phone; all these instruments that are on a global scale diffuse more than the computer-based access on the internet. With regard to the passage between Web 1.0 and Web 2.0 many factors have to be considered which are not only related to the Net environment such as the sociopolitical context in which users began to interest themselves in first person to problematic regarding not only their society.

What has changed is the idea itself of a local community, in which the individual feels protected by the surrounding of acquaintances, in which she or he could live in a closed environment where a profession, a family, and a culture could be raised without the interest or the fear of external factors. Globalization has often been criticized for the threat in its proposal against local communities, local languages and customs that have to be incorporated into a global understanding for and of the 'globalized human kind'. What

the internet exemplifies here is the necessity to be understood on a global scale.<sup>8</sup> Marshall McLuhan, considered as one of the founders in the field of media communication and sociology wrote one of the pillars of the analysis between social and communication sciences with Fiore, in which they argue that,

The medium, or process, of our time — electric technology is reshaping and restructuring patterns of social interdependence and every aspect of our personal life. It is forcing us to reconsider and re-evaluate practically every thought, every action, and every institution formerly taken for granted. Everything is changing: you, your family, your education, your neighborhood, your job, your government, your relation to “the others”. And they’re changing dramatically! (McLuhan-Fiore, 1967, p. 8)

In McLuhan-Fiore’s book, considered by many as a cult for the science communication’s field, he is representing both the hope and the belief on technological development. Even if the words expressed above refer to contexts of 50 years ago, the same concepts are completely understandable and shared today. The expression ‘The Medium is The Message’, that gave the title to the book, is even easier to comprehend today, when we are daily involved in the use of technological media, and we often agree

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<sup>8</sup> The main language that has been recognized as a ‘lingua franca’, which should be hence known and spoken by everyone is English. The shift from French in the late XIX Century has prevailed in diplomatic relations. This does not mean that all the webpages can be consulted only by English speakers, but that in order to have information shared on a global scale, instead of having translations in all the major languages, English is the one selected. If this does represent an example of digital divide, it will be a focus for the following chapters. For the moment it is sufficient to say that in the future, English will not remain as the language of the Web since by today there has already been a return to local languages, spoken by a number of people that is continuing to grow, questioning therefore the primacy of the English language. However, the case is different for institutional, commercial, or journalistic ramification of the uses of the Web.

that it is the instrument that makes a message understandable and shared. It is the instrument that shapes the way communications are made, contributing to the development of new forms of relating with each other. The words used by McLuhan are probably an outcome of an over positive reaction to the introduction of the electronic revolution of the 1950s. Today the main thinking is oriented on a more neutral approach to the effectiveness of these instruments. As with the internet, distinctions had to be made between the enthusiastic approach of researchers in the 1990s, and the different aspects that rose only a decade after, when more and more people got access to the web. A case that can be taken as an example is the digital divide, but there are other several consequences by which societies may be negatively affected by the introduction and the spread of the internet. It is no news that the Net can be a dangerous environment for children and minors; it can be a powerful instrument for terroristic organizations, a threat for the securitization of states, a place where hate and violence can be directed from a virtual to an empirical space. These are examples that have all in common the many usages that people make of the Web.

What is not to be doubted is the potentiality of the Web, which is independent from the instrument itself, but more related to the usages that users could do, the limits that are imposed by third parties, and the capability of users to properly use these instruments.



## **ICTs and the Internet**

If we contextualize the environment in which this transformation is happening we cannot exclude from the analysis both the role of globalization and the Zygmund Bauman's concept of individualized societies. This is probably truer for Western societies, but it is a typical element of the societies that are using new technologies to communicate. It is a side effect of the computer-mediated communication combined with the polarization between individual and communities. The physical dimension of an individual connected to the world through a monitor reflects the contrast between globalized societies distinguished by a community of individualized human beings. This individualization is reflected in many aspects of the society, from the political to the economic and relational context from which the (Western) individual is skeptic about the external world. The mistrust of politicians, of laws and governments, the prioritization for individual needs and the difficulty to integrate close relations to different or remote cultures, are only some aspects that generically describe our societies. The role of social media and of the internet is then a vitreous shield against the external world, through which one can virtually observe the world without being directly flooded under its fearful aspects. It can be defined as a new way of dealing with the personal identity of the people, both in a good and in a bad way. It helps, in fact, to build an identity in two different manners, on the individual's and on the community's level. In the first case the relation between a virtually built identity and a virtual space, defines an environment in which anonymity and personal beliefs produce expression of ideas that, in a government-

controlled environment, such as the majority of the Arab states, could otherwise not exist. Related to this concept is the other case, in which a common identity can be developed starting from globalized media, that, even if physically relegated to a specific context, or state, from which this media transmits its messages, is addressing these to an undefined public, united by the interest for what has been communicated. Useful at this point is Castell's concept of mass-self communication. For the Spanish sociologist, the evidence of our society today reveals a situation in which globalization is acting together with the communication suitable with the already cited Bauman's idea of individualized society (Bauman, 2010). In other words Castells argue that mass-self communication is really,

[...] mass communication because it reaches potentially a global audience through the p2p networks and Internet connection. It is multimodal, as the digitization of content and advanced social software, often based on open source that can be downloaded free, allows the reformatting of almost any content in almost any form, increasingly distributed via wireless networks. And it is self-generated in content, self-directed in emission, and self-selected in reception by many that communicate with many. We are indeed in a new communication realm, and ultimately in a new medium, whose backbone is made of computer networks, whose language is digital, and whose senders are globally distributed and globally interactive. (Castells, 2007, p. 248)

What makes the internet unique is the fact that for the first time there has a mass-media which is not embodied in a single direction of the message, a media where the technology properly acquires the role of the message, since without it many new types of

relations between individuals could not even be possible. The fact that the internet ties communities has been recently underlined by many studies that have used empirical research on the field to demonstrate how local networks can raise or resulting reinforced by the use of this media. Community networks are defined as a 'digital tool, serving as a local medium for a "proximate" or geographical community, responding to the needs of the community and its residents' (Mesch – Talmud, 2010, p. 1095). But more than the instrument alone, 'it is the participation that internet connection provides in electronic boards, that enhances participation in locally based activities and community attachment' (Mesch – Talmud, 2010, p. 1099, reformulated). The study conducted by Mesch and Talmud is also interesting for the research focused on two different Israeli communities. The difference between the so called Face-To-Face (FTF) communication and the virtually mediated one is relevant in the way these tie communities differently. The study, in fact, reveals how the introduction of digital instruments as media for forming and strengthening relationships in a community produces different outcomes in context where FTF and classical communications are the only ones present. In general, the classical type of communication is the easiest way to make new connections, to participate in the community's life, and to inform others about initiatives and proposals related to the local context. This is because on virtual spaces such as blogs, emails and chat-lines there is a communication that is mutually capable of informing and of producing participation, in a way that traditional media were not capable.

There is not only a passive attendance to the message communicated, but an active involvement in the reception and understanding of it. And this second passage represents the most innovative aspect of the ICTs. The use of blogs, emails and forums is therefore a return to the local instead of global. With the evolution also in the connection's technology, the lowering of the price by internet providers and the introduction of virtual advertisings as a source for incomes, web sites could improve their data's hosting capacity in a way that the feasibility of having new blogs without paying anything was possible soon after the 90s. The diffusion that ensued reached unbelievable numbers already in the mid-2000s. If we consider the data collected by Technorati, this being a web site that provides useful statistics about social media's usage, the same data used by Castells for his analysis about blogs (Castells, 2007), we discover that it has only been between January and October 2006 that the number of blogs duplicated, from nearly 26 to 57.6 million. This means that every day 75.000 blogs were founded, 1.2 million posts were written each day with an average of 500.000 blog's updates. In 2011, these numbers duplicated, where 133 million of blogs were analyzed by Technorati, with 900.000 new blog posts updated each day.

Blogs and forums represent the most illustrative example of the one-to-many or many-to-many communication's form. In fact, in both cases, there is a first user that writes about an issue, informing the public about a particular fact of his or her concern, giving the possibility to known or unknown users to reply and comment about it, hence generating discussions that can also build opinions and political enthusiasms. Obviously,

there are plenty of different arguments that are covered in the blogosphere, with an evolution of topics that follows the real effectiveness of these instruments in the field of national and international politics. In the beginning, blogs were considered as a space for sharing personal experiences, individual points of view, and other elements that are not relevant to this analysis; by time, however, these instruments began to be used for political purposes, transmission of facts and imparting of general knowledge and other information, in addition to the above. In 2011, the top 5 tags for blogs were ‘News’, ‘Business’, ‘Politics’, ‘Entertainment’ and ‘Video’ (<http://technorati.com>). This result reflects both the fact that the relative independence of these spaces from the political authority gave blog authors the ability to follow the banned path of political disobedience, and the usefulness of these technological tools as a source for general, mostly political and economic information. Blogs rapidly began to be used for dissident voices of political authoritarian states, where the states tried to control the media manipulating news information and preventing open criticism with violence.

Exemplifying this is Cuban’s blog of Naomi Sanchez, a dissident of the Castro’s regime who for the first time used blogs to spread knowledge about the internal situation of the state of Cuba to the rest of the world. If we look at the Arab states, a number of dissidents used blogs to openly manifest their concerns about the political power, reaching a relevant number of followers. The reaction of governments to these media was and still is considerably negative.

Satellite television channels, especially some like CNN or BBC had the opposite effect to use media for a global scale, thereby to inform the people about events happening all over the world, but also to influence a particular perspective on opinions about this information. Globalized information is also an adjectivation for new media, but the characteristic of being capable to direct this information into specific containers (or forums), where people can discuss on the same level about them, is a feature only of the virtual space; a space which is virtual in its technology and local in the definition of common interests.

As we stated before, relations between these new ways of communication and of interaction between people are also resulting from external factors that are dependent on the globalization. Elements directly related to the economic field, theoretical findings about new uses for the internet and its related media have been analyzed recently for an application also in other fields. The same idea of a globalized environment, in which local realities are working, as the place in which relations are made, was theorized since the 80s by a Japanese vision of the global economy. The idea was to build local economic communities simulating experiences of other countries, applying models for local communities using the instruments and the capabilities of the global economy.

In the field of sociology, Keith N. Hampton, associate professor in the Department of Communication at the Rutgers University, defined and contextualized this new concept as an outcome of the relation between global and local. He conducted a three-year-research 'that examined the use of internet for communication at the

neighborhood level' (Hampton, 2010, p. 1111), in which he analyzed the positive effects of the introduction of the Web in less developed communities. It is in his papers where we can find for the first time the term glocalization. According to Hampton,

Researchers have argued that when a critical mass of people within a shared local environment adopt the Internet, such as a neighborhood or workplace, they cultivate an increased awareness that the Internet affords communication within local space as much as it does across distant space – a concept referred to as glocalization. (Hampton, 2010, p. 1113)

Even if his research is focused on neighborhood's communities where different levels of inequality are affecting the success of the internet for the unification of the society, the assumptions made for this project are interesting for this dissertation. In particular the author emphasized how 'The Internet reduces the transaction costs of communication, which in turn undermines contextual constraints on social and civic involvement' (Hampton, 2010, p. 1112). In other words, even in a context of potential inequality where communities differ in terms of living standards, racial disparities, and social and civic disadvantages, the instrument of the internet has revealed how it typically involves an exchange over distance that can be applied in environments other than those relegated to the geophysical. The research also showed that this distance could be considered also as a separation within communities divided by a different grade of 'disadvantages', which means that people living in the same neighborhood could communicate and inform themselves independently from the specific condition of living

they represented. This idea reflects again the concept of glocalization, where mass-media communications can operate on a local level. This will be pointed again in the next chapters, since the idea of a globally-oriented media that operates in other directions than the one-to-many can be analyzed also from different perspectives. If the case of the Arab Spring has to be taken again, the fact that local blogs, forums and information-sharing websites were visited by both resident and foreigners in the attempt to organize the mobilizations, we have again an example of this concept of glocalization. The Arab Spring, as it will be pointed out later, revealed this aspect of producing positive outcomes even in a context of untied communities, where people belonging to different religious perceptions, different ages and genders, could use a digital environment to collaborate. Hampton stated that,

A context of structural instability is often induced through the concentration of inequality, such as the presence of poverty, unemployment, and racial segregation. In a context of structural instability, individual desire and motivation to build a network of broad social ties and develop a norm of informal social control may be high but unattainable, given the ecological context and options for local communication. This is where the Internet holds the most promise because it may afford local cohesion and collective action. (Hampton, 2010, p. 1116)

This and other studies help to understand what is the potentiality of the internet and of the ICTs in general, whereby this statement is also helpful to understand how this dissertation's analysis will approach the topic.



There is the empirical possibility to shape and simulate local communities on a virtual space, where the direction of the message is undefined – one can potentially spread his opinion on a global scale and this opportunity is both cause and consequence on the uses of this new media.

This broad communication is hence open to malevolent uses, since this perception can also be intended from a negative approach in relation to this use of digital media as anonymous. It is sufficient to refer to those uses by criminal and terroristic organizations, by undemocratic governments' institutions such as secret agencies, to control and undermine the security of citizens and negatively affecting international relations. Even if users' credentials for their account are anonymous, there are still several restrictions on their freedom. Technological restrictions can derive from the instrument itself. The connection to the internet implies a number, an IP address that is related to the hardware connected; this can be, however, easily traceable by governmental institutions. This means that for unprofessional users the 'real' liberty to express their opinion 'freely' can be undermined. The situation may be different in case of other typology of users who can use other tricks to connect their hardware to the internet using foreign providers, and in doing so, altering their IPs. But this will be covered in the following chapters in more detail. The interest here is to present the new ICTs following the already cited timeline articulated by technological development. The question about the usage of ICTs for terroristic or violent purposes will be covered in more detail in Chapter IV.

Mass-media communication, as the term itself suggests, is directed to an undefined number of people whose physical collocation is independent to the role they can have participating in virtual spaces.

Mass media can address messages to communities characterized by the sharing of a religious ideal, a political inclination, a gender orientation, or a generic ideal, in a way that can be compared to the physical presence of an individual to a talk show. In other words, people attracted by the same interest can participate on TV talk shows while being at home in front of their computers, mobile phones, or PDAs. An online forum, for example, simulates a talk show, where there is a presenter (which is also the moderator) and the public. In the same way, we can find forums with administrators that moderate discussions (that can be compared to different episodes of the same talk show) and the public that can interact with each other, sharing opinions, and information. Then there are blogs, where opinions are made and people are called to express their opinions on given arguments. The main difference is the accessibility to these media, and the direction of the message that it is going – namely changing from vertically to horizontally, as we will see in the following pages.

Starting with the most exemplificative mass-media instrument, the television, this process involved many other technological inventions, in different stages. The first step is the propagation of satellite's televisions in countries where political powers were the sole holders of the information. The accessibility of mobile phones with user-friendly interfaces, the lowering of prices for devices and communication, and the popularity of

the uses themselves, are only some of the number of these media in the market. The latter are more symbolic than other classic media such as radio or television, even and most likely in areas often defined as the developing world. Then, and only then, comes the internet. It is important to underline how these innovations in the media arrived after the creation of a solid base of hardware's spread in the world.

If we take ICTs as a broad category containing all the communicative and informative technological tools, consequently all the elements that will interest this analysis are going to be picked from there. Even if the interest of this dissertation is certainly related to the internet, the role that other technological devices have, should not be overshadowed. It is then useful to understand what ICTs means and how this concept is going to be used within the next chapters of this dissertation.

Following the classical meaning, for ICTs one can intend all the technological devices that have been used and are still used today to inform and facilitate communication. This broad category also includes radio, fax machines, telephones, television, and the internet. These kinds of technologies experienced a development that was so rapid, that the uses these had in the beginning soon changed and expanded in such a way that one tool's function is now shared by the other ones. The outcome is new kinds of technologies that are strictly connected, especially in their communicative function, with each other, and this is cause of the massive alterations in many aspects of society.

Information and Communication Technologies (ICTs) therefore include all kind of tools that use technology, but in order to simplify the meaning that this broaden

concept has, for the purpose of this dissertation ICTs mean those instruments which use virtual spaces, the globalization of the message, and the many-to-many direction of the communication to share information, ease the utilization of communication, therefore allowing participation.

The introduction of a new way of delivering the message is translated in the overcoming of the strong separation between the media and the public. It is essentially represented by the introduction of virtual spaces in which the verticality of the hierarchy between sender and receiver is replaced by the horizontality of the users that are either informing or getting information from web pages such as blogs or forums.

This idea of a shift between former and present directions of the message has been developed by many scholars, especially in the field of sociology and communication's science. For a chronological contextualization, we can argue that the redefinition of what the internet is, of the usages that users can make of it, and of the potentiality of a globalized and shared message, represent the moment from which Information and Communication Technologies achieved the role of informing the public with a many-to-many perspective. On the academic side, we can refer to specific authors that developed this concept of a relation between the media and the society.

The role of the Net changed from a consultative instrument, in which the one-to-many direction of the message was shared with traditional media, to become a place where new voices could express opinions and facts. Environments such as blogs and forums were the first examples of a shift in the communicative level from one-to-many to

many-to-many, as noted by sociologist Manuel Castells. The distinction between these two phases can be observed, then, as the shift between the directions of the message. Castells argues that,

[the] communication system of the industrial society was centered on the mass media, characterized by the mass distribution of a one-way message from one to many. The communication foundation of the network society is the global web of horizontal communication networks that include the multimodal exchange of interactive messages from many to many both synchronous and asynchronous. (Castells, 2007, p. 246)

The change Castells speaks about concerns the ample possibilities for users to deal with the internet for different purposes. He states that,

[w]ith the convergence between Internet and mobile communication and the gradual diffusion of broadband capacity, the communicating power of the Internet is being distributed in all realms of social life, as the electrical grid and the electrical engine distributed energy in the industrial society. (Castells, 2007, p. 247)

This focus on the direction of the message in order to distinguish two different eras of the democracy, even for the new democratic process that a many-to-many communication produces, is also shared by other authors interested on this matter. Cropf and Casaregola, for example, wrote in their article about Community Networks that,

[t]he Internet, with its many-to-many, decentralized, and non-hierarchical flow of information, is in marked contrast to mass broadcast with its one-to-many flow of information. (Cropf-Casaregola, 2007, p. 198)

However, ICTs are not delivering their information only through this redefined direction of the message. In many contemporary technological tools, in fact, the one-to-many spread of information is still used, with some distinctions. The already cited Marshall McLuhan once wrote that '[...] societies have always been shaped more by the nature of media by which men communicate than by the content of the communication. (McLuhan-Fiore, 1967, p. 8) [...] All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered' (ibid., 1967, p.26). This famous citation reveals what we will argue in this dissertation, namely that it is the use that people make of the ICTs that actually define their functionality. In addition, for each technological tool there is a specific advantage for the different desired outcomes. If we consider mobile phones as an example, these instruments can be considered in the uses as a natural development from the traditional phone lines: their use will be to communicate, with the advantage of not being constrained to a physical place in order to establish a connection. Satellite phones, in fact, let people communicate wherever they are located in the world, hence challenging the technological underdevelopment that some areas are affected by. But if we consider the

achievement on the technical perspective, nowadays mobile phones are used to navigate through the internet. This means that a relatively cheap technology allows people to connect to the internet while using all the communicative tools related to it, first of all social media. Social media are in turn intended not only as blogs and forums or for status updates, but also for the sharing of information, experiences, and ideas. The steps towards an integration of traditional computer's applications in a smartphone reached today a phase in which photo and video sharing can be used and spread easily through mobile phones. This has enormous repercussions in the context of news' information. Having in mind the Arab spring, one cannot forget the role of amateur video posted on YouTube, shared on Facebook and used by news broadcast channels as a source of field footages. This is the meaning of what we intend by an integration between new ICTs, because there is a convergence in the uses between electronic devices.

In other words, considering again McLuhan's citation, the instrument itself become the message, where the communicative tool has brought about the cause of shifts in our societies, more than what is communicated through it. This is what happened in the past with previous revolutions, and this is what can be predicted for the future: once one realizes the possibility he or she has in using a specific kind of media, the consequences related to his or her position in the society are changed. The potentialities are enormous, and again as broad as this concept is, one can comprehend both its negative and positive outcomes. In the first instance, we have the globalized scale through which a video message can be transmitted by and the global audience it can reach. This can be

terroristic, as Al Qaeda in the name of Osama Bin Laden has proved. It would also be apt to consider all the false and misleading information that are circulating through the ICTs, information that can undermine the political stability of the international arena, and which can eventually cause wars and riots, as the false news about the death of the former Egyptian PM, Hosni Mubarak, has caused. This will be dealt with in Chapter IV. The section below will present the opposite side.

In order to provide a brief explanation of the many uses of ICTs, the following pages will analyze other new media instruments other than internet, typically: satellite televisions, mobile phones, and the opportunities offered by newer devices.



## Satellite Televisions

[...] more satellite television channels gave news consumers a choice between “us” and “the other” - the option to turn away from outsiders and instead gravitate to information providers that might be more parochial but also more deserving of trust. Once they began to build an audience, the satellite news channels affected politics. (Seib, 2008, p.7)

The first November 1996 represents the moment from which television communication in Arab countries and in the rest of the world began to change. The first air date of Al Jazeera is considered as the first step in the yet not concluded process of transforming the way news is produced and delivered. From an international politics perspective these were the years characterized by a direct Western involvement in the Arab region, where the First Gulf War was still a burning memory and the role of international media in the conflict changed or emphasized the perception of the events related to the war and to the region's population. In his book entitled *The Al Jazeera Effect*, Philip Seib, professor of journalism and public diplomacy at the University of Southern California, presents the outcome of his study on the introduction of regional satellite channels and the evolution in the media from a unilateral, Western, perspective, toward a critic, multifaceted interpretation of the facts on regional basis (Seib, 2008).

The so called ‘CNN effect’ (Seib, 2008), overtly manifests the need for people to follow information on a daily basis, regarding wars, political upheavals, natural disasters and crisis situations. The marketization of the media become a symptom of how news

began to be included in the entertaining world, based on profits and share percentages of audiences more interested on the spectacle of the stories, more than the stories itself.

Through the Western presentation of the facts, ensued emphasis on the absence of other sources for information for those populations affected by the one-way direction of the true, the need for other sources began to be critically elevated as necessity for those unrelated to Western societies or critic about its politics. In other words the CNN's slogan, 'The world is watching CNN' (Seib, 2008, p. 7), can be considered as the reason why there was the need of other interpretations, other presentations of the facts, to another public and with fewer negative stereotypes and biases against the Arab world. The Qatari-based channel held this important position. Considered as a free source of information, critical in its neutrality against many elements of the Arab society and politics—except obviously against the Qatari government, on which the economic resources of the channel depends—the fortune of Al Jazeera was met in its interlocutors. However, unlike the case of the CNN's effect, with Al Jazeera many considerations have to be made for the consequences this channel represented in the Arab world. At first, there is the effectiveness of satellite televisions. The need to get information about countries such as Afghanistan and Iraq made the Western media interested in this region. The already diffused technological development in mainstream media offered the situation in which begin a new type of 'live' coverage, using most frequently satellite's communication, but also through continuous reportages from the region.

As Seib and others argue, one of the main points in favor of Al-Jazeera and Al-Arabia and the other local satellite channels in the region is the level of trust these channels rely on. The population is aware of the way the news is transmitted by international TV channels, at times distorted and oriented toward the politics of the country hosting the satellite. Therefore, as an alternative source of information, this instrument was considered both by the population living in the region and by the other populations living in the rest of the world as a trustful source of information through which they could take a second look at what was going on in their countries. Firstly, during the Second Gulf War and during the Arab Spring after, this element was expressed at its best for this potentiality. The need to get information about those countries such as Afghanistan and Iraq made the Western media interested in the region. The already diffused technological development in mainstream media offered the situation in which begin a new type of 'live' coverage, using most frequently satellite's communication, but also through continuous reportages from the region. This kind of coverage, somehow antagonist and new compared to the Western world media, soon acquired a political connotation, since for the first time TV channels could be transmitted in countries where the monopoly of state-owned televisions was the practice. As Powers and Gilboa state,

[...] it was not until the terror attacks of 9/11 that the news organization truly started to become a significant player in international politics, at least in the eyes of the Arab and Western worlds. (Power and Gilboa, 2007, p. 55)

This consideration on the use and diffusion of the satellite channel's offer is not only true for satellite's channels media, but also for other technological media, such as the internet and the mobile phone technology that from this moment began to integrate the Web in its devices.

There are then two different evolutions in the use and types of media; one is related to the one-to-many communication and the other is related to the innovative many-to-many environments. Following the first one we can observe how the television's role has changed during recent times for what regards news coverage. From the Second Gulf War first and the Afghani war after, the presence of journalistic coverage "on the field" soon began to be the essential requirement for a news channel. Since television is part of the business system characterized by share and profits, the way the public increased its demand on choosing what to watch, the demand for a continuous way of informing soon became the must for this kind of journalism. What enabled Western channels to cover instantly news coming from war zones, for example, was the introduction of satellite communication. Three elements have to be considered on this regard: first, the spread of satellite's televisions in the Western World, second, the introduction of foreign channels in the availability of the television's offer, and third, the success of independent satellite channels in countries where state run television was the norm. The success of the local satellite's channels in the developing world as a primary source for those populations was directly affected by conflicts. The independence from national and censored sources of information was also a benefit for locals as well as for

international users. This evolution has to be contextualized in the globalization's process that involved also those areas historically excluded from it.

The first element is directed both from an internal vision of the external world, and from the external world challenging the internal environment of a society or a state. In the first case it is clear that it is with the success of the so called 'CNN channel's effect' that was once only a news coming from a far country and culture, by which we could even emancipate the reiteration of news broadcasts coming from these places other than ours. The idea of pertaining to a globalized society soon developed hand in hand with the proper economic and political globalization's process. The second direction can be defined, in the words of Philip Seib, as the influence of external threats in domestic contexts, like the 9/11 attacks and the massive use of video-messages to spread the terror and the fear to terroristic organizations such as Al Qaeda. In his book entitled *The Al Jazeera Effect* (Seib, 2008), Seib underlines from the beginning this direct correlation between the purposes of the terroristic organization and the market-oriented choices of news channels. The popularity of video-messages sent by Osama Bin Laden and his fellows, together with the daily coverage of military operations in Afghanistan might not have helped terrorism directly, but had for sure contributed to deliver terroristic messages to populations all over the world. This use of satellite televisions, which can be watched by a population defined as 'globalized', is one of the first elements that suggests the subsequent phase of internet 2.0 and social media.

On one level, more satellite television channels gave new consumers a choice between “us” and “the other” – the option to turn away from outsiders and instead to gravitate to information providers that might be more parochial but also more deserving of trust. (Seib, 2008, p. 7) [...] The greater variety of viewpoints available to a large public has expanded the range of discourse and fostered new levels of public debate. (ibid., 2008, p. 8)

Public debate is the question around which has to be defined the relation between media and the democratization process. What satellite television brought, in societies where even human rights on free thinking were abused by the state power, is a first step toward the definition of a new, broaden, political culture. What will be the main topic of the next chapter is the discussion about this political culture, and the relation between the functioning and the participation of the population in its mechanism is dependent on the instruments that are described in this chapter, the media, but also on the people themselves, the level of education, of Human Development, of political freedom and censorship. If in the Arab World satellite television represented the main introduction in the media’s panorama, towards a political, critic, participation by the citizenship, whose opinion was since long time relegated in the shadow of their own houses, mobile phones had an important position in the overcoming of political disinterestedness in many African countries. In the first development of the technology, where internet and mobile communication were not tied together in the technological objects we are used to have today, mobile phones represented the instrument through which people could retrieve

news and information immediately, even more than television. The first consideration is however about the price of the technology. Mobile phones, more than many other technological devices, have seen a reduction in the prices for materials and components with percentages that were unimaginable a decade ago. Nowadays numbers indicate that the diffusion of mobile phones in African countries is by far more relevant than either the internet or the television. Together with the development of this trend in the region, the political culture, or the participation in the decision making process of the politics, developed towards a deeper interest on intra and infra state issues.

## **Mobile Phones**

The mobile cell phone is another ICT device widely used in the Middle East to communicate by exchanging text, image and video messages. This tool transformed the means of communication, and in particular, the younger generation, who adopted it readily, using it to send text, pictures and video messages as an event occurred. (Shirazi, 2008, p. 10)

In countries where the access to the internet is limited to several public spaces and the use of personal computer at home is still a privilege for few, the numbers of active internet users are suggesting that it is still possible to speak about a digital divide that is characterizing once again the North as a different reality than the South. It is important to underline what will be discussed in the IV chapter, particularly that the numbers used by these studies are often reflecting a misleading reality, that is, the approach to statistical data cannot be the same than the one used particularly in Western countries. This is because the way people connect to the internet is different. There are many cases in which there is a massive diffusion of internet cafes, for example, in urban areas where the same statistical sample, like the IP used for an internet connection, is shared by more than one people, deceiving the outcomes of an approximate analysis. In rural areas and in countries where the phenomenon of internet cafes and Wi-Fi spots in public areas is yet not really developed, people are still accessing the internet through mobile phones and in some cases through satellite's communications.



Professor Charles O. Uwadia, president of the Nigerian Computer Society and member of the University of Lagos as director of the Center of Information Technology and Systems, was once interviewed for the Vanguard journal<sup>9</sup> about the use of mobile phones as technological tools for internet access. The focus of this article was about the use of ICTs for political participation within the country. Considering the analysis that he presented, the use of these technological instruments is affecting the way people communicate and politically participate in the community in a positive way. The problem is that political powers are often obstructing the full use and spread of these technologies because of the fear on mobilizations or even protests against governments that not always are really supported by the population. The use of mobile phone communication is not only related on the call itself, as the technology developed towards multitasking gadgets that can navigate, send email and capture and share video and audio files. The beginning of the chapter is dedicated to communication and conflict resolution, where Miall-Ramsbotham-Woodhouse describes an episode in which mobile communication prevented a situation of misunderstanding between two villages to escalate in violence or even war. The case was of an African village in Congo where the population was observing the movements of their neighbors which were quickly running within their village, as if they were planning an imminent attack against the other village.

In the meantime a helicopter arrived alarming the villagers on the other side of the valley. But a simple SMS was enough to explain that there has been an emergence and a

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<sup>9</sup> The article is online available at: <http://www.vanguardngr.com/2010/01/political-will-needed-to-implement-e-governance/> (Last visited on 13 August 2012).

helicopter was called to save a life, no threats, no violence. Even as simplified as it may sounds, in rural area where communication infrastructure lack, the introduction of cheap mobile technology has resulted in the lowering of tensions in many cases, even inside the community itself where gender disparities could be overcome again also thanks to these instruments. The already cited professor Uwadia remembers how radio communication through mobile phones introduced in the community a relevant shift in women participation in public discussions. The fact that there is a device that can both receive information and make calls allows people to actively participate in on-air debates, where gender differences are overcome. Once again it seems that ICTs can be useful instruments for an active participation of the population, acting as the first step toward the democratization process, political freedom, and the abolition of structural and cultural violence (Galtung, 1969, 1999).

## CHAPTER TWO

Information and Communication Technologies are the instruments that are used to improve and spread the way people communicate around the world. In this chapter, the focus will be on how these instruments can be positively used for a political purpose as to involving the population in the country's decision-making process.

Once again, the Arab Spring, and the massive use of ICTs during the protests, is a factor for understanding what the assumptions are at the core of a political use of these technologies, especially in countries where the transition to democracy is still a process in itinere. The fact that the internet is a technology that is alone potentially capable of everything but empirically dependent on the usage users make, or can make of, is a statement that has been repeated during the dissertation. There are three elements that combined together reveal how the use of ICTs in politically destabilized contexts, together with physical mobilizations and collective responses can improve and even resolve issues of direct and structural violence, in the meaning Galtung gave of social injustice in his fundamental book *Violence, Peace, and Peace Research*<sup>10</sup> (Galtung, 1969, p. 171). These elements are communication, information, and participation (CIP).

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<sup>10</sup> 'In order not to overwork the word violence we shall sometimes refer to the condition of structural violence as *social injustice*'. (Galtung, 1969, p. 171)

## **Communication**

Since ICTs are technological tools that have the role to communicate a message, the first benefit that democratization has is a facilitation in the way people can communicate, in a cheaper way, such as through the internet, web mails, and chat lines, without the restraints of a geographical position and separation, without a direct implication of gender, race, age distinctions, and of placing people on a horizontal direction of the message. Considered as an instrument itself, without the considerations related to the digital divide, ICTs seem to be a democratic instrument. As we stated in Chapter I, the fundamentals of a message is the language that is being used, and since the purpose of the internet is to have a globalized media through which people are connected with each other, the question about English, the main language spoken in the Web, should be analyzed before entering in further elements. According to the Internet World Stats,<sup>11</sup> one of the most reliable webpages on statistics related to the Web, the majority of the world's users that are now using the internet are in numbers Chinese, followed by English and Spanish speakers.

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<sup>11</sup> Available online at: <http://www.internetworldstats.com/> (Last visited on 13 August 2012).

Table 1 Top Ten Languages Used in the Web<sup>12</sup>

<b>Top Ten Languages Used in the Web</b> ( Number of Internet Users by Language )					
TOP TEN LANGUAGES IN THE INTERNET	Internet Users by Language	Internet Penetration by Language	Growth in Internet (2000 - 2011)	Internet Users % of Total	World Population for this Language (2011 Estimate)
<u>English</u>	565,004,126	43.4 %	301.4 %	26.8 %	1,302,275,670
<u>Chinese</u>	509,965,013	37.2 %	1,478.7 %	24.2 %	1,372,226,042
<u>Spanish</u>	164,968,742	39.0 %	807.4 %	7.8 %	423,085,806
<u>Japanese</u>	99,182,000	78.4 %	110.7 %	4.7 %	126,475,664
<u>Portuguese</u>	82,586,600	32.5 %	990.1 %	3.9 %	253,947,594
<u>German</u>	75,422,674	79.5 %	174.1 %	3.6 %	94,842,656
<u>Arabic</u>	65,365,400	18.8 %	2,501.2 %	3.3 %	347,002,991
<u>French</u>	59,779,525	17.2 %	398.2 %	3.0 %	347,932,305
<u>Russian</u>	59,700,000	42.8 %	1,825.8 %	3.0 %	139,390,205
<u>Korean</u>	39,440,000	55.2 %	107.1 %	2.0 %	71,393,343
TOP 10 LANGUAGES	1,615,957,333	36.4 %	421.2 %	82.2 %	4,442,056,069
Rest of the Languages	350,557,483	14.6 %	588.5 %	17.8 %	2,403,553,891
<b>WORLD TOTAL</b>	<b>2,099,926,965</b>	<b>30.3 %</b>	<b>481.7 %</b>	<b>100.0 %</b>	<b>6,930,055,154</b>
NOTES: (1) Top Ten Languages Internet Stats were updated for May 31 2011. (2) Internet Penetration is the ratio between the sum of Internet users speaking a language and the total population estimate that speaks that specific language. (3) The most recent Internet usage information comes from data published by <a href="#">Nielsen Online</a> , <a href="#">International Telecommunications Union</a> , <a href="#">GfK</a> , and other reliable sources. (4) World population information comes from the <a href="#">U.S. Census Bureau</a> . (5) For definitions and navigation help in several languages, see the <a href="#">Site Surfing Guide</a> . (6) Stats may be cited, stating the source and establishing an active link back to <a href="#">Internet World Stats</a> . Copyright © 2012, Miniwatts Marketing Group. All rights reserved worldwide.					

This trend about the users is in part following the one on the spread of native speakers on a global scale. Chinese (Mandarin) is the most spoken language in the world, followed by Spanish and English. Obviously, this statistical data has to be considered carefully since not everyone speaks only one language, and it is therefore difficult to establish how many people effectively speak English or Spanish. The fact that English is globally the most taught language in schools, suggests that English speakers may really still be in the majority. Then there is the problem related to the use of the internet, how web pages are built and consulted. If we consider the computer science languages that are used to develop web sites, the most popular of which are HTML, XML and Flash,

<sup>12</sup> Available online at: <http://www.internetworldstats.com/stats7.htm> (Last visited on 13 August 2012).

English is a common factor that either an electronic engineer or a student has to know. Then there is the issue related to the global understandability. It is the easiness by which an English written webpage can be translated and understood even by people not that familiar with it, that makes this language the most proper for a Net environment. Dealing with Mandarin or Catalan is altogether another issue. But what about the countries in which the internet is developing and slowly gaining more force among the Arabic citizens for instance, where Arabic is the predominant language? And what about the regional minority languages that are in danger of disappearing? Once again such questions have to be approached in view of the use that users make of the Web: it is how webpages are oriented, locally, regionally, or globally.

A webpage is, in fact, a space created in most of the case for public consultation, where information, opinions, digital media, files, and news can be discussed, shared, and collected. The language is therefore strictly dependent on this premise and it is possible to say that usually the main distinction between when a language is used as an official instead of a regional code is related to the direction of the message. This interpretation is showing in other words what the distinction between a top-down and a bottom-up direction of the message is. In a top-down communication, the informative aim of an institution is referring to a 'down', a population that can benefit from this information only through a unidirectional approach. In other words, in a 'top-down' communication's direction, typical of institutional webpages, news channels, web encyclopedia, and all the informative-based web pages, the approach would not be interactive as an active

participation in the developing of the contents of the webpage. In this case, the language has to follow the official one, namely that recognized by the nation in which the page has been created, in order to be potentially oriented to all its citizens. There is the possibility of translating into several languages web sites accordingly to the ones different people use. This is intended to improve the accessibility, such as in the case of the UN, or when the understanding of the official language proves difficult for a non-native user, such as the institutional webpages of the Chinese or the Japanese government. In other words, under the linguistic aspect, the language spoken in the top-down communication follows the institutionalized type, like the official language or the internationally recognized one.

The direction of the message that goes ‘bottom-up’ represents a category that is much broader and implies many by-products of the Web. Following the definition proposed by Fuchs, a message is in the bottom-up environment where digital democracy can really operate (Fuchs, 2006). In other words, eParticipation, or political web-based participation, is therefore advanced in the bottom-up process of common citizens who are interested on a more effective and double directed communication with the institutions. Bottom-up direction of the communication is that expressed by blogs and forums of users that recall their rights and their ideals to propose to institutions ideas for change. If we make a comparison between the social movements that in throughout the years have fought for their rights, marching in the streets in front of state buildings, the direction of their messages was from the bottom to the top of the democracy. Similarly, on the net,

when social networks are involved in social movements, the instruments of the ICTs included in some of them are used as bullhorns for their bottom-up messages.

What happens on the communicative aspect has often been theorized under the perspective of the instrument by which the message is spread. As we have already seen, Baldini has developed his idea on the relation between societies and media (Baldini, 2006). However, looking closer at the ICTs, it is possible to make other observations. What is here relevant is the concept itself of a virtual space. As we have already stated, the internet is first of all a space in which people are free to communicate and share. What happens when the media becomes the space in which the message is not only delivered but also produced? Where can opinions and different approaches model new ideas that can grow, can be criticized, and can even collapse inside the same media? It is always important to remember what ICTs can become once they are utilized for several different means to organize and communicate. Blogs and forums are these kinds of spaces where the human mind is often free to express at its best (or at its worst), protected by the anonymity of a nickname and the actual distance that divides users. In their article for the *International Journal of Communication*, M. Aouragh and A. Alexander are presenting this question about ICTs as the space and tools for social movements (Aouragh-Alexander, 2011). With particular regard to the Egyptian uprising the fact, often debated, about the more or less usefulness and relevance of the internet in the uprisings and its positive outcomes is here approached following the idea of ICTs as space and tools of these uprisings. In other words, what the two authors suggest is that the



internet and its by-products were spaces in which to direct the dissent, and tools thanks to the opportunity offered by the Web through which share video and photo captions of what was going on in Egypt with the rest of the world. These tools are the ones, already discussed, of the so-called Web 2.0, or ‘user-generated and social network applications’ (Aouragh-Alexander, p. 1345, 2011).

Other than these two directions of the message, the communication analysis of the ICTs cannot ignore the hierarchy that characterizes the sender from the receiver. As we have already mentioned in the first chapter, the level of communication shifted from the verticality to the horizontality, between who writes a hypertext and who accesses it. The vertical aspect of the hierarchy between author and readers was typical of the written communication, where one person was the sender and a multitude were potentially the receivers of that message. In the Web 2.0 era, this trend was overcome, since the readers could engage and participate actively in the development of the hypertext, with what the author wrote previously, so that the process of writing became potentially endless. This is the case of blogs, where comments and further posts can complete what the author of the blog stated in a first post. The horizontality of this kind of media has set the users on the same level, with interesting outcomes on the level of participation on the topics.

In summary, communication was enhanced by ICTs, such as the media and the internet, because they offer people a place while equipping them with the necessary tools by which they could organize and direct their opinions. They can do this on a vertical

level in the case of a bottom-up direction and social media, and on a horizontal level in the case of a top-down direction, where there is a specific sender and a receiver.

## **Information**

A Web page is therefore essentially a receptacle for information, in a way that never before could any form of media be more comprehensive. The era of digital media is the one of information overload, a concept that has been studied since the 70s in psychology – where the term has been used to refer to situations in which there is too much information directed to the senses. But it is with the digital era that the term acquired its best known meaning, which is related to situations when the quantity of information is no longer useful. This is happening when the user retrieved an overload of information, sometimes consisting of conflicting interpretations on the same topic. This happens when there is no specific source to refer as trustful, and when everyone is free to deliver their own definition which can be misleading or even false. This is also a common problem related to the use of the internet as a news source. A lot of information that circulates on the Web is misleading or false, sometimes this is done on purpose, whereas at other times it is a misinterpretation of other information. The fact still remains however that this is the ‘price’ that users have to pay for any material that is freely available for all. The concept is simple, while everyone is free to share webpages containing sources not controlled, the credibility of the media itself is at stake. This consideration is often being used by politician or individuals, against which critics were developed within these web pages, to diminish the content as untrue, so to protect themselves.

In addition, ICTs and the internet are media that most frequently provide an undefined number of users useful and trustfully information. In cases where the state is

controlling the flow of news from agencies, where all kinds of counterculture are censored and deleted, the internet is providing the space and the tools for alternative information to grow and spread in territories such as the Arab states where the recent revolutions have occurred. Obviously when speaking about ICTs we are referring again to tools that are also not just the internet. As Aouragh-Alexander reminds us, the assumption that the internet and social media per se were the triggers and the main reason why protests in the Arab world prevailed, is far from being the truth. The fact is rather that such technologies included in the ICTs are built in a way that each gadget shares functions with others. For instance, mobile phones have access to both the internet and the radio, satellite televisions are also available and integrated with more materials on the Web, where it is the combination of these instruments that resulted in a helpful element that moved the pointer of the balance in favor of the protesters.

Information, therefore, is a combination of elements that are assembled in these media and are delivered to the public following the same directions that were described for the communicative aspect of the ICTs. In other words, top-down versus bottom-up information, vertical versus horizontal hierarchy in the sources of information and different languages depending on whether the source is formal or informal, globally or regionally oriented.

What is important to underline here, is to consider the democratization process as an element that begins within a country but which has to be enforced also by external elements, information through ICTs are revealed to be particularly essential in the

moment information, which was strictly controlled by dictatorial ruling parties – that used censorship or punishments to prevent critics to be spread through the media – is almost free to be shared with other countries and other actors. The flow of information that was released outside the Arab countries was different according to whether the media was controlled by or free from the state monopoly. In an article dated mid-October 2011, the New York Times is reporting the story about a Tunisian blogger, Ms. Ben Henni, who since 2007 held a website in which she wrote about human and especially women's rights, freedom of speech and censorship.<sup>13</sup> Ms. Henni is an example of how internet users helped the revolution. If it is true that '[she] is an example of how protesters helped break a regime's stranglehold on the media and accelerate a revolution that brought down the 23-year dictatorship of Mr. Ben Ali and that went on to ignite much of the Arab world', it is also true what Ms. Henni states herself, that, 'maybe in Egypt the call started on social media, [...] but here, everything started on the ground. Mohamed Bouazizi set his body on fire and everyone started to demonstrate. Social media didn't start the revolution. It was just a tool that helped'. This means that ICTs and the internet, social media and alternative news sources, contributed to the protests in a way that has not to be confused as if these were the reason of the positive outcomes of the protest itself. However, this article also reveals two other aspects that characterize the information's flow of the internet's instruments. On the one hand, there is the testimony of a blogger that went 'on the field' to document with pictures and articles what was really happening

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<sup>13</sup> The full article is available online at: <http://www.nytimes.com/2011/10/13/world/africa/a-blogger-at-arab-springs-genesis.html> (Last visited 14 August 2012).

in her country. This is a by-product of the openness that is peculiar to the internet, which lets all users who want to share their materials to freely contribute to the alternative information flow. The reverberation of this new kind of reporting has been valued also by satellite channels that for the first time included as news agencies also video filmed by amateurs. Many of these channels were obviously foreigners or not influenced by the censorship made by the Tunisian government. CNN, BBC, Al-Jazeera among others at the very first gave credit to this new type of 'on the field' reportages. Hence this underlines the fear of authoritarian governments toward ICTs, and toward those people who were contributed to the development of these alternative media that threatened the legitimacy of a unilateral version of the facts. This accounts for the persistence by which Ben Ali and other dictatorships were particularly violent dealing with bloggers and internet activists. When that happens, the already globally oriented effort to spread the dissent also toward foreign countries pursued by bloggers, made the decision taken against them by the authoritarian countries to reach a global scale. Other countries became therefore involved in what was happening within the Tunisian country. International news agencies covered this and other stories of bloggers that were threatened, imprisoned or even tortured, reducing the distance between a neutral approach toward the Arab Spring and a concrete aid to these countries. When a national issue became digitalized and open to the global public, the consequences also shifted from being local to global.

## **Participation**

The missing piece to a deeper understanding of how ICTs can contribute to the democratization process, therefore to the conflict resolution field, is the participatory tendency that these instruments benefit to the people. What is being considered here is essentially the concept of eParticipation, the political activism that an informed and connected community pursues towards the achieving of goals. The interest here is to define the environment inside which users can use ICTs for a participation that will be here analyzed only under the focus of the political involvement of citizens. The environment that defines this political participation is expressed by two concepts, namely, eDemocracy and eGovernment. These have been often utilized to express a range of meanings that is often imprecise or even misleading Following Clift's definition,

eDemocracy is the use of information and communications technologies and strategies by "democratic sectors" within the political processes of local communities, states/regions, nations and on the global stage. (Clift, 2003)

This broad category defined as eDemocracy is therefore the use of ICTs. Strategies that follow the functioning of the political participation is mediated by other classical means. If we consider the way people used to be involved in the decision-making process in the past, where local, often small communities used to meet in a defined location in order to take collective decisions, we can compare that situation with the one offered by virtual spaces. What this means is that the Greek agora, the public

square used by citizens to directly run the democracy, can be today compared to these virtual forums and posts, to same cases of social media, where fundamental decisions are made about the future of a country. They can also be made available by governments on their webpages for economic but also political benefits. The way people are participating in the eGovernment, essentially “the use of the internet by governments to provide information and to provide delivery of public services or goods” (Cropf-Casaregola, 2007, p. 198), or in the eDemocracy (wherein the concept is more related to the active participation between politicians and citizens). Once again this depends on the direction of the message. In the first case, the one-to-many direction is influencing how people experience the institutions by knowing more, owing to the more diffused and open level of transparency. In the second case, there is a mix between the two levels of communication, since there has to be a dialogue between the government and the governed. There is the will to be an active part of the political decision-making body, a desire that goes further the basic necessity to make sure that the democratic will of the population is heard. The already cited Bauman in his work about the individualization of the societies analyzes the political trend to mistrust neighbors and other individuals, even part of the same collectivity. This is mostly applied to the political, local, or global reality of one’s environment. In other words, the contemporary citizen has elaborated a level of mistrust against politics and politicians, which is experienced together with the disinterest about what is happening in contexts different than his close ones, a characteristic this common to the individualized man (Bauman, 2010). This interpretation, as extreme as it



may sound is certainly reflecting part of the truth. This could be seen in countries where the political stability is related to individuals and/or restricted to power groups that control and govern for decades, although to the detriment of the community, where two different reactions were often noticed. In general, considering also the dynamics and governance systems of the past, we can distinguish between two radically different reactions to unsuitable behaviors of rulers: indifference to everything related to the sphere of politics on the one hand, and antagonist activism, including violent forms of expression of dissent, on the other. This trend seems to be changing while the new technologies of communication and information have been introduced in countries where the subsistence of the same government through the years was followed by a slight, marginalized, political participation by the citizens. If we consider the Italian case as an example among others, we can understand why the attitude of citizens towards the institutional policy is following this trend of disaffection and mistrust.

One of the most important Italian socio-political theorists, Ilvo Diamanti, recently stated in an article published in the well-known Italian newspaper *La Repubblica* how representative democracy is facing many difficulties coming from the former media of the TV. Politicians adapted their agendas to spectacular appearances in as many channels as possible. Populism and frequent appearances in TV news broadcasts, socio-political debates and cultural programs, challenged historically significant concepts such as political confrontation, political programs, ideologies, and public speeches. The solution politicians found to counter mistrust and disaffection was not to reconsider the way to

interact with the electorate in a more direct and transparent way, maybe already integrating media channels other than TV or radio programs. They have followed the rules of the TV share; they listened to suggestions coming from TV specialists on what to say with which clothes. Politicians have even adapted their images to their electorates. They became, as Diamanti states, part of the unsatisfied population they had to represent, even if they firstly where the cause of the dissatisfaction.

To win votes, to win elections, “politicians” have presented themselves as anti-politicians. That is to say against parties and politicians elected in parties. Even if, to be elected, they formed and created new (anti-) parties.<sup>14</sup> (Diamanti, 2012)

Considering the 2011 Arab Spring, the success represented by Facebook and other social networks at the organizational and communicative level is also due to the tenacity with which activists in those countries used for years ICT to exchange, discuss, and inform. This has pushed the already thin level of benevolence towards undemocratic regimes, to the uprisings that followed. The common interpretation, in fact, shared by many Arab intellectuals but also underlined by several social observers and political analysts, is that social networks and ICTs represents tools that can be used in constructive (or negative) ways helping communities to organize themselves thanks to the already considered two elements of ‘communication’ and ‘information’.

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<sup>14</sup> The original in Italian: *‘Per conquistare voti, per vincere le elezioni, i “politici” si sono presentati come antipolitici. Cioè: contro i partiti e i politici eletti nei partiti. Anche se, per essere eletti, hanno formato e fondato nuovi (anti) partiti’*.

A similar view is taken by Donald P. Moynihan, professor at the Wisconsin-Madison University. In his contribution to the Encyclopedia of Digital Government, Moynihan wrote about the kind of participation described above. The premise of his analysis is the relevance of this concept in the development of further political realities. According to the analysis of Moynihan, about the 'rise of postmodern values among citizens', that are 'distrust of formal institutions such as government and political parties, and the desire for more participatory democracies' (Moynihan, 2007, p. 169). This concept is considered as characteristic of our time. Indeed, the shift in values that affect the way people are experiencing their involvement in the civic society is a by-product of 'societal changes, [and] particularly increased education', concepts that are the reason of 'a greater demand for involvement and access to information' (Moynihan, 2007, p. 169). This the same argument Diamanti put forth when he recalled on the trend of the contemporary representative democracy. Both share the idea that there is a need to access to the new technologies, because 'citizens [...] enjoy both the will and the means to break the monopoly and centralized control on public information enjoyed by the government' (Moynihan, 2007, p. 169). These three quotations summarize the underlying idea behind the contemporary societies from the perspective of the changes in political and social life. These concepts may belong to an historical context of a decade ago, when social networks and social media, a wider access to the internet and the global dissemination of information were far from reality today. What happens if this trend has proven to be correct? What happens if a lot of wishes based on new technologies have been realized?

This is still an ongoing process, and as far as the technology develops into further ideas and uses, the conclusions that can be drawn are far from being conclusive.

Looking at the present trend, it seems that ICTs can overcome the problem defined by Putnam (Putnam, 2003), also cited by Moynhian in his paper, that there has been a trend in recent years of a ‘decline in civic engagement between citizens in the society’ (Moynhian, 2007, p. 169). This is because the process of democratization is both the result of forces that are coming from the bottom up and from the top of society (individuals and institutions). If we consider what we discussed earlier the situation of our postmodern society is characterized by a miscommunication between power-holders and power-subjected. Therefore if the tools offered by ICTS, which do not comprehend strong embodied hierarchies, can provide a bridge between these two types of bottom-up/top-down movements, new solutions might be possible. This might hence give way to a deeper meaning for the concept of representative democracy. Zizi Papacharissi, a professor at the University of Illinois in Chicago, seems to share this view where she argues that,

[...] new media are viewed as vehicles through which these conditions [the fact that there is a lesser interest in civic participation, a mistrust of politics and public affairs, a negative trend in the participation of public elections, a lesser interest to watch or read the news] can be amended. For instance, the Internet could serve as a virtual sphere or revive the public sphere, provide a forum through which individual, not numbered, voices can be heard, host political discussion that focuses on issues and not strategy, and encourage deliberative or direct models of democracy, (Papacharissi, 2007, p. 316)

A famous jurist and expert in politics, Stefano Rodotà,<sup>15</sup> advanced similar arguments, but takes a step further by proposing the concept of *democrazia continua* (continuous democracy). In one of his best-known publications, *Tecnopolitica* (Rodotà, 2004), he analyzes the situation of the representative democracy and argues that considering how societies and technologies are shifting much faster than in the past, embodied theoretical concepts have to be adapted to these transformations. Therefore the concept of continuous democracy allows rethinking of both the representative and the direct democracy in the light of the instruments offered by the new technologies. ICTs in fact provide an opportunity for citizens to participate in the political life not intermittently, but continuously. Their voice may stand at any time and from anywhere and become part of the daily political concert (De Kerckhove, Tursi, 2006 p. 149).

In addition to the Arab Springs, several social movements are using ICTs as tools for their parallel and crossed protests. To give an example, the Spanish 15-M Movement, known also as the Indignants movement, is considered to be an outcome of discussions born on social media like ‘Democracia Real YA’ or ‘Juventud Sin Futuro’. What the Arab Spring and the Spanish protests have in common is the need, principally of young people, to express their concerns to interlocutors that have to be other than untrusted politician. As we have already stated, ICTs are tools and spaces for these movements,

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<sup>15</sup> Rodotà is an internationally well-known scholar and politician. He is one of the authors of the Bill of fundamental rights of the European Union. In 2009, the Electronic Privacy Information Center in Washington awarded him the International Privacy Champion Award.

spaces that can offer immediate and continuous conditions to satisfy this need. We can say, following the thought of Rodotà that new political subjects are emerging, along with new forms of politics. At the roots of their origin, which is based on the use of social networks, these new subjects work together in a network of organizations, allowing different realities to connect, communicate, make decisions, without any special leadership and hierarchies.

Politics and politician have therefore to consider the power of these instruments, adapting their behavior to globally connected electors that can express their concerns with instruments other than voting or petitions. In particular, what these movements together with the technological tools have proved is that, when capable of obtaining information from institutions, there is the will by many to know more, to be more involved, to exercise democracy in its very deep meaning and, last but not least, to prevent conflicts which may be prevented.

Following the main political trend of mainly Western societies, the concept of transparency underpins the need for citizens to know what is being decided on an institutional level. In this context of discourse, we emphasize the positive effects of transparency as defined by Ostermann-Staudinger in their study about ‘Corruption, Transparency, and eGovernment’:

[...] transparency may serve as a catalyst for better system, since it reduces discretionary power and promotes a government’s (and its administration’s) accountability” (Ostermann-Staudinger, 2007, p. 252).

This term, therefore, seems to be the contemporary must-have that governments and public offices have to offer in order to be competitive on a democratic level: the more transparent a government is, the more it will be considered democratic by its citizens and by the international arena. More than that,

The promotion of transparency [...] is a key element in preventing and also fighting corruption, financial irresponsibility, and underhand dealings. (ibid., p. 252)

The two abovementioned authors remember how transparency and accountability have to be the key elements in '[the] public procurement and [in] the management of public finances' (Ostermann-Staudinger, 2007, p. 252). How this level of transparency can be reached is considered an issue that involves also the ICTs, given that such instruments can be useful to create a system in which citizens (users) and politicians (or public officials) are strictly connected with each other, can share responsibilities, but also ensure a mutual continuous control. Important considerations have been advanced by Ostermann and Staudinger as regards the level of transparency, typical of digitalization processes that can fight against corruption. They statistically proved the existence of a 'strong positive relationship' between the so-called 'eGovernment readiness index' (which is an index that calculate the number of high quality information and the effective tools for communication that each UN member state using ICTs is capable to include and

deliver to the public) and the ‘corruption’<sup>16</sup> perceptions index’ (formed by other three sub-index, ‘Web measure index’, ‘telecommunication infrastructure index’ and the ‘human development index’ (HDI)<sup>17</sup>.

This study has involved 123 nations for both rankings (Ostermann-Staudinger, 2007, p. 252). Once it is understood why a correlation does exist between a higher level of eGovernment’s use and corruption,<sup>18</sup> but keeping in mind that this relation is not mono-causal, as Ostermann and Staudinger argue, it is relevant to emphasize from this study that transparency together with eGovernment can lower the level of corruption within a country. It is necessary to consider four indicators cited in the article, namely, ‘law and order, bureaucratic quality, government stability, and civil liberties’ (Ostermann-Staudinger, 2007, p. 254). A system not economically efficient should therefore consider the use of ICTs for implementing the quality of bureaucracy, since the costs will be lesser once the digitalization’s of public offices and documents is in act. It has been proven that the use of ICTs provides dissolution of paper works, lowers employee costs, and brings benefits of time, space, salaries, and trust in public

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<sup>16</sup> Corruption here is intended to *implicitly incorporate an underlying notion of the original or natural state of government run altruistically by politicians and civil servants in pursuit of the public good* (Ostermann-Staudinger, 2007, p. 252).

<sup>17</sup> More information about the indexes utilized and the statistical tools included in the study, as well as tables and results, are available in the article by Ostermann-Staudinger, pp. 252-258 part of the Encyclopedia of Digital Government, 2007, IGI Global: USA, Pennsylvania). For more information: <http://www.igi-global.com/about/> (Last visited on 20 August 2012).

<sup>18</sup> Because economic development is harmed by systems where corruption is promoted, damaging the GDP index, which is related to the spread within a country of eGovernment’s projects. The more resource a country is capable, the more probable is the use of eGovernment strategies to undermine corrupted systems. This may lead to the question if there is then a loop, if, in other words, the more a country is poor, the less eGovernment’s strategies will be useful. But there are other factors that should be analyzed, such as the presence or lack thereof a democratic culture or of civil liberties.



institutions. The government stability is therefore partially empowered by this relation. However, one cannot suggest a direct relation between ICT and a lower level of corruption, because eGovernment can become just a small solution to the much more complicated issue of corruption. In the effort to stay on the ICTs topics, we can only argue that eGovernment may not be the only and the most effective solution to the corruption's issue. Even if it is true that an overcoming of corruption and a propensity toward transparency still depends on the availability of public officials and institutions, bottom-up movements have been proved that can actively contribute against these negative trends in today's democracies.

The publication of official documents in institutional webpages is one among many examples of how to bring more transparency thanks to the ICTs and that can be both an outcome of a top-down and a bottom-up movement. The Vatican papers that were revealed to the public for the first time after centuries and, of course, WikiLeaks are the two most common examples for the two cases.

This can also be achieved in other ways. For example politicians can build up a virtual environment from which they could keep contact with their electoral population, like the case of US President Barack Obama, which is considered by many as a step towards a new way to pursue politics, also in relation of a new understanding about electoral campaigns, which have to deeply involve citizens with attention on critics and suggestions. In his 2008 campaign the future President decided to massively use ICTs tools for communicate and be involved with US citizens' issues. For this reason a

YouTube channel was created<sup>19</sup> where users could upload their questions and desires in the form of short video-interviews. The effect of this campaign, and the consequent use of ICTs on a political level, has been analyzed by Clain C. Miller, a New York Times journalist. In his article entitled 'How Obama's internet Campaign Changed Politics', Miller makes a comparison that somehow directs the attention on what Baldini said about the use of new technologies as a succession of different eras in the human history. Participating actively in political debates or even in electoral journeys to the White House is a feasible possibility of the internet. Since one of the main concerns of politicians is the fundraising, necessary to be visible to as many potential voter as possible, the idea of using social networks like YouTube directly reveals why these technological tools can be so powerful. Miller remembers how,

Mr. Obama used the Internet to organize his supporters in a way that would have in the past required an army of volunteers and paid organizers on the ground [...]. (Miller, 2008)

Even now that Obama's mandate has gone through several difficult years; the keyword seems to remain that of 'transparency'. Visiting the White House web page<sup>20</sup> one can directly interact with the decision-making process of the American politic, thanks to podcasts (a series of short videos frequently updated). This is definitely what Castells

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<sup>19</sup> The channel is online available at: <http://www.youtube.com/user/BarackObamadotcom> (Last visited on 17 August 2012).

<sup>20</sup> Especially the section of the site dedicated to the weekly videos that show the 'weekly addresses' of the President; online available at <http://www.whitehouse.gov/podcast> (Last visited on 17 August 2012).

would classify as a top-down direction of the message, but the integration of comments on the YouTube channel offers the possibility of even the bottom-up's one. In Miller's article, the author compares John F. Kennedy to Obama because of the decision to use a new medium that will, like the television, 'forever change politics' Indeed, '[f]or Mr. Kennedy, it was television. For Mr. Obama, it is the Internet.' (Miller, 2008)

The concept of transparency goes together with the one of inclusiveness, since adapting the politics to a continuous critical revision by millions of users means being able, with the tools at disposition, to present as much as possible opinions and facts that can be accepted by the electorate. This is particularly relevant in political contexts characterized by corruption and power's abuses.

In 'The New York Times' Joe Trippi, a political strategist that first realized the importance of ICTs for political election and mandates, has been quoted when he stated that,

This medium [Internet] demands authenticity, and television for the most part demanded fake. Authenticity is something politicians haven't been used to. (Miller, 2008)

But the local context of a presidential election and mandate is not the only example that well defines how the combination between communication, information, and participation can positively contribute to the democratization process. There are several independent websites that are active in promoting campaigns on a global level,

intended to familiarize users with issues that are far to be directly related to them. This is the case of Avaaz.org<sup>21</sup> or Greenpeace.org,<sup>22</sup> two very different foundations that are dealing with world issues for the ‘common good’. These two realities are operating on both the virtual and the empirical levels, informing, collecting signatures for petitions against injustices, environmental destruction, wrong political initiatives, atrocities that can also affect limited contexts of population but requiring extensive, globalized mobilizations. Political involvement in these cases is probably more manifested because it requires an active participation also on the ground, not comparable to a comment on YouTube. In other words, the different finality between the two cases is on how the participatory level is differing, having a comment, probably followed by a vote, in the first case, and manifestations and protests in the latter one. The purpose is different, and so is the level of participation. In the first case, there is a comment, probably followed by a vote; in the second case, you can inspire people and groups to intervene with their own initiatives, from below, as well as with concerted demonstrations and protests. In addition, Avaaz.org and Greenpeace, to stay at these examples, are open to a circular communication, which stress upon reporting problems and possible solutions from users, thus favoring an increased active participation.

The level of communication is still in favor of a one-to-many relationship, at least at the beginning when the issue has been raised by the web site, but later users can

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<sup>21</sup> Online available at <http://avaaz.org/en/> (Last visited on 17 August 2012).

<sup>22</sup> Online available at <http://www.greenpeace.org/international/en/> (Last visited on 17 August 2012).

interact and mutually inform through email lists or social network, and especially, they can turn the initiative to an open debate or campaign, on issues they consider important. It is interesting to note that in recent years many conflicts were prevented and many others resolved thanks to the type of action chosen by Avaaz.org and Greenpeace.

When there is transparency about an issue that can be changed into more positive outcomes, when there are the instruments and the willing to include users in this struggle, the level of participation becomes universal. But transparency can also be feared by the same democracy that fights for people's freedom abroad. The case of WikiLeaks, the sharing of secret documents and information represented an issue even for the political stability of the international arena. What needs to be considered is not really the fact that ICTs can become an instrument of subversive movements against the peaceful agreements between politicians or international realities. The fact that people were interested about these documents and accessed the web sites several times, is revealing that people are not satisfied with the mainstream version of the facts. Diamanti remembers that,

We are in the age of an always connected Public Opinion. Where everyone can speak and be heard. Intercepted. Where every document, even the most secret, can be scrutinized, selected and divulged. In the Web. Where Democracies fear the excess of transparency and liberty. (Diamanti, 2012)<sup>23</sup>

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<sup>23</sup> Original in Italian: *‘Siamo nell'era dell'Opinione Pubblica sempre in Rete. In cui tutti possono parlare ed essere ascoltati. Intercettati. In cui ogni documento, anche il più segreto, può essere scrutato, captato e divulgato. In Rete. Dove le Democrazie temono l'eccesso di trasparenza e di libertà.’*

These words seems to be extrapolated by Rodotà's reflections on continuous democracy, since the mechanisms of a continuous participation by the citizens in the politics makes politicians so afraid to be in favorites positions all the times. Looking at the shift between TV guided politics and the new media ones; one can directly see how the visibility of politicians is playing with the issue of transparency. The two terms are correlated, when there is a governmental behavior which is unjustified or misunderstood, the necessity to know, the need for information, and for many sources for these information, transparency and visibility can undermine the stability of a political reality

Several uses of the ICTs have been introduced in communities where the necessity to establish a more coherent and strong sense of identity and participation was needed. The common trend of these projects was the use of technologies as integration to already built or developing strategies that may have been used to work together with other media. In the following pages there will be presented two cases in which ICTs resulted as useful tools for experiencing a sense of community. The first is related to the Digital Town Hall Meeting, a technique that lost its meaning after the number of individuals in communities could not be more managed, and the other one is Community Networks.

Looking then to a more focused solution to these negative trends and images that have influenced the participatory level of citizens in the past, it is useful to present what professor Moynihan has discussed in his already mentioned paper. The idea of an active political participation can be summarized in the concept of town hall meetings. In the

past centuries, physical location, like public monuments or squares, were the places where the decision-making process about assessments regarding the community was developed.

The most exemplificative experience is the one about the basic Greek conception of democracy, of an agora (square) where people could discuss all the political issues within the same level of participation. Moynihan has studied two processes of 'Digital Town Hall Meeting' held in Washington D.C. and in New York. The first concerned the 'government's strategic planning and budget process' (Moynihan, 2007, p.170), the other one dealt with the reconstruction of the World Trade Center site. In both projects a consistently high number of participants could, through the use of new technologies, interact with each other and with the institutions in a specific place. This meant that the use of computer and flat screens, connected together to each of the participants, divided depending on the neighborhood, letting them organize themselves and propose actual ideas to the project. While it may be considered as a success, the fact that institutions listened to their voices is also the reason why Digital Town Hall Meeting still seems to be less than effective on a larger scale. First, the ones who always had the final word were the participants' institutions. Secondly, the cost to organize and lead these meetings has been so high that it is not realistically possible to repeat it more frequently. Considering the years during which these meetings were held one can ask if many of the critiques that were made at that time, are maybe nowadays overcome. For example, the cost of technologies has been reduced heavily from 1999 (D.C. Town Hall Meeting) or 2002

(N.Y. Town Hall Meeting). In more than 10 years the differences between what was available in the past and what is available now is not irrelevant, if we consider that technologies were less diffused and less equipped than today. As Moynihan states in his conclusions,

Perhaps the most obvious lesson is that technology can reinvigorate the traditional town hall meeting. [The two cited experiences] suggest it is possible to bring together a representative group of thousands and use technology to allow them to have an interactive dialogue with public officials. (Moynihan, 2007, p. 172)

And even if public officials have the power to decide whether to allow citizens to participate in these kinds of projects, the same cannot be said to other virtual spaces that in between have grown and are mostly free from the decisions of an upper power. Again the case of social media, and the useful tools they attempted to become during the Arab Spring, should be a wake-up call for those who think that ‘public officials will schedule and listen to such feedback [the ones arising during the meetings] when it suits them’ (Moynihan, 2007, p. 172).

Digital Town Hall Meetings, then, with the instruments used in the past, seemed to be potentially an important benefit to the community, but in practice, there is still a process subjected to the will of public officials. The question is therefore again the same, what if these projects were reiterated with the instruments available nowadays? What if



the use of high speed internet connections, of social media and forums, can effectively improve the real process of (re)democratization?

On the local level, many other projects have been developed under the wording eParticipation, meaning a high level of interactions between institutions and citizens through ICTs. The most successful experiences in this field began with the late 90s, when in many North European countries several projects were encouraged to involve citizens in the community's decision-making process. In The Netherlands, England, and Germany as well as in Estonia and in other EU countries ICTs began to be utilized by institutions and local governments to provide the people with useful instruments to interact. In addition to the internet, mobile phones were provided to the population in order to interact with institutions via text messages through which they could question the institutions about the living in neighborhoods, the development of new strategies and ideas and to understand the desires of the citizens. These kinds of projects can all be embodied in the 'top-down' modalities of participation. On the EU zone side, the European Union, in the specific the European Commission deliberated a project called 'European Union from A to Z', which was a CD-ROM delivered to middle and high school in 1997 presenting the asset of the Union, with ample information about the future development, such as the Euro and the Schengen treaty. After several studies from EU specialists, the Council of the European Union deliberated that eParticipation should be integrated in the 2006 European eGovernment Action Plan, which has been renovated

during the years until the present. The main aim of this plan is presented in the European Commission for Information Society web page,<sup>24</sup>

The Action Plan aims at maximizing the complementarities of national and European policy instruments. Its actions support the transition of eGovernment into a new generation of open, flexible and collaborative seamless eGovernment services at local, regional, national and European level that will empower citizens and businesses. (Home page of ICT for Government and Public Services)<sup>25</sup>

The main objectives of the plan are very similar to those outlined in this chapter, ‘increased access to public information, strengthened transparency and effective means for involvement of stakeholders in the policy process’ (The European eGovernment Action Plan 2011-2015, p. 4).

What this and other projects are showing is the possibility to strengthen also the international collaboration between states. Until now, our concern has been focused only on regional or national experiences aimed at encouraging citizens to organize and communicate better their concerns to institutional bodies, in order to facilitate the latter to integrate citizens in the decision-making process. But studies on ICTs have demonstrated that they are useful also to build up relation on the international level where particular aspects of the economics and politics can cooperate with each other strengthening the

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<sup>24</sup> Available online at:  
[http://ec.europa.eu/information\\_society/activities/egovernment/action\\_plan\\_2011\\_2015/index\\_en.htm](http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/index_en.htm)  
(Last visited on 21 August 2012).

<sup>25</sup> Available online at:  
[http://ec.europa.eu/information\\_society/activities/egovernment/policy/eparticipation/index\\_en.htm](http://ec.europa.eu/information_society/activities/egovernment/policy/eparticipation/index_en.htm),  
(Last visited on 21 August 2012).

relation between two or more States, but also the internal politic/economic situation of each participating state. The case of the European Union can be used again as an example to explain how this can be feasible. In 2006, ‘under the European Commission’s sixth framework programme: Information Society Technologies IST’,<sup>26</sup> Demo-net was funded as a Network of Excellence project.

Particularly related to this discussion are the areas of application of the eParticipation, which are divided among the following:<sup>27</sup>

- |   |  |
|---|--|
| (a) Campaigning                                   | The use of ICTs in social movements such as protests, lobbying, petitioning and similar.   |
| (b) Community Building/Collaborative Environments | The use of ICTs to create and empower communities with the use of shared agendas and goals.  |
| (c) Consultation                                  | The use of ICTs in the purpose of official initiatives, both on the public or private level, to allow stakeholders to manifest their opinions on specific issues, privately or publicly. |
| (d) Deliberation                                  | The use of ICTs for small or large group discussions, allowing a larger reflection and consideration on shared issues.   |
| (e) Discourse                                     | The use of ICTs to support analysis and representation of discourse.   |
| (f) Electioneering                                | The use of ICTs as support for election campaigns.   |
| (g) Information Provision                         | The use of ICTs for structuring, representing and managing information in participation contexts.  |
| (h) Mediation                                     | The use of ICTs to resolve disputes or conflicts in an online context, like the application of ICTs in the CR field, as analyzed in the chapter IV.                                      |

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<sup>26</sup> Extrapolated from the ‘About’ section of the Demo-net web page, available online at: <http://www.demo-net.org/about-the-eptn>, (Last visited on 21 August 2012).

<sup>27</sup> The table has been shaped following the distinction presented on the same Demo-net web page, available online at: <http://www.demo-net.org/data/eparticipation-area>, (Last visited on 21 August 2012).

(i) Polling	The use of ICTs to measure public opinion and sentiment.
(j) Spatial planning	The use of ICTs in urban planning and environmental assessment.
(k) Voting	The use of ICTs in the context of public voting in elections, referenda or local plebiscites.

The European Union therefore utilized eParticipation as a tool to direct the member states in projects that were supposed to create ‘Community Building/Collaborative Environments’ hence involving citizens and institutions in the decision-making process of the plan. For the purposes of this dissertation it will be not necessary to list all the 21 projects developed during the last decade, which in turn comprises different categories of citizens – such as youth, workers, stakeholders and institutions – and many of which has already been closed. It is important to underline that the process of integrating the work of several States in the same projects, involving citizens in the construction of new ideas, led to positive results. These, in fact, were only provision projects built as a part of the framework that contributed to the realization of the European eGovernment Action Plan.

Summarizing how information, communication, and participation are characteristic of the new media that can contribute to the democratization process, therefore to the settlement of situation of struggle or even violence in the context of political instability. How eParticipation is a relevant part of eDemocracy together with eGovernment and specifically how the two directions of bottom-up and top-down

reflected the way people and institutions could communicate with each other. We presented and discussed tools that facilitate communication between citizens and between citizens and institutions. The need to be informed, to participate on what is surrounding and conditioning our existence, led us to question about transparency, inclusiveness, and universality. These three concepts have in common the fact that ICTs can improve the level of participation thanks to its tools, which is if users and institutions insist on these principles with new forms of politics. Several thoughts have been considered on how representative democracy is coming to an answer mark, since the level of interest and consensus toward it has been declining in recent times. Therefore, other tentative solutions or ideas were proposed, like the concept of continuous democracy, as put forward by Rodotà. We then presented two applications of the eParticipation on the community level, particularly, Digital Town Hall Meeting, and Community Networks. Considerations about the later one led us to the European Union and to the applicability of the eParticipation project on an international level. It is important to remember that we are considering perspectives that are constantly changing. eParticipation practices or the idea of continuous democracy are yet to be fully understood. In particular, it should be further explored the way through which direct democracy offered by the web can be a complement and not a substitute for the representative one, because there is a lack on empirical contextualization that could enable assumptions about different and further applications. What was the main opinion about the internet in the 1990s, also according to authors such as Pierre Levy and Derrick de Kerckhove, is that humanity is going to

meet a great universal change, that everything will be based on technological relations between web-based communities, which is rather unrealistic. For now, it is important to understand what is the level of feasibility of the ICTs to provide a relevant aid to the democratization's process. In the next chapter it will be analyzed the issue affecting the ICTs and its spread and application on a global scale, in particular, the problem of the digital divide will be presented.

## **CHAPTER THREE**

The Internet, the primary medium for this type of [digital] citizen, as it converges and sustains several operative digital technologies, becomes an asset or a detriment, depending on how it is put to use. (Papacharissi, 2007, p.316)

This chapter examines some problems related to the uses of the ICTs as tools and as a space in contexts where limitations are imposed in the access or in the use.

In the last two chapters, we have discussed the nature and the potential of the new technological media in the processes of democratization leaving aside concern about their applicability to a global scale. It comes to no surprise that there are deep-rooted differences between rural or less industrialized areas and metropolis and technological developed situations. But the limitations associated with the ICTs include factors other than technological ones.

In more industrialized Western countries, the access to the World Wide Web has been granted for the majority of the population. In Europe and North America the

penetration of the internet among the population reaches a percentage of 69.5%,<sup>28</sup> hence much higher than the world's, which amounts to 32.7%. But even in these areas there are discrepancies between the access and the different types of connections available, with high broadband ADSL and fiber-connections in major towns, and broadband or narrowband connections in rural or even in urbanized but decentralized areas. Between one neighborhood and another there can be different offers by different providers, the phone-line connection may be older in some street than in another, limiting the technological opportunities existing in the region. These kinds of differentiations are less relevant if compared to other countries characterized by technological, political and economic underdevelopment.

Digital divide, or the concept that summarizes this issue, is often used in many generic ways to express the main concerns that are questioning theories that have been presented in the previous chapters. As with all the phenomena that have not yet been fully defined, but that developed many studies without reaching a definitive understanding on the subject, the debate on digital divide has been articulated between more optimistic (Castells 2007, Rodotà 2006, Levy 2006, De Kerchove 2006, Miller 2008, Cropf-Casaregola 2007) and more pessimistic perspectives (Norris 2001, Venkatesan-Nambiar, 2003).

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<sup>28</sup> This number has been calculated considering the 2011 statistics, available online at <http://www.internetworldstats.com/stats.htm>, between Europe (61.3%) and North America (78.6%). DATE OF ACCESS?



An apt point of departure would be to outline the meanings for digital divide and underline the kind of digital divide that is being referred to when dealing with political processes such as that of democratization. It would also be useful to specify the fields and the contexts where digital divide has raised so many questions about the future of people living in different regions of the world. This chapter will also highlight those instances in which it is possible to speak about digital divide and when some historical features may have been overcome and replaced by new, more problematic issues, when compared to the one related to technical impediments, since requires a deeper analysis on socio-political mechanisms. Only after all this has been taken into consideration does it become useful to remember the different positions expressed by theorists and scholars, which seem to be divided between those who believe in digital technologies as a means of resolving conflicts and those who think that the gap will only worsen already existing problems.

Generally speaking, we can distinguish between digital divide in the access and digital divide in the use. The first relates to the lack of technological tools needed to navigate on the web; the latter one occurs when the access is limited by factors other than the technological availability. In other words, there is digital divide in the access in environments where the lack of economic, technological and political development is a direct cause of the absence of necessary tools to use the web. This is the case of many sub-Saharan African areas or rural regions of Central and South America and even of the Middle East, commonly labeled as ‘developing countries’. The digital divide in the use

relates instead to the limitations imposed by factors other than the technological development of a country. In this case, the use is directly dependent on the decisions and conditions imposed by external actors in contexts where the technological availability has been reached.

## **Digital Divide in the Access**

Most of the literature on this subject has been focused on the first kind of digital divide. One of the most influential authors is Pippa Norris who wrote an essential book entitled, *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide* (Norris, 2001). The main concern of Norris was about a different distribution of technologies among the most and the less developed countries of the world, affecting and endangering an already critical situation of disparities. Information and Communication Technologies were therefore considered as an outcome of a capitalistic perspective on a global scale that was not considering other contexts than the Western industrialized society. This can be justified in part by the underdevelopment characterizing internet infrastructures worldwide, as well as by economic interest to spread these technologies only in socio-political contexts where private and public investments could benefit by large-scale of relatively rich users. Digital divide in the access is still today an issue for many of the African, Asian, and South American countries characterized by a lack of infrastructures on a very basic level. The lack of electricity directly affects the possibility of internet connections in most of these countries' regions, except for the most populated, industrialized areas. But even here the availability of personal computers and internet connections is considerably low if compared to other regions. This can be observed by both a simplistic understanding that poorer countries have less economic availabilities to buy expensive technological infrastructures, but also by considering the fact that private providers, such as ISP and

communications' companies, have less interest to invest big amount of capitals for social contexts where the majority of the population cannot afford their services. Therefore the statistical data collected during the first years of studies about internet's penetrations were considerably low in peripheral areas of the Western world, figuring a reality which could be considered dangerous for the already present divide between North and South. This trend has been defined as the risk of a division between the 'have' and the 'have-nots'. On the same side of the literature, many scholars of the early 2000s considered the differentiation between those who have and those who have not access to the new technologies and internet. V. S. Venkatesan and Neetha Nambiar (2003), for example, underlined this perspective in their article on e-Colonialism. The vision of a Western world imposing their own models under the name of globalization – often referred as homogenization – is considered as a new reproduction of colonialism, with e-colonies directly dependent on Western developed countries. The article concludes with the auspice that developmental programs on an international and national level will be oriented towards an implementation on the access and the use of ICTs also in the so-called 'less developed' countries.

In an economic perspective, the use of new technologies in Western markets, the introduction of new media for the creation of even new markets, and the necessity to be part of the globalized economy, were only some of the concerns of major leaders of these 'underdeveloped' countries. The importance of the internet and of ICTs in the Western

world were perceived as a potential threat to those countries who could not afford the price to be part of this game.

The digital divide in the access should be therefore considered only under a technological aspect of lack of availability, which is a condition that reflects the reality of a decade ago compared to today. In fact, the price of infrastructures and gadgets has been indeed extremely reduced, compared to the benefits for governments and citizens. Private companies have realized the potentiality of new media and promoted projects and business operations to introduce them into new national contexts. An example that may represent well this intent, somehow anticipating what will be said soon after, is the One Laptop Per Child foundation. OLPC is an organization aiming the use of personal computer in less developed countries using education as a motivation towards the information world. This ONG, enjoying support of Intel and other funds, is providing basic computers, which are working since 2005 without the necessity of an electric infrastructure thanks to a crank-charging. The idea behind the purpose of this ONG, to introduce technological instruments as educative materials in socio-political context where a lack in the educational system will otherwise make these tools useless, should be followed by all the other organizations involved in ICTs projects.

The spread of new media devices and infrastructure has been constantly growing, as the statistics of [internetworldstats.com](http://internetworldstats.com) shows again.

**Table 2 World Internet Usage and Population Statistics**

<b>WORLD INTERNET USAGE AND POPULATION STATISTICS</b> <b>December 31, 2011</b>						
World Regions	Population ( 2011 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2011	Users % of Table
<a href="#">Africa</a>	1,037,524,058	4,514,400	<b>139,875,242</b>	13.5 %	2,988.4 %	6.2 %
<a href="#">Asia</a>	3,879,740,877	114,304,000	<b>1,016,799,076</b>	26.2 %	789.6 %	44.8 %
<a href="#">Europe</a>	816,426,346	105,096,093	<b>500,723,686</b>	61.3 %	376.4 %	22.1 %
<a href="#">Middle East</a>	216,258,843	3,284,800	<b>77,020,995</b>	35.6 %	2,244.8 %	3.4 %
<a href="#">North America</a>	347,394,870	108,096,800	<b>273,067,546</b>	78.6 %	152.6 %	12.0 %
<a href="#">Latin America / Carib.</a>	597,283,165	18,068,919	<b>235,819,740</b>	39.5 %	1,205.1 %	10.4 %
<a href="#">Oceania / Australia</a>	35,426,995	7,620,480	<b>23,927,457</b>	67.5 %	214.0 %	1.1 %
<b>WORLD TOTAL</b>	<b>6,930,055,154</b>	<b>360,985,492</b>	<b>2,267,233,742</b>	<b>32.7 %</b>	<b>528.1 %</b>	<b>100.0 %</b>
NOTES: (1) Internet Usage and World Population Statistics are for December 31, 2011. (2) CLICK on each world region name for detailed regional usage information. (3) Demographic (Population) numbers are based on data from the <a href="#">US Census Bureau</a> and local census agencies. (4) Internet usage information comes from data published by <a href="#">Nielsen Online</a> , by the <a href="#">International Telecommunications Union</a> , by <a href="#">GfK</a> , local Regulators and other reliable sources. (5) For definitions, disclaimers, and navigation help, please refer to the <a href="#">Site Surfing Guide</a> . (6) Information in this site may be cited, giving the due credit to <a href="#">www.internetworldstats.com</a> . Copyright © 2001 - 2012, Miniwatts Marketing Group. All rights reserved worldwide.						

## **Digital Divide in the Use**

Luca Tateo, an Italian professor who focused his research on social psychology and digital media, made in one of his papers a useful distinction between several types of digital divides (Tateo, 2002). He articulated and discussed different distinctions that are at the core of the discussion about the digital divide in the use. If access can be regarded as a problem of technological availability – even conceptually forcing a concept that can be used with a more generic meaning – the divisions directly correlated to the use are resulting from many other factors, which should be considered beyond the potential availability of technologies. These digital limits are technological, economic, linguistic and related to the sociality (Tateo, 2002).

The first category is directly related to the media itself, specifically to all the characteristics that are negatively affecting the usefulness of them. We had already mentioned the opportunity to consider the overload of the information available on the Net, a problem that is also linked to the trustfulness of the information. Due to the almost unlimited possibility of visiting contents coming from the most differentiated sources, the reliability of the internet may be compromised on this level. But information overload has an immediate consequence also for the usefulness of the Web. If we need to be informed about a specific topic, the Web represents an encyclopedia of billions of pages, most of which are probably unrelated, not enough accurate or even misleading. For this reason usually the web pages used as sources belong to two categories, either new born

institution of the knowledge, such as Wikipedia, or products of already existent media and sources.

There are several web-based tools that can help to overcome this issue, such as research engines (Google, Yahoo, Bing!), specialized in following the user in the process of source-finding. The question about the use of digitalized version of already existent media led us to the economic limitations of the digital divide. If we consider the positive effects of the digitalization of a paper journal, for example, we immediately understand how the benefits in economic terms are related also to the updated immediacy of new sources. But this type of service, if it is convenient for the Publisher, may not be compatible with the economic availability of all its readers. Economic limitations can be hence analyzed both from an individual/community level and from a state/international level. Service providers and states budget can orient their funds towards projects that do not benefit the majority of the population. In particular, internet service providers usually ensure a broadband ADSL connection in those neighborhoods where users are willing to pay more for services that may not interest everyone. Prevailing markets and economic trends of the globalized world are following a profit-related research for other markets, and if in some developing countries the idea of a future income from the introduction of new media led foreign companies to directly invest in infrastructures and services, in other political and economic realities that did not happen. There is therefore this tension between less developed markets and less interest of foreign investors that is affecting the access for those populations. Many non-governmental projects have been developed to



fill this gap, with a specific interest on the populations more than directly on the economic benefit for the country. Many NGOs have worked together with the specific intent to introduce people to the new media, to introduce materials and infrastructure in places where the government's plans were oriented towards more urgent necessities. This is the case of SANGONeT,<sup>29</sup> a developing project based in South Africa for the use of ICTs among African NGOs with the aim of 'facilitating access, sharing information, building capacity, raising awareness, enhancing reach and impact, and linking people and organizations through the use of ICTs in Southern Africa'<sup>30</sup>. This is only one example of the many NGOs that are involved in developing countries characterized by the same purpose of improving people's condition with the help of ICTs. The experience of these local projects advanced in parallel with international organizations, such as the UN. In fact many local projects are even a by-product of the General Assembly decision-making processes.

The problem that people working in these projects have faced is the difficulty of communication due to the language. Since, at least in the first decades, the language on the internet has been mostly English, the usefulness of the internet as an instrument to get knowledge and information was limited by English-speakers users. What has changed during the last years, especially thanks to blogs and forums, bottom-up instruments, is the adaptation of internet web pages to more than one language, or at least to the most

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<sup>29</sup> SANGONeT is online reachable at: <http://www.ngopulse.org/node/6311/og-panel/3>. (Last visited on the 26<sup>th</sup> August 2012)

<sup>30</sup> As explained in the 'about' section of the web site's project, on line available at: <http://www.ngopulse.org/about>, (Last visited on 4 September 2012).

frequently used by the users in a specific country. Today, the Spanish and the Chinese languages are challenging English's supremacy, though many other languages have been also included in the Web environment.<sup>31</sup> For example, many websites are providing their pages in a number of local languages and dialects, facilitating populations that are not familiar with English or even with the institutional language. There are other international websites and news sources that are adapting their offer with languages and contents specific for a particular nation or region. This is the case of CNN webpage, which is providing different online versions, one for the world,<sup>32</sup> one for the US,<sup>33</sup> one for Mexico<sup>34</sup>, one for Europe<sup>35</sup>, one for Asia<sup>36</sup> and one for Latin America<sup>37</sup>. There is also another version intended for the Arab world.<sup>38</sup> The first two versions are even available on more than one language. With regard to the satellite's television, there has been an increasing offer of new channels in languages other than English. The fact that a language can be an element of the digital divide is still actual, but it has brought about an improved use of other languages. Blogs and forums are virtually smaller places where closer communities of users use only their language to express their opinions and information, in a way that can be considered as an enforcing element for their community

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<sup>31</sup> Consider the table about world's languages of page 42.

<sup>32</sup> Available online at: <http://edition.cnn.com/> (Last visited on 26 August 2012).

<sup>33</sup> Available online at: [http://us.cnn.com/?hpt=ed\\_US](http://us.cnn.com/?hpt=ed_US) (Last visited on 26 August 2012).

<sup>34</sup> Available online at: [http://mexico.cnn.com/?hpt=ed\\_Mexico](http://mexico.cnn.com/?hpt=ed_Mexico) (Last visited on 26 August 2012).

<sup>35</sup> Available online at: <http://edition.cnn.com/EUROPE/> (Last visited on 26 August 2012).

<sup>36</sup> Available online at: <http://edition.cnn.com/ASIA/> (Last visited on 26 August 2012).

<sup>37</sup> Available online at: <http://edition.cnn.com/LATINAMERICA/> (Last visited on 26 August 2012).

<sup>38</sup> Available online at: [http://arabic.cnn.com/?hpt=ed\\_Arabic](http://arabic.cnn.com/?hpt=ed_Arabic) (Last visited on 26 August 2012).

itself. It is interesting to note how virtual spaces are simulating in a more simplified way situations of the 'real' world.

In other words, the internet can potentially replicate and enforce the concept and the structure of communities, offering instruments and hence helping to create relationships between users living in the same community while also creating new virtual communities.

This underlines the issue on digital divide as related to the various composition of the society. These limits are related to differences on the personal and societal level of the users. The way people are able to freely use the internet and the other ICTs media largely depends on a first point on the level of freedom from censorship and protection by the privacy. In socio-cultural contexts where these two elements are undermined by governmental controls, the interactions between users and the media are consequently limited. It may be considered as a digital divide in the access, since users are unable to open specific web contents, but censorship and privacy's control are also related to the way people think about the use of these tools. Knowing that their opinions are controlled, that there can be consequences on their words even on a physical level, such as torture or imprisonment, may influence the level of trust that people give to these media. But is it that really true? As an example, the democratization process that interested many countries of the Maghreb area in North Africa was also characterized by the level of participation of the people on a digital space. Censorship and digital control were a tangible reality in countries such as Tunisia or Egypt. Blogger activists and website hosts

have been threatened with torture and imprisonment since the early 2000s, when bloggers from North Africa or South America got ‘special’ treatment for their words. The same Arab Spring movements revealed how these controls over internet users can be overcome with many technological tools and strategies that include the use of foreigners’ proxies, providers, or the use of satellite communication. In other words, for those who are not experts on new technologies are using them at their own risk. This may place the internet as a too dangerous form of media. The differentiation between experts and novices can be considered by looking at the type of users that are participating in political manifestations of community building on the web. The Arab Spring movement has been analyzed under the consideration that who was really active and uses social media to communicate, inform and participate in the uprisings was principally a well-educated younger member of the middle class. Not everyone has the conditions, other than economic availability, to use the internet and the by-products of the ICTs productively. The difference between members of the so-called NET-generation and the elder members is in the easiness with which users of the first category are using these tools comparatively to the latter ones.

Under an economic perspective differences on social classes that divide societies between rich and poor, educated and illiterate, can be overcome because of technological development in the availability – internet cafes, internet points, public internet providers such as libraries and free Wi-Fi public hotspots –, and web contents realized in different languages and using multimedia tools that are accessible independently from the literacy level of the users (YouTube videos, pictures and web podcasts). The economic

development of a society is not the only indicator regarding the effective use of internet. And for the purposes of the democratization process other factors have to be considered, such as the level of political participation independent by the instruments through which this participation is exercised; in other words the necessity of a population educated to be part of the civil society, informed and active. This is a perspective also outlined by Papacharissi in her article (Papacharissi, 2007), which are the roles and the characteristics of the digital citizen inside the Web environment, and the relations between this digital context and the socio-political reality of his or her role in the community. Relations between politicians have changed. There is now an increasing bottom-up movement in the Western society, as well as in the Arabic one, that is shaping a new understanding of the politics, a mix between the representative and the continuous democracy. But as for the citizens of the continuous democracy, in which level are they engaged with their politics? It is true that during particular political movements, ICTs have been used politically in a positive way, but uprisings and social active movements are categories of political participation that are somehow an exception to the usual activity of the citizens. The question therefore insists on how citizens are relating to politics through the ICTs in everyday democratic-participative activities. Papacharissi is criticizing the idea of an increasing active participation, probably because her analysis was developed before the many social movements had flourished in several parts of the world, movements that in part used ICTs and in part were born on these new platforms.

The first acknowledgment is that the internet is a product of a capitalistic orientation within a process of globalization of the markets. One of the risks related to the ICTs are that, as it has already happened for TV and other mass media, after the innovation of the media, the commercial benefits of this media will overcome the many other positive aspects of the web, shaping the contents toward a speculative research on how the users navigate through the web. Advertising became one of the main reasons why many web sites were founded, and the need for private corporations to produce profits, from digital projects often created situations in which a political campaign was only the other side of the coin. This is the case, for example, of the ‘Kony 2012’ campaign. It has been proved that the ‘social movement’ that developed from the very first YouTube video message<sup>39</sup> of the founder was a product of misleading false information. Insisting on the sentiments of the users, the video helped the fake-campaign to raise an exaggerated amount of dollars to the founder, helping him to reach global attention. This is the risk of the web, many misleading information can be found and users that are not aware of the relevance of the sources, can believe and participate to fake projects such as this one. The use of sentiments to mobilize people is a common characteristic of the mass media. It is immediate and can provoke an active and intense participation/belief like many TV programs and movies have done in the past. The entreating aspect of the Web is the risk which the digital citizen should be aware of. Otherwise the Web will be used only as a fulfillment of free time, becoming another

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<sup>39</sup> Available online at: <http://www.youtube.com/watch?v=Y4MnpzG5Sqc> (Last visited on 27 August 2012).

time-waster media. In her research Papacharissi revealed how many statistical studies proved that since the introduction of the internet, there has been an increasing number of hours in which children were exposed to various forms of entertainment every day. If these media are not introduced by parents and by schools in a proper way, the risk of them having a negative influence on children if not inhibiting their education is more than probable.

The missing gap between a misuse of the internet and an active and positive participation through the new media in the community is education, where, in the specific of the democratization process emerges the necessity to reestablish a democratic culture. This concept, as defined by Balkin, director of ‘The Information Society Project’ at the Yale University, means ‘a culture in which individuals have a fair opportunity to participate in the forms of meaning-making that constitute them as individuals’ (Balkin, 2004).

Education is also an element utilized by the UN (Human) Development Program in the conceptualization of its index that establish the development of different countries in terms other than just economic or politic. This index is called Human Development Index, or HDI, which is a combination between the ‘Life Expectancy Index’, the ‘Education Index’ (composed by ‘Adult Literacy Index’ and ‘Gross Enrollment Index’) and the GDP. Considering the table below, it is possible to make a comparison between the HDI and ICTs spread in developing countries. We can observe how countries characterized by a low HDI, such as Zimbabwe, Congo, Niger, Burundi, Mozambique,

Guinea-Bissau, Chad, Liberia, Burkina Faso, Mali and Central African Republic, together are representing only the 2.8% of the internet users in Africa.



**Table 3 Human Development Index and its components**<sup>40</sup>  
Human Development Index and its components

HDI rank	Human Development Index (HDI) value <sup>a</sup>	Life expectancy at birth (years)	Mean years of schooling (years)	Expected years of schooling (years)	Gross national income (GNI) per capita (PPP 2008 \$)	GNI per capita rank minus HDI rank	Nonincome HDI value
	2010	2010	2010	2010 <sup>b</sup>	2010	2010	2010
<b>LOW HUMAN DEVELOPMENT</b>							
128 Kenya	0.470	55.6	7.0	9.6	1,628	10	0.541
129 Bangladesh	0.469	66.9	4.8	8.1	1,587	12	0.543
130 Ghana	0.467	57.1	7.1	9.7	1,385	14	0.556
131 Cameroon	0.460	51.7	5.9	9.8	2,197	-3	0.493
132 Myanmar	0.451	62.7	4.0	9.2	1,596	8	0.511
133 Yemen	0.439	63.9	2.5	8.6	2,387	-9	0.453
134 Benin	0.435	62.3	3.5	9.2	1,499	8	0.491
135 Madagascar	0.435	61.2	5.2 <sup>ba</sup>	10.2	953	22	0.550
136 Mauritania	0.433	57.3	3.7	8.1	2,118	-5	0.454
137 Papua New Guinea	0.431	61.6	4.3	5.2	2,227	-10	0.447
138 Nepal	0.428	67.5	3.2	8.8	1,201	12	0.506
139 Togo	0.428	63.3	5.3	9.6	844	22	0.557
140 Comoros	0.428	66.2	2.8 <sup>ba</sup>	10.7	1,176	12	0.507
141 Lesotho	0.427	45.9	5.8	10.3	2,021	-8	0.448
142 Nigeria	0.423	48.4	5.0 <sup>ba</sup>	8.9	2,156	-12	0.436
143 Uganda	0.422	54.1	4.7	10.4	1,224	5	0.491
144 Senegal	0.411	56.2	3.5	7.5	1,816	-7	0.433
145 Haiti	0.404	61.7	4.9	6.8 <sup>a</sup>	949	13	0.493
146 Angola	0.403	48.1	4.4 <sup>ba</sup>	4.4	4,941	-47	0.353
147 Djibouti	0.402	56.1	3.8 <sup>ba</sup>	4.7	2,471	-24	0.394
148 Tanzania, United Republic of	0.398	56.9	5.1	5.3	1,344	-1	0.441
149 Côte d'Ivoire	0.397	58.4	3.3	6.3	1,625	-10	0.420
150 Zambia	0.395	47.3	6.5	7.2	1,359	-5	0.434
151 Gambia	0.390	56.6	2.8	8.6	1,358	-5	0.426
152 Rwanda	0.385	51.1	3.3	10.6	1,190	-1	0.432
153 Malawi	0.385	54.6	4.3	8.9	911	6	0.463
154 Sudan	0.379	58.9	2.9	4.4	2,051	-22	0.373
155 Afghanistan	0.349	44.6	3.3	8.0	1,419	-12	0.358
156 Guinea	0.340	58.9	1.6 <sup>ba</sup>	8.6	953	0	0.380
157 Ethiopia	0.328	56.1	1.5 <sup>ba</sup>	8.3	992	-2	0.357
158 Sierra Leone	0.317	48.2	2.9	7.2	809	4	0.360
159 Central African Republic	0.315	47.7	3.5	6.3	758	4	0.363
160 Mali	0.309	49.2	1.4	8.0	1,171	-7	0.312
161 Burkina Faso	0.305	53.7	1.3 <sup>ba</sup>	5.8	1,215	-12	0.303
162 Liberia	0.300	59.1	3.9	11.0	320	5	0.509
163 Chad	0.295	49.2	1.5 <sup>ba</sup>	6.0	1,067	-9	0.298
164 Guinea-Bissau	0.289	48.6	2.3 <sup>ba</sup>	9.1	538	1	0.362
165 Mozambique	0.284	48.4	1.2	8.2	854	-5	0.300
166 Burundi	0.282	51.4	2.7	9.6	402	0	0.400
167 Niger	0.261	52.5	1.4	4.3	675	-3	0.285
168 Congo, Democratic Republic of the	0.239	48.0	3.8	7.8	291	0	0.390
169 Zimbabwe	0.140	47.0	7.2	9.2	176	0	0.472

<sup>40</sup> Available online at [http://hdr.undp.org/en/media/HDR\\_2010\\_EN\\_Table1\\_reprint.pdf](http://hdr.undp.org/en/media/HDR_2010_EN_Table1_reprint.pdf) (Last visited on 27 August 2012).

**Table 4 Internet Users, Population and Facebook Statistics for Africa<sup>41</sup>**

INTERNET USERS, POPULATION AND FACEBOOK STATISTICS FOR AFRICA						
AFRICA	Population (2011 Est.)	Internet Users Dec/2000	Internet Users 31-Dec-11	Penetration (% Population)	Users % Africa	Facebook 31-Mar-12
Algeria	34,994,937	50,000	4,700,000	13.4 %	3.4 %	3,326,800
Angola	13,338,541	30,000	744,195	5.6 %	0.5 %	361,420
Benin	9,325,032	15,000	744,195	3.0 %	0.2 %	134,920
Botswana	2,065,398	15,000	167,180	8.1 %	0.1 %	199,180
Burkina Faso	16,751,455	10,000	230,562	1.4 %	0.2 %	103,680
Burundi	10,216,190	3,000	176,040	1.7 %	0.1 %	31,460
Cameroon	19,711,291	20,000	783,956	4.0 %	0.6 %	481,280
Cape Verde	516,100	8,000	148,800	28.8 %	0.1 %	83,940
Central African Rep.	4,950,027	1,500	123,800	2.5 %	0.1 %	105,580
Chad	10,758,946	1,000	190,863	1.8 %	0.1 %	26,780
Comoros	794,683	1,500	37,472	4.7 %	0.0 %	13,340
Congo	4,243,929	500	295,132	7.0 %	0.2 %	81,640
Congo, Dem. Rep.	71,712,667	500	915,400	1.3 %	0.7 %	643,220
Cote d'Ivoire	21,504,162	40,000	968,000	4.5 %	0.7 %	n/a
Djibouti	757,074	1,400	61,320	8.1 %	0.0 %	42,280
Egypt	82,079,636	450,000	21,691,776	26.4 %	15.5 %	10,476,940
Equatorial Guinea	666,225	500	42,024	6.3 %	0.0 %	21,200
Eritrea	5,939,484	5,000	283,699	4.8 %	0.2 %	20,120
Ethiopia	90,873,739	10,000	622,122	0.7 %	0.4 %	511,240
Gabon	1,576,665	15,000	108,845	6.9 %	0.1 %	94,940
Gambia	1,797,660	4,000	159,012	8.8 %	0.1 %	82,880
Ghana	24,791,073	30,000	2,065,501	8.4 %	1.5 %	1,205,420
Guinea	10,601,009	8,000	95,823	0.9 %	0.1 %	43,720
Guinea-Bissau	1,596,677	1,500	37,123	2.3 %	0.0 %	n/a
Kenya	41,070,934	200,000	10,492,785	25.5 %	7.5 %	1,325,020
Lesotho	1,924,888	4,000	83,813	4.4 %	0.1 %	31,480
Liberia	3,786,784	500	20,000	0.5 %	0.0 %	n/a
Libya	6,597,960	10,000	391,880	5.9 %	0.3 %	464,700
Madagascar	21,926,221	30,000	352,135	1.6 %	0.3 %	219,620
Malawi	15,879,252	15,000	716,400	4.5 %	0.5 %	127,780
Mali	14,159,904	18,800	414,985	2.9 %	0.3 %	132,520
Mauritania	3,281,634	5,000	100,333	3.1 %	0.1 %	87,160
Mauritius	1,303,717	87,000	323,494	24.8 %	0.2 %	312,640
Mayotte (FR)	209,530	n/a	10,620	5.1 %	0.0 %	11,460
Morocco	31,968,361	100,000	15,656,192	49.0 %	11.2 %	4,408,340
Mozambique	22,948,858	30,000	975,395	4.3 %	0.7 %	191,080
Namibia	2,147,585	30,000	148,414	6.9 %	0.1 %	148,420
Niger	16,466,886	5,000	128,749	0.8 %	0.1 %	43,880
Nigeria	155,215,673	200,000	45,039,711	29.0 %	32.2 %	4,312,060
Reunion (FR)	834,261	130,000	300,000	36.0 %	0.2 %	236,880
Rwanda	11,370,425	5,000	818,048	7.2 %	0.6 %	127,680
Saint Helena (UK)	7,700	n/a	900	11.7 %	0.0 %	n/a
Sao Tome & Principe	179,508	6,500	31,012	17.3 %	0.0 %	4,640
Senegal	12,643,799	40,000	1,989,396	15.7 %	1.4 %	694,220
Seychelles	89,188	6,000	33,900	38.0 %	0.0 %	19,880
Sierra Leone	5,363,669	5,000	48,520	0.9 %	0.0 %	50,320
Somalia	9,925,640	200	106,000	1.1 %	0.1 %	75,500
South Africa	49,004,031	2,400,000	6,800,000	13.9 %	4.9 %	4,954,280
South Sudan	8,260,490	-	n/a	n/a	0.0 %	n/a
Sudan	45,047,502	30,000	4,200,000	9.3 %	3.0 %	n/a
Swaziland	1,370,424	10,000	95,122	6.9 %	0.1 %	62,540
Tanzania	42,746,620	115,000	4,932,535	11.5 %	3.5 %	437,040
Togo	6,771,993	100,000	356,300	5.3 %	0.3 %	84,480
Tunisia	10,629,188	100,000	3,856,984	36.3 %	2.8 %	2,955,260
Uganda	34,612,250	40,000	4,178,085	12.1 %	3.0 %	367,080
Western Sahara	507,160	n/a	n/a	n/a	0.0 %	n/a
Zambia	13,881,336	20,000	882,170	6.4 %	0.6 %	208,700
Zimbabwe	12,084,304	50,000	1,445,717	12.0 %	1.0 %	n/a
<b>TOTAL AFRICA</b>	<b>1,037,524,058</b>	<b>4,514,400</b>	<b>139,875,242</b>	<b>13.5 %</b>	<b>100.0 %</b>	<b>40,205,580</b>

NOTES: (1) Africa Internet Statistics were updated for December 31, 2011 and Africa Facebook subscribers were updated for March 31, 2012. (2) CLICK on each country name for further data on individual countries and regions. (3) Population numbers are based on data from the U.S. Census Bureau and local census offices. (4) For help and definitions, see the [site surfing guide](#). (5) Internet usage information comes mainly from data published by WWWV, ITU, Facebook, the Nielsen Company and other trustworthy sources. (6) For growth comparison purposes, baseline usage data for the year 2000 is displayed. (7) Data from this table may be cited, giving the due credit and establishing an active link back to [internetworldstats.com](http://internetworldstats.com) Copyright 2012, © Miniwatts Marketing Group. All rights reserved worldwide.

<sup>41</sup> Available online at: <http://www.internetworldstats.com/stats1.htm> (Last visited on 27 August 2012).

Education in this context is not only related to general index used in the HDI as a key factor to understand the development of a country given the adult literacy rate and the gross enrollment ratio. With education, the main concern for those interested in the study about the applicability of ICTs to democratization processes or generally in the field of politics, should consider the way people are relating with these technologies. Starting with the assumption that the new media are also part of an entertaining offer which is increasing and involving children and the young daily, it is important to consider these as a start. In fact, if digital natives used to be involved with technologies and capable to move inside the Web environment easily, they are implicitly being educated to overcome that lack of democratic and political culture. The way institutions, governments and communities are working will change if they are to follow the advantages that have been outlined before, thereby implementing transparency, inclusivity, and universality in the politics. ICTs will become the causes and the tools through which implementing the concept of democracy.

Digital divide in the use is therefore an element not directly related to the technology itself. It may be influenced by political and institutional decisions for that it shares characteristics of the digital divide in the access, but both on the top-down and on the bottom-up level, digital divide in the use is related to the approach to these technologies.

In other words, digital divide in the use may be overcome by two movements, in one of which institutions participate in the bottom-up movements or involve bottom-up

movements in the decision making process. In the other, individuals interest themselves to top-down initiatives, participating in it or involving top-down officials to their bottom-up movements.

To summarize what it has been argued in this chapter, we can briefly say that digital divide is a topic subjected to a shift in its definitions directly related the continuous progress in the development and use of the new technologies. Therefore ideas of a unique definition of digital divide as considered by literatures of the early 2000s seems to be moving toward other reinterpretations. We nowadays have two typologies of digital divide, one referring to the access and the other to the limits. It has been stated that the former one was the most problematic in the past, since the lack of technologies for the availability and the price was effectively dividing the world population between the ‘have’ and the ‘have-nots’. However, it has been suggested that it may be more profitable to consider the digital divide in the use, since the spread of new technologies also in the so-called developing countries is happening and with relevant percentages.<sup>42</sup> The use of social networks, forums, and blogs together with a digitalized version of mainstream media like newspapers brought us the problem of information overload. This issue, together with the entertaining dimension of the Web, made us criticize an effective usefulness of internet within democratization processes, since studies conducted on young generations revealed how these new media are not being utilized properly. We

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<sup>42</sup> For the statistical data about the widespread use of the internet, it may be useful to consider once again [internetworldstats.com](http://internetworldstats.com), which reveals how countries are extending their ICTs offers and how users are growing, with trends that could not even be considered a decade ago.

concluded the chapter stating that education is the gap between a senseless use of the Web and a positive instrument for democracy and the resolution of conflicts.

## **CHAPTER FOUR**

[...] ICTs can help address the root causes of violent conflict. By promoting access to knowledge, they can promote mutual understanding, an essential factor in conflict prevention and post-conflict reconciliation. ICTs also offer ways to reveal human rights abuses, promote transparent governance, and give people living under repressive regimes access to uncensored information and an outlet to air their grievances and appeal for help. (A.A.V.V., 2005, preface)

The focus of this chapter will be particularly on the uses of the ICTs that are positively considered and applied in the field of Conflict Resolution (CR).

The effort is therefore to present some theories and projects that have resulted from a primordial research framework that has grown in the past decade. This follows a historical but still basilar storyline of the successions of events and theories in the International Relations' field—thence also related to that of CR. An understanding on how the interest on conflicts has notably shifted from a classical realist perspective of the conflicts (that followed the thoughts from Thucydides till Morgenthau and von Clausewitz) to new theories. These theories are considering new emerging actors in the

Post-Cold War era, example of which can be the subaltern realism (Ayoob, 2002). This stands in relation to the CR field, the Alternative Dispute Resolution Theory (ADR), and its inclusion of elements that were not considered as relevant before, such as culture, ethnicity and identity, in the conflict resolution process.

Three elements have to be analyzed when dealing with the evolution of theories in the field of International Relations, which are:

- (a) The end of the Second World War and the consequent demise of Colonialism;
- (b) The raise of Cold War and Post-Colonialism;
- (c) The decline of these two concepts in favor of a new world order that is more fragmented and violent for those countries that have been, over the time, labeled as ‘developing countries’.

The tendency of considering realism as the guideline to understand the world’s conflicts has been justified by international conflicts that opposed allied deployment of forces essentially on a global scale. This perception was even enforced after the ending of the two World Wars, describing the environment in which the two Cold War’s superpowers represented the balance of power directly reflecting different influences on new-born states, in the aftermaths of Colonialism. Neorealism, a theory mostly developed by Kenneth Waltz (Waltz 2001, 2008), ascribes the Cold War to a world order in which states are the same leading actors considered by the theory of realism, but interprets the balance of world order as a result from global conflicts, intended as a competition

between international actors in an environment of anarchy. These two theories were contra posed by the three different stages of liberalism, neoliberalism and post-liberalism. These doctrines, considering other actors involved on different levels than only the military/war one, introduced in the field the interest for culture, economic system and differences in government's type. There was therefore a shift between 'high politics', security/war related, and new-introduced 'low politics'. The contextualization of this theory in the socio-political environment of International Relations in the globalized world led this liberalist perspective to develop towards a positive approach, and to the potentiality of collaboration between states. This stands in relation to the globalized economy that is also affecting political and diplomatic relations. Between the (neo)realist and the (neo)liberalist interpretations, constructivism, Marxism and feminism developed thoughts on a lower level. The role that ideas and forms of societies have in the international order is a matter of analysis in the constructivism field. The role of class distinctions and economic orientations between capitalists and Marxists is related to the second one. Meanwhile, the role of gender biases in the development of the relations in the IR field is related to the feminism approach. All these three theories of constructivism, Marxism and feminism, have in common the role of societies in the international arena, and hence all the differences that exist between different identities.

One of the latest theories that have been focused on the International Relation's system and its mechanisms is the subaltern realism, a critique developed by Mohammed



Ayoob in 2002 available in the form of article in vol. 4 no. 3 of the International Studies Review.<sup>43</sup>

It is relevant for the purpose of this chapter to briefly explain why this theory should be considered today as the one, more than the others presented, which can include in the solution of its problematic the use of Information and Communication Technologies. The author defines his proposal as a perspective rather than a theory, because of the understanding that in the field of IR it is not possible to define ‘the sole repository of truth [theory]’. A perspective has to do with something that

[...] thrives by building upon earlier insights, while modifying and adapting earlier perspectives to fit contemporary situation. It is historically shaped and does not lay claim to universality across the time. (Ayoob, 2002, p. 28)

In other words the author is suggesting that perspectives are more moldable than theories, and therefore they are more apt to describe a historical context that is shifting in its composition; globally other elements have to be included in a wider understanding of what IR has to analyze and with which instruments. Ayoob’s main concern is to define a perspective that includes actors other than the one belonging to the Western theorization of International Relations studies. As we stated before, since the end of the cold war disputes began to be linked primarily with inter-state conflicts and aspects of culture, ethnicity and identity began to be the predominant keys for analysis (Avruch-Black-

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<sup>43</sup> Available online at:  
<http://www.jstor.org/discover/10.2307/3186462?uid=3738632&uid=2129&uid=2&uid=70&uid=4&sid=21101178411857> (Last visited on 29 August 2012).

Scimecca 1998, Kaufman 2001, Avruch 2003, Huntington 1993). Ayooob has grasped the need to adapt this new perception of conflicts around the world to different interpretations than Westerners.

[...] [A]ll of the contesting truth claims have one thing in common: they privilege the experiences, interests, and contemporary dilemmas of a certain portion of the society of states at the expense of the experiences, interests, and contemporary dilemmas of the large majority of states. (Ayooob, 2002, p. 29)

This does not mean that the theories of neorealism or neoliberalism are irrelevant because of limits of their perspectives, but it is necessary to broaden the approach and interpretation of the conflict to other unrelated to the Western world and yet fundamental for contemporary studies of IR. In this regard, Ayooob warns about the risks that neorealism and neoliberalism are encountering while dealing with these new types of conflicts:

[...] questions about war and peace cannot be addressed without referring to the context in which conflicts occur and are managed and resolved, theorizing on the basis of inadequate knowledge of the historical and geographic contexts can be misleading and counterproductive (Ayooob, 2002, p. 30).

The critic is here referring to the two IR theories and their reason for not presenting a perspective.

Subaltern realism therefore refers to other theories, but include in its perspectives elements that are necessary to be analyzed when contextualized in socio-political realities that are different from the ones considered by realism and liberalism. The example of former colonies should simplify the purpose of this necessity. With regard to the contribution of social and human sciences (like cultural, ethnicity and identity studies), the search for a 'scientism' is diverting these main IR theories to historical and geographical contextualization that is essential in the analysis of contemporary conflicts. In following this research for a 'theoretical minimalism', neorealism and neoliberalism became highly compatible. In fact, '[a] dominant neo-neosynthesis became the research programme of the 1980s'. (Waever, 1996, p. 163)

The sense of 'disinterest' regarding the contextualization of both history and geography that was exercised by these theories can be defined in the aftermath of World War II, and especially in the bipolarization of the international system. When dealing with nuclear concerns and bipolarity, neorealism and neoliberalism were focused on an ahistorical interpretation of the balances of power between the United States of America and the USSR, the two Superpowers, excluding from its scope other socio-cultural manifestations that were consequences of other historical events, such as the already mentioned end of Colonialism and the emergence of Post-Colonialism. The difference between colonialism and post-colonialism has to be researched in the way colonialist powers were controlling their respective colonies. In the first case, there was a direct form of governmental control, with the assignment of local administrators in the name of

the colonialist power, and the population's subjection to the colonialist flag. In the second case however this control became indirect and was, and still is, related to economic and commercial interests, within the geo-political context of Globalization.

Post-Colonialism can be observed also as a theory interested in those cultural and social phenomena that are related to former colonies, such as cultural, national, and ethnic identities and other concepts such as race, religions, and racism.

The above interpretation of Post-Colonialism is relevant in defining aspects that neorealism and neoliberalism have not considered in their theories. The shift from international to national and intrastate conflicts, evolved towards a research for identity between communities that were free to define themselves as political actors, therefore interested to rule and dominate other cultures in territories considered as own.

But what has the subaltern perspective to deal with Conflict Resolution and the democratization process? And how can ICTs be included in the understanding of IR as a field of study that has to deal with the definition of identity, or identities, even resorting to conflict and violence, which shifted from being international to become nationally or intrastate limited?

Subaltern realism perspective summarizes the evolution in the last three decades of political history. When struggles in the developing countries began to include health, resources/poverty, and control over territories' issues, the spreading of these concerns began to interest the international community. Independently if moved more by economic

interests rather than humanitarian aids, international organizations such as the ONU, directly involved Western countries in regional conflicts. The Rwanda genocide of 1994, in which an estimated 800.000 people died, was taken as research field for those conflict resolution's studies that have begun to include identities and media within their analysis. The problem created by the mass media, with the Kangura state-owned newspaper on the one side, and the Radio Rwanda on the other, contributed to the spreading of hatred between the Hutu and the Tutsi communities. Misleading messages from both sides, calling communities for active violence against each other is a common misuse of mass media for negatively affecting the solution of conflicts.

Propaganda and propagandists have historically been the two key elements of non-transparent political experiences, which aimed to control populations, instigating hatred and misleading information so that attention moved from the source of the struggle, the government, to a hypothetical enemy. The Nazi government that ruled over Germany in the 1933-45 periods is probably the most efficacious example. But the mechanisms of using the media for controlling purposes, is a recurring element in history, which was reiterated also in the Rwanda genocide.<sup>44</sup> Alison Desforges relates the

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<sup>44</sup> The role of propagandists in the Rwanda genocide has been underlined by Alison Desforges in her publication for the Human Rights Watch 'Leave none to tell the story – the Rwandan genocide' when she describes what a Rwandan propagandist wrote about his role in subjecting the population: 'He [the propagandist] advocates using lies, exaggeration, ridicule, and innuendo to attack the opponent, in both his public and his private life. He suggests that moral considerations are irrelevant, except when they happen to offer another weapon against the other side. He adds that it is important not to underestimate the strength of the adversary nor to overestimate the intelligence of the general public targeted by the campaign. Propagandists must aim both to win over the uncommitted and to cause divisions among supporters of the other point of view. They must persuade the public that the adversary stands for war, death, slavery, repression, injustice, and sadistic cruelty'. (Desforges, 1999, p. 57)

negative outcomes of the tragedy with the role of the media. First of all propagandists developed techniques for manipulating information, specifically towards the creation of false events and the accusation of untrue violent behaviors of the enemy as a reason to respond with the same violence. Newspapers, especially Hutu-owned *Kangura*, spread nationwide after the Tutsi invasion of 1990, listing all the episodes of violence. Shortly after, other newspapers were introduced in the media panorama of Rwanda, but all of them were protected by government's official and allies, therefore filled with concerns about Tutsi's invasion in the country.

Hutu's Radio Rwanda, used by the President to announce new government measures, as the main tool to communicate with the population, was soon followed by Tutsi Radio Télévision Libre des Mille Collines (RTLM) that opposed the ethnic division as a key element for the Hutu's fight, with nationalist messages (Desforges, 1999, pp. 58-60). The validation of the message and the message itself were two outcomes of the Hutu culture and education. Propagandists used the accepted reference of intellectuals as a source for propagandist messages, in other words, for the legitimization of the message as derived from sources considered legitimate, such as professors of the national university. Messages were transmitted as per the cultural roots of the historical Hutu tradition. This way of conducting politics is really not much different to that practiced in Westernized governments, where political speeches and debates are repeatedly broadcasted in the almost commercial effort to collect voters.

The Rwandan genocide, and the use of the mass media in a negative way, has been taken as example for considerations on information technologies that many theories have developed starting from the assumption of their negative influence on conflict resolution. This consideration can notably also be applied to the internet and the new media.

From the Cold War, when new technological tools have been used in the so-called ‘War Games’ to simulate nuclear conflicts’ provisions, the influence of these media in recent conflicts has been basically always considered according to military-related contexts. Internet and its by-products have been used by terroristic organizations to spread video messages all over the world. Osama Bin Laden used these technologies exactly because of their characteristic of being untraceable and capable of reaching a global audience.

In addition, there are all security and privacy-related considerations, ranging from the national to the individual level, affecting internet users and governments alike. WikiLeaks can be incorporate in this argument, since the spread of confidential information destabilized the diplomatic relations between countries, involving the recent Iraqi and Afghan wars, which have been kept hidden by the media. The fact that this source has been politicized and the owner persecuted is a side effect of this destabilization, and reveals how governments are dealing with these problems, by blaming others instead of tackling the problem from its roots. New technologies are also

affected by cyber-attacks from independent movements, like Anonymous, that is using hackers to intimidate governments' officials on several questions, threatening their web materials to be hacked or stolen. On the military side new technologies have been developed in the direction of autonomous systems of attacking and defending, with RC systems or automated target-destroying. Literature and mass media on these subjects have deeply educated many of us in the last two decades.

Minor efforts have been made regarding the analysis of the positive uses of ICTs in the field of IR and CR. Some studies however have been conducted even before the Arab Spring, the Spanish 15-M, or the American Occupy Wall Street movements and the consequent global understanding of the role of social networks, virtual communities, and individuals virtually connected, used in the pursuit of a democracy on peaceful terms.

The paragraphs below underline how the subaltern realism perception and the use of ICTs in CR practices are related in an international relations' context.

One aspect that has not yet been described in the passage between the Cold War era and today's international politics is the introduction in the field of actors other than state-related institutions. The UN organization, which influenced the relation between global countries and local conflicts, has been hampered in its decision-making process by the composition itself of the General Assembly. The veto function of the five most influential member states (China, France, Russia, United Kingdom, and the United States) has often created a situation of stall in decisions that were to be taken in



problematic contexts related to war zones. The Gulf War (1991) and the Rwanda genocide (1994) are just two among many situations where UN resolutions were not applied because of inside crosscurrents divisions. Therefore, in order to be actively present in the conflicts, to aid populations, and to guide the processes of peace making, peace enforcement and peace building, many organizations were founded, both from the UN organizational body, and from other non-state private and public experiences. Local private and public organizations, social movements and private companies, began to invest human and economic resources in countries affected by underdevelopment and/or conflicts. International NGOs continued their operations in the same territories, branching their composition in different sub-organizations. When we consider how many offices are now working under several UN mandates, we clearly have the idea about how the shift, mainly in the fields of humanitarian aid, development, human rights, health care assistance and education. This went from being institutionalized, government-related projects, to local, non-state related organizations, shaping a deeply revised idea of international relations. What has changed is the impact of these organizations in world's forums, where decisions are taken for countries and populations.

Countries that often did not provide a valuable protection to their populations, even if considered the potentiality all the states have to participate on the same level, decisions related to health, environment, economy, poverty and work conditions have not been arranged properly. Therefore the role of NGOs is also about amplifying undertones resulting from the requests coming from the lower levels of societies. Working categories

such as manufacture and agriculture, minorities, as well as environment's protection, social welfare and health, are all contexts that can be protected by specific NGOs and social movements; this consideration is strictly related to the impact mass media and internet had in the visibility of these organizations, where creating mechanisms of awareness involves a global audience. A hypothetical reluctance in involving these organizations in decision-making processes can produce relevant repercussion in the credibility of the IOs itself, and by consequence also on the single participants, challenging their politically representation on a national and international level.

Unfortunately, as the recent UN Rio+20 meeting on sustainable development has revealed, the participation of world's famous NGOs such as Greenpeace and WWF was not enough to provide challenging modification in economic interests' approaches on topics of sustainable development. But two considerations have to be made in this context.

The first one is correlated to the fact that many organizations were mobilized over the internet to provide information about this meeting and the challenges proposed by the environmentalists. Forums and blogs were discussing ideas and proposals to be submitted to the political leaders attending the meeting. Avaaz.org, for example, promoted several petitions, whose signatures were submitted also in this conference.

The second aspect is that, even if on an international level the outcomes of this digital participation has not produced the desired effects, on a local and regional scale

mobilizations involved far more participants than in the past, using the same three directives of communication, information, and participation (CIP) that have been analyzed before in the dissertation. In other words what has not worked on an international level has produced bottom-up movements that are still involved in projects oriented to the achieving of other purposes.

The association of new technologies in the spread of these NGOs on the local and regional level has been considered fundamental since the WSIS (World Summit on the Information Society). Specifically the preliminary First Phase of the World Summit on the Information – that ‘issued the Geneva Declaration of Principles and a Plan of Action that emphasized the potential of ICTs to help achieve the Millennium Development Goals (MDGs)’ (A.A.V.V., 2005, p.1), stressed that:

[the] lack of discussion of the potential positive role of ICTs in promoting peace is somewhat understandable. A large part of the development focus of the WSIS was on building ICT infrastructure and reaching those currently without ICT access. Areas suffering from conflict are seen as out of reach by traditional development actors. (A.A.V.V., 2005, p.2-3)

At that current phase, therefore, the use of ICTs in the context of conflicts is considered a matter of future studies, when further progresses in the availability of technologies will permit users in less developed world’s region to integrate in their everyday political experiences these technological tools. Nevertheless during the

preliminary meeting for the WSIS First Phase called The Organisation Internationale de la Francophonie, which resulted from the 2003 Rabat Declaration, it was stated that:

[The] appropriate use of information and communication technologies should contribute to better management of crisis and conflict. It should also strengthen means of monitoring and prevention in order to consolidate peace. Moreover, it should be a vector and catalyzer of national reconciliation and reunification. (A.A.V.V., 2005, p. 3)

One of the most important things to consider when dealing with Conflict Resolution is the level of available information between the two parties and between them and a third one. In other words, in a negotiation, facilitation or mediation, the amount of information is one determinant element that influences the resolution of a conflict. Meanwhile one of the parties, or the facilitator/mediator, has less information than the others that were participating in the resolution. This means that the outcome may not be the most desired one, and pacification will not be even possible. As we considered before, the use of ICTs for gathering information about conflicts in remote parts of the world has been justified for the variegation of the available sources.

In other words, even if the risks about information-overload and of misleading information are yet real and tangible, the variety of sources still represents an important element in the evolution of conflicts.

Many characteristic parts of the Alternative Dispute Resolution (ADR), as we mentioned before, are considering elements about conflicts that weren't yet integrated as

a relevant part of the field before the 60s. After then, there has been the perception that conflicts about identity are the ones that reflect the socio-political environment in which most of the struggles has been fought after the end of Colonialism.

Therefore, in recent years, many NGOs have been introduced by International Organization, or developed independently, in those regions where conflicts were and still are more diffuse. Even if the majority of the NGOs that are dealing with conflict resolution processes through the use of ICTs are still part of the UN, many other organizations began to be actively interested in this topic.

Where a situation of war or struggle quickly developed causing from the beginning an important number of casualties, peace or aid operations have to deal with contexts where the information necessary may not be easily accessible or useful. International mediations, on fields where conflicts about identity rose between two or more parties, were often unable to intervene due to these reasons.

On one side there is the political implication behind a peace operation that it may be hampered by the members themselves of the international organizations. This is the case of the veto power, where parties involved in a conflict were holding political flags that were dividing the composition of the organization between different interpretations of the conflict – such as during the Cold War – it may be difficult to overcome this divisions and an intervention may not be even possible.

The Post-colonialism era represents again a valid example to explain this situation. When new-born states declared their independency from their former colonizing countries, political assets were often divided by the same international arrays that were characterizing the so called 'balance of power' of the Cold War. In other words, political parties and governments were aligned accordingly to the two Superpowers, implying a different political support in case of the victory of one party on the other. This process of alignment within the Cold War was often an outcome of external political influences.

If we consider the case of the United States and its intrusions in the political stability of newborn states in Africa and South America, we have an exemplificative picture of how resources and raw materials, as well as political support, were contended between the two Superpowers. Therefore the process of stabilization of these countries has always been hampered by the same nations that were part of these international organizations designed to create a global level of peace between the world's countries. By contrast, those countries that were affected by political instability, with many different governments that characterized the national sphere only for a limited number of years, contributed to the developing forms of corruption and violence that are still today one of the underlying reasons behind those countries' underdevelopment and misery.

To overcome this kind of ineffectiveness, many small, non-governmental organizations were introduced in these countries, with the attempt to resolve disputes and

underdevelopment not from distant and two-faced policies, but with the aim to effectively help the process of peace – often intervening at first on struggles that affected civilians and the civic society.

Presenting once again information, communication and participation, the three categories from which ICTs can be used in a participative/active way lies in the democratization process. It is important to underline how these uses are relevant in the context of peace operations, which involve both professional conflict resolution practitioners, and members of the civil society.

As we mentioned before regarding the Arab Spring, the direction of the participation followed a bottom-up movement from the population against the government. Challenging political elites that were ruling from several decades required a level of organization between the different political movements and individuals, which was certainly facilitated by the use of the ICTs. Virtual communities and social network, together with public manifestations in public spaces, produced a shift in regimes that were never historically threatened that much. The same bottom-up movement can be utilized to describe the sources for information – the same that international news channels utilized to produce amateur live reports from the areas in conflict. Used as tools for campaigns, however, videos uploaded on YouTube and shared on social networks, recorded with mobile phones or cheap cameras, created a sentiment of being part of the revolutions, and therefore provided a support, even for that part of the population that left

the country because of the regimes. This at least applies for what concerns the informative level of the ICTs.

However, this is not the only use of ICTs in participation, in conflict resolution and in peace operations. It may be one of the reasons why many projects have been developed, starting from this global awareness that a single video, showing the protests in a remote town in the Middle East can produce. But, as we are going to present in the following pages, some organizations are focused on the development of a theoretical framework that analyzes the effective use in the Conflict Resolution field. Two of them, ICT4Peace and ICT4Development, produced significant literature on the topic.

ICT4Peace, available online at [ict4peace.org](http://ict4peace.org), is a Swiss-based foundation created with the aim to:

facilitate improved, effective and sustained communication between peoples, communities and stakeholders involved in conflict prevention, mediation and peace building through better understanding of and enhanced application of Information Communications Technology (ICT) including Media. ([ict4peace.org/whoweare](http://ict4peace.org/whoweare))

During the years it developed several working papers for the WSIS meetings, insisting on the ICTs as tools for a positive resolution of conflicts. ICT4Development comprises a group of professors and researchers that aim to teach, on a university basis, with the use of ICTs under a theoretical and empirical perspective. It is indeed ‘designed



to enhance the appropriate use of ICT to support poor and marginalized communities across the world' (ict4d.org.uk/).

As composed by an academic body of professors and researchers, ICT4Peace and ICT4Development defined the applicability of ICTs in the respective fields of peace and development, contributing to the framework related to the resolution of both.

In order to briefly explain the practices of CR in which ICTs have been used it is useful to consider again the working paper presented in 2005 by the ICT4Peace foundation. Considering the year during which the report has been written, the development in the field of CR was not theoretically amplified toward a deeper analysis of the relation between ICTs and field-practice of CR.

According to the ICTs for Peace paper the 'concept of ICT for Development (ICT4D) is now widely accepted [...]. However this concept does not generally take into account the impact that conflict has on development. [...]. Despite this, ICT is utilized by a wide range of organizations [...]' (A.A.V.V., 2005, p. 5). With regard to the objectives analyzed in these projects, is it possible to define both, which are the uses of ICTs in the CR field, and how different these typologies of organizations included in the analysis are. The following projects are divided by the field of interest in the CR area:

- |   |                                    |
|---|------------------------------------|
| a. Information<br>Dissemination             | d. Operations and Support          |
| b. Networking and Learning                  | e. Post-Conflict<br>Reconstruction |
| c. Early Warning and<br>Conflict Prevention |                                    |

## **Information Dissemination**

Information dissemination is the most diffused use of new technologies in crisis management, conflict prevention and solution, peacemaking, peace enforcing and peace building. Through several projects many NGOs have developed databases for providing information about conflicts or crisis contexts. The operations of aid during the 2010 Haitian earthquake were managed also using new technologies to inform about local crisis situations and provide efficient responses in short time. The use of mobile phones and the SMS technology were fundamental tools in that they helped NGOs to prevent an increasing in the health and food crisis that rose after the earthquake. The projects offering sources about conflict situations are established from NGOs or private experiences. UN and private information sources, namely newspapers that have digitalized their contents, foundations of peace studies, and by-products of institutional bodies are managing to collect in their databases all the information available about world's conflicts. Information in these websites is organized through a research database that drives common users and NGOs' professionals in daily updated sources. Web feeds are available as short news and uploaded on an hourly basis; email newsletters are sent daily showing news coming from specific conflicts' regions. Multimedia tools are used to provide an interactive analysis of information related to specific regions, like Geographic Information Systems (GIS), satellite images, maps, and webcams. One of the main projects that was developed in this category is RliefWeb,<sup>45</sup> a project launched by the

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<sup>45</sup> Available online at: <http://www.reliefweb.int/> (Last visited on 3 September 2012).

United Nations Office for the Coordination of Humanitarian Affairs (OCHA). This project offers database collecting from 1981 useful source for humanitarian information. Alertnet<sup>46</sup> is an experience of web information's source born from the Reuters Foundation, which uses web feeds and mailing lists to provide 24h information. Development Getaway<sup>47</sup> uses forums that are open to discussions on conflict and post-conflict reconstructions.

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<sup>46</sup> Available online at: <http://www.alternet.org/> (Last visited on 3 September 2012).

<sup>47</sup> Available online at: <http://zunia.org/> (Last visited on 3 September 2012).

## Networking and Learning

The other aspect of ICTs' uses in conflict/crisis contexts is related to networking and learning. This is referring to the contribution in the expansion of a sector, specifically oriented toward conflict and post-conflict responses, where NGOs and other organizations are connected together through the internet and new media. Therefore, NGOs member's relations and advocacy work are the two elements that were advanced by projects considered in this context. The International Council of Voluntary Agencies<sup>48</sup> is a Swiss-based online portal about humanitarian relief, human rights, and refugees issues, offering information and documents from other relevant agencies like the UNHCR. The interest of InterAction<sup>49</sup> is even more focused on ICTs, having 160 NGOs and one headquarter specifically created for the use and for the study about new media initiatives. Meanwhile, experiences on learning initiatives on the web comprised projects for the education of practitioners in several critic contexts. The education is a product of experiences shared between operators in the field that are dealing in very different contexts, geographically remote, but the mechanisms of which experiences are similar. A mutual sharing of knowledge without the ICTs is unlikely to be possible if costs and time-saving have to be compared to other traditional media. Aid Workers Network (AWN)<sup>50</sup> hosts a virtual space where aid workers can 'share their knowledge and build a community of practice' (A.A.V.V., 2005, p. 17). Other projects are even more oriented

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<sup>48</sup> Available online at: <http://www.icva.ch/> (Last visited on 3 September 2012).

<sup>49</sup> Available online at: <http://www.interaction.org> (Last visited on 3 September 2012).

<sup>50</sup> Available online at: <http://www.aidworkers.net/> (Last visited on 3 September 2012).

toward the educational aspect, offering online courses on conflict, peace and the role of the media. The Geneva Humanitarian Forum<sup>51</sup> and the UN University of Peace Institute for Media, Peace and Security<sup>52</sup> both belong to this category.

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<sup>51</sup> Available online at: <http://www.eldis.org/assets/Orgs/6867.html> (Last visited on 3 September 2012).

<sup>52</sup> Available online at: <http://www.upeace.org/> (Last visited on 3 September 2012).

## Early Warning and Conflict Prevention

Early warning systems have been developed in recent years to avoid situations of conflict. Together with the abovementioned networking, the ICTs can provide a relevant help to NGOs in dealing with these kinds of efforts. Because of the difficulty to provide objective information coming from conflict's environment, in order to be aware in time of a burning issue that can become a situation of crisis or even war, the creation of one or more central facilities is essential when dealing with these concerns. But the need for information is not the only element necessary to intervene in time, the lack of political will, the incompetence to respond of policy makers, are also issues that have to be considered in such cases. Even in these contexts ICTs can 'assist in building early warning systems' (A.A.V.V., 2005, p. 20). Creating a visibility about issues that governments and international actors are unwilling to manage, is a utilization of ICTs that can provide NGOs and non-state actors to address their concerns to political powers more effectively.

The United Nation's OCHA<sup>53</sup> organization is providing these kinds of materials and information with the purpose of monitoring 'and assess[ing] trends and events world-wide that may give rise to humanitarian crises' (A.A.V.V., 2005, p. 20). These and other UN projects have been focused in these contexts, using the composition of its organization to work together with national governments in the pursuit of early warnings

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<sup>53</sup> Available online available at:  
<http://ochaonline.un.org/AboutOCHA/Organigramme/CoordinationandResponseDivisionCRD/EarlyWarningandContingencyPlanningSection/tabid/1263/language/en-US/Default.aspx> (Last visited on 3 September 2012).

and conflict prevention issues. The European Union, in this direction, provided a digital system that hosted information about global developments. This system, called Tariqa,<sup>54</sup> provides a combination of news sources with historical data about a conflict situation, maps, satellite images, and data managing and collection of information achieved from other media tools.

Quantitative and qualitative methods for statistical analysis have been utilized for FAST<sup>55</sup> and SIPRI<sup>56</sup>. These two projects focused on the methodological perspective of ICTs as early warning systems. These data have been analyzed by experts that have devised a system in which index and indicators are used to study a specific socio-political context. These projects were developed for in-field professionals, as database to collect and elaborate on existing information. It seems that the role of ICTs in preventing conflicts is generally related to ‘promoting better communication between factions, communities and external actors in the hope of altering the dynamics of conflict to allow for a negotiated resolution’ (A.A.V.V., 2005, p. 23).

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<sup>54</sup> Available online at:  
<https://www.tariqa.eu/index.php?module=Users&func=loginscreen&lang=it&returnpage=%2F> (Last visited on 4 September 2012).

<sup>55</sup> Available online at <http://www.swisspeace.ch/projects/previous-projects/fast-international.html/> (Last visited 3 September 2012).

<sup>56</sup> Available online at <http://www.sipri.org/> (Last visited on 3 September 2012).

## **Operations and Support**

Field-based and operational support projects is another category in which ICTs have been used where the necessity to give a rapid response became a priority. The element of coordination seems to be efficiently suitable to the use of ICTs, since communication between NGOs and between NGOs and civilians can be facilitated in both the levels of costs and time saving costs. The problem with the concept of coordination in NGOs' environments is presenting some issues when considering the relations between these organizations and civil-military operations. This is because in the first case there can be several complications due to concurrence for funding, different purpose of mandates and differences in capacity and resources among them. In the second case the problems are related as to the sharing of information between military institutions and civilian agencies. The more information about a crisis' context is shared, the more the NGO can intervene effectively. Again the main benefit deriving from the use of new media is related to organizational and communicative aspects. Humanitarian Information Centers<sup>57</sup> (HICs) are OCHA's 'open access facilities established in conflict and post-conflict zones to support the humanitarian assistance through the provision of information resources' (A.A.V.V., 2005, p. 26).

The aims of these information centers are 'to provide a common meeting point and framework of action [... for international NGOs but also for local actors]; to provide

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<sup>57</sup> Available online at <http://www.humanitarianinfo.org/iasc/pageloader.aspx> (Last visited on 3 September 2012).



access to the information management tools needed to assess, plan, implement and monitor humanitarian assistance given local conditions; facilitate standardized data collection, analysis and dissemination [...] to promote a culture of information-sharing and awareness of good practices' (A.A.V.V., 2005, p. 26). However, field operations are also organized and monitored through another UN agency known as the World Food Program (WFP).<sup>58</sup> The WFP agency developed many projects in the direction of connecting its operations together with other UN operations with the use of satellite technologies and with the use of high-frequency short-wave radios for communicating through emails. It also aided in the development of tracking-systems for food commodities and other projects for the implementing and facilitating the technological availability that is necessary to navigate over the internet. From the last category, Télécoms sans Frontières (TSF)<sup>59</sup> is an organization specialized in providing internet and ICTs access and support to humanitarian relief operations.

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<sup>58</sup> Available online at <http://www.wfp.org> (Last visited on 3 September 2012).

<sup>59</sup> Available online at <http://www.tsfi.org> (Last visited on 3 September 2012).

## **Post-Conflict Reconstruction**

The examples we have examined in the previous pages concerned uses and tools in conflict and in crisis situations. The usefulness of having NGOs and international actors in these environments is real only if the decision-making process created a first step in the solution to conflicts. To be effective, this should, include deliberations and resolutions that have produced an active improvement in crisis situations, without any major impediments resulting from the organization itself (UN's veto function), or from an ineffective collaboration between NGOs and NGOs and governments.

Post-Conflict operations are therefore essential to impede the resurgence of former struggles. The task that international NGOs and IO have to deal with is about long-term projects that are not at risk to be abandoned after the visibility of the conflict cease to interest the international public. This argument follows the necessity of smaller NGOs to be subsidized by international funding which justification's mechanisms have to follow the markets' rule. In other words visibility is an essential element for Post-Conflict operations. The problem with traditional media was the connection between TV's share of audience and news coverage:

While the CNN effect may increase pressure on the international community to respond to a crisis, it also promotes on a very transitory approach to such crises; once the crisis ceases to be news, it ceases to require a response – the phrase “forgotten emergencies” is therefore commonly used [in this context] (A.A.V.V., 2005, p. 10-11).

In the case of web pages this trend is not unavoidable, since potentially the information contained in these pages can remain available to the public until the host decides to shut down it.

In addition, the information provided is not as transitory as the mass media; a website remains online for as long as the site administrator wants, can be shifted or mirrored on other sites, links to related information on other websites, and helps to build collective knowledge that becomes more detailed and accurate over time. (A.A.V.V., 2005, p. 11)

The question about the uses of ICTs in Post-Conflict operations is therefore again regarding information, transparency, and visibility. In practice, ‘effective communications can disseminate the terms of a cease-fire agreement to warring factions and local communities, clarifying the situation and building support’ (A.A.V.V., 2005, p. 42). A relevant number of projects were born within this context, where their objective is specifically to offer support and knowledge for those newborn states in Post-Conflict environments.

The most effective of these projects is the International Institute for Democracy and Electoral Assistance (IDEA),<sup>60</sup> an IO that helps countries to realize and strengthen democratic institutions, offering a virtual space that is open to debate between academics, policy-makers, and practitioners. In other words offers it should concern that theoretical framework and empirical research to ‘develop practical tools aiding democratic

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<sup>60</sup> Available online at <http://www.idea.int/> (Last visited on 3 September 2012).

processes' (A.A.V.V., 2005, p. 43). Similar to this organization but more focused on the political aspect of elections, citizen participation, transparency, and online institutional contents, is the National Democratic Institute for International Affairs (NDI).<sup>61</sup>

The role of the media in this phase of Conflict Resolution is essentially to keep the civil society informed objectively and independently, reducing in other terms the negative political influences that an unclear government's transition may produce. The role of the radio is therefore essential, since radio programs can reach and communicate also in environments in which low literacy levels and access to other media can often be very limited (A.A.V.V., 2005). Therefore international organizations and NGOs have developed projects aiming the development of media channels through which communicate in conflict and post-conflict contexts. UNESCO<sup>62</sup> is an example of an international organization implementing culture through the use of 'independent films, radio, television and internet related media' (A.A.V.V., 2005, p. 45). The role of media in conflict's environments is following the negative/positive analysis that was developed before in the dissertation. The use of images and photos to illustrate an armed conflict may often be influenced by the political will behind the media channel. But 'reconciliation and social integration among populations in crisis zones' (A.A.V.V., 2005, p. 48) can also be obtained through influencing political leaders and audiences on both the international and the local levels. Documentaries about the condition of all the

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<sup>61</sup> Available online at <http://www.ndi.org/> (Last visited on 3 September 2012).

<sup>62</sup> Available online at <http://unesco.org/> (Last visited on 3 September 2012).

communities involved in conflict, portraying the shared experiences that exist between them can be a useful tool for building peace. Promoting peace techniques through visual and multimedia tools can improve the settlement of disputes, as well as promoting struggles, like the Rwanda genocide and other cases.

Before concluding this chapter, there are some reflections that have to be made in relation to what has been said throughout the dissertation. In view of the question regarding the role of ICTs in the democratization's process, in the field of politics, International Relations and Conflict Resolution, there are several elements that suggest the potentials of the ICTs. The bottom-up movements that have been characterizing social movements for the last five years are using social networks, the internet, and more in general the ICTs (satellite's communications, and radios), with several positive outcomes in the different stages of communication, information, and participation levels. The visibility of the internet seems to be the main quality of the Net, since it amplifies voices coming from all over the world, and potentially from all the social classes, intensifying the process towards transparency, an important element for contemporary democracies. Bottom-up movements are also characterizing NGOs projects that aim to overcome problematic contexts where an introduction of ICTs brought a higher level in the qualitative communication between these organizations and between those and the governments/institutions. The three elements of CIP are also applicable on top-down movements, where international organizations, ruling parties and institutions can reach their interlocutors (civil societies, minorities and the electorate) in a more direct and

effective way. What has been discussed is therefore the applicability of these new technologies in the evolving panorama of the International Relations theory. Following new interpretations of former cornerstones, such as the subaltern realism, the shift from international actors (governments in the diplomatic arena or international organizations in world's forums) to regional or even local actors seems to offer solid roots for an implementation of the ICTs. The level of effectiveness of these technologies is still subjected to the users and to the political and economic elite at the top of decision-making processes. Even if the theory on this topic is not yet completely developed, due also to the difficulty in defining a path to follow in concepts strictly connected to the key element of the technologies themselves, what the practices and the fragmental theoretical background suggest is that the democratization process can only than benefit from the ICTs.

In other words, if the technological development reached a point where the costs for these tools are not a braking element for the introduction of these in new markets, and if the funding and human resources are available, the combination of CIP and NGOs can create a double-oriented movement that involves the civil society and the governments, in the effort of establishing politics that would result in expressions of democracy. Elements that can undermine this process are the digital divide, with the meanings given in the dissertation, and a low level of political culture/participation in-between the civil society.

For what concerns bottom-up movements, education is particularly essential, since in many cases social movements rose after the establishment of a self-consciousness of communities of workers or minorities that spread from isolated and often state-moved persecutions against individuals or small organizations. When awareness is imprinted in the mind of the people and there is the will to contribute to an achievement of goals oriented to democracy-like governments/socio-political conditions, ICTs can result in being the element that makes these voices reach a global audience or an internally independent movement, as the Arab Spring and other movements had taught us. Using the shared hope of the professionals involved in the effort of producing a series of challenging shifts using the ICTs as a medium and a space, it would be apt to conclude these considerations by saying that:

We believe we can build stronger and more resilient societies while enabling in particular young people to move from economic despair to a positive contribution for business and society. [...] [T]hey can become the pillars of their respective communities and countries and take up the challenge of a more peaceful future. (A.A.V.V., 2011, p. 9)

## **CONCLUSIONS**

The research and analysis advanced in this dissertation presented the ICTs as both an instrument and as a space that can be used in positive terms for the democratization process. Considering the available literature on the subject and the lack of empirical confirmations, how exactly the development of technologies will affect social and political movements towards a participative, inclusive and continuous democracy is still unclear.

As objective as an electronic device may be, the final word belongs to the people and rests on representative institutions. If it is true that the relations between these two centers of powers can be influenced by both bottom-up and top-down movements, it is also true that technologies alone cannot provide a revolution. Simplistic, or over positive interpretations about the revolution of the media are lacking from an empirical confrontation with the real possibilities offered by these technologies. With regard to top-down movements especially, there is still a lack in considering virtual spaces as real tools for improving the quality of politics in terms of transparency and inclusiveness. The idea of a continuous democracy is not a goal that the civic society alone should pursue to, because even on the institutional level an improved participation means a wider support from the citizens. The way people may contribute to the decision-making process is a



benefit for both the rulers and the governed, at least in terms of political stability. And if it is true that many projects and experiences have been developed using on line platforms, for communicative, informative and participative purposes, bringing a relevant contribute in the field, only a deeper in-the-field application of these technologies can reveal if the ICTs are intended to produce real changes in conflict situations, especially where international organizations and diplomacies often failed. Considering the Rwandan genocide it is possible to abstractly imagine a different outcome if the way the international arena intervened was involving ICTs. The way information could be shared between the two Tutsi's and Hutu's identities, the way global awareness could be built around web information, could contribute to an intervention on more opportune and effective terms.

In fact, better information is always the start from which institutions attempt conflict resolution practices. It has been stated that information is the field where ICTs are producing most immediate benefits, which means that what has been analyzed in this dissertation may not be so far from what ICTs can become for the CR field. Other than the technological availability, which is an issue of digital divide that has to be overcome in short terms mostly because it is a by-product of markets' strategies, what is essential is both an education oriented to practical uses of these media (otherwise the risk is to have another redundant entertaining distraction) and the diffusion of a politic/civic culture (democratic culture). This hence underlines the reintroduction of an active civil society that is involved in participatory movements that may be run on the ICTs tracks.

Positive feedback has been coming from recent experiences of social movements born and/or developed on both social networks and virtual spaces, while increasing the interest of international organization, most importantly of regional NGOs, to develop projects towards the use of ICTs in their practices in the specific of the regions of their concerns. Visibility and information are the two key elements that have been analyzed in the dissertation, since their improvements have resulted from the use of ICTs, which can be observed directly, even after a short time after the introduction of these new media.

New born states open to democratization processes, can benefit too from these technologies, founding their institutional body on '2.0 bureaucracy' where transparency and accessibility affects positively time and costs, two elements that can benefit corruptive behaviors on the institutional level, as well as in the civic society.

The democratization process is therefore enriched qualitatively by the ICTs, leading to the idea that a further development of technologies' availability in developing countries will signify a better shift for other dictatorial or semi-dictatorial form of governments to be overcome. When dealing with this kind of research, the relation between the existent theoretical framework and both the development of new technologies, and new uses for these technologies, are suggesting that media itself can contradict existing analysis even shortly after these theories have been developed. Social networks such as Facebook, that fall inside the categories of ICTs' uses that risk to become pure entertaining, can be considered as an example for an experience of digital social movement which effects couldn't be part of any kind of prediction in the last

decade's studies. Therefore it is important to avoid firm considerations about the ICTs and the relations with the democratization process, because a further evolution cannot be predicted. In this regard the pessimistic views that considered ICTs as useless instruments in relation to politics and civil societies, wrongly developed theories that in less than a decade are mostly disproved.

It has been often stated that it is absurd that a by-product of globalization such as the internet has been used as a tool for openly criticizing globalized mentalities, in politics and economic contexts. Social movements are using the internet to criticize those globalization's elites that are behind the market related to service providers, advertising and technologies producers, exactly because the internet is an objectified environment, in which movements can coexist, even if it is directly towards the opposite direction. The way (NGO) organizations and companies are using these media for visibility and funding (profits), pursuing completely different purposes is reflecting how ICTs and the internet are the only tools at the mercy of the uses that individuals and communities decide to make of. The potential of the internet, especially for the democratization process and the conflict resolution field, is this freedom to orient in direction of a global audience the most different issues, purposes and aims.

## APPENDIX

This appendix is intended to summarize the considerations that have been expressed during the dissertation. With the words of Kofi Annan, this small text represented a useful source to be remembered when analyzing the role of ICTs in the field of Conflict Resolution.

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### Information and Communication Technology for Peace

The Role of ICT in Preventing, Responding to and Recovering from Conflict

PREFACE

Kofi A. Annan

Secretary-General, United Nations

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We are all becoming more familiar with the extraordinary power of information and communication technologies. From trade to telemedicine, from education to environmental protection, ICTs give us potential to improve standards of living throughout the world. Our challenge is to harness that potential for the benefit of all people. Less well known than the role of ICTs in efforts to achieve the Millennium Development Goals is the contributions they make in our work to promote peace and help the victims of humanitarian emergencies. As the underpinning for early warning systems, ICTs are crucial in weather forecasting and in building resilient communities better able to respond to humanitarian emergencies. When disaster does strike, ICTs are helping us to better coordinate complex relief missions.

This role has taken on even greater significance in the past year, following the Indian Ocean tsunami, hurricane-related flooding in Central America and a devastating earthquake in Pakistan. ICTs are also critical tools in peacekeeping operations, including in logistics. Moreover, ICTs can help address the root causes of violent conflict. By promoting access to knowledge, they can promote mutual understanding, an essential factor in conflict prevention and post-conflict reconciliation. ICTs also offer ways to reveal human rights abuses, promote transparent governance, and give people living under repressive regimes access to uncensored information and an outlet to air their grievances and appeal for help. The technology by itself is no panacea or magic formula. Political will is required to respond to information, to share it widely and equitably, and to ensure global dissemination of ICTs. In that context, I strongly welcome the initiative taken by the Government of Switzerland to study the role of science and technology in advancing our work for peace. This report showcases many instances of actors coming together to use technology to prevent, stop and remedy man-made disasters. It also offers valuable policy recommendations covering such key issues as trust, security, inter-agency coordination, best practices and common standards. I commend the information and analysis contained here [in the ICT4Peace report] to a wide global audience.

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## **E-REFERENCES**

In this section are collected the web links that chronologically were quoted in the dissertation, as well other web sites interesting for the topic.

World Wide Web foundation, established as an organization focused on the accessibility of internet in geo-political contexts characterized by underdevelopment. [www.webfoundation.org](http://www.webfoundation.org)

Cyber Conflict Studies Association, a non-profit organization focused on cyber conflicts:  
[www.cyberconflict.org](http://www.cyberconflict.org)

iRevolution, a blog that analyze the relations between new technologies and recent revolutions:  
<http://irevolution.net/category/social-media/>

ICT4Peace's web page:  
<http://ict4peace.org>

Internet World Statistics:  
<http://www.internetworldstats.com/stats.htm>

Definition of eParticipation by UNDP:  
<http://europeandcis.undp.org/files/uploads/ICTD/e-participation%20Guide%20%20blurb.doc>

EU projects on eParticipation:  
[http://ec.europa.eu/information\\_society/apps/projects/index.cfm?menu=secondary&prog\\_id=EPART](http://ec.europa.eu/information_society/apps/projects/index.cfm?menu=secondary&prog_id=EPART)

## **CURRICULUM VITAE**

Chaim Gabriel Waibel graduated from Liceo Classico “S. Maffei”, Verona, Italy, in 2007. He received his Bachelor of Arts from Alma Mater University of Bologna in 2011. After spending a year participating to the Erasmus Exchanging Program in Germany, he decided to take part to the dual degrees’ Master Programme on the island of Malta.