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Three Decades of Contention: The Roots of Contemporary Activism

Back in 1999 a trio of scholars who at the turn of the 1970s had been active in the debate around NWICO, announced that

> What started, historically, with the proposed restructuring of the international information and communication order has grown into an alliance of grassroots organizations, women's groups, ecology networks, social activists, and committed academics. Some now call it a media reform movement, others emphasize media education, and still others focus on the entire cultural environment, of which the mass media are an important part. There is a new NWICO in the making which sees itself as a network of networks based in civil society.
>
> (Vincent *et al.*, 1999, pp. ix–x)

How did this "network of networks based in civil society" mobilizing on media and communication issues come about? How did emancipatory communication practices evolve within this "new NWICO in the making"? This chapter traces the historical evolution of the issue area of communication, media, and technology as it became a field of contention in its own right. It analyzes the political and socio-cultural contexts in which emancipatory communication practices emerged, in order to situate them in relation to past struggles.

Contemporary media activism has its roots in the 1970s. Here I review the period of time from 1975 to 2005, following the *fil rouge* of the political opportunities that become available over time. For analytical purposes I have identified three decades of contention, each characterized by a specific set of political opportunities and a distinct socio-cultural climate. The decades represent an artificial classification aimed at making order of a very dense period of time. Each decade is labeled according to its prevalent feature, as follows:

- **1975–1985: the "institutional" period.** Communication and information issues enter the development discourse. UNESCO promotes a

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debate on the NWICO. The MacBride Report, commissioned by UNESCO, denounces severe imbalances in global information flows. The first "free radio" stations appear in Europe and Latin America, and hacker groups emerge in industrialized countries.

- **1985–1995: civil society engagement.** UNESCO withdraws its support to NWICO. Faced with fading interest within multilateral organizations, civil society organizes independently around the so-called MacBride Roundtables, charged with taking forward the debate inaugurated by NWICO. The first national media reform campaigns emerge. The Velletri Agreement marks the beginning of the civil society engagement with computer networks.
- **1995–2005: the renaissance of media activism.** Multilateral organizations manifest a renewed interest in communication issues. The UN calls for the first WSIS, organized by the ITU. The "movement of movements" protests global governance organizations. Emancipatory communication practices proliferate, thanks to the diffusion of the internet and cheap, user-friendly technologies, with the Independent Media Center (Indymedia) paving the way to independent online content creation.

The scope of this chapter is to capture the *Zeitgeist* in each of the decades to help situate the emergence of activism around media and technology issues in relation to other contemporary developments. A number of events, debates, and processes spanning the realms of nation states, multilateral organizations, and organized civil society illustrate the main trends in each decade. The list of events is by no means exhaustive, and the geographical span is deliberately mixed, including local, national, world-regional, and transnational mobilizations and policy processes. In order to detail the most salient moments, I rely on a mixture of primary and secondary sources, including official documents.

The analysis brings under the spotlight the interplay between three elements: world politics, characterized by multiple and multifaceted changes affecting both governance configurations and governance cultures; the technology landscape, shaken by an unprecedented innovation spree that questioned existing media policy arrangements; and the relation between institutions and civil society, with a focus on prevailing modes of interaction and discourses. As a result, each period is explored by focusing on three elements: political opportunities, technological innovation, and the socio-political context. First, I identify the prevailing political opportunities, analyzing the transformations in global communications governance and looking at both the structural features of institutional environments (and their organizational cultures) and the informal relations between institutions and non-governmental actors (cf., Cammaerts and Padovani, 2006). In particular, I focus on the emergence of a "global" civil society as a new political actor in transnational policy arenas (Rosenau, 1999; Held, 2000;

Kaldor, 2003; Keane, 2003). I investigate the evolution of institutional and civil society discourses in the framework of various global debates from the 1970s onwards (Nordenstreng, 1992; Vincent *et al.*, 1999; Carlsson, 2003; Padovani, 2005). Second, I trace the evolution of technological innovation and of the related policy arrangements, and reflect on the possibilities that technology offers for networking and organizing. I see the evolution of communication technology in connection with the types of social relationships ~~they enable~~, following Bennet (2005), who argues that there is a correlation between the organizational code of inclusive diversity of contemporary activism and the technology code of ICTs used to structure network interactions. Third, I look at the socio-cultural environment, focusing on other social mobilizations that might have come into contact with, and influenced, media and technology activists. Further, for each decade I identify an element of "crisis" – that is to say, the "breakdown of the functional and integrative mechanisms of a given set of social relations" (Melucci, 1996, p. 22). Crises have the ability of fostering profound changes in the governance system, especially when social actors see them as an opportunity for transformation. I argue that decolonization (late 1960s and 1970s), trade globalization (mid-1980s and early 1990s), and the emergence from the mid-1990s of what has been labeled as the "post-national constellation" (Habermas, 1998) embedded a transformative potential typical of uncertainty situations, offering crucial opportunities for change. Finally, for each decade I describe the main features of media and technology activism, focusing on issue framing, action repertoires, and organizational forms.

The historical reconstruction stops at the point where the empirical research begins. I include a section dedicated to the latest developments in the field, meaning the spread of hacktivism and the role of social media in recent popular protests, such as the Arab Spring, the Indignad@s and 15-M mobilization in Spain, and Occupy Wall Street. These recent developments are not part of this study. However, the empirical findings presented here help to understand their emergence, and illuminate many of their features. The chapter ends with an extended description of the case studies explored in the research.

1975–1985: Post-colonial demands for new world orders: NWICO

Early international debates about information and communication issues emerged in the 1970s within the UN. They shed the spotlight on the imbalances in global information flows, and explored the opportunities and challenges for development brought about by technological innovation.

At that time the world was divided in two spheres of influence, each corresponding to one of the two "superpowers" represented by the US (with the allied countries of the North Atlantic Treaty Organization) and the Soviet

Union (with its Communist bloc). Nation states were the dominant actors on the global scene but the strategic interests of the two superpowers largely determined the international political agenda. Following decolonization, several new independent countries entered the world map, determining an unprecedented shift in the global configuration of power and paving the way to a systemic "crisis" within the international community. The number of countries with membership of the UN grew from the original 51 of 1945 to 149 in 1976.[1] Although the system remained fundamentally bipolar, it could only partially absorb the tensions generated by the struggles for independence in Africa and Asia. These struggles spawned new perspectives on development and North–South relations, which were supported by innovative theoretical thinking such as the world-system perspective of Marxist inspiration (Wallerstein, 1974), and the dependency theory (Amin, 1976). The latter claimed that poor nations were deliberately kept so by wealthy countries, since an underdeveloped "periphery" was functional to a prosperous "center". It provided a counterargument to earlier development theories claiming that poor countries were just primitive versions of developed ones, and that Western-style development would eventually bring everyone to the same level of economic growth. Such perspectives influenced also international communication scholars, who proposed the notion of cultural imperialism, linking it to the global patterns of domination and dependence (Nordenstreng and Varis, 1974; Schiller, 1976).

In 1955 some 29 Asian and African states, many of which were newly independent, had met in Indonesia in the historic Bandung Conference, credited with having crystallized the Non-Aligned Movement (NAM). The NAM, created in 1961 by those countries refusing to support any of the blocs, aimed to oppose neocolonialism by any imperialistic nation, and to promote economic and cultural cooperation among African and Asian countries. It pushed for structural changes to the international system, and launched innovative proposals in matters of trade and development assistance. In the early 1970s it promoted the so-called New International Economic Order (NIEO), a set of policy principles seeking to improve international trade conditions for developing countries.

Around the same time the so-called "new social movements" emerged in Europe and North America (Touraine, 1981; Melucci, 1989). They focused on "new" issues such as peace and the environment. Affirming immaterial interests and values, these movements stressed the individual and cultural dimensions of participation, and managed to link the call for justice of Western activists to the independence struggles of "Third World" countries. Human rights supporters and feminist groups mobilized on the occasion of UN global summits, such as the 1975 Mexico City World Conference on Women, but the political culture within multilateral organizations offered little space for civil society to participate in the actual decision-making.

The mediascape was characterized by tight state control. The airwaves were typically regulated at the national level; television was slowly migrating from a natural state monopoly to commercial or hybrid systems based on private competition. The first modern computers appeared at the beginning of the 1980s, but for almost a decade they remained confined to small circles of US-based research labs and communities of practice. Although Western news agencies such as Reuters and Agence France-Presse had been operating since the 19th century, the first transnational media corporations as we know them emerged around this time, with Bertelsmann paving the way (Golding and Harris, 1997). Satellite communication technologies, which had appeared in the late 1950s, posed new challenges as they transmitted across national borders, threatening state sovereignty. At the same time there was the notion that satellites were inherently democratic as they could potentially allow everyone in the world to communicate with each other. This humanitarian conception of communication technologies led Jean D'Arcy, a French national and former director of the Radio and Visual Services at the UN Office of Public Information, to write in 1969 an article entitled "Direct Satellite Broadcasting and the Right to Communicate". According to him,

> The time will come when the Universal Declaration of Human Rights will have to encompass a more extensive right than man's right to information, first laid down twenty-one years ago in Article 19. This is the right of man to communicate. It is the angle from which the future development of communications will have to be considered if it is to be fully understood.
>
> (D'Arcy, 1969, p. 1)

In the same year, UNESCO organized a seminar in Montreal that inaugurated the international debate on communication and information issues. To be fair, these issues had already been discussed during the elaboration of the Universal Declaration of Human Rights (1948) but with no concrete outcome. A first attempt at translating these concerns into principles took place at the UNESCO 1972 General Conference in Paris, when a "Declaration of the Fundamental Principles Governing the Use of the Mass Media with a View to Strengthening Peace and Understanding and Combating War Propaganda, Racialism and Apartheid" was proposed and discarded following the opposition of, among others, the US. Parallel to this was the (failed) proposal by the Soviet Union for a binding convention on television transmission from satellites, with the intent to regulate direct broadcast satellites (Pavlic and Hamelink, 1985).

In 1973 the NAM began to get involved in the international debate about these issues. In March 1976 it promoted a symposium on information

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in Tunis, followed by a conference of the information ministers in New Delhi. Mainstream media were accused of playing a crucial role in pushing the objectives of the transnational power structure by giving unbalanced representations of the developing world (Somavia, 1977). National communication policies began to be seen as new arenas for social struggle (Schiller, 1975). Mimicking the NIEO, non-aligned countries promoted a debate on the NWICO, on the grounds that "[a] more just and more effective world communication system is an integral part of the efforts to achieve a new international economic order" (UNESCO, 1979, pp. 21–34). Emphasizing development and human rights concerns, they claimed that existing communication channels, such as satellites and news agencies, were the legacy of the colonial past. They called for, among other things, collective ownership of satellites as a way to challenge cultural domination and technological dependence on Western countries, and a means to achieve national sovereignty. The political declaration of the 5th NAM conference (Colombo, Sri Lanka, 1976) read: "The emancipation and development of national information media is an integral part of the overall struggle for political, economic and social independence [...] dependence in the field of information in turn retards the very achievement of political and economic growth." The debate was picked up by UNESCO, which between 1976 and 1980 organized a series of intergovernmental conferences on communication policies in various developing regions, including South-East Asia, the Caribbean, and Africa. The resulting documents included references to the rights of all countries to have "equal access to all the sources of information and take part on an equal footing in the control over and use of international channels of dissemination". They also called for "treat[ing] the communication sector not only as a support to development but as an integral part of the development plan itself" (UNESCO, 1976, p. 39).

In 1979 the ITU proposed the so-called Global Domestic Satellite System, an upgrading of the information infrastructure of the developing world. The project, however, did not go any further because of the lack of financial support from developed countries (Braman, 2006). In 1980, UNESCO appointed an International Commission for the Study of Communication Problems, chaired by Irish Nobel Peace Prize laureate Seán MacBride. The commission was to analyze communication problems in modern societies, and propose solutions to further human development through communication. Its book-length final report, entitled *Many Voices, One World*, identified communication as a basic individual right, and called for a "right to communicate" as "a prerequisite to many other [rights]" (MacBride, 1980, p. 253):

> Communication be no longer regarded merely as an incidental service and its development left to chance [...] Communication needs in a democratic society should be met by the extension of specific rights such as the right to be informed, the right to inform, the right to privacy, the

right to participate in public communication – all elements of a new concept, the right to communicate. In developing what might be called a new era of social rights, we suggest all the implications of the right to communicate to be further explored.

<div align="right">(pp. 254, 265)</div>

In advocating a change "in the nature of relations between and within nations in the field of communication" (p. 254), and "a better, more just and more democratic social order, and the realization of fundamental human rights", the commission maintained that these goals "can be achieved only through understanding and tolerance, gained in large part by free, open and balanced communication" (p. 253). It stressed the importance of making communication an investment priority, and called for the integration of communication into development policies and for international cooperation in the area. It urged developing countries to reduce their dependence on the industrialized ones; it stressed the importance of the professional integrity of journalists, and of their protection; and it praised the diversity of policy solutions adopted in different countries, which "should be respected; there is no place for the universal application of preconceived models" (MacBride, 1980, p. 253). It criticized the free-flow doctrine on information flows, accused of reinforcing Western cultural domination in developing countries, and the increasing concentration of media, technology and technical information in the hands of Western companies (Alegre and Ó Siochrú, 2005). The report mentioned also the relevance of non-commercial/non-governmental media, recognizing the role of "group and local media", although understood merely as "small media" (pp. 55–57), and the importance of "alternative communication" for "liberating people's initiatives" (p. 113). Finally, it explicitly called for the involvement of all sectors of society in the development of national communications policies "linked to overall social, cultural and economic development objectives" (p. 254).

The commission was dissolved after presenting the report. Eventually its findings were endorsed by the 1980 UN General Assembly, but it was a short-lived success. The report sparked controversies within the organization, which bolstered pre-existing ideological differences between the NAM and Western countries, and the US in particular. The vocal support offered to NWICO by the Soviet bloc, and a turn in the US foreign policy that became more critical towards multilateralism, led the UK, the US, and Singapore to abandon UNESCO in the early 1980s (Valle, 1995; MacBride and Roach, 2000). The split is better understood in the context of the advent in the presidency of the US of the Republican Ronald Reagan (1981). The new administration embraced an aggressive unilateralism, which led to a resurgence of the Cold War and to huge military build-ups in the two superpowers. The UN, and UNESCO in particular, had seen the rise of vote after vote in the General Assembly isolating the US and its allies. Withdrawing from UNESCO

(and the International Labor Organization) was a shot across the bows for the UN itself, given the large US budgetary contributions to UN organizations. It was also a victory for the telecoms firms, which could rely on commercial strategies for developing Third World infrastructure rather than the state-centric approach of NWICO. NWICO remained on the UNESCO agenda until 1987, when it was dislodged by the New Communication Strategy put forward by the new director, Federico Mayor, in 1989.

Although the UN Charter provided for consultation with non-governmental organizations (Article 71 calls for "suitable arrangements for consultation with non-governmental organizations which are concerned with matters within [the UN] competence"), NWICO remained largely out of the reach of civil society organizations. In the virtual absence of widespread mobilization (with the exception of the US-based coordination of media representatives on freedom of expression), professional associations became the most active non-governmental actors in the international debate. The Consultative Club of International and Regional Organizations of Journalists, as well as the International Association of Journalists, supported proposals for a restructuring of communication flows and for the protection of communication as a fundamental right. But the MacBride Report mobilized conservative currents as well. The Inter-American Press and Broadcasters Association launched a campaign against NWICO, while conservative Western media corporations and professional associations created the World Press Freedom Committee, which opposed NWICO on the grounds of possible threats to freedom of expression (Giffard, 1989; Preston *et al.*, 1989).

By taking part in the NWICO, national and international federations of journalists and professional unions encouraged similar expert groups to emerge. The progressive journalist association Media Alliance was founded in San Francisco in 1976 and the Campaign for Press and Broadcasting Freedom was launched in the UK in 1979 (Richardson and Power, 1986; Hackett and Carroll, 2006). In 1981 a group of computer hackers founded the Chaos Computer Club, "a galactic community of life forms, [...] which strives across borders for freedom of information" (Bennett, 2008), in Berlin. Shortly afterwards, on the other side of the Atlantic, Richard Stallman launched the GNU Project. In response to the tightening of copyright laws, it called for software writers to contribute to the compilation of an operating system free from constraints on its source code.[2] In his view, if developers were to release their creation to the public and collaborate, "everyone will be able to obtain good system software free, just like air" (Free Software Foundation, 1987). The GNU manifesto inspired the free software movement, which spread across the globe in the mid-1980s, blending in with the hacker movement, a programmer subculture that had emerged in California in the 1960s.[3]

Overall, most of the groups active in this period were single-operation local organizations rooted in elitist sectors of society. Advocates adopted a

double-edged strategy: on the one hand, the production, often with the support of progressive academics, of empirical evidence on the responsibility of Western media corporations in cultural imperialism, and, on the other, the promotion of progressive principles in intergovernmental settings, where they had only limited access, however. Issues were framed in terms of imbalances in the attempt to highlight the centrality of communication processes in society. Although intellectuals and scholars did contribute to develop a critical discourse on international communication, they did not manage to influence policy-makers.

In this period, independent communication projects, mostly local "free" radio stations, began to flourish in Europe and Latin America (Gumucio-Dagron, 2001), inaugurating a process of "decentralization of broadcasting" (Rennie, 2006, p. 78). The movement started in Italy with the so-called *radio libere* (free radio stations) following the liberalization of the Italian airwaves in 1976. Italian and later French stations inspired pirates all over the world (Downing, 2001; Ortoleva *et al.*, 2006). A long-term activist illustrated these developments as follows:

> I think civil society started to act before it started to think about this. All these alternative media, for example, was the "right to communicate" put into practice; it was people taking in their own hands the right to communicate without even spelling it that way. They were just saying, "we need to talk about our issues, about our problems, and we will do it" [...] We didn't use the word right to communicate twenty-five years ago. But it existed, it was already in the ground, people were doing it.[4]

1985–1995: The civil society agenda on communications reform

By the mid-1980s the idea of a democratic reform of the global information and communication system had been raised, discussed, and discarded. NWICO proved to be a matter of "high politics": its determining factors were socio-economic and geopolitical forces rather than intellectual and moral arguments (Nordenstreng, 2012, p. 36). But, although it did not bring along the changes in the media structures and flows that its proponents were hoping for, "the debate and its lessons" (p. 38) did mark much of the activism to come.

The Cold War came to an end in 1989, paving the way to democratic transition in former Communist countries and opening up new markets. The end of the bipolar confrontation, alongside processes of deregulation, privatization, and market integration, led to a redefinition of the role of the nation state in world politics, and to a shift in the location of authority (Held *et al.*, 1999; Rosenau, 1999). In 1989 the crackdown of student-led demonstrations in Beijing resulted in thousands of casualties among unarmed civilians in what became known as the Tiananmen Square massacre. The transition

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to democracy and capitalism, however, was peaceful in the large majority of cases, with the exception of Yugoslavia and the Caucasus area, where former Soviet republics Azerbaijan and Armenia engaged in the bloody Nagorno-Karabakh War (1988–1994).

On the other side of the Atlantic, many of the dictatorships that had plagued Latin American countries came to an end. After Bolivia (1982) and Argentina (1983), Brazil and Uruguay shook off dictatorships in 1985, followed by Guatemala in 1986 and Paraguay in 1993. In most cases the democrats that came to power faced the choice between justice and stability, opting often for the second (with the exception of Argentina, which set up a National Commission on the Disappearance of Persons, which led to the trial of the military junta). The persistence of military influence and organized political violence in post-authoritarian Latin America gave rise to "low intensity democracies" with a troubled path to democratic consolidation (Kruit, 2001). The many hundreds who had fled to exile returned, which resulted in an unprecedented flourishing of the organized civil society, although the post-dictatorship generations had to deal with a society in which repression and horror had brutally harmed solidarity, social bonds, political projects, and individual lives (Chovanec, 2009; Ros, 2012). NWICO-inspired debates about national communication policies emerged throughout Latin America, addressing the "democratization of communication relationships within countries," in the wake of the "shift in the structural hierarchy of ideological apparatuses and socialization agencies towards the media" (Roncagliolo, 1986/2006, p. 315). These debates addressed the political economy of the media, and ownership in particular, the impact of media on national cultures and cultural sovereignty, and the connection between freedom of expression and democratization. At the grassroots level, alternative and militant media and documentary cinema began to flourish alongside the new protest movements (see, e.g., Dodaro *et al.*, 2009).

By the mid-1980s, media and telecommunications lobbies had succeeded in introducing market dynamics in policy sectors traditionally controlled by states, setting in motion a process of concentration of media ownership. Commercial media played a crucial role in spreading capitalist lifestyle models and values (Herman and McChesney, 1997). Personal computers and compact disks entered households. In 1984, Apple's then-chairman, Steve Jobs, launched the Macintosh, the first commercially successful desktop computer to come with a mouse and a graphical user interface. In 1985, Microsoft launched its Windows operating system, preparing to become the main player on the personal computer market.

The EU Television Without Frontiers directive (1989) marked the first attempt to regulate media at the regional level by creating a common European market for audiovisual services. In 1994, the General Agreement on Trade and Tariffs (the General Agreement on Tariffs and Trade (GATT), set up in 1946) was replaced by the WTO. The new organization incorporated

measures on the TRIPS, marking the first steps towards a global regime for media and telecommunications. Although the US pressured European countries to liberalize audiovisual services, there was no multilateral agreement on this matter (Chakravartty and Sarikakis, 2006).

NGOs grew in number and expanded their scope of action from national to international (Smith *et al.*, 1997; Sikkink and Smith, 2002). Their number within the UN grew from 377 in 1969 to 928 in 1992, and to more than 1500 in 1998 (Dodds, 2002). From civic renewal in Eastern Europe to the Zapatista struggle in Mexico, which opposed indigenous groups in the remote state of Chiapas to the Mexican government, the day the North American Free Trade Agreement (NAFTA) came into effect (1994), grassroots organizations were increasingly able to represent themselves on the global scene, while state actors were progressively delegating governance to market forces. The "crisis" brought about by market globalization provided some political opportunities for civil society groups, offering "incentives and causes for resistance" (Tarrow, 2005, p. 5). It contributed to promoting a process of legitimization of NGOs, as UN conferences offered organized civil society an arena for exchange and dialogue (in parallel, however, with the growing in prominence of private actors).

With the NWICO failure it became clear that little or no reform of the global communication system would come from the media themselves or from multilateral organizations. UNESCO adopted a medium-term plan for the period 1990–1995 entitled *La communication au service de l'umanitè* ("Communication at the service of humanity"). This emphasized pluralism and the free circulation of information, and it supported alternative media. It represented a shift from diplomacy among sovereign states to international solidarity and relations among peoples (Raboy, 1991). Starting in 1989, UNESCO organized a series of regional roundtables. These stressed the role of communication as the foundation of society, and highlighted the need to develop skills in the use of media technologies. But these events offered few political opportunities to media reform advocates to participate and have a say. Civil society groups then began to organize autonomously, mainly at the national level (White, 1995; Alegre and Ó Siochrú, 2005). Faith-based associations, early internet organizations, and advocacy groups started addressing issues of media concentration, media pluralism, and copyright. National initiatives on media issues spread in Latin America as well as in the US, where a democratic media activism movement made its voice heard at Congress (Hackett, 2000; McChesney and Nichols, 2002). In 1986 the national media watchdog Fairness & Accuracy in Reporting (FAIR) was formed in New York. At the international level, progressive media professionals and some academics began slowly to regroup around the MacBride Roundtables, an advocacy group that met annually from 1989 to 1999. But this was not yet a grassroots mobilization, and experts and progressive intellectuals played a prominent role. A People's

Communication Charter was first launched in 1993: its 18 articles claimed that communication systems should serve "human needs and rights" and that people should be empowered through media access and possibilities for participation[5] (Hamelink, 1983). Learning from the NWICO failure, the charter's advocates tried to build up support among international networks of civil society organizations. They envisioned a bottom-up strategy, calling for cooperation between NGOs and governance institutions. By the 1990s, many coalitions for the democratization of communication had emerged, including the coalition Platform for Democratic Communication (later Platform for Communication Rights) and the international campaign Voices 21, an informal association of media activists ~~funded~~ "with a view towards building a new social movement around media and communication issues"[6] (Nordenstreng and Traber, 1992). This civil society mobilization had roots in the cultural and socio-political processes of decolonization and democratization (White, 1988). Groups organized in reformist coalitions, and issues were now framed in terms of democratization and rights rather than development. However, there was still the common perception that, as columnist Katha Pollitt wrote in the US progressive magazine *The Nation*, "movements need media, but media don't make a movement"[7]: in order to build a strong coalition around communication issues, other movements were to understand that media access was relevant to their campaigns as well.

In 1984 a group of grassroots NGOs from four continents active in the human rights, sustainable development and women's movements signed the Velletri Agreement, committing to use telephone lines to network their computers, thereby recognizing the potential of the new information technologies for the promotion of social justice and development.[8] They formed a coalition that would work to "provide the channels for the mutual sharing of skills and knowledge on information handling" (Interdoc, 1984). As a result, the Canadian International Development Research Centre funded Interdoc, a series of connection experiments geared towards civil society organizations (Murphy, 2005). Interdoc was implemented and used by various civil society groups across the world, including the Asia Monitor Resources Centre, based in Hong Kong, the Instituto Brasileiro de Análises Sociais e Economicas in Brazil, and People's Access in the Philippines. It paved the way to many other experiments in computer communication. Between 1985 and 1990, several networks were created to provide grassroots activists with cheap ways of sharing text-based information. They included Fidonet, which relied on the Bulletin Board System (BBS; a sort of forum allowing users to connect through a common landline and exchange messages and files); the London-based GreenNet, oriented towards the environmental activism community; PeaceNet and EcoNet in the US, which later merged into the Institute for Global Communications; and the European Counter Network (ECN – Isole nella rete), based in Italy and connected to

Table 2.1 Contention on media and communication issues: A timeline

1975–1985: The "institutional" period. Postcolonial systemic "crisis"	1985–1995: Civil society engagement. Globalization "crisis"	1995–2005: The renaissance of media activism. Legitimacy "crisis" of global governance institutions
In Europe, commercial television breaks the natural state monopolies in broadcasting; first computers	Increasing concentration of media ownership	Wider than ever diffusion of ICTs; spread of the internet
"New social movements" appear in Western democracies. People mobilize on identity and culture	1983: launch of the People's Communication Charter; AMARC is born; the Community Radio Association (later Community Media Association) is created in the UK to lobby the UK regulator for the legalisation of community radio	1995: first edition of the Global Media Monitoring Project. Others follow in 2000 and 2005
The world-system approach and the dependency theory question mainstream visions of development, reclaiming the specificities of developing countries	1984: Apple launches the Macintosh computer, the first with a mouse and an interface; 1985: Microsoft launches its operating system, Windows	1996: creation of the Platform for Communication Rights, a group of NGOs committed to the democratization of communication structures and institutions; revision of rules regulating UN–NGO relations
The debate about a NWICO emerges in UNESCO, promoted by the Non-Aligned Movement. Non-aligned countries claim more balanced North–South information flows and a democratic use of communication satellites	1986: FAIR is formed in the USA	1999: the association of media activists Voices 21 is created in London, in view of "building a new social movement around media and communication issues"; blockade of the WTO summit in Seattle, which inaugurates a wave of "anti-globalization" protests; Indymedia is born

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Table 2.1 (Continued)

1976: the association of progressive journalists Media Alliance is born in San Francisco	1989–1999: civil society autonomous engagement in MacBride Roundtables. NWICO themes are discussed independently of institutional debates	2001: first World Social Forum, in Porto Alegre, Brazil; the CRIS campaign is born
First media reform campaigns: the Campaign for Press Freedom, a leftist media reform organization, is launched in the UK (1979)	1989: introduction of measures on intellectual property (TRIPS) in the framework of the GATT	2002: The media reform organization Free Press is formed in the US
1980: publication of the report of the MacBride Commission entitled *Many Voices, One World*. It identifies communication as a human right	1989: EU ~~direction~~ "Television Without Frontiers" creates a common regional audiovisual market	2003–2005: the WSIS is celebrated in Geneva and Tunis. In Geneva the Geneva03 collective organizes a series of actions under the label of ~~WSIS?We Seize!~~
The NWICO debate sparks controversies within UNESCO. The US and the UK leave UNESCO, and the NWICO debate progressively dies out	1989: the GNU project is launched. The first Linux systems appear in 1991	2003: communication and media ~~are on~~ the agenda of the World Social Forum
	Launch of the Platform for Democratization of Communication; the first alternative ISPs are created	2004: seizure of Indymedia disks by the FBI; foundation of the Community Media Forum Europe, with a view to lobbying EU institutions
	1993: the first edition of the *Next 5 Minutes Festival* is held in Amsterdam. The theme is "Tactical Television"	2005: the European Parliament rejects software patents; UNESCO adopts the Convention on Cultural Diversity
	1994: Zapatista insurgency in the state of Chiapas, Mexico. The insurgents use the internet to spread information about their local struggle to the world	

the most radical fringes of European social movements. Some still operate today. In 1988, inspired by "the Internet vision of global communications unfettered by commercial barriers" (Murphy, 2000), PeaceNet and GreenNet teamed up to create the first NGO-owned transatlantic digital communication network. In 1990, non-profit ISPs joined forces in the Association for Progressive Communications (APC), to ensure that "all people have easy and affordable access to a free and open internet to improve their lives and create a more just world".[9]

The first GNU general public license was released in 1989: it was a "copyleft" license (as opposed to a copyright one), allowing users to produce derivative works provided that such works were to be distributed under the same sharing agreement. The first Linux operating system, launched by Finnish student Linus Torvalds, was released in 1991: expert users could modify, improve, and adapt its source code to their needs. Transnational forms of cooperation emerged within communities of developers, such as Computer Scientists for Social Responsibility, founded in 1981 with an education mandate. Meanwhile, electronic disturbance and civil disobedience were theorized and practiced by groups like the Critical Art Ensemble, a US-based art and technology collective. Online direct action, such as virtual sit-ins, "digital storms", and DDoS attacks aimed at making a website temporarily unavailable, were seen as the virtual equivalent of blocking a company's headquarters. Practiced as hit-and-run digital interventions, they were thought to be the most meaningful forms of political resistance in times of nomadic and decentralized power (Critical Art Ensemble, 1993). In other words, the Critical Art Ensemble called for a strategic move away from the streets towards the online: "Resistance – like power – must withdraw from the street. Cyberspace as a location and apparatus for resistance has yet to be realized. Now it is time to bring a new model of resistant practice into action" (Critical Art Ensemble, 1996, p. 20).

The link between social movements and grassroots media was strengthened. Community radio stations began to organize both nationally and internationally. The UK Community Radio Association (CRA; later Community Media Association) was founded in 1983; in the same year the Assemblée Mondiale des Artisans de la Radio Communautaire (World Association of Community Broadcasters, henceforth AMARC) held its first meeting in Canada. A new discourse on tactical media emerged: at the crossroads between arts and activism, it promoted the critical usage of old and new media practices for tactical intervention into the social with the aim of achieving non-commercial and subversive political goals (Critical Art Ensemble, 2001; Garcia and Lovink, 1997). The first edition of *Next 5 Minutes Festival* in Amsterdam in 2003 focused on tactical television: about 300 people from Europe and North America gathered to discuss forms of intervention in television and autonomous production under the umbrella of progressive political values and social justice.

1995–2005: The renaissance of communication struggles and emancipatory practices

In the second half of the 1990s, the neoliberal model was called into question as a series of financial crises hit South-East Asia in 1997–1998, while Argentina, which was considered a model country for its responsiveness to the International Monetary Fund's (IMF's) policy proposals, went bankrupt in 2001. Although emerging economies such as India, Brazil, and China played a bigger role in global trade and politics, power remained within the economic council of the world's wealthiest economies (the Group of Eight (G8)). Following the September 11, 2001 attacks on the Twin Towers in New York and the Pentagon, the US launched a global "war on terror" that resulted in the controversial attacks on Afghanistan (2001) and Iraq (2003).

In 1995 the WTO replaced the GATT with the mandate of further liberalizing international trade. The General Agreement on Trade and Services (GATS), administered by the WTO, entered into force in 1995. It incorporated under the "services" rubric information and its processing and flows (Braman, 2006). Through a series of world conferences addressing global issues from poverty to the environment, the UN attempted to reposition itself in a "post-national" context where non-state private interests and informal governance networks were increasingly gaining power (Hale and Held, 2011). This "crisis" of legitimacy of global governance institutions turned into an opportunity for civil society. In 1996 the UN directive regulating the role of NGOs within the organization was updated (UN Directive, 1996/31), increasing the interaction between the UN and organized civil society, and paving the way to multistakeholder summits. The multistakeholder approach to governance was tested on the occasion of the WSIS, the first UN summit to address communication issues and the role of ICTs in development. Coordinated by the ITU, the WSIS took place in two phases: Geneva 2003 and Tunis 2005.

By the mid-1990s the internet had entered the everyday lives of ordinary people, accelerating communication across the globe and fostering connections among dispersed activists. With direct actions and demonstrations becoming easier to organize, and networking across borders cheaper to sustain, activists began to organize at the transnational level and to target supranational institutions (Smith *et al.*, 2002; della Porta and Tarrow, 2005). Although mainstream media labeled the protesters with the pejorative neologism of "no global", they preferred to be called the "alternative globalization" movement or "the movement of movements", in recognition of the multiplicity of groups, ideologies, and issue areas represented by the movement (della Porta, 2007; Juris, 2008). In 1999, protesters managed to obstruct the WTO summit in Seattle: the blockade, which caught by surprise institutions and media alike, gave global visibility to this nascent alternative globalization movement. From Seattle onwards, a continuum of ever-bigger

demonstrations and countersummits unfolded (Pianta, 2001; Marchetti and Pianta, 2006). The many websites of the movement ensured visibility of the protests and of the activists' demands (della Porta and Mosca, 2007). In July 2001, thousands of people marched against the meeting of the G8 in Genoa, Italy (Andretta *et al*, 2002). The demonstrations were brutally repressed, with one protester killed by the police and several hundred wounded. Amnesty International condemned the arbitrary and abusive use of force by the police force, and it accused protest policing during the event of representing "an intolerable stain on Italy's human rights record" (Amnesty International, 2001, 2011).

Alongside protesting the summits of multilateral organizations, civil society created its own autonomous spaces: social forums debuted in Brazil in 2001 as "spaces of convergence" for civil society (Juris, 2008). The idea of social forums rapidly expanded throughout the globe, becoming crucial to the development of an independent civil society agenda and the utopia of "another possible world" (De Sousa Santos, 2003). Transnational coalitions multiplied, thanks to internet-based exchanges, and a "global civil society" emerged (Kaldor, 2003; van Rooy, 2004). On February 15, 2003, this global civil society made itself visible on the occasion of the global day of action against the then-imminent Iraq War: millions of people across the world took the streets, as a result of several months of mobilization, which started in 2002 and continued after the beginning of the war.

Emancipatory communication practices mushroomed, also thanks to the availability of camcorders, laptops, and cheap internet connections which allowed non-experts, readers, and listeners to become writers and producers (Atton, 2002, 2004; Langlois and Dubois, 2005). Activists inherited the values and tactics of the many pirate and free radio stations, flyers, and pamphlets produced over the years by all kinds of social movements (Downing, 2001). A myriad of alternative media websites, independent video productions, online radio stations, and pirate microtelevision stations (the so-called "telestreet", broadcasting to a neighborhood; Berardi *et al.*, 2003) emerged on the fringes of the commercial mediascape. The "media activist", embodying a particular skillset and the cultures of critical usage of technology, became a distinct identity within the social movement ecology: a specific figure at the service of movements, and instrumental to other struggles (Pasquinelli, 2002). Further editions of the *Next 5 Minutes Festival* took place in Amsterdam in 1996 and in 1999. It started addressing tactical media on the internet, promoting transnational networks of activists that were engaged in tactical media interventions (Lovink, 2003).

In 1996 the Zapatistas had called for "mak[ing] a network of communication among all our struggles and resistances" (Hamm, 2005). Partially inspired by the Zapatista cyberstruggle, activists protesting against the WTO summit in Seattle created the first Independent Media Centre (IMC), or Indymedia, in order to report from the demonstrations. For the first time

in the brief history of the internet, thanks to a piece of software called Active (developed by the activist community in Sydney, Australia, and released as open-source software), users could publish news, text, and pictures online without an editorial filter or prior registration. At a time when one needed to be a webmaster to modify a webpage, the IMC's innovative "open publishing" platform positioned itself as "the mother of all blogs" (Milan, 2010b, p. 89). Rapidly, Indymedia became a global independent information network: in 2002, three years after its foundation, the network could already count 89 IMC nodes in six continents (Kidd, 2003). However, independent information projects (and Indymedia was no exception) were occasionally threatened by repression. In response to threats, grassroots activists launched international solidarity campaigns, established quick intervention networks, and tightened data-encryption systems. When the US Federal Bureau of Investigation seized some Indymedia servers in 2004 following terrorism allegations (Milan, 2004b), a transnational campaign was launched with the participation of grassroots activists, NGOs, and lawyers' associations.

The internet also changed the protesters' action repertoires, and new forms of technology-based action emerged (McCaughey and Ayers, 2003; van de Donk *et al.*, 2003). The idea of appropriating online and offline communication spaces regardless of institutional boundaries became increasingly popular, following an approach to social action that did not consider institutions as legitimate sources of power (cf. Jordan, 2002). Hacktivism tactics, such as net strikes and DDoS attacks, became more frequent, but they remained confined to circles of technosavvy activists. The hacker collective known as Cult of the Dead Cow (currently Hacktivismo) is credited with having invented the term, a portmanteau of "hacking" and "activism", in 1998 (Delio, 2004). A form of "activism gone electronic" (Jordan and Taylor, 2004, p. 1), hacktivism indicates the politically motivated use of technical expertise such as coding: activists seek to fix society through software and online action.[10] This form of digital resistance inverted the logic of mass action: instead of trying to create an oppositional mass, digital tactics celebrated the role of decentralized units and networked individual action in disrupting the system. In addition, they bypassed mainstream mass media, targeting policy-makers and companies directly (Meikle, 2002).

National, world-regional, and transnational mobilizations on media, technology and communication issues gained new momentum. In 2003 the debate about media and technology issues made the agenda of the World Social Forum, becoming one of the five thematic areas of discussion (Milan, 2003). The forum provided an arena for media activists to meet, exchange skills, and launch joint projects. Media centers at major antiglobal demonstrations and countersummits became occasions for further collaboration and networking. In 2004 the European Forum on Communication Rights took place in London.

Mainstream media were not ignored. In 2002 the media reform organization Free Press was created in the US with the aim of promoting independent media ownership and strong public media. In 1995 the NGO MediaWatch Canada organized the first edition of the Global Media Monitoring Project (GMMP) from an idea that emerged at the Beijing UN Conference on Women that same year. Citizens in 70 countries monitored news media in order to gather data on gender representation and to plan advocacy interventions, making of the GMMP the first ever grassroots monitoring experiment of media content. The 2000 and 2005 GMMP editions, coordinated by the World Association of Christian Communication, resulted in awareness-raising campaigns targeting the role of media in reproducing gender stereotypes (Gallagher, 2001). In 2005 the European campaign No Software Patents crystallized around the issue of software licenses that was under discussion at the European Parliament (Breindl, 2011). Critical voices were not concentrated in the industrialized north alone: in the early 2000s, Brazil became a vocal supporter of Creative Commons licenses[11] as a vehicle for digital inclusion; community radio advocates successfully lobbied the Indian government for licenses; activists launched a Campaign for Popular Media Reform in Thailand; and Bangladeshi NGOs launched a campaign against media concentration, to name but a few.

But the biggest event for media reform advocates was the WSIS. Civil society groups attempted to seize the opportunity by participating in big numbers "inside" the summit, but also organizing counterevents "outside" the summit venue. The CRIS campaign, created in 2001 and gathering NGOs and individuals from many countries, served as an umbrella group to represent civil society values and interests at the summit. It was the most vocal supporter of the right to communicate at the WSIS (Thomas, 2006; Mueller *et al.*, 2007). Although on several occasions the voices of repressive governments and media corporations proved much louder, civil society managed to make its voice heard, including in the debate surrounding its own participation. Groups that had come together with diverse agendas converged into the alternative Geneva Declaration: "Shaping Communication Societies for Human Needs". The documents read: "At the heart of our vision of information and communications societies is the human being [...] We are committed to building information and communication societies that are people-centered, inclusive and equitable" (WSIS Civil Society Plenary, 2003, p. 3). It addressed aspects of the information society that had been ignored or at best downplayed by the official summit documents, such a people-centered and sustainable definition of development, the centrality of human rights, and the ethical dimensions of the so-called enabling environment. During the Geneva phase, groups with an alternative media background gathered in a temporary network named the Geneva03 Collective and organized a series of initiatives called WSIS? We Seize!, including

a conference, protest events, and media laboratories (Hadl and Hintz, 2009; Hintz, 2009).

The WSIS allowed civil society to strengthen transnational connections and identify priorities for action (Padovani and Pavan, 2009). The summit served as a meeting space for groups of different generations and backgrounds, and it fostered connections between media activists, and women's and indigenous people's movements. It pressured civil society activists from a number of countries to elaborate a common understanding of communication issues (Hintz and Milan, 2007); for many groups it represented an unprecedented opportunity to organize globally around communication issues (Burch, 2004). Notwithstanding the tension between participation and exclusion (several informal civil society groups were not given accreditation; cf. Cammaerts, 2009), the WSIS strengthened a global mobilization around communication issues and communication rights (Ó Siochrú, 2004; Raboy and Landry, 2005). Some scholars saw a direct connection between the WSIS-mobilized civil society and the NWICO (Raboy, 2004; Padovani and Pavan, 2009; Frau-Meigs *et al.*, 2012). Although I do agree that NWICO was an important reference for recent mobilization as well, its legacy for contemporary activism was limited to the older generations of activists.

The second phase of the WSIS, in Tunis, symbolically closed a decade of international policy advocacy activism. With grassroots activists practically absent and the agenda being reduced to a few specialized issues and monopolized by the debate about the lack of freedom of expression in the hosting country, WSIS2 included only a handful of thematic, well-resourced NGOs specializing in internet governance, doing away with the diversity of participants that had made WSIS1 such an innovative event. Critics went as far as accusing the participating civil society organizations of neocorporatism "oriented at satisfying neoliberal economic imperatives" (McLaughlin and Pickard, 2005, p. 359).

Other multistakeholder policy arenas opened up towards the end of the decade, at the European and global levels, including the multilateral negotiations towards a UNESCO Convention on Cultural Diversity, eventually adopted in 2005. Such policy windows fostered the creation of *ad hoc* advocacy coalitions, such as the lobbying group Community Media Forum Europe (CMFE), created in 2004 in response to an open policy window at the Council of Europe (Milan, 2009c). International NGOs with expertise on ICTs and development, such as the APC, were ~~often~~ asked to advise UN institutions and governments. In the UK the Community Media Association (CMA) became an advisor on community media policy to the UK regulator, Ofcom. In a nutshell, media policy activism was strengthened by the many political opportunities of the decade and its agenda broadened to include "issues of structure, content, culture, practice and rights" (Stein, 2009, p. 13).

Media activism today: Hacktivism, liberation technology, and cloud protesting

If the WSIS closed a decade characterized by the unprecedented diffusion of emancipatory communication practices and brand-new openings in governance processes, the WSIS itself could not be considered as concluded in Tunis. The debate on the future of internet governance moved to the newly established Internet Governance Forum, a multistakeholder arena which inherited the WSIS rules (DeNardis, 2009; Mueller, 2010; Pavan, 2012). Communication policy activism became even more specialized: more policy arenas opened to civil society, but the hyperprofessionalization of the issues at stake accelerated a process of disengagement of civil society organizations, and widened the gulf between established thematic NGOs and grassroots groups (Hintz and Milan, 2009a/b). Recent threats to internet freedoms, such as the 2006 EU Directive on Data Retention, the corporate challenges to net neutrality (Kidd, 2009), and the many ways in which the internet is being filtered and censored (Deibert *et al.*, 2008 and 2010) attracted the attention of only a handful of specialized groups of citizens (with the exception of the SOPA/PIPA case; cf. Chapter 5).

Meanwhile, other "crises" have emerged that add to the legitimacy crises of neoliberalism and multilateral institutions: first, the global financial crisis, which started with a credit crunch in the US banking system in 2008, and evolved in 2011 into a debit crisis in the Eurozone; second, the socio-cultural "crisis" that is the legacy of the 9/11 attacks and the "war on terror", which jeopardizes the dialogue between the West and the Arab world; and third, the global environmental and food crisis affecting mostly the poorest countries in Africa and Asia. After a period of relative quiescence, citizens are taking to the streets again. From December 2010 onwards, an upsurge in protest demonstrations hit North Africa and the Middle East, resulting in the fall of authoritarian governments in, for example, Tunisia and Egypt. The so-called Arab Spring inspired a new wave of worldwide social mobilization. In May 2011 a series of demonstrations and protest camps in the biggest Spanish cities demanded change in national politics and "real democracy now" (Hughes, 2011; Oikonomakis and Roos, 2013). In September 2011, people started camping in a public park in New York City's Wall Street financial district, soon followed by similar protest camps all over the world (Feigenbaum *et al.*, 2013). People protested against financial inequality and expressed distress at institutions too often giving in to corporate agendas. But the Occupy protests, as they became known, represented primarily a quest for participation by disempowered citizens, and a call for recognition of the citizens' democratic agency (Tarrow, 2011).

On the communication technology front, the diffusion of commercial web 2.0 tools, such as microblogging and social networking services, are changing our understanding of the link between media, participation, and social

mobilization. Most importantly, they have an impact on protest dynamics that goes beyond their instrumental role: according to Juris, social media use "has led to new patterns of protest that shape movement dynamics beyond the realm of technological practice" (2012, p. 297). Various scholars have investigated the impact of social media on the organizational structures of collective action. Bennett and Segerberg observed a "logic of connective action" at play, whereby personalized content shared across media networks changes the core dynamics of the action (2012, p. 739). Along similar lines, Juris argued that, precisely because social media leverages interpersonal networks, they tend to generate "crowds of individuals" rather than organizational networks (~~Juris,~~ 2012, p. 297). In other words, they foster a "logic of aggregation" in a way similar to how the internet has nurtured a "logic of networking" within the global justice movement. But what for Juris is the "logic of aggregation" is for Gerbaudo the "choreography of assembly", a rather weak and temporary group dynamic typical of highly dispersed and individualized constituencies where influential *Facebook* administrators become " 'soft leaders' or choreographers, involved in setting the scene, and constructing an emotional space within which collective action can unfold" (Gerbaudo, 2012: Kindle location 151–161).

Fenton and Barassi (2011) and Milan (2013) explored the emerging individualism in collective action and its relation to social media use. Milan coined the notion of "cloud protesting" in order to capture the way in which social networking services are changing organized collective action. The metaphor is borrowed from computing, where the cloud indicates the customized delivery of services over a network. In contentious politics the cloud takes on two meanings: on the one hand it is a metaphor for highly individualized collective action, and, on the other, it is an online imagined repository for the soft resources crucial to collective action. As a metaphor the cloud indicates a specific way of connecting individuals in an instance of collective action, where individuals and informal amorphous collectives have taken central stage, dislodging organized groups, such as traditional social movement organizations. As an online imagined space, the cloud stores the know-how, narratives, and meanings associated with collective action, including the building blocks of collective identity. It makes them available to individual activists, who can "shop" for existing meanings but also contribute to creating and sharing new ones. The cloud is enabled by and accessible via digital technologies, and social media services and mobile devices in particular. It has the ability to reduce the costs of mobilization by offering resources that can be accessed and enjoyed independently by individual activists in a cherry-picking fashion. In this way, individual participants can tailor their participation by creating a customizable narrative and a "personalized" collective identity by means of posts, tweets, links, and videos, but also with "retweets" and "likes". The resulting hashtag-style narrative is flexible, real time, and crowd controlled. It

connects individual stories into a broader context that gives them meaning (Milan, ~~2012,~~ 2013).

The instrumental role played by social media and mobile phones in the Arab Spring (Eltantawy and Wiest, 2011), particularly in the incremental creation of a joint narrative for the protests, is a case in point. Some observers have come forward with the (contested) notion of "liberation technology", to indicate those technologies enabling citizens "to report news, expose wrongdoing, express opinions, mobilize protest, monitor elections, scrutinize government, deepen participation, and expand the horizons of freedom" (Diamond, 2010, p. 70). However, there is no consensus on the potential of social media for the promotion of democracy (Morozov, 2011), and the role of commercial proprietary platforms as agents of social change has rightly been questioned (Mejias, 2011). What is sure is that the internet, and the direct participation of the average citizen enabled by web 2.0, has changed many realms of contemporary life, including journalism practice, cultures, and norms (Fenton, 2009). For example, traditional news media increasingly incorporate forms of "citizen journalism" in order to encourage a conversation with audiences that are hungry for participation (Bowman and Willis, 2003). The whistle-blower site *WikiLeaks* contributed to question the role of news media in contemporary societies as it took over the investigative mission that traditionally belonged to journalists (Lynch, 2010; Brevini *et al.*, 2013).

But as both activists and scholars grow more excited at the possibilities offered by social media and mobile devices, cyberspace is becoming increasingly controlled. According to Deibert *et al.* (2011) and Deibert (2013) we have entered a phase where the contest over access to cyberspace has burst into the open, as governments and corporations alike increasingly intervene in this domain. For example, social media have been used during the Arab Spring to control protesters (van Niekerk *et al.*, 2011; Wilson and Dunn, 2011). A few days after the beginning of the uprising, the Egyptian government attempted to curtail internet access in order to inhibit people's ability to organize through social media. Similarly, in 2011 the US considered the introduction of a "kill-switch" bill to give the president the power to shut down the internet in case of cyber threats. On the corporate front, the US music and movie industry inspired the infamous SOPA, ~~which is expected~~ to restrain copyright infringement in cyberspace.

These recent events and developments show how the internet is no longer just a tool for activist networking and mobilizing but has become the main platform for action, recruitment, and identification. Collective action is becoming increasingly disembodied, distributed, and individualized. This is particularly visible in the recent revitalization and growing popularity of hacktivist tactics: what were back in the 1990s sporadic cell-based cyber performances are now tactics practiced on a regular basis by decentralized networks of individuals seeking to intervene in real-world struggles where

their cyber support might be needed (Milan, 2012a, 2012b). Groups like Lulz Security (LulzSec) and Anonymous regularly make the news, and hacktivism, DDoS attacks, and website defacements have become part of the lexicon of mainstream media and security forces alike. According to Jordan, hacktivism has become a new ethics for living, characterized by the transgression of existing states of affairs, and "a sense of solidarity in pursuit of transgression" (~~Jordan,~~ 2002, p. 12).

In 2010–2011, Anonymous mobilized in support of *WikiLeaks* by defacing the websites of companies that had taken action against the whistle-blower website. The extraordinary visibility that hacktivism acquired with the *WikiLeaks* case encouraged more young people who do not care about the consequences to join the struggle, and fostered the creation of an "army" of hacktivists that can be readily mobilized in case of future threats to online or offline freedoms. To name but one such case, we have seen hacktivists in action to support the popular uprisings in Tunisia and Egypt as well as the Occupy Wall Street protests. Hacktivism is becoming increasingly popular also because, when compared with other activism tactics, such as campaigning or street demonstrations, cyber disruption and electronic disturbance have an intense and real-time impact despite the limited deployment of resources.

From the perspective of emancipatory communication activists, social media and technology have come to perform some of the functions (e.g., media production, online unedited publishing) that only media activism projects provided up until a few years ago. What was new and innovative back then (e.g., the Indymedia open publishing software) is now also available on commercial platforms, which enjoy greater visibility compared with activist projects. Today people prefer to post videos from street demonstrations on *YouTube* rather than Indymedia (Askanius and Uldam, 2012). At first, activists responded to this challenge by updating their services. Alternative ISPs introduced blogging platforms, while in 2008 IMC London launched a new website with "tumble" mobile publishing, allowing people to publish text and pictures from their phones. However, some projects surrendered to the predominance of commercial social media. In October 2012 the Indymedia London collective announced the suspension of its operations on the grounds that the project was "no longer the one which we think is tactically useful to put our energy into" (IMC London, 2012). In response to these latest developments, the alternative versus commercial, activist as well as academic debate is moving away from online media and broadcasting and into the realm of social media. Unlike Us, a network of academics, activists, and artists seeking to understand social media monopolies and their alternatives, emerged in 2011 around the Amsterdam-based Institute of Network Cultures. Meanwhile, progressive techies are working to create non-commercial citizen-based social networking platforms in order to counteract threats to privacy by corporate social networking. At the time of writing the

projects under way include *Diaspora, Crabgrass, Lorea, SocialSwarm, Briar, and Freedombox.

I will now turn my attention to the history of community radio and the radical internet, illustrating their main characteristics.

Low power to the people! A brief history of community broadcasting

Community radio goes under many names, and stations operate differently in different countries. It is part of the broader category of community media. Community media provide public communication ("made available to everyone") within a specific context, the community, understood primarily as a social setting (Hollander *et al.*, 2002, p. 22). The community "serves as a frame of reference for a shared interpretation": it is not a matter of size but of the "special relationship between senders, receivers and messages" offered by the common social context (ibid., p. 23). The notion of community media is strongly connected to broadcasting and radio in particular. Starting from the 1970s, measures on community radio have been progressively included in national media regulations (cf. Hintz, 2011). In many other countries, however, community radio remains illegal.

Community radio stations are distinct from commercial broadcasters in their aspirations, working methods, and structures (Jankowski, 2002; Jankowski and Prehn, 2002; Howley, 2005; Rennie, 2006). They are "the means of expression of the community, rather than for the community", and "media to which members of the community have access [. . .] when they want access" (Berrigan, 1979, p. 18). Audiences are often disempowered or minority communities to which community media offer a means for participation and empowerment (Hadl and Hintz, 2009). The radio station is conceived as "the voice of the voiceless", and "the mouthpiece of oppressed people (be it on radial, gender, or class grounds) and generally as a tool for development" and social change (AMARC and Panos, 1998).[12] The emphasis is on dialogue and communication as a two-way process (Carpentier *et al.*, 2002). Notwithstanding geographic and cultural differences, three elements typically define community stations: non-profit making, community ownership and control, and community participation (AMARC and Panos, 1998; Jallow, 2012). They are often run by a volunteer base of programmers. Usually they do not broadcast commercials. Examples include Radio La Tribu in Buenos Aires, Argentina; Radio Peace in Accra, Ghana; Radio Corax in Halle, Germany; Radio Samarghata in Kathmandu, Nepal; the Punjabi community station Desi Radio in East London, UK; and the university stations KCBS Radio in Santa Barbara, California, US and CKUT Radio in Montreal, Canada. Their programming includes local news, programs in migrant languages, educational programs, and niche music and self-produced entertainment.

Since its invention at the beginning of the 20th century and its large-scale adoption throughout the second half of the century, the story of radio has been a story of control and battles over spectrum scarcity. Governments have made multiple attempts to control access on the grounds of the scarce availability of airwaves and cultural protection provisions. This "scarcity" has sometimes been a convenient rationalization for commercial or state control.

The struggle for citizen-led media emerged on a large-scale in Europe in the 1970s (cf. Jankowski *et al.*, 1992). The earliest experiments of grassroots broadcasting, however, date back to the second half of the 1950s, when the first unlicensed stations began to broadcast from ships in international waters off the Scandinavian coast (hence the term "pirate" to indicate illegal broadcasters; cf. Chapman, 1992). Radio Mercur, the first pirate commercial station, broadcast from Denmark. Others followed in the Netherlands, Belgium and the UK. They were soon outlawed but kept emerging elsewhere, with the technical equipment and even the ships passing from pirate to pirate. At that time the broadcasting environments of most European countries were characterized by public service monopolies operated by the state or by semipublic institutions. Pirates were seen as dangerous for a number of reasons, including their possible interference with emergency signals, and the deviation of listeners towards "dangerous ideologies".

A second wave of piracy emerged in the 1970s, initially in Italy and France, where trade unions and left-wing and antagonist groups started to challenge the state monopoly on broadcasting. These non-commercial stations became known as *radio libere* (*radio libre* in France: "free radio"), a label that referred to their antiauthoritarian and anticonformist character. In Italy the battle was also fought in court, with the monopoly of the Italian public broadcaster RAI being declared unconstitutional at the local level in 1974. By mid-1978 there were 2,275 stations broadcasting in the country, both commercial and linked to political projects. In France the Socialist Party began a process of legalization when it came to power towards the end of the 1970s. Thanks to the gradual introduction of advertising, the road to legal broadcasting was also paved for commercial broadcasters. By 1985, 16,000 stations had already been licensed as "local radio" in France (Rennie, 2006).

The French and Italian free radio stations inspired many other similar experiments across Europe and the Americas. In the UK, for example, where community radio stations were only legalized in 2004, piracy was a widespread phenomenon for many years.[13] In the US the obstacle to community expression was not public service broadcasting (virtually insignificant in the country) but powerful commercial broadcasters. The struggle developed around issues of free speech and access, with a strong role played by both commercial and political pirates.

From the 1960s onwards, community radio stations spread rapidly across the developing world, in particular in Latin America and Africa. They helped

to fight dictatorships and contributed to the democratization process, providing a space for the articulation of democratic values. For example, the miners' radio stations that appeared in rural Bolivia at the end of the 1940s and operated for about 50 years played a fundamental role in Bolivian society (Huesca, 1995; Gumucio Dagron, 2001; O'Connor, 2004). These stations were not as horizontal in their structure as many other radio stations that emerged later, but they are regarded as a pioneering example of a truly "communitarian radio". Ownership was within the community: miners' union leaders funded them for political purposes. In times of peace they would serve miners to campaign for better wages and other claims, while in times of social turmoil they would work as a means of resistance.

Community radio is a local phenomenon. Since the 1980s, however, there have been several attempts by radio stations to network at the national, regional, and global levels. In several countries, radio activists, many of whom were or are pirate broadcasters, began to get together to lobby national governments for the release of the state monopoly on the airwaves, and the allocation of frequencies to social groups. In some (e.g., in the UK, France and Austria, and also in Uruguay and Ghana), advocates have organized over the years in stable sector organizations able to represent the stations within national regulatory agencies (cf. Scifo, 2013). Community radio advocates have also organized in transnational networks. The World Association of Community Broadcasters and the United Kingdom Community Media Association have often partnered with national regulators and international organizations such as the UN. Other organizations, such as the CMFE, have emerged to respond to opportunities for participation in policy arenas. These networks are set up to exchange programs, training, and best practices for policy advocacy. They also function as an international solidarity system that is able to raise awareness and provide support when the authorities threaten a community station.

Running servers for revolution: A brief history of radical tech activism

Radical techies provide self-organized internet-based communication channels to the citizenry and the activist community. Typically they offer non-commercial web-based services, such as website hosting and blogging platforms, e-mail accounts, mailing list services and chat rooms. Although their services are similar to what might be available from an array of corporate servers, these groups operate under distinct values. They are non-profit and commit to protect user anonymity and individual privacy. They usually supply privacy-protection tools, such as anonymous remailers and encryption systems, and commit not to release user data to third parties, including security forces. Often they manage the machines (servers) in which these services run. They may also provide platforms for information self-production

and knowledge sharing, such as collaborative platforms and wikis.[14] Examples include Riseup Networks in the US, ASCII (the now silent Amsterdam Subversive Center for Information Interchange) in the Netherlands, Nodo50 and SinDominio in Spain, Aktivix and Plentyfact in the UK, SO36 and Nadir in Germany, and Autistici/Inventati in Italy.

As a result of their poor visibility and secretive nature, radical techies are an underinvestigated area of social activism. Groups call themselves different names, as this call for action shows: "radical techies, anar(cho)geeks, hacklab members, keyboard squatters, tech-aware activists, autonomous administrators... we've often directly participated in that [internet] evolution, advocating subversive uses of new technologies, hacking free software and sharing knowledge with passion, running servers for revolution".[15] The groups are affected by national political cultures and ideological backgrounds. The label "radical techies" used in this study strives to be as inclusive as possible, and to incorporate procedural and identity aspects relevant to the research questions. For analytical purposes, here hackers are considered to be a subcategory of radical techies, although some of them might not agree.

Radical techies usually organize in grassroots tech collectives. A typical radical tech collective would consist of half a dozen volunteer activists who are often, but not necessarily, based in the same town. These groups generally operate on a voluntary basis and through collective organizing principles. Some have weekly meetings, some even operate a computer lab, but most of their work and communication takes place online. Daily tasks include managing webservers and services like list-servs. Larger projects may also aim to develop software tools, such as content management systems (e.g., Drupal), operating systems (e.g., Debian and Obuntu), and encryption tools and online anonymity networks (e.g., Tor). One of the biggest alternative ISPs hosts about 4,000 e-mail accounts, and more than 30,000 people subscribe to the mailing lists hosted on the server. Annual revenues from donations do not exceed €5,000–6,000, which is insufficient to cover the operational costs.

The radical tech groups analyzed in this research emerged in the mid-1990s when activists started to develop the idea of networking infrastructures as new political subjects in their own right. They pioneered internet usage by the citizenry, reversing the idea that the internet was the monopoly of states, the military and corporate players. Similar projects, however, emerged as early as the 1980s, long before the World Wide Web even existed. The idea of an e-commons had spread across the world, thanks to what later became known as the free software movement (Wayner, 2001). This advocated freedom to manage and use technologies, and to redistribute and modify software according to one's needs.

In the 1990s, with the rise of the internet, civil society organizations saw the potential of this new tool in bringing about social change.

Community-based organizations in North America and Europe started to provide communities with cheap access and connections, focusing on information distribution. One of the first widely used applications was the BBS, a sort of ancestor of the modern internet. With the signing of the Velletri Agreement (1984; discussed above), a number of NGOs across the world committed to develop and implement Fidonet (Kidd, 2001). The European Counter Network, which was among them, can be considered the precursor of the radical projects analyzed in this study (deprisa, 2003). However, for a while, large NGOs were the only civil society groups able to afford the room-sized machines that were necessary to be online.

When computers entered common households and youngsters started gaining some experience of these machines, a new type of grassroots tech activism emerged. The 1994 Zapatista uprising inspired these would-be techies: the far-seeing use of the internet by the insurgents transformed a local struggle in the remote Mexican state of Chiapas into the first "information guerrilla movement" (Martinez-Torres, 2001; Bob, 2002). The internet allowed the nascent social movement to speak for itself and control information that was vital to its survival, bypassing international corporate media which would at best have ignored the group's mobilization. It served as the backbone for the creation of supportive transnational networks that amplified its messages and provided solidarity (Russell, 2001). People started to see the internet as a tool for struggle, and new forms of political protest emerged. In 1995 the first netstrike, "a networked version of a peaceful sit-in" according to its promoters, targeted the French government in opposition to its nuclear experiments on the Mururoa atoll.[16]

But soon it became clear that the mere distribution of messages would not be enough, and activists started to develop the idea of networking infrastructures as new political subjects in their own right. Projects developed around two main axes: the provision of public access to the internet, and the empowering use of free software. Back then, internet connections in private homes were still a mirage, thus most groups started out as internet cafés: vanguard areas often in occupied buildings where people could freely access the internet. They differentiated themselves from the NGOs operating in the sector through their radicalism, grassroots ways of organizing, and lack of resources. They were explicitly linked to social movements. In Europe, in particular, they emerged in the *milieu* of the squatted social centers and street activism, with strong links to the more radical and the autonomous/antagonist scene.[17]

The nature of these projects changed as the internet spread. Nowadays, only a minority of radical tech groups still maintain physical spaces, often in squats, but they mostly serve as meeting points. Activists hang out there, organize training workshops for users, and party. But most of the groups exist now only on cyberspace. Activists still meet face to face to coordinate their activities, but they provide a virtual space instead of a physical

space. Users reach them via e-mail. Types of services and priorities have evolved over time, too, following technological innovation and the needs of emerging social movements. A German collective, for example, started in 1993 offering mailboxes, and evolved later in a web *infoladen* (a sort of "info shop"). Nowadays the group provides secure e-mail addresses, organizes training workshops, and seeks to raise awareness of issues such as data retention.

Radical tech collectives become more visible when they step out of cyberspace. In the past, tech groups have established media centers at major protest events, such as G8 meetings. Over the last decade, Indymedia activists have set up tents with computer equipment in the middle of actions to allow other activists to upload their reports directly from the streets. A collective once transformed a countryside barn in a remote North German village into a high-tech media hub that provided thousands of environmental activists with a sophisticated communication infrastructure to report on a protest against nuclear waste shipments.

Radical tech groups are mostly located in the Western world, due to the availability of resources such as cheap technology, fast internet connections, skills and expertise. There are two or three such groups in each Western country, and a few others in Latin America and South-East Asia. Over the last decade their activities have been increasingly targeted by state repression and online surveillance because of their role as the backbone of activist networking and organizing. Server seizures have affected, among others, the Indymedia network (2004 and 2008), Autistici/Inventati (2004), Riseup and May First/People's Link (2012). Other threats include data retention and user traceability legislation that forces server administrators to retain the connection metadata of users and release them upon police request. Radical techies have organized to face such threats; transnational meetings have been called to discuss common strategies and technical solutions, as well as to exchange skills.

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Chapter 2

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AQ2	33	Describe the acronym "DDoS".
AQ3	41	Please specify Milan (2012a) or (2012b).