2 Methods for Investigating Online-Related, Large-Scale Campaigns on the Web

Multi-method, multi-platform analyses should be sought and rewarded.
– Tufekci (2014: 514)

Online spaces are simultaneously environments where people and organizations increasingly interact as well as privileged points from which to better observe and trace these interactions. Especially during a campaign organized on a national scale, activists, associations and normal Internet users create new connections or reinforce previously existing ones, for instance, when they create web pages dedicated to a local demonstration, post comments on an online mainstream article, share electoral videos and files reproducing leaflets on Facebook.

As this book aims to describe, during a large-scale campaign activists interact with social media and other Internet environments differently according to certain dimensions, such as the geographical scale of action, the characteristics of their organizations, and their previous political experiences. Furthermore, the Net is increasingly a sort of ‘electronic spine’ (Kavada 2003: 91) for various activities in a social movement milieu. Therefore, I am convinced that observing different forms of online interaction, and how they relate on a larger scale, can greatly help to understand how communication works in social movement campaigns and initiatives. Investigating online communication as networks, in particular, researchers can better identify how the individual agency of activists and the structure that they collectively form are linked, in which ways contrasting identities can coexist within the same movement, and how new forms of protest spread following geography or existing social connections. In other words, researchers who are investigating the interactions of social movement actors with the web can obtain a detailed image of how communication circulates within a social movement during a large-scale campaign.

This notwithstanding, while the structure of communication on the web comes into contact with and sometimes reproduces an increasing number of aspects of social life (see Rogers 2009, 2013), the complexity of web communication is increasing: it is today becoming more difficult to
reconstruct the patterns of online interactions, in comparison with four or five years ago. Issues as different as the availability of data on social media, the lack of well-established methods, and the geographical fragmentation of interactions with social media make it complicated to reconstruct the numerous characteristics that delineate an online campaign organized by activists on a national scale.

In this chapter, I describe the methodology that I developed in order to investigate the very complex online communication sphere created during the 2011 water referendum. Probably hundreds of thousands of activists and sympathetic citizens collectively gave life to this particular ‘wave’ of social media communication during spring 2011, attempting to establish the paradigm of water as a common good in contrast to the political and legal efforts aimed at privatizing this resource. Three different elements, or difficulties, contributed to directing the methodological choices I made during the research. First of all, the lack of a standard model and of well-established methods when it comes to observing multifaceted Internet phenomena, in particular, for investigating new forms of communication, such as those hosted by the most widespread social media platforms (Facebook and Twitter). Second, the complexity of the studied phenomenon, a polycentric and extremely diffused political campaign organized by various independent but connected actors. Third, my choice was to focus on various different levels and aspects simultaneously, aiming to understand how these levels and aspects are connected, rather than trying to compare different cases. Four main aspects guided my methodological choices: first, the possibility of individuating online-related actions through a different geographical scale of the actions; second, the interactions through offline and online boundaries; third, the differences between individuals, organizations and broader networks of organized actors; fourth, the different online platforms that the activists used.

To summarize briefly, the methodology that I proposed combines an ethnographic investigation between online and offline space, including interviews with activists, and a network analysis of the web domain of the water referendum. I integrated this last approach with the ‘digital methods’ (Rogers 2009) perspective, created to investigate the social meaning of aggregated web data. The ethnographic point of view helped me to recognize and describe new and unexpected phenomena regarding activists’ web communications. In particular, it allowed me to reconstruct the connections between online and offline actions, to observe the context of web production, and to focus the investigation on the local practices that the activists produced. Moreover, the use of digital methods and the reconstruction
of web networks allowed me to combine the different traces that users and producers left online during the campaign. These last methods thus helped me to obtain descriptive images of the online campaign, adopting a point of view that is broader than the one that an ethnographic researcher usually adopts. By relying on these network approaches, moreover, I was better able to understand the hidden, aggregated structure of the online communication, a level that activists are generally not able to observe and that they do not describe, therefore, in interviews. In order to present in detail the methodology that I decided to adopt, I discuss the methods of Internet research that other researchers have developed in recent years, and describe the specific characteristics of my object of study, which directed my methodological choices.

The first section investigates the main problems that the phenomena that I seek to study pose from a methodological perspective. In particular, I concentrate on the problematic aspects of the four analytical dimensions that I instrumentally adopt in my research: the geographical scale of action; the organizational level; the use of different online platforms; and the dichotomous opposition of the online/offline spheres.

In the second section, I examine in further detail some complex methodological approaches that constitute, to different degrees, the foundations for my personal methodological choices. The first ‘families of methods’ that I present have guided the ethnographic part of my work: they are ‘network ethnography’ (Howard 2002) and ‘virtual ethnography’ (Hine 2000). The second family focuses on the relational structure that characterises most online platforms, providing me with useful suggestions for investigating the referendum campaign from a broad point of view. In particular, I describe the online forms of social network analysis, the so-called digital methods and the connected ‘issue network’ approach (Rogers 2009), and the analysis of web spheres (Foot and Schneider 2002; Schneider and Foot 2004).

In the last section, I present in detail the methodology that I adopted to investigate the water referendum campaign. First, I provide a broad overview of my methodological choices, linking them with those previously presented. Second, I list the methods that I used during my research in a more precise way, presenting the kinds of data that I was able to gather and analyse. Third, I briefly discuss the methodological differences that I had to introduce in order to analyse the different communication platforms (websites, Facebook, real-world interactions) that I observed. Finally, in the conclusions I highlight the methodological difficulties that I encountered during my research, suggesting possible solutions to these problems, in order help other scholars in their potential future research.
2.1 The Italian Referendum Campaign on Water: methodological opportunities and difficulties

During the spring of 2011, Italy hosted a long-prepared referendum campaign on three issues: against attempts to privatize water supplies, against the reintroduction of nuclear power plants, and against a criminal procedure that partially exempted ministers from prosecution. For the first time since 1995, the referendum consultations held on 12 and 13 June 2011 passed the legal quorum of 50 per cent plus one voters, resulting in a sound victory for the committees that proposed them. Even though the main political parties, the mainstream media, and the activists who lived through the campaign interpreted this result differently, they tended to agree on one point. During the Arab Spring and the Indignados mobilizations in Spain, which took place a few months before, a new way of using the Internet, and, in particular, social media such as Facebook, seemed to have fostered a major change in the forms of communication used by social movement actors, permitting them to influence the national agenda in different ways. As many commentators observed, through Facebook, Twitter and other web platforms, the pro-referendum activists were able to share content and symbols with a larger audience, without the help of television and newspapers, opening up unexpected and direct channels of communication with sympathetic but less active people.

Unfortunately, the large wave of political communication that the activists created during the referendum campaign is very difficult to investigate in detail, due to the complexity of the phenomenon and to the large number of activists and organizations that contributed to its organizing. In particular, four dimensions seem to pose problems for a detailed investigation: the geographical scale of action, the differences between the actors involved, the simultaneous use of different online media platforms, and the strong interaction between online and offline spaces during the campaign. In this section, I briefly present these four aspects, in order to outline the methodological problems that they pose, while the next sections are dedicated to proposing possible ways of investigating them.

Scale of action

The first reason why it is very difficult to investigate the evolution of the online Italian referendum campaign on water privatization concerns geography and space. Even though different types of online content are available everywhere – and therefore seem to be located outside the
boundaries of a geographical dimension – they surge from an extremely wide set of variegated environments: digital communication at the same time connects these environments, and it is deeply rooted in every one of these milieus. In order to understand the activists’ communication, it is necessary to take into account the fact that they organized their campaign while acting at the same time on a national scale (for instance, by distributing a unique leaflet throughout the entire country) and on a local scale (for instance, by organizing events in their own cities or towns). Additionally, their initiatives sometimes crossed and linked these two scales (for instance, to promote on a common Facebook page similar images that a crowd of numerous local sympathizers independently produced).

In every investigation of social movements, scholars tend to start their research by deciding at which scale they want to observe the mobilization. In general, this decision demands a trade-off choice, between the possibility of examining local events or situated relationships through qualitative methods, and the possibility of investigating a movement in its entirety, resorting at least in part to sampling techniques, surveys, protest event analysis, and other quantitative methods.

In my case, the answer to this trade-off can seem obvious: I am dealing with a national-scale phenomenon, and a national, large perspective should be the one to adopt. However, I am convinced that by choosing a large-scale point of view I would be unable to observe how people communicate on social media, and, in particular, on Facebook. In this campaign, most online and online-related initiatives derived from the work of small groups who are part of local organizations, and on most social media an increasingly relevant part of content is produced in order to be read by very small local communities of people and friends.

Moreover, even though the referendum campaign partially developed online, and it addressed a national issue, the *Forum Italiano dei Movimenti per l’Acqua* (Italian Forum of Water Movements, hereafter FIMA) always adopted a highly decentralized strategy of action. At least since 2007, FIMA declined every national campaign in numerous locally rooted actions and sub-campaigns, which it delegated to committees acting at the city or the regional level that were highly different among regarding their compositions (Cernison 2016). A similar strategy – in part derived from the Cochabamba Water War (see Chapter 3.1) – probably helped to include in the Forum actors that were often in conflict at the national level, and some local committees arrived at the conclusion that national coordination was ineffective and undesirable. Therefore, a local focus
on the campaign is highly relevant to determining the methodological level, too.\textsuperscript{15}

The alternative perspective of limiting the observation to local groups, for instance, comparing how some of the local organizations gave life to their initiatives on and thanks to social media, is probably more effective. Nevertheless, adopting only this point of view, a researcher risks being unable to perceive how communication circulates online, how groups are connected, and how they organize together. Furthermore, this perspective makes it more complicated to observe the online communities not linked with a particular territory. Therefore, I made methodological choices that permitted me to observe the online campaign in its entirety, and at the same time to reflect on how activists locally produced it. Briefly summarizing, I can resume the problems connected with the geographical dimension in two methodological questions, which guided my research:

- On what geographical scale does an online campaign mainly occur, and where, therefore, can an external observer examine it?
- If an online campaign involves numerous different places and geographical scales, which methods are best suited to explore the interactions between these points/geographical dimensions?

**Different actors**

The referendum campaign against water privatization was the result of numerous joint efforts on the part of actors belonging to a range of different categories. Some examples of these actors testify as to how wide and complex this spectrum of individuals and organizations was. During the mobilization, for instance, numerous young people started to participate in pro-referendum bicycle rides, although they had no previous experience of political activism. At the same time, communication and marketing professionals dedicated part of their time and skills to the water issue, in order to produce viral campaigns, YouTube videos, or better planned events. Moreover, small sports-related associations, such as groups of fishermen or teams of kayakers, were involved in local water committees. Alongside this, large trade unions and national organizations, involved in numerous political issues, asked their members to participate and support the referendum initiatives. Finally, FIMA enlarged its central office, giving to

\textsuperscript{15} For instance, at the local level some sections of the Democratic Party collaborated during the water campaign with activists of the \textit{Movimento 5 Stelle} (Five Star Movement) and with the networks of the radical left, a collaboration impossible to obtain at the national level.
this structure the tasks of coordinating the communication among the plethora of individuals and organizations supporting the campaign and of creating some of the national events that characterized it.

As can easily be understood, it is very difficult to compare these actors, and their contributions influenced the development of the referendum campaign in very distinct ways, both online and offline. Organizations, informal networks of friends, veteran activists and young neophytes acted differently during the months that preceded the referendum, interacting among themselves, and partially modelling the online tools to their own aims. These differences and interactions are extremely relevant to my research, and I consider them as being a useful dimension that can contribute to explaining how social movement actors differently shape the communication on various online milieus.

However, this complexity can give rise to new methodological difficulties. This is particularly true when the researcher does not aim at comparing well-defined, small realities (such as two local committees, a certain number of events, or specific organizations and their use of the web), but instead observes how these realities interact and contribute to creating a common political and communication-related effort. In this case, the researcher is obliged to trace the connections and the existing paths between the actors involved, also taking into account that they are different according to numerous criteria. The ethnographic approach can provide a partial methodological solution to this difficulty. However, at first glance it seems very difficult to apply ethnography to a large-scale field, which extends both online and offline, and with undetermined boundaries. As in the previous case, I can summarize the methodological problems connected with the differences between the actors involved in two questions:

- In order to investigate the development of an online campaign, should I focus on a single kind of actor, such as individual online users or the organizations, or on the relationship between these actors?
- If I wish to explore various categories of actors, which type of methodology can help me to deal with their differences in my research?

Contemporaneous use of different online media

The third problematic dimension that I had to take into account while developing my methodology was the use of numerous online media platforms during the referendum campaign. The activists published messages and coordinated their efforts on social media, such as Facebook and Twitter, on platforms such as YouTube, on traditional blogs, on dedicated websites, and via internal mailing lists. Furthermore, they intensively linked these
platforms, creating complex communication networks that are particularly difficult to investigate. As Tufekci and Wilson (2012) remember, ‘the connectivity infrastructure should be analysed as a complex ecology rather than in terms of any specific platform or device’ (ibid.: 365). While ten years ago researchers could explore the development of online campaigns and Internet phenomena by focusing only on a single tool and practice (for example, the creation of websites), nowadays examining a large-scale mobilization requires dealing with platforms that are different, connected, and in continuous interaction with offline activism. Every one of these platforms, of course, follows its own rules, sees the emergence of particular communication models, and provides to researchers data that are different.

From a methodological point of view, the fragmentation of online communication into several spheres poses, in my opinion, two different dilemmas for the researcher. The first and main dilemma regards the quality of the data that scholars can collect. Researchers may decide to focus on a single online ‘sphere’ or platform. In this way, they can obtain data that are homogeneous (for instance, the number of ‘hits’ on various YouTube videos) and easy to compare. However, following this path researchers will obtain an oversimplified image of the mobilization, and, as a result, are unable to understand the campaign in its entirety. In contrast, scholars may decide to focus on more than one online platform. In this way, they theoretically can obtain a complete image of the online campaign, but must deal with fragmented data, which are impossible to aggregate. Therefore, they become almost obliged to investigate these data through qualitative methods: a paradoxical situation, since the boundaries of the object of study and the quantity of data that needs to be collected are larger than in the previous case.

The second dilemma regards the issues of privacy, availability and the properties of the data. While researchers have created numerous sound methodologies to observe the static web or emails, the analysis of social media is still very exploratory. The novelty of these media, the fact that their content is only in part publicly available, how platform administrators continuously reorganize the structure and the application programming interfaces contribute to make it difficult for researchers to develop stable methods to observe social media.

Considering these dilemmas, I formulated two questions to guide my methodological choices:

– How should I treat in my research the fragmentation of web content and web activities over numerous different platforms?
– How can I explore online communication on social media platforms, where the content is not always open and well structured for research purposes?
Offline and online spaces

The fourth and last problematic dimension that affects the methodological aspects of my research concerns the divisions, differences, and relationships between the online and the offline milieus of action. As with the dimensions already presented, the online/offline dichotomy strongly guided my research, permitting me to examine how actors’ behaviours respond to or change within the online sphere, and how different activists and organizations link in various ways to local contexts and online spaces. Moreover, since the first diffusion of Internet-related technologies, the connection between online communication and physical actions has been at the centre of theoretical debates, elaborations of research paradigms, and divergent methodological choices. When online communication emerged, scholars mainly focused on the emergence of virtual spaces of interaction. In particular, during the 1990s, they tended to observe online communications as an independent sphere, without referring to the offline context: consequently, ideas of virtual realms for protest have therefore emerged. Alternatively, researchers have sometimes investigated online communication as a product of a particular offline context: in this perspective, digital interactions can appear as a replica or as an online extension of the offline ones. In recent years, the idea of stable connections between offline and online contexts clearly prevails. Authors increasingly describe protests and online campaigns as happening in a sort of digital augmented reality, where activists immediately share or remix content that they created on the ground. Therefore, in 2018 Poell and Van Dijck can write that ‘[a]s much current research shows, the distinction between the “online” and “offline” can no longer be made. Since many protestors carry smartphones and have continuous access to online platforms to share their content and observations, protest simultaneously unfolds on the ground and online’ (Poell and Van Dijck 2018: 2).

In the case that I study here – a campaign that is at the same time geographically broad, and rooted in local territories – an approach that considers online communication as the product of numerous connected offline contexts is probably the most appropriate. In this way, I can avoid the risk of conceiving digital communication as a virtual space, independent and detached from their creators, examining at the same time the online connections between the numerous contexts where the campaign developed.16 However, I concede in this research something

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16 For an exploration in detail of the idea of the ‘end of virtual’, see Rogers (2009).
to the virtual aspects of social media activism. In the initiatives that I describe in Chapter 6, in particular, the activists play with the online sphere differently. For instance, sometimes they make communities that share a common geographical location yet mainly interact online; in other cases, the activists adopt the ‘virtual spaces’ that digital communication creates in order to spread on broader scales initiatives that they created at the local level.

I consider the idea of the ‘electronic elsewhere’, adopted by, among others, Zizi Papacharissi (2015: 69-73) to describe Occupy Wall Street, as a particularly useful concept that can help me to maintain a certain level of conceptual separation between offline forms of protest and the emergence of partially independent online spaces of action. According to Papacharissi, social media platforms ‘do not simply represent places that already exist but actually become the means for producing places that traverse the boundaries of home, community, work, and play’ (ibid. 68). The author describes these ‘elsewheres’ as ‘geo-social, hybrid, and mediated environments’, terms that strongly separate the concept from the idea of virtuality. Similarly, my research investigates how activists adopted social media in hybrid online/offline initiatives, where new characteristics of action seem to emerge.

However, a perspective that links several connected geographical contexts is difficult to put into practice from a methodological point of view, for two reasons. Firstly, scholars of the field conceived most of their research methods in order to investigate in a separate way online and offline spaces, dedicating less attention to the relationship between them. Furthermore, digital communication and offline interactions tend to offer to researchers highly dissimilar data. Secondly, the offline context of the production of digital content (and, in particular, of most social media posts) can be private, difficult to reach, and geographically fragmented.

To conclude, the online/offline dichotomy gave rise to the following two questions that I considered when deciding which methods to adopt in my research:

- Which methods would better permit me to trace the online development of the referendum campaign, without losing the contact with the local contexts that produced it?
- Since I decided to follow the campaign both online and offline, in which cases should I investigate online spaces, and in which others should I observe offline activities? In other words, where should I place the boundaries that define my field of research?
2.2 Online-Related Social Research: some inspiring methods

Methodological experimentations in a changing environment

It is very difficult to present in few pages the numerous methodological approaches that authors from different disciplines have adopted in order to investigate the complex relationship between social phenomena and online technologies. The multifaceted nature of online media, the continuous changes they undergo and their numerous points of contact with different aspects of everyday life have contributed to generating not only rich and diverse theories, but a probably even more diversified exploration of methods, which try in different ways to depict how people and online environments interact.

For what concerns web-based communication and social media, scholars have developed tools and methodological approaches that they have tended to dedicate to specific web platforms. Of course, the first researchers to explore the relationship of these technologies with society adapted traditional methods to the new online context (Weare and Lin 2000; Wellman et al. 1996), sometimes combining previously existing techniques (Pickerill 2003; Garrido and Halavais 2003; Howard 2002). In later phases, authors conceived and experimented with new techniques, in most cases adapting tools of analysis that were already present online, for example, types of Google research (e.g. Rogers and Marres 2000; Foot and Schneider 2002; Foot et al. 2003; Hine 2000). Various methodological labels slowly appeared to indicate the new or adapted techniques, while a large number of methodological approaches had only a very brief life, due either to their exploratory nature, or to the fact that the web technologies (and, in particular, social media) create constantly changing environments, which require a continuous adaptation of the techniques of research.

Due to this complexity, in this section I do not try to produce a complete overview of the methodological perspectives that authors have proposed in order to investigate the web from a social point of view. My aim is more limited: I wish to briefly present some recurrent methodological patterns that appeared in literature, inspiring my research. Furthermore, I pay particular attention to those techniques that helped me to develop a comprehensive methodology to observe the interaction between activism and online platforms during the 2011 water referendum campaign. Therefore, I mainly focus on methods with three characteristics. First, they helped me to deal with large-scale phenomena, centred on both the local production of digital content and on the structure that this content contributed to create.
Second, I focus on methods that consider the web as a space that is deeply rooted in the social milieu that uses and produces it. Third, I concentrate on methods that propose interesting ways for dealing with the traditional online and offline dichotomy.

In the following sections, I present some methodological paths that inspired my research. First, I present a family of methods that are in different ways linked with the ethnographic approaches to research. In particular, I describe the differences between ‘network ethnography’ and ‘virtual ethnography’. Second, I present some methodologies that analyse online communication from a relational perspective, as I mainly did in Chapter 4 of this book. After having quickly presented the first protocols that observed the web as a network structure, I introduce the digital methods perspective and the ‘issue network’ protocol of analysis that emerged from it. Finally, I briefly discuss the so-called ‘web sphere’ approach.

**Online-related ethnographies**

Digital ethnographies of different kinds tended to slowly emerge during the last two decades, trying to describe the complexity of the online interactions and their intertwinement with the offline milieu that created it. In the following two sections, I introduce the two versions of digital ethnography that mainly inspired my work, focusing, in particular, on their divergent ways to conceive the online milieu and its relationship with the offline environment.

*Network ethnography*

Network ethnography is a relatively ‘old’ approach to web studies, mainly linked to the work of Philip Howard (2002). In his studies, Howard adopts a broad focus: he observes digital technologies, and their role in permitting the existence of ‘physically decentralized social networks made up of individuals who form a community but are not members of the same formal organization’ (ibid.: 553). In particular, this author has sought to find a method that will allow the investigation of what he calls ‘Hypermedia organizations’ (ibid.), observing how much these groups are embedded within technological networks of communication. Howard argues that an ethnographic approach is the best solution for exploring the emergence of these structures. He also claims, however, that traditional ethnography cannot help researchers to understand a geographically diffuse network.

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17 See Coleman (2010) for a complete review.
structure: wherever they situate their field of research, they risk seeing just the internal organizational paths rather than the relevant interconnections that online communications might permit. At the same time, Howard refused to limit the research only to the ‘virtual’ online environment, a ‘place’ where, in his opinion, an ethnographic immersion is impossible.

As a solution, Howard proposes a combination of social network analysis and ethnography. The first technique is used to define the boundaries and the structure of the analysed community, and then to understand the presence of relevant nodes within the network. The second technique, instead, is used to analyse these nodes in depth, entering the field and participating within a community of practice. This solution, complex and time demanding, allows the mapping of the process of evolution of the network, and the relevance of the information and communication technologies (ICTs) in its organization. Since it permits investigating in detail large structures that are composed of both online and offline relations, I consider this approach as particularly adapted to the observation of diffused, large-scale campaigns.

**Virtual ethnography**

A sort of online transposition of numerous ethnographic indications, virtual ethnography is probably the most comprehensive among the methodologies used to investigate online phenomena that I met in my research. As often happens with the ethnographic approach, it is reductive to consider virtual ethnography only as a method, because this approach incorporates very complex theoretical and epistemological choices. These choices aim at determining, in particular, how researchers can observe online phenomena, how they can conceive the boundaries between online and offline spaces, and what they can consider as a field. Christine Hine (2000, 2008) has proposed that virtual ethnography is a holistic approach for investigating online phenomena. Among its pillars, it suggests that we observe the Internet in two combined ways: as a culture, meaning a new online place where researchers can observe by focusing on online, virtual relations; and as a cultural artefact, meaning an object or a set of objects that are embedded in other interactions, for instance, in the everyday activities of web users. Furthermore, virtual ethnography proposes to researchers to observe the Internet by focusing not only on its technological characteristics, but also – and mainly – on how people actually use these features.

Although virtual ethnography can include numerous methods, and it does not determine *a priori* the data that a researcher should observe, or the techniques that she/he should use, I consider it to be a useful methodological perspective for my research, for two reasons. Firstly, because it combines
different points of view on online phenomena, in order to reach a deep and complete description of them. Secondly, because it shifts attention from a single, materially bound place to a network of relations. At the same time, this approach presents a limit that Christine Hine contributed to correct in its recent contributions: initially focused on virtual spaces, this form of ethnography has increasingly recognized that online phenomena are usually rooted in the offline places that produced them.

Relational approaches

Social network analysis of online phenomena
Several research methodologies investigated web communication as a network: in almost every case, these methods adopt techniques derived from social network analysis, adapted to the online environment. Scholars represent sites or social media accounts as nodes and ties in a network, which they investigate in order to obtain information on the social actors that developed them. These forms of network analysis – often grouped under the label ‘hyperlink network analysis’ (Park 2003) for what concerns the traditional web – are based on two assumptions. First, that ‘as the Web is one giant network, it makes sense to approach it from a network perspective’ (Hogan 2008: 147). Second, the web structure is considered to have a social meaning. Authors conceive this meaning in different ways, but in general they share the idea that every site, social media user, or Facebook page does not connect to other resources in a random way. Rather, the presence or absence of connection between online actors attests to a unilateral relationship, a pattern of recognition (Adamic and Adar 2001; Park and Thelwall 2003; Foot et al. 2003; Rogers 2004). The social relation that a link seems to indicate is a relation of relevance: for example, a blogger who includes a link to Greenpeace on his website, according to this perspective, is indicating that this actor is important for him, either positively or negatively. Scholars perceive this web network both as a trace of the offline social relations of the authors that create it, and as a new, ‘electronic’ set of connections.

This perspective has been adopted, in particular, to describe social phenomena already perceived as networks, such as social movements (Biddix and Park 2008; Van Aelst and Walgrave 2004; Garrido and Halavais 2003). Furthermore, it has proven to be useful for investigating transnational connections, and the persistence of cultural boundaries on the web (Halavais 2000; Adamic and Glance 2005; Van den Bos 2006; Caiani and Wagemann 2009). However, this approach displays two main limitations. First, the meaning of online connections appears too vague to be indicated as a
social relation: it can refer to both opponents and collaborators, taking into account that the content authors create links according to a variety of different logics. Second, online actors (sites, or social media accounts/pages/groups) can represent various offline realities: behind a Facebook page, we can find individual activists, organizations, firms, and even initiatives. As a consequence, a network analysis of online content has in this case to deal with these heterogeneous actors.

*Digital methods and issue networks*

The label ‘digital methods’ refers to a series of experimental techniques that rely strongly on the work of Richard Rogers and his collaborators in the Digital Method Initiative group, based in Amsterdam. In particular, this team of scholars – helped by coders, artists, and web designers – proposes to adapt tools that directly emerged on the web (e.g. search engines, Wikipedia bots, online datasets) to serve research purposes, at the same time focusing on how to conceive of online spaces and digital information from an epistemological perspective. Furthermore, the group widely adopts the idea that the structure of online phenomena can provide cultural information regarding the social actors that gave life to it.

Rogers and his colleagues have deeply influenced my research, in particular, modelling the way in which I conceive online communication as an object of study. More specifically, they have proposed a constantly expanding set of tools with which to explore online phenomena, and to understand numerous aspects of society, starting from web-gathered data. In particular, their reconstruction of online ‘issue networks’ has strongly inspired my work.

In order to better explain this approach, I briefly present an example. Richard Rogers and Anat Ben-David (2008) investigated the Israeli West Bank barrier construction, and how transnational and Israeli non-governmental organizations (hereafter NGOs) were framing in different ways this theme on the web. The authors sampled two distinct populations of websites, created by NGOs that had contrasting views on the barrier project: the first group was comprised of the websites of transnational NGOs and the second of Israeli websites. The authors then reconstructed three different networks of hyperlinks starting from these NGO websites: one network combined the two populations, while the other two networks presented the two groups in a separate way. Finally, the authors controlled the presence or absence of some relevant terms within the content of the websites. On the basis of the results obtained in both analyses, the researchers argued that the Israeli organizations were isolated from the transnational ones. The hyperlink
network analysis showed that the Israeli NGO sites received only a small number of links from the transnational group, and this behaviour suggested that they were not recognized as relevant partners. The keyword analysis, moreover, showed that the two groups were framing the barrier issue using different terms: the Israeli NGOs used the official Israeli label ‘security fence’ to describe the barrier, while the transnational NGOs preferred the phrase ‘apartheid wall’, commonly adopted also by the Palestinian authorities.

From the methodological point of view, these researchers proposed a triangulation between a large-scale, computer-guided hyperlink network analysis, and a very basic form of content analysis, similar to the one used by search engines. Both network and content are investigated in an automatic way, with the help of software, without direct qualitative observation: the web is investigated by taking three snapshots of its structure, and the relationship between the sites and the ‘real’ NGOs creating them is not part of the analysis.

Web sphere analysis
A slightly different methodological approach is promoted by Foot and Schneider in their study of United States electoral campaigns on the web and is based on the concept of the ‘web sphere’ (Foot and Schneider 2002; Foot et al. 2003; Schneider and Foot 2004). In brief, the authors conceive of a web sphere as a set of web resources in particular sites which are dynamically connected through links and related to a central theme (Foot et al. 2003). The boundaries of this sphere – that is to say, the population of observed websites – are determined by the researchers’ continuous investigation, and by the dynamic evolution of the sites and links through time. Starting from this definition, the authors adopt an extensive set of combined methods in order to describe the nature, the evolution and the components of the web sphere. For instance, they observe and compare the linking practice of sites, they qualitatively investigate their content, adding and comparing labels (or metadata) to them, they periodically archive data in order to conduct retrospective analysis, and they triangulate the online information with interviews.

This approach – deeply linked with the web before the advent of social media – reveals both limitations and strengths. One limitation is that this methodology observes web connections instead of networks. Furthermore, a web sphere does not represent a portion of the web taken as it is, but a controlled set of connections, sometimes selected relying on human interpretation and composed only of connections considered relevant for the observed theme. This choice can be interpreted as both a limitation (because
the representation of the web is somehow distorted) and as a strength (because the intervention of a researcher can help to select meaningful connections and to reduce the background noise created by unrelated resources in the network).

The network analysis that I present in this book relies on a methodology – the analysis of web domains by Jacomy and Ghitalla (2007), which I describe in detail in Chapter 4 – that shares several premises and techniques with the web sphere approach. The concept of domain, however, seems to me a ‘digitally native’ idea that better describes the structure of information that characterises web phenomena.

2.3 A Methodological Proposal for Investigating Large-Scale Online Campaigns

Combining different methodologies: online/offline ethnography, web domain reconstruction, digital methods perspective

Even though the various methodological approaches presented in the previous sections have many different characteristics, these perspectives still provided me with a useful methodological basis for studying a large-scale online phenomenon. Notwithstanding their differences, I believe that they share a common perception of digital communication, considered as the dynamic result of the work of numerous content creators. Furthermore, in most cases the authors increasingly propose to observe the offline social context that surrounds the online media; the digital method approach, in particular, aims to investigate offline phenomena, using web structures as a source of data. To a large extent, I elaborated my own methodology by drawing from the methodological approaches presented above.

In this research, I aim to observe digital communication in relation to an internally divided, network-shaped social phenomenon. Within various social movements, numerous individual or organized actors use online platforms in order to make public a point of view, to represent themselves, and to inform activists and sympathizers of their activities. Acting in this way, they situate their content in a broader network of digital communication. Even though every activist or organization can develop content in a very different and creative way, it is possible to observe how these messages form a broader, connected sphere, which this book tries to reconstruct maintaining at the same time a focus on the small practices and initiatives that contribute to its creation.
The evolution of methods through time: dealing with social media and their evolution

As happens with every piece of research that includes an ethnographic point of view, the methodology that I have adopted has evolved significantly during my investigation. Three elements mainly contributed to these positive modifications. First, I entered in direct contact with activists during my research, participating in their initiatives and observing their local contexts of creation. This contact helped me to understand that I was adopting a naïve, methodologically driven point of view as to how they were organizing their campaign. Second, during the research I started to observe new and continuously changing data, which were less easy to structure but richer in content than I initially believed. Third, I started to shift attention to the complexity of practices that characterized activism on social media platforms: due to the lack of solid tools for examining these online spaces (and, in particular, Facebook) from a relational perspective, the ethnographic part of this work started to become more relevant.

During the research, I gradually shifted the focus from well-structured web data (links, nodes, social media friendships, likes) to less schematic elements and to offline practices, shifting the focus from the traditional web to the entire set of online forms of communication, finally privileging Facebook and the main campaign websites to observe the campaign development. This methodological, and theoretical, change of perspective derives from the fact that during the referendum campaign I noticed that the activists tended to connect the existing online technologies with each other. The same actors produced videos and published them on YouTube, posted links and images on Facebook, communicated with other core activists on a mailing list, and started to create web pages that hosted content created on social media. In doing so, they interacted with numerous online platforms differently, assigning different roles to them. Therefore, as Couldry (2004) and Mattoni (2012) have shown, I came to understand that a perspective centred on the activists’ interactions on, about and with these media can contribute better to understanding the relationship between people and online technologies. When I finally decided to concentrate my attention on Facebook, my choice simply followed the one that the activists increasingly made privileging the communication on this platform.

Furthermore, my use of the concept of online network evolved through time, contributing to change the way I conceived the activists’ relations, and the methods that I used to trace them. In particular, I started to understand that during a large-scale campaign it is almost impossible, at
least with my limited resources, to observe the fast-growing social media connections involving hundreds of thousands activists by adopting the rigorous perspective of social network analysis. This methodology works at its best with relatively stable phenomena: therefore, I strongly adopted it to reconstruct a relatively stable online infrastructure, composed of traditional websites. For what concerns social media, I decided to privilege the adoption of qualitative techniques, in order to investigate the complexity of how people interact with these online technologies. Therefore, during my research I gradually abandoned the idea of concentrating attention on a single kind of information (the online connections), deciding instead to collect a larger set of heterogeneous data, in order to avoid oversimplifying the complex social media dynamics that characterized the campaign.

To summarize briefly, these changes of perspective convinced me to shift my research methodology more in the direction of a diffuse ethnography situated between the online and the offline spaces, integrating this qualitative observation with the reconstruction of large-scale, network images of the online campaign.

Data and methods: a final list

The web can be considered as a very broad archive of data, which partially inform us about the communication strategies, the interactions and the activities of the people who write or read online content. In my research, I combined an exploration of the data gathered online with the direct observation of the activities of the people who contributed to the wave of online communication during the water referendum campaign.

During my research, I relied on six kinds of data, two referring to the offline sphere, and four to the online milieu. As regards the offline environment, I based my research on interviews and on participatory observation. For the online techniques, I relied on digital forms of participant observation, the systematic collection of Facebook notifications, the reconstruction of networks between websites (based on the web domain research protocol), and data on the text within websites.

For what concerns the offline data that I collected, during this research I conducted 42 semi-structured interviews with different kinds of activists and supporters, in some cases repeating the interview in different phases of the mobilization. While I initially tried to propose to the activists a common set of questions, the actors that I interviewed proved to be so

18 See the complete list of the interviews at the end of the book.
different and experienced the referendum campaign in such different ways that I decided to leave them relatively free to discuss their own interpretation of the events. In most cases, the questions that I asked were related to behaviours of the actors, which I observed either online or offline. In order to select the people to interview, I decided to reach very different kinds of actors, groups adopting diverging communication strategies, and organizations proposing various ways of interacting online. In particular, I chose to interview, on the one hand, professional or semi-professional figures, such as webmasters, a press agent, designers and bloggers; on the other hand, some interviews with non-skilled activists, such as Facebook users at their first political experience, provided me a complementary perspective on the campaign. Similarly, I interviewed both informal leaders, who were deeply involved in the organization of the campaign, and people belonging to local and less relevant organizations. Finally, I always linked the interviews to some local milieu or initiative: therefore, I attempted to interview, when possible, more than one person for each context whom I considered interesting.

The second offline technique that I applied, participatory observation, proved to be more problematic than the organization and collection of interviews. In numerous cases, the creators of online content were very difficult to observe, because they tended to communicate from home, during their spare time. Furthermore, computers, emails or mobile phones mediated a significant part of the interactions. This notwithstanding, I observed the activities of the central office of FIMA for about one month. I had the opportunity to work within a group of media activists during an international event, and I participated in national assemblies, demonstrations, and a memorable electoral night with them. Finally, I participated in a highly relevant two-day meeting, aimed at collectively planning key media strategies that characterized the campaign. The field notes that I collected during these experiences helped me to understand the everyday routines of the media activists, their connections, and their collective or isolated elaboration of online communication strategies. This direct observation helped me to locate, at least in part, the online activities in specific offline places.

As regards the online methods, I decided during my research that online participant observation – rather than an offline, multi-located one – was the best choice for exploring a very broad and fragmented campaign in its entirety, which was taking place at the same time in very different online media. Therefore, I dedicated a large amount of time to simply observing the activities of the main campaign sites and Facebook groups,
the online communication between activists on the campaign mailing list, the creation of videos for YouTube, and the evolution of the most relevant hashtags on Twitter. I recorded this very long exploration process through traditional field notes, which I analysed in conjunction with the offline notes.

In particular, I have dedicated a special methodological attention to Facebook, the online space that the activists used more than any other during the referendum campaign. Adapting the virtual ethnographic approach to this platform, with a particular attention to the ethical problems connected with the exploration of a semi-private online space, I investigated the activity of about 200 groups. Collecting on a daily basis the notifications related to the campaign, I recorded an important and distributed – even though not statistically representative – part of the very numerous activities related to the referendum that this platform hosted. Even though the data that I collected were, necessarily, online content, I adopted them to reconstruct the everyday online and offline interactions of the activists during the campaign, in an uncommon kind of digital ethnography.19 In this way, I have been able to observe from inside a constantly evolving sphere of communication, comparing events happening in different parts of Italy, and collecting symbols, leaflets, unexpected practices that the activists were performing both online and offline. The choice of following Facebook derived from my very first steps in the field. The activists and the campaign development through time indicated me that this platform was becoming, in a somehow unexpected way, a crucial resource in this mobilization, convincing me to partially move the focus from the web, the networks of links and the offline interactions surrounding single websites, to the Facebook environment.

In order to link the data collected offline (which tended to be focused on single organizations) with the online data (relatively more focused on the large-scale initiatives), I adopted two techniques to reconstruct web networks. First of all, I selected a particular way in which to trace the structure of the web through the distribution of links among websites. This technique, linked with the software Navicrawler and sometimes labelled as a ‘reconstruction of web domains’, proved to be more effective in tracing in very precise ways large-scale online networks. In particular, I reconstructed with Navicrawler a network of 441 websites linked to the referendum campaign, which I investigated using two social network analysis software programs. Finally, I linked this network analysis of the

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19 See Mercea (2013) for a similar approach.
water referendum web domain with a basic investigation of the content of the analysed sites. Using scripts that I had elaborated (on Python and for the Linux tool Wget), I controlled whether numerous keywords were present or absent from the main campaign websites. In this way, I partially reconstructed how content circulates differently at the core and at the periphery of the water web domain.