Networked Collective Action and the Institutionalized Policy Debate: Bringing Cyberactivism to the Policy Arena?

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New forms of networked action and informal collaboration are challenging traditional notions of civil society. Based on the proliferation of new technologies, and spurred by the spread of trans-border delocalized communities and the increasing disillusionment with traditional forms of political organization, civic action is becoming increasingly flexible, temporary and elusive. This type of non-traditionally organized collective action often stays below the radar of public discourse, unless it is propelled to the spotlight because of international political developments such as the WikiLeaks case (and the related actions by the cyber-activist network Anonymous) and the mass protests in Northern Africa and the Middle East (and the role of social networking tools in these uprisings). In this article, we investigate the interactions and (in)compatibilities of internet-based networked collective action with institutionalized spaces of policy debate. We begin by characterizing online networked action as an emerging form of organized civil society, focusing on the realm of cyberactivists who are building and using cyber-infrastructure (‘grassroots tech groups’). In particular, we examine their values, identity features and organizational forms. Based on this analysis, we explore two dimensions in which cyberactivism challenges established forms of institutionalized policy debate: the structural dimension and the realm of action repertoires. We ask whether these new forms of civil society are structurally compatible with current multi-stakeholder governance, and we discuss their repertoires of action with regards to policy advocacy and policy interventions, and thus the level and type of their engagement with governance processes and institutions.

KEY WORDS: networked collective action, policy, cyberactivism, multi-stakeholder governance, civil society participation, Internet governance

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Introduction

New forms of networked action and informal collaboration are challenging traditional notions of the civil society. Based on the proliferation of new technologies, and spurred by the spread of trans-border delocalized communities and an increasing disillusionment with traditional forms of political organization, civic action is becoming increasingly flexible, temporary, and elusive. This type of non-traditionally organized collective action often stays below the radar of public discourse, unless it is propelled to the spotlight because of international political developments such as the WikiLeaks case (and the related actions by the cyber-activist network Anonymous), the mass protests in Northern Africa and the Middle East (and the role of social networking tools in these uprisings), and the Occupy Wall Street protests in 2011 (and their horizontal democracy practices).

Decentralized cyberactivist groups play a crucial role in building the digital backbone of contemporary social movements, experimenting with technological infrastructure, and enabling innovative forms of organization and citizen action typical of the digital age. These (relatively) new instances of collective action question how policy is made, whose perspectives are included, and how Internet politics is conducted. While non-governmental organizations (NGOs) traditionally serve as proxies for the inclusion of the civil society’s voice in policy debate, decentralized cyberactivist groups are rarely represented in the discussion and decision-making processes of governance.

In this article, we investigate the interactions and (in)compatibilities of Internet-based networked collective action with institutionalized spaces of policy debate. We focus on a specific type of cyberactivism that is concerned with developing and improving technical infrastructure, and that is organized in small collective entities (‘grassroots tech groups’). These groups represent only a portion of current cyberactivism, but their practices allow us to identify various recent transformations in contemporary collective action, both online and offline.1

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1 Many other forms of networked collective action exist both on- and offline, and each of these adheres to different goals, organizational principles, and action repertoires. This article cannot provide conclusive results for all these forms but will discuss mainly the specific sub-group of grassroots tech groups.
We begin by characterizing this realm of online networked action as an emerging form of organized civil society. In particular, we examine the activists’ values, identity features and organizational forms. Based on this analysis, we explore two dimensions in which technology activism challenges established forms of institutionalized policy debate: the structural dimension, and the realm of action repertoires. We ask whether these new forms of civil society are structurally compatible with current multi-stakeholder governance. We also discuss their repertoires of action with regards to policy advocacy and policy interventions, and thus the level and type of their engagement with governance processes and institutions.

The article therefore links up two bodies of research that have largely been distinct and have led to relevant but disconnected findings. We explore the changes in digital culture and online activism, and the transformations of organizational models that they imply, and we connect these observations with research on global governance and civil society-based policy advocacy. We conclude that new instruments need to be developed to understand the interactions between networked collective action and the policy domain, but also that these forms of activism constitute a fundamental challenge for the ways in which policy is traditionally discussed and developed, particularly on the transnational level.

**Methodology**

Qualitative data for this article was derived from two strands of research. The first is based on observations of international policy processes such as the World Summit on the Information Society (WSIS) and the Internet Governance Forum (IGF), and on case studies of media policy change in various countries of Latin America, the Arab region, and Iceland. It includes document analysis and a series of in-depth interviews with key actors as well as media activists on strategies, policy agendas and their relation with institutions (see, for example, Hintz 2009; 2012). The second data set comprises a series of e-mail interviews with Internet activists conducted between 2006 and 2010. Activists were asked about the motivations and values underlying their activism, their tactical preferences and action repertoires, the perceived obstacles to their activities, and their attitudes towards policy fora and institutions. Part of these interviews was conducted in the framework of research on political mobilizations in the field of media and communication (Milan 2009; 2013) while others were part of a project looking at forms of exclusion in participatory governance processes (Hintz and Milan 2009).

Most of the interviews were conducted using the method of online asynchronous interviewing, a specific form of online interaction consisting of periodic exchanges of questions and answers, which allows for a prolonged
interaction between researchers and activists, and values collective feedback as well as individual impressions (Kivits 2005). This methodological choice was based on our conviction that the researcher should relate to the object of inquiry according to the ways “in which social practices are defined and experienced” (Hine 2005, 1), and that this is particularly relevant in the case of Internet and technology activists.

The different civil society groups whose experiences underpin this article share a focus on democratic communication values and the exposure over time to institutions and policy-making processes of different kinds, both in terms of participation and repression. We interviewed members of about twenty radical tech groups based in Europe and the Americas. The groups were selected on the basis of their engagement in shaping and developing digital communication infrastructure for social movements. Most interviewees were male, educated, and based in urban areas. Interviewees are kept anonymous in this article to maintain their privacy and avoid endangering their projects and collectives. We refer to them as ‘Interviewee,’ followed by a number.

**Infrastructure for Social Change: Understanding Tech Activism**

In 2008 hundreds of self-identified members of an amorphous online collective known as Anonymous launched a nuisance campaign against the Church of Scientology, which they accused of violating freedom of speech. They adopted a number of online protest techniques, including distributed denial of service (DDoS) attacks against Scientology.org and other affiliated websites, making them temporarily unavailable (Gorenstein Massa 2010). In 2010, Anonymous supported the whistle-blower organization WikiLeaks (WL) by providing technical support, mirroring WL content, and attacking the websites of Amazon, PayPal, MasterCard, and Visa for terminating the services they had previously provided to WL. However Anonymous is only a recent—and particularly prominent—example from a wider range of activism for which the Internet offers a (relatively) new battleground and a laboratory for experimenting with online protest practices and alternative cyber infrastructure.²

These broader forms of cyberactivism encompass collective action that addresses network infrastructure or exploits the infrastructure’s technical and ontological features for political or social change. Examples include the autonomous creation of infrastructure, electronic disturbance tactics, and online civil disobedience (for example, defacing of websites and attacks against servers),

² While some of these activist practices provide everyday services to citizens, others—such as Anonymous—are an integral part of emerging cyberconflicts between social movements and their adversaries (Karatzogianni 2004).
software and hardware hacking, and pranks and trolling\(^3\) (Meikle 2002; Vegh 2002; Jordan 2008; Coleman 2009; 2010; Milan 2012b).\(^4\) Autonomous infrastructure development is a particularly interesting (and, comparably, less researched) aspect of cyberactivism, as it provides the underlying infrastructure for communication (and action) by a wide array of social movements and civil society. This type of both individual and collective action concerns the development of hardware infrastructure, for example by setting up servers, wireless networks and free Internet access points; development of software infrastructure, such as web interfaces (mailing lists and websites); and the development of open source tools such as content management systems and encryption software. Tech activism is typically non-profit and takes place outside the state and business realms.

‘Grassroots’ or ‘radical tech groups’ aim at counteracting commercial as well as state pressures on information content, media access and the privacy of media users, and the current drive towards pre-emptive mass surveillance (Hintz and Milan 2011; Hintz 2012; Milan 2013). They usually offer web-based services such as website hosting and blogging platforms, e-mail and mailing list services, chat rooms and other tools such as anonymous remailers; or provide platforms for self-production of information and SMS-to-website services in the occasion of protest events. Some of these groups were among the pioneers of Internet development in the early 1990s and many have since contributed to innovation on the web. Some are currently engaged in developing distributed alternatives to commercial social networking services that would put the user back in control of their data.\(^5\) Examples of radical tech groups include the Spanish SinDominio, the Italian Autistici/Inventati, the German Nadir, the British Plentyfact, the North American Riseup.net, and the open-publishing platforms of the Indymedia network. Even though these groups do not attract the same media attention as Anonymous’ actions, they play a crucial role by providing non-commercial digital tools to current political activists. They are at the service of, as well as an integral part of, contemporary movements, and contribute to the latters’ political agendas by raising awareness of issues such as privacy protection, intellectual property, and access to knowledge.

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\(^3\) Trolling refers to the practice of posting inflammatory, off-topic messages in a mailing list or a forum, with the sole purpose of causing disruption and provoking a reaction of the other users.

\(^4\) Cyberactivism means different things to different people. Vegh (2003) arranges cyberactivism tactics into three categories: awareness / advocacy (for example, carrying out action), organization / mobilization (for example, calling for action), and action / reaction (for example, hacktivism). Here we adopt a restrictive notion of cyberactivism focusing on infrastructure-related activism and ignoring, for example, organizing and networking.

\(^5\) See, for example, Crabgrass (http://crabgrass.riseuplabs.org), Social Swarm (http://wiki.socialswarm.net/), and Diaspora (https://joindiaspora.com/).
Radical tech groups are usually organized as small cells of volunteer media activists. Typically, groups take the form of ‘collectives,’ a loosely organized, non-hierarchical and decentralized ‘group of equals.’ Most communication and work takes place online via email and Internet relay chat (IRC) channels. Groups become more visible when they occasionally step out of cyberspace, with some establishing large media centers at major protest events such as those against G8/G20 meetings. Others have set up tents with computer equipment in the middle of protest actions and action camps to allow other activists to write and upload reports directly from the street to a global audience. The German group Nadir once transformed a countryside barn into a high-tech media hub that provided thousands of activists with sophisticated communication infrastructure during environmental protests. The New York-based group May First/People’s Link has run the communication infrastructure of the Social Forum of the Americas.

Populating the realm of non-state and non-business activity, grassroots tech groups are part of the sphere of civil society, particularly its ‘activist’ forms which aim at the radical democratization of social and political life (cf. Kaldor 2003). However, the centrality of technology and of a network logic provides a particular context in which tech activism assumes specific structures, practices, and ideologies, which transcend established forms of, and knowledge on, civil society and social movements. Rooted in cyber-libertarian thought (for example, Barlow 1996), ideas of self-organization, informal experimental practices, openness, and bottom-up processes form the foundation of tech and net activism (Jordan 1999). Typically it takes place in informal and loose structures, sometimes in temporary associations and coalitions, lacking explicit hierarchies and differing significantly from established membership-based formats such as unions, political parties, and non-governmental organizations. Based on a self-understanding that emphasizes a group’s (or individual’s) role as a node in a network, rather than its boundaries and exclusivity (Benkler 2006), this form of activism resembles what has been called “connective” rather than collective action (Bennett and Segerberg 2012).

Connective action across communication networks highlights personalized interaction, and thus emphasizes the individual dimension. In fact, the Internet has facilitated the creation of links between individual ‘users,’ rather than between

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6 Traditionally, the notion of the collective indicates a group of people who work and live together, and who share resources. In the literature, a ‘collectivist organization’ is described as “lacking central authority and hierarchy, using job rotation, minimizing material incentives, and driven by shared political values and a sense of community” (Rothschild-Whitt, quoted in Jasper 1997, 204). Means and ends are blurred.

7 Protest camps have been a key feature of social movement activism; in particular, communication technology infrastructure has been a crucial component of the most recent camps (see, for example, the web archive and book project, http://protestcamps.org).
organizations and social movements. Those actively developing infrastructure and applications, for example as part of the free/open source software movement, have often done so in their own individual capacity and on their own accord, with personal reputation being seen as more relevant than representing the interests of a particular organization. With the multiplication of social networking services and the diffusion of mobile devices, individuals and networked collective action have taken center stage, partially dislodging traditional social movement organizations (Milan 2011; 2012b).

Research on online campaigning and cyber-protest has provided us with many examples of the prominent role of individuality (Breindl 2010; Garrett 2006; Kavada 2010). Radical tech groups as well as Anonymous embody what might seem to be an uneasy combination of individualism and collectivism: they retain the aspects of collectivism, but combine it with the informality and individualism of broader tech and online activism. In this respect, radical tech groups show a peculiar identity-building process, one that is rooted in the private and subjective experience of the individual. In fact, although activism becomes meaningful only in the context of the group of peers, action (like coding and hacking) is first and foremost experienced individually. The collective identity is therefore realized in the experience of difference and affinity in the encounter between distinct individuals. Contrary to the textbook definition of collective identity in social movement studies (whereby individuals virtually disappear into the group),8 within radical tech groups the ‘I’ encounters another ‘I’ (Milan 2013).

**Organizational Principles and Forms**

“I’m usually very happy that whenever a policeman comes and asks us “who’s the boss here?” everybody jumps up and says, “that’s me!” The confusion that follows is usually enough to let the cop forget why he asked in the first place” (Interviewee 18).

Radical techies reject top-down power in the form of institutions and control. They organize according to the values of grassroots autonomy, which refers both to the autonomy of the individual and the autonomy of the group. Hierarchical forms of organization and representation—as in ‘classical’ social movement organizations such as NGOs—are in conflict with these principles. Instead, radical techies lean towards what has been called a “community without

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8 There are different definitions of collective identity in social movement research, but their common trait is a kind of collapsing of the ‘I’ into the ‘we,’ through which the individual recognizes him or herself in some sort of ‘we-ness’ (real or imagined) that stands for collective agency (Snow 2001).
structure” (Leach 2008, 1059), with decentralization and horizontality as primary organizing principles. Horizontality, in particular, ensures that even informal hierarchies are kept in check by a continuous and collective reflexive exercise. Decision-making is typically based on consensus, that is, reaching an agreement that is acceptable to all members. This preference for consensus versus the majority rule correlates with the democratic possibilities embedded in ICTs, and the common practices of voluntary interaction. As one activist put it, “I won’t volunteer for any place where someone shows me around and tells me what to do” (Interviewee 24).

The preference for flat hierarchies is, furthermore, informed by an anti-establishment ethos and a political radicalism that entails a principled scepticism towards power-holders and power structures. Radical techies are sub-cultural (and at times counter-cultural), and contentious at the same time. The challenge to authority is present in both their organizing principles and their products.

Radical techies emphasize participation. Participation entails openness to those willing to get involved, yet in a checked and limited form: access barriers include a social and political proximity that members tend to hold and value, as well as the practical limitations of resource availability and expertise which potential new members may lack. To enable participation, mechanisms of knowledge sharing and mutual learning are often implemented.

From values of autonomy and independence, and practices of decentralized social production (for example, open source methods), follows a tendency towards decentralized and distributed forms of regulation, as in self-regulation (Benkler and Nissenbaum 2006). In this, tech activism is not entirely different from recent strands in social movements (for example, large segments of the global justice movement, but also the Occupy mobilizations) where self-organization and do-it-yourself (DIY) cultures are constituent features (Day 2005; Castells 2012).

Organizational forms that reflect a collective identity of non-hierarchical and decentralized ‘groups of equals’ (see above) as well as the distinct ideological background of cyberactivism have three main characteristics: a) the group works as an ‘affinity group’, but is active in the long term; it also resembles a ‘community of practice’; b) it functions through a ‘division of labor’ model; c) the group is invisible.

Regarding the first characteristic, we can refer to two categories of organizational forms; one which is limited in time and scope (affinity groups), and one which is a sustained organizational activity that emphasizes the dimension of learning (the community of practice). Regarding its recruitment mechanisms, focus on action and expressive function, a group of radical techies resembles an
affinity group. The affinity group emerges as a group of friends who share values and passions and who own specific technical skills. They are oriented to direct action in both a short and a long-term perspective. It is fairly small (typically from a minimum of three to a maximum of fifteen active members), and is regulated by trust and loyalty. Members already share the same values prior to the action, and follow a sort of tacit consent that led to the creation of the group. New members are recruited over time according to the same affinity principle.

The functioning (and sustainability over time) of a group of radical techies is based on a division of labor according to individual skills; on the contribution (in terms of capacities, time, and money) that every individual provides; on high degrees of personal motivation; and on individual reputation (which has the double function of projecting participants and policing members; see Karatzogianni and Michaelides 2009). An Australian activist defined this organizational form as a system for “free, networked collaboration and shared production” (Interviewee 16). It is a configuration where the ‘I’ finds his or her space in the function of his or her knowledge and capacities. The ‘we’ becomes the sum of the various ‘Is’. Through action, the ‘we’ is enriched from time to time by newly shared experiences.

Individual expertise is central, as many activities involve technical knowledge, and skill sharing therefore plays an important role. Ideally, the project does not rely on single irreplaceable persons, and the power of a single member over the whole project is limited. An activist described this situation as follows: “It is like a table where there are different cockpits, different machines, and nobody is sitting at these machines. It is responsibility of the individual to choose his location according to what he is able to do and what is necessary to the group dynamics” (Interviewee 3).

As far as the division of labor and knowledge sharing mechanisms are concerned, there are many similarities with the ‘community of practice,’ a concept elaborated by Lave and Wenger (1991) and more recently used by Husband (2005) and Diani (2009). Communities of practice are at the same time an area of social interaction, where individuals work together, taking advantage of

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9 Albeit with some differences from the textbook definition. In the literature, the affinity group is a group of individuals who gather around a given objective, usually a disruptive action such as a road block or an occupation. It is a temporary aggregate and is dissolved at the conclusion of the action (McDonald 2002; Jordan 2002; Bennett 2004). In contrast, the groups created by radical techies differ in terms of their duration and the sustainability of their activities over time.

10 Learning is an important driving force for radical techies, and knowledge sharing is an omnipresent principle. Knowledge is at the same time the asset of the individual, and a collective good belonging to the group. Thus, it is shared, through dedicated moments of exchange either within the group or between individuals. The group works as a learning circle (Interviewee 8). Sharing is not necessarily ‘organized,’ resulting in a certain degree of dependence of the group on certain individuals.
complementary capabilities, and a place where new participants are socialized for inclusion in the community. Therefore, “practice and learning are complementary processes in a community of practice where both are situated within the particular organizational and physical characteristics of the workplace. In such an environment, learning is not merely a process of mastery of a new knowledge; it is also an acquisition of a shared identity” (Husband 2005, 463).

Finally, the group is invisible. The group actively pursues invisibility as the emphasis is on the action itself rather than on sustaining the entity. Although collectivist culture implies that the internal mechanisms of the group, such as group decisions and activities, are highly valued, the group as an entity does not necessarily act publicly. Partly, this is a consequence of the dissident nature of many groups, which often encounter state repression as well as hostility from corporate actors. Invisibility is attained through recourse to anonymity (via the use of a nickname, for example the “Anon” moniker adopted by the multitude of Anonymous activists), and through the refusal of everything that could facilitate the identification process (such as images). But it is the mediation of the machine in particular, typical of the web environment, which facilitates invisibility: you may know the name of the group and its website, you may reach it by e-mail, but the group appears physically only very rarely. It is the action which is visible, because the action is the very quintessence of the group. The group (the ‘we’) identifies itself with its action.

In the following two sections, we explore how the characteristics and features of tech activism relate to institutional forms of global governance, as well as to the established strategies of civil society actors’ engagement with policy processes.

**Tech Activism and Communication Governance**

Recent notions of ‘governance’ offer interesting similarities to the decentralized organizing principles of tech activism. The understanding of governance has moved beyond a traditional understanding of the state’s exclusive capacity to steer social, political and economic development; instead denoting systems of interdependent problem-solving by a diversity of actors on a diversity of policy levels (Rosenau 1995), as well as webs of policy-making fora in which new actors, particularly business and civil society, have “transformed sovereignty into the shared exercise of power” (Held and McGrew 2003, 11). Global governance

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11 Not only do these groups pursue invisibility; similarly to other autonomist and indigenous social movements, they may also be “rendered invisible by the dominant frame of representation. Exercising forms of power, which are centrifugal, they are easily obscured by frames focused on the ability to exercise ‘power-over’” (Karatzogianni and Robinson 2010, 148).
questions the diplomatic exclusivity of states and inter-governmental dialogue by experimenting with the ‘multi-stakeholder’ policy debate (Hemmati 2002) as a collaborative process involving all ‘stakeholders’—usually governments, international institutions, business, and civil society. Recent communication policy fora such as the World Summit on the Information Society (WSIS) and the Internet Governance Forum (IGF) have expanded multi-stakeholder practices and set new standards for the collaborative governance of issues that attract worldwide concern (Raboy, Landry, and Shtern 2010).

Multi-stakeholderism opens the door for new actors, but only so far. Criticized as “neo-corporatism” (Messner and Nuscheler 2003; McLaughlin and Pickard 2005), it expands traditional modes of regulation to include those that are acceptable to, and willing to engage with, established policy actors and institutional environments. It involves only certain sections of civil society; usually professionalized NGOs. This separation into ‘official NGOs’ and the wider civil society—and the lack of appropriate concepts for including actors that are not based in traditional and familiar formal structures and organizations—was visible at, for example, the WSIS (Hintz 2009). The summits lacked “significant participation from those working directly at the grassroots in initiating and implementing ICTs” (Gurstein 2005a). The increasing prominence of the limits to, as well as the need for bottom-up participation “demonstrate that the friction-free days of ‘multi-stakeholder governance’ … are now over” (Lovink 2011, 1).

The first challenge that tech activism presents us with regards to global governance is structural. Non-formally established organizations, loose networks, and activist groups currently have few possibilities to access the venues of policy debate. In order to provide such access, institutional policy processes should provide channels by which informal activist groups can have their objectives represented in policy debate. In short, the question is “how to shift (...) from closed and inter-locking compacts—however tripartite they may appear—into the broader, more inclusive, even ‘wilder’ reaches of democracy and inclusive and participatory decision making” (Gurstein 2005b).

However, tech activism provides a broader second challenge. Focusing on self-organization and autonomy, and rejecting centralist decision-making, it is based on different understandings of democratic organization than established governance institutions. Its compatibility with institutional governance mechanisms can be questioned from two, seemingly opposite, perspectives. Some forms of tech activism, as we have seen above, are set up as collective enterprises that regard consensus decision-making and consultation of all members as a foundation of their work and that therefore reject traditional forms of representation—both political representation through election and organizational representation through leaders, chairs or CEOs. Assigning decision-making power to a representative, for example to one member participating in a policy forum,
conflicts with collective organizing principles. At the same time, the centrality of informality, temporality and elusiveness, with an emphasis on networked individual action, provides similar challenges. So most forms of tech activism—those that focus more on a collectivist approach as well as those based on individual action—have in common that they are structured in a way that is incompatible with current institutionalized policy debate.\(^\text{12}\)

Reform proposals for the latter have included allowing “people to speak for themselves in the forums in which decisions (...) are made and not require that they act through artificial proxies” (Auerbach 2005). The non-representational perspective of such suggestions speaks to the values and models of tech activism. It highlights, more broadly, the disintegration of traditional forms of formal organization, which affects both organized civil society and inter-national (inter-state) policy-making.

Tech activism thus provides us with a third challenge, as its organizational form inherently points to a change in how social and political life is organized in a context of computer-based and mediated interactions. According to Manuel Castells, the increasingly decentralized and networked forms of organization and intervention, of which tech activism is a key example, have reflected a “crisis of democracy in the information age” (Castells 1996, 302). The connection between a constituency of citizens and elected representatives has been eroded, weakening the nation-state as a site of politics and changing the conditions for policy-making. If social and political practices in the networked world today are changing, and if the forms of affiliation and engagement have been transformed, then political “formats derived from the politics of liberal democracies centered in nation-states do not fit” anymore (Sassen 2006, viii).\(^\text{13}\)

Authors analyzing democratic mechanisms in networked processes have pointed to the limits of representative democratic models (Cammaerts 2009) and have highlighted the need for a “new logics of politics” (Lovink and Rossiter 2005) characterized by “non-representational democratic models of decision making” (ibid.) or even “post-democratic” (Dean, Anderson, and Lovink 2006, xvii) forms of governance. Network theorists Geert Lovink and Ned Rossiter urge us to “abandon the illusion that the myths of representational democracy might somehow be transferred” (Lovink and Rossiter 2005) to the emerging era of post-geographical forms of human organization, and instead come to terms with the

\(^{12}\) In this respect, the logic of action of tech activism resembles that of what Karatzogianni and Robinson (2010) termed ‘affinity-networks.’ An affinity network is by definition antagonistic with the dominant system; while being “inclusive of everything at the level of content, it is necessarily incompatible with the hierarchical forms of state and capital” (145).

\(^{13}\) Rossiter (2006, 23) notes that it is a ‘phantasm’ that the principles of representative democracy, such as citizenship, participation, equality, among others, can be transposed into the realm of networks.
reality of loose and networked interaction and with forms of legitimacy that do not involve the transfer of power to a sovereign. Traditional democratic suppositions of representation might be replaced by values that are more prominent in networked interactions, such as subsidiarity, expertise, and reputation (Dean, Anderson, and Lovink 2006).

Concepts such as “organized networks”, or orgnets, that is “temporary and voluntary forms of collaboration” (Lovink and Rossiter 2005; Lovink 2008), which link the informality of virtual networks and the formality of institutions, are proposed instead. Emerging as a consequence of the process of digitization and informatization, organized networks “seek stronger bonds within smaller units that emerge out of peer-to-peer encounters” (Lovink 2011, 167). Similarly, the category of ‘constituency’ moves beyond established political forms as it identifies members not according to citizenship and geographical territory, but according to common interest, a common history, and common language. ‘Constituencies’ thus take note of the “reconfiguration of social space” towards “relative deterritorialization” and growing “supraterritoriality” (Scholte 2000, 46, 50).

Action Repertoires: Inside, Outside and Beyond Governance Processes

Following our observation of a structural incompatibility between tech activism and governance fora, we can further ask whether its repertoires of action differ from those of other civil society groups and policy advocates. To do that, we first outline the typical approaches to policy intervention.

Institutional policy arenas provide ‘windows’; that is, temporary opportunities for civil society activists and advocates to raise their policy concerns and influence the political environment (Kingdon 1995). The way activists respond to such opportunities depends on their cultural backgrounds and ideological values, as well as on whether they perceive these as offering potential gains or as posing a threat (Milan 2009; 2013). Traditionally, social movement theorists have divided different types of responses according to the positioning of social actors vis-à-vis political institutions into ‘insider’ and ‘outsider’ strategies (see, for example, Tarrow 2005; Sikkink 2005). ‘Insiders’ interact directly and cooperatively with power-holders through advocacy, lobbying and, in some cases,

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14 Kleinwächter has proposed to create the ‘United Constituencies,’ complementing the United Nations and highlighting the need for “a new co-regulatory model, where nations and constituencies, that is different stakeholders, can interact in a way that human rights and cultural diversity, economic growth and social development is promoted on a global level” (Kleinwächter 2005).
participation in multi-stakeholder fora; ‘outsiders’ question the legitimacy of power-holders and address them through protest and disruptive action.

Tech activists who are working with larger organizations such as the Association for Progressive Communications have been involved with policy arenas such as the WSIS and the IGF. They have regarded these spaces as opportunities to constructively influence policy debate. They thereby have accepted the rule of the game, thus recognizing institutions as legitimate power-holders, and have interacted with these power-holders in order to foster change from the inside. A participant commented, “as a place to spread the word about new ideas, even if you can’t get anything officially passed, these kinds of conferences are really significant” (Interviewee 3). However, as we have seen above, the structures of participation have not been suitable for the more loosely organized and individual-oriented approach of most tech activists. Furthermore, with access there is a risk of domestication and dampening of a critical perspective (Calabrese 2004; McLaughlin and Pickard 2005) and many tech activists have therefore been skeptical about ‘inside’ activities.

Tech activists, and more recently Anonymous, have also adopted tactics of street protest, mobilization and disruption, that is, the classic ‘outsider’ repertoires of action which serve to interact with institutions or other actors in a more confrontational way, and which express fundamental opposition to either a particular policy, a general attitude, or to the policy process as such. A key example has been ‘Freedom Not Fear,’ a series of protests that has taken place since 2008 in various European capitals, with its epicenter in Germany, to oppose the surveillance measures enacted by the European Union directive on Data Retention and similar policies (collection of telecommunication data, surveillance of air travellers, biometric registration of citizens, etc.; Löblich and Wendelin, 2012). Other examples include street protests by the U.S. media reform movement against the relaxation of media ownership rules by the Federal Communications Commission (FCC) and recently by coalitions of communication activists against the Anti-Counterfeiting Trade Agreement (ACTA) and the Stop Online Piracy Act (SOPA). However, whereas the global social justice movement has focused successfully on disruption and mass protest, these tactics are more rare within tech (and, more broadly, media) activism. Communication policy processes are generally difficult to frame for mobilization and often distant from the immediate concerns of non-expert publics (Hackett and Carroll 2006; Napoli 2007; Milan and Padovani 2013).

If both ‘inside’ and ‘outside’ tactics are problematic as spaces of action for tech activists, key interactions with the policy and legal environment must take place elsewhere—‘beyond’ actual institutional processes. One activist explained:
“I don’t think we need to focus on ‘asking’ or ‘having a voice’. I think we have ‘to do,’ ‘keep doing’ and keep building working structures and alternatives that are diametrically opposed to the ways capitalism forces us to function in our everyday lives. Our job, as activists, is to create self-managed infrastructures that work regardless of ‘their’ regulation, laws or any other form of governance” (Interviewee 4).

‘Beyond’ strategies consist of creating alternatives to existing communication infrastructure. Like many ‘outsiders,’ they reject institutional policy processes as being undemocratic top-down interventions, yet they go further by refusing to stay within the logics and rules of the game of the known social system. They seek to act “regardless” of “their” rules (as in the quote above), suggesting independence from institutional arenas, rejecting the latter’s relevance, and questioning the value of addressing power holders. ‘Beyond’ strategies instead focus on prefigurative action: by envisioning and creating a different system, both at the ‘material’ and ‘symbolic’ level, tech activists dismiss a mainstream system that they consider to be governed by distorted values and illegitimate actors. Rather than interacting with power holders like the ‘insiders,’ or dancing around power arenas as ‘outsiders,’ they engage in a “redefinition or explosion of power” (Jordan 2002, 33) as we know it. As the Indymedia slogan goes: ‘Don’t hate the media, be the media.’

‘Beyond-ers’ do not usually interact with institutions and policy arenas, but they react when their activities and values are threatened by laws, regulations, forms of control, and police repression. The tactical repertoire that they prefer in these cases includes control circumvention, creation of technical ‘bypasses’ to evade regulation, and ‘hacking’ of norms and conventions. In the words of one interviewee: “Our main tactic is just to avoid all the laws, just sneak a way around it” (Interviewee 24). They use their technical skills, create encryption, move servers to other ‘safer’ countries, and generally develop creative solutions that allow them to keep one step ahead of regulatory efforts. As institutions and regulation are seen as potential interference and a danger to their prefigurative autonomous zones, beyond-ers seek to find unregulated spaces and to expand them.

The rationale for the ‘beyond’ approach is closely related to the organizing principles informing the hacking community and open source software development (cf. Milan 2012a). As Coleman points out, technical expertise and policy strategies are related, and “tinkering” with technology and the law requires similar skills and forms of reasoning, leading to efforts to reconfigure (rather than

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15 Breindl (2010), in her study on advocacy efforts by hacktivists, confirms such ‘threats’ as the main trigger for action.
advocate) policy through the development of the GPL and Creative Commons licenses.

A visible example of ‘beyond’ strategies (in contrast to ‘inside’ and ‘outside’ approaches) was ‘WSIS?WeSeize!,’ an activist gathering outside the WSIS Geneva summit (December 2003). While heads of state and of international institutions were meeting inside the official summit compound on the outskirts of Geneva, accompanied by many civil society ‘insiders,’ media and tech activists created a ‘PolyMediaLab’ in the city center, where some hundred radical techies, hackers and communication experts gathered to share technical skills, develop independent media, and promote alternative ways of production and social relation. They took the opportunity of a UN gathering to meet and discuss their own agenda for the ‘information society’, but they did not present any demands to the global leaders who met in the same city, nor did they embark on mass protests. Instead they put their ideas directly into practice by developing temporary alternative media infrastructure, and thus created an ‘information society’ from the bottom-up (Hintz 2009).

More recently, the response by tech groups to the aforementioned European Union Data Retention directive has included the development of encryption and data protection tools, the establishment of secure connections between different components of the infrastructure, and the relocation of servers to jurisdictions outside the reach of the directive. The very success of WikiLeaks in providing a secure upload facility for whistle-blowers has been based on its practice of using decentralized server networks and by placing those servers in countries with beneficial laws that have prevented, or at least reduced, the risk of censorship and surveillance.

The three action repertoires that are presented here (inside, outside, and beyond policy arenas) are ‘ideal-types’: they are derived from features of the empirical cases we have undertaken in order to highlight a series of elements common to different forms of contemporary activism. There are no fixed boundaries between the tactics, and activist groups might engage in them to different degrees in response to the specific political opportunity at hand. However, we observed a sort of stable ‘division of labor’ amongst groups that were active in the same field, with some groups regularly cooperating with institutions and others positioning themselves rigorously ‘beyond’ institutions and related norms. Table 1 summarizes the three approaches.\textsuperscript{16}

\textbf{TABLE 1 ABOUT HERE}

\textsuperscript{16} An expanded version of this table can be found in Milan 2013, where the different dimensions on which activists differ are explored and where detailed examples of groups or activists belonging to each category are presented.
Complementing the three challenges highlighted above, tech activism’s focus on prefigurative action ‘beyond’ institutional policy processes presents us with a fourth challenge, which is embedded in the increasing role of standard-setting and latent policy by technical developers. Tech activism acknowledges a development model that is exemplified by the Internet; a resource that “for the most part, […] has evolved openly, freely, and without a great deal of governmental or other oversight” (Cerf 2004, 14). As “code is law” (Lessig 1999, 6), or as the design of technology pre-determines what information and communication technology systems can and cannot do, designers and developers become ‘policy-makers’ and designing/developing becomes a more fruitful policy exercise than lobbying governments or international institutions.

Tech activists typically highlight the value of self-regulation by those who are actually developing and using communication technology. This includes, according to some of the tech activists who we interviewed, “non-binding standards that gain popularity based on their quality, usefulness and ease of use/implementation” (Interviewee 5), and an exclusivity of content regulation “by the end users themselves” (Interviewee 2), within the framework of strong safeguards for the “basic rights of the Internet user: privacy of communications, right to anonymity, right to freedom of expression and to political dissent” (Interviewee 7). One interviewee argued that “democratically chosen groups of technical experts that operate in a very open and transparent way are the best approach for this kind of regulation” (Interviewee 3).17

Tech activism thus provides an example for the ideological justification as well as the practical role of technical standard setting. The significance of this latent and often invisible approach to policy-making is not new—the development of radio in the late 19th and early 20th centuries was influenced and partly determined by technical developers and businesses (Hamelink 1994)—but with the penetration of all aspects of social, political, and economic life by online communication, the development and establishment of standards and protocols has an ever-increasing role in how we interact and how we live (DeNardis 2009).

Conclusions

17 Prefigurative action is, of course, equally problematic regarding its democratic value as it means that a group of ‘experts’ shapes key communication infrastructure with little consultation of the users, let alone the broader public. It would go beyond the remit of this article to critique the groups’ democratic practices, but we can observe that activists are aware of this potential disconnection with users, and contemporary social movements in general. As one activist put it, “Collective culture *can* be very dis-connected from any sense of a bigger movement. (…) There can be a powerful sense that the collective is only answerable to the collective members: a huge advance over being only answerable to a board of directors, but a far cry from being answerable to a political movement” (Interviewee 14).
Technology activism points us to transformations in the organization of social and political life, and consequently challenges the traditional models of representation and policymaking. As an informal, ephemeral, decentralized, and networked form of collective action, emphasizing the role of the individual and the user within a loose collective framework, technology activism highlights current forms of interaction and association that differ from established modes of formal organization and representation. It is, as we have argued, paradigmatic for a transformation of civil society that concerns the increasing relevance of loose collaborations of networked individuals, and is an expression of the current “shift in social formations” (Bennett 2003, 21).18

In this article, we have focused on a specific form of tech activism; radical tech groups that develop the infrastructure to support the communication, networking, and protest of contemporary social movements. These groups provide the digital backbone of social movements, enabling protest coordination, campaigning, and more generally secure interpersonal communication. They may constitute a particular and peculiar sphere of cyberactivism, as their value systems and organizational models put considerable emphasis on collective processes and consensus decision-making. However, with an equally strong focus on the goals of autonomy, openness, decentralization, and meritocracy, they are firmly based in cyberactivist approaches. These groups are deliberately ‘invisible,’ as the disclosure of private information of their members is considered not only to be dangerous but also unnecessary, given the emphasis on the action per se. Membership is based on self-identification and reputation rather than on membership applications and centralized processes.

Even though recent forms of global multi-stakeholder governance have emphasized networked and decentralized forms of policymaking, the ‘stakeholders’ that are included typically encompass formal organizations; that is, states, businesses, and civil society entities or social movement organizations. Newer and more informal types of organization, and those with a different understanding of representation and decision-making, are left out of these forms of policy making, even though they may play a key role in creating technical infrastructure, standards, and applications. Tech activism thus provides us with a perspective on the deficiencies of current communication governance; key actors are structurally incompatible with the institutional framework, and so their voices and expertise are not taken into account. Further, tech activists privilege self-

18 The recent “Occupy” protests may serve as an example, with their main decision-making structures—the assemblies—bringing together many individuals who were previously disconnected from each other or from organized civil society entities. The communication mode of the ‘human microphone’ symbolizes the many-to-many interaction between masses of individuals, which replaces the mediation through NGOs and fixed activist groups.
organization and prefigurative action over advocacy. Developing alternative infrastructure and technological ‘by-passes’ around policy challenges is therefore valued more than participating in policy dialogue with governments and the private sector. They often operate ‘beyond’ policy processes, that is, they do not interact directly with the institutional forum and thus provide a new perspective that differs from cooperative engagement ‘inside’ or opposition ‘outside.’ They point to alternative ways of participating in policy-making, such as ‘policy by doing,’ creating and expanding free zones, legal bypasses, and latent policy.

The practices of tech activism thus challenge centralist approaches to policy-making, such as global summits. Rather, these groups speak to a radical decentralization of global governance and to a bottom-up approach to policy-making, which places those that are directly affected by policy measures (the users and the developers) at the center of governance efforts. They point to the need to develop new ways of organizing political interactions and, thus, to imagine a new logics of politics.

References


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Table 1. Inside, Outside and Beyond: A Summary Table

| ‘INSIDE’                  | • Cooperative attitude: active engagement in policy-making processes through advocacy and participation in multi-stakeholder processes  
|                          | • Institutions and policy arenas are perceived as a potential gain  
|                          | • Members accept the rules of the game, thus recognize institutions as legitimate power holders |
| ‘OUTSIDE’                | • Confrontational action: ‘interaction’ with institutions through protest, disruption, campaigning and public pressure from ‘outside’  
|                          | • Either because they do not have access to the institution  
|                          | • Or because they reject the rules of the institution-related game and do not accept institution as legitimate interlocutors |
| ‘BEYOND’                 | • No interaction with policy processes, no dialogue with institutions  
|                          | • ‘By-passing’ regulation and expanding unregulated spaces  
|                          | • Focus on prefigurative action: envisioning and creating a different system, both at the ‘material’ and ‘symbolic’ level, setting up alternative infrastructures and generating alternative sets of rules |