# INTRODUCTION

## ‘Digital Communities’, a Shifting Subject

‘To what extent is talking of communal ties on the internet meaningful today?’ At the turn of the 21st century this question resonates with many who had taken part in the early waves of TCP/IP-mediated grassroots cultures.[[1]](#footnote-1) With the 2000’s ‘Dotcom burst’, the War on Terror and its privacy intrusions, and the emergence of the ‘Web 2.0’ wave, spontaneous online aggregations find themselves at a crossroads. This book investigates the conditions under which, since the early 2000s, it has been possible to re-launch a discourse on online digital sociability, despite increasing trends in commercialization, securization, and territorialization. Far from being ill-timed, investigating online communities today is strategic. Indeed, after the Dotcom burst and the aftermath of 9/11, on one hand, and the explosive renaissance of digital participation with social networking applications, on the other, the culture of digital communitarians[[2]](#footnote-2) seems to have either lost autonomy in favour of giant internet companies and governments or been popularized and absorbed into the ‘Web 2.0’ hype.[[3]](#footnote-3) [[4]](#footnote-4)

The experiences that marked the birth and development of digital communitarian cultures until the end of 1990s have been extensively mapped by historical, cultural, and media literature. From cold-war academic research with its cybernetic decentralized logics, to early civic networks pursuing the democratization of information technology; from counter-culture’s communitarian legacy, to virtual life on the *WELL*; from 1970s’ and 1980s’ early Bulletin Board Systems (BBS), to Free and Libre Open Source Software (FLOSS) communities based on reputation capital; from net art’s focus on the aesthetic of interaction and underground lists like *Nettime*, to the encounter of media artists withthe global movement for social justice which saw the emergence of *Indymedia*: these diverse experiences have partly overlapped and contributed elements to the communitarian cultures which crystallized by mid 1990s.

What came after the first internet bubble has received less systematic scholarly attention. This was partly due to diverse sectors and actors appropriating the landscape of digital sociability in the first decade of the 21st century, so that its boundaries became less clearly identifiable. While ‘online communities’ disappeared from the digital culture’s agenda, articles about ‘social networking sites’ colonized high-tech magazines’ columns; ‘communities of practice’ constituted the backbone of corporate knowledge management policies; and internet marketers invoked use of ‘Web 2.0’ platforms as strategic components of business strategies.

To understand the origins of a shift that has transformed the online communitarian landscape for good, this book begins by recognizing that the anarchic prairie of the internet has turned into a battlefield. Nowadays it is well acknowledged that many of the utopias that underpinned the ‘digital revolution’ have revealed their naivety, if not complicity with the established order.[[5]](#footnote-5) The book shows some signs of this shift that have become undoubtedly visible in this first decade of the new century, when libertarian cyberculture that had nurtured a virtual communitarian utopia of peer networks – as means for the empowerment of individuals, strengthening of democracy, and achievement of social justice – has come to a crossroads. In the last years, free internet communitarian culture had to face three major threats: massive commercial expansion of internet companies; increasingly strict laws on intellectual property; and the proliferation of ‘dataveillance’ technologies related to the ‘War on Terror’.[[6]](#footnote-6)

By the end of 2000s, disenchantment about the use of information and communication technologies (ICTs) for collaborative production of knowledge was shared by many. According to *Nettime*’s moderator Felix Stalder, ‘by now it is clear that something more than simple collaboration is needed in order to create community’.[[7]](#footnote-7) According to Stalder, the aim of collaboration has shifted from community-making towards purpose-specific projects. Such conviction is shared by activist and artistic networks that reflect on state-of-the-art forms of digital aggregation. They are trying to re-focus the scope of online communities, while at the same time questioning the innovative potential of social networking platforms.[[8]](#footnote-8)

## The Crisis of Foundational Myths

Between late 1990s and mid-2000s, three main techno-libertarian myths had to face counter-evidence. These myths were based on the cybernetic vision of information technology as the source of a second industrial revolution that bore the promise of emancipation for the citizenry. First, in spite of declarations of cyberspace independence, it turned out that geography matters, and that the libertarian credo of an intrinsically ungovernable internet was an illusion. In 2006, Stanford’s researchers Goldsmith and Wu depicted a more and more controlled and territorialized internet. The ‘Balkanization of the Net’[[9]](#footnote-9) was the result of cooperation between governments and global internet companies, officially fostering freedom of networking. As a consequence, one of the pillars of cyberculture – i.e., the possibility that the virtual and the brick-and-mortar domains could be kept separate – began to crumble.

The second libertarian myth, that had to face the new climax of early 2000s, was the that of the emergence of a creative class: a new social class whose roots would lie at the convergence of cultural values prompted by the social actors that had led the digital revolution, on one side, and internet entrepreneurs’ vision, on the other. The lifestyle and economic weight of such a class was expected to influence the global market as well as political systems. However, the Dotcom burst ratified the failure of the ‘Fifth State’.[[10]](#footnote-10) Even if the net economy did eventually recover from the burst, the coalition between knowledge workers and internet companies – that in the meanwhile had become giant corporations – never did.

The third myth that had to face a self-reflexive stage concerned the creation of digital commons. The digital commons, it was believed, would empower disadvantaged individuals against governmental authorities and business interests. However, while the openness of digital architecture – of code, practices, and standards – was a *condicio sine qua non* for the existence of the early internet, the question of how a digital commons-driven economy should or could distribute resources and wealth has long been a matter of dispute. The rapid diffusion of social behaviours and commercial services subsumed under the heading ‘Web 2.0’ is a perfect example. With commercial multi-user platforms and user-generated content, the rationale behind independent communities focusing on collaborative knowledge production seemed to have come to large-scale realization thanks to the corporate facilities provided by *YouTube*, *MySpace*, *Flickr*, and *Yahoo*!. However, as Lovink has pointed out, while the ‘ideology of the free’ has been pushing millions of people to contribute with their content to Web 2.0 platforms, there is a endemic lack of models fostering a distributed and decentralized internet economy.[[11]](#footnote-11) No consistent distribution of resources corresponds to the ‘cult of the amateur’[[12]](#footnote-12).

These arguments will be further discussed in chapters 1-3. For the time being, we can anticipate that they highlight a set of contradictions between recent developments and key characteristics that had originally marked the growth of the online community paradigm, and of the internet as a whole. The Dotcom burst, the territorialization of the net, and the advent of Web 2.0, in particular, brought to light fractures in communitarian internet cultures. These fractures have been pointed to by scholars from diverse disciplines, who indeed wondered about the enduring possibility of communitarian ties on the internet.

## Scholars’ Reactions to the Crisis of the Digital Communitarian Culture

By introducing ‘network individualism’, Manuel Castells and Barry Wellman have called into question the possibility of identifying communitarian relationships online. According to Wellman, portability, ubiquitous computing, and globalized connectivity fostered the movement from place-to-place aggregations to person-to-person networks. As a consequence, communities are not to be found in bounded groups anymore, but rather in loose networks.[[13]](#footnote-13) Similarly, in Castells’ ‘space of flows’ the individual is the hub of different kinds of flows that move from the place to the subject and vice versa.[[14]](#footnote-14)

Rather than advocating for macro models, humanities on their side have produced meta-reflections aiming at putting order among the multiple souls of digital communitarian culture. Sociologist of culture Patrice Flichy, for example, called into question the existence of a homogeneous internet communitarian culture. He identified three principal imaginaries related to amateurs experimenting with information technology: initiatives linked with counter-culture and the hippie movement; hackers interested in technical virtuosity; and ICT community projects originated by civil society.[[15]](#footnote-15) Differently, historian Fred Turner has traced the cultural origins of the U.S. cyberculture movement to the early days of the Free Speech movement. By focusing on spokespersons like Kevin Kelly, Stewart Brand, and the *Wired Magazine*, Turner has shown that over the years the libertarian, anarchist *digerati* culture has turned into open support for neo-conservative political positions, like Newt Gingrich’s Contract with America.[[16]](#footnote-16) As a consequence, those scholars who are more optimistic about the renaissance of digital ties based on commonality can be so only on condition that communitarian efforts get rid of libertarian ideology. Notably, media theorists Geert Lovink and Ned Rossiter have re-examined the notion of virtual communities as ‘organized networks’ and ‘osmotic interfaces’ that reflect society while anticipating new forms of social interaction.[[17]](#footnote-17)

## A Non-essentialist Perspective for Diluted Communities

According to many analysts, the crisis of foundational myths suggests that cyberculture utopias are facing the counter-evidence of both a more and more controlled and territorialized internet and of a newly new economy based on the exploitation of informal cognitive labour. This seems to have consequences for online communalism. First, at stake is the correlation between access to digital networks and empowerment of individuals and communities. As we will see in chapter 1, such correlation lies at the core of the digital communitarian paradigm. However, with the rise of social networking services acting as intermediaries, the immediate character of this correlation cannot be taken for granted anymore. That uploading personal information on a digital platform, participating in e-democracy focus groups or keeping a personal blog would necessarily empower individuals and communities indeed needs demonstration.

Second, with the above crisis, the communitarian paradigm has acquired a paradoxical character. While this first decade of the 21st century is witnessing the diffusion of the virtual *gemeinschaft* well beyond *digerati* niches, counterculture or civil society experiments, this proliferation entails an ontological ‘dilution’. It is by no means clear whether there exist ties that are specific enough to be labelled ‘communitarian’, and that could make up a special type of relationship. ‘Community’ seems to be diluted everywhere and yet it is difficult to describe what it is supposed to be made of. While communitarian ties enabled by digital platforms are more and more invoked, the internet is revealing itself as a more bureaucratic, controlled, and profit-oriented domain than ever.

As a consequence, scholars and commentators have argued that when the cyberculture paradigm – together with its actors and technical platforms – shows its limits, other players are likely to appropriate ‘online communities’ as techno-social assemblages made of specific ideologies, interaction models, values, rules, and technical protocols. Drawing on similar evidence but avoiding swift conclusions, this book suggests that such developments can constitute an opportunity to answer a still open question by means of empirical analysis: under what conditions is it possible to conceptualize online sociability in the first decade of the 21st century?

By avoiding macro accounts and linear evolutionary perspectives, the book answers this question by investigating theories of actions that have underpinned the development of techno-social assemblages for online collaboration after the fade of the ‘golden age’ of digital communities. It privileges the analysis of probably the largest archive on digital communities worldwide, and in doing so it returns a multi-faceted picture of contemporary sociability online. This outcome, however, requires a radical epistemological turn and well-thought empirical methods. In particular, it needs an anti-essentialist approach that frees the communitarian perspective from some of the constraints that pulled it into the blind alley anticipated above, further described in chapters 1-3.

In order to introduce such an approach, it should be recalled that the conceptualization of community lies at the very heart of the social sciences. It has been of crucial importance in identifying the types of society brought about by modernity. The evolutionist distinction between *gemeinschaft* and *gesellschaft* by Ferdinand Tönnies, for instance, marked the dichotomy between a pre-modern form of human organization based on emotional will (*Wesenwille*) and a modern society based on rational will (*Kürwille*).[[18]](#footnote-18) An opposition between pre-modern group solidarity vs. individual inclusion into a modern organizational structure was conveyed also by Émile Durkheim’s notion of mechanical vs. organic solidarity.[[19]](#footnote-19) Such a binary distinction between a supportive community and an evolution towards individualized networks persists also in contemporary references to ‘community’.[[20]](#footnote-20) Here, the term ‘community’ indicates social assemblages whose elements are maintained together by strong, solidarity-based ties, as opposed to weak, individual-based ties. In other words, ‘community’ is a ‘substance’ that differentiates a specific type of social aggregate from other types.

Following this tradition, studies on digital communities have often concentrated on the extent to which online collaboration could be conceived of as a ‘real’ community, rather than a simple transaction. Durability over time, regularity of the rhythm of interaction, presence of one or few shared interests were used as indicators to distinguish ‘successful’ communities from other types of looser social aggregates.[[21]](#footnote-21) These approaches acknowledged as genuine online communities only those groups featuring *a priori* established characteristics like emotional investment, sense of belonging, active engagement, durability over time, and face-to-face encounters.

From an epistemological viewpoint, social research methodologists label this epistemic strategy ‘intensive classification’.[[22]](#footnote-22) Intensive classification proceeds by articulating the characteristics an item must manifest in order to be classified as a concept. As in Plato’s cave, once an abstract ‘Form’ (*Idea*) of online community is established, only cases of online collaboration matching those criteria can be considered as its occurrences. Latour calls this classification method ‘ostensive’, and highlights its inadequacy to account for change:

[t]he problem with any ostensive definition of the social is that no extra effort seems necessary to maintain the groups in existence […]. The great benefit of a performative definition, on the other hand, is just the opposite: it draws attention to the means necessary to ceaselessly upkeep the groups.[[23]](#footnote-23)

Ostensive definition does not fit unstable social groups. This is particularly true of online communities. Despite their ostensive efforts, early authors agreed that online assemblages were transient aggregations where durability, stability, and order were exceptions.[[24]](#footnote-24) Even when the social assemblage reached a sort of self-consciousness as a community, it was somewhat impossible to trace clear delimitations between the inner and the outer social space. In the WELL, for example, more than 80 per cent of the subscribers where lurkers: ephemeral participants rarely intervening in discussions.[[25]](#footnote-25) This fleeting character of digital communities has only been accentuated by the above-mentioned proliferation of digital sociability in diverse domains, which contributed to its ‘opacity’, a resistance to being ‘grasped’.

If internet instability is the norm, then the presence of communitarian ties needs to be demonstrated each time anew and cannot be simply postulated. Are there homogeneous ties that are peculiar to a substance labelled ‘community’? Does the traditional distinction between *gemeinschaft* and *gesellschaft* retain its meaning? What is difficult – if not impossible – when researching online forms of aggregation is exactly individuating a closed list of features that are specific to communitarian digital assemblages.

In order to address this conundrum, the book proceeds in a different way than earlier studies. It does not aim to distinguish ‘genuine communities’ from ‘simple transactions’, nor does it postulate specifically ‘communitarian’ types of relationship. It does not set any specific social aggregate or theory as a starting point. For example, it does not begin with setting ‘networks’ rather than ‘groups’ as the best social assemblage to start with, nor does it take ‘social networking sites’ as the brand new machinery for social capital production. Rather, it asks involved actors themselves what they mean by ‘digital community’.

In other words, in this book I prefer to adopt a ‘Wittgensteinian’[[26]](#footnote-26) epistemic approach in which a concept is defined *a posteriori*, as the result of clustering together occurrences seen as similar. This ‘extensive classification’.[[27]](#footnote-27) corresponds to Latour’s performative definition. Concepts are empirically defined through recognition of objects as members of a cluster: ‘they are made by the various ways and manners in which they are said to exist’.[[28]](#footnote-28) Since they need to be constantly kept up by group-making efforts, digital communities cannot be the object of an ostensive definition, but only of a performative one: ‘[t]he object of an ostensive definition remains there, whatever happens to the index of the onlooker. But the object of a performative definition vanishes when it is no longer performed’.[[29]](#footnote-29) Research dealing with the transient nature of online sociability thus needs to focus on how heterogeneous entities are woven together, and the means whereby they are kept assembled, instead of postulating the substance of community.

This anti-essentialist approach avoids defining beforehand what communitarian ties are supposed to be. Rather, it suggests to start from the observation of different, conflicting selections. To do so, the research summarized in this book adopts a bottom-up method that asks social actors themselves which theories of action supported their forms of online communality.

For this reason, this book is not written in the specialized meta-language of specific disciplines, but rather strives to adopt a language based on lay words.[[30]](#footnote-30) Indeed, any preliminary classification based on the type of technology used, the type of social ties created or the shared interests and commons would get stuck in the necessity to define those types in advance, thus postulating concepts derived from other researchers, other disciplines, or from the market-driven digital hype.[[31]](#footnote-31) Paradoxically, if we want to keep our feet on the solid ground of science, we cannot rely on other concepts but those provided by social actors themselves.

## Ars Electronica’s Digital Communities Competition as Space of Controversy

Driven by an interest in recent transformations of digital communalism, and adopting an anti-essentialist epistemic approach, this book aims to investigate the communitarian potential of digital techno-social assemblages in the first decade of the 21st century, as it is accounted for by those actors who are directly involved. Notably, it inquiries how actors themselves account for the relationship between access to information technologies and societal empowerment, a relationship that lies at the core of the digital communitarian paradigm.

To do so, the second part of the book analyses theories of empowerment that have underpinned the development of computer-mediated sociability in 2000s. It draws upon research conducted between 2004 and 2009 on probably the largest digital communities archive worldwide. Cases are provided by the applications submitted to the world’s leading competition on digital culture, the *Prix Ars Electronica* in Linz, Austria.

Initiated in 1979, the *Ars Electronica Festival for Art, Technology and Society* (www.aec.at) was the forerunner of 1980s’ festivals on art and new media technologies, like *VIPER International Festival for Film Video and New Media* (Basel), *Imagina* (Montecarlo), *ISEA International Symposium on Electronic Art* (worldwide), *Multimediale* (Karlsruhe), *Next Five Minutes* (Amsterdam), *DEAF Dutch Electronic Art Festival* (Rotterdam), *Transmediale* (Berlin). As Bazzichelli has recalled, these events characterized the emergent phase of an electronic culture that was meant to fill the gap between humanistic and techno-scientific forms of knowledge.[[32]](#footnote-32) In mid 1980s, engineers and computer scientists started to collaborate with architects, musicians, and visual artists on electronic art projects that required multi-faceted skills and know-how from both the technological and the humanities domains.

The *Prix Ars Electronica*, ‘competition for CyberArts’, was established in 1987 as an international forum for artistic creativity and innovation in the digital realm. The first edition included three categories. Over the years categories have expanded, to reach eight categories in 2007. Since the early days, an accurate selection of the jury members among the top experts in each category, the largest prize pursued worldwide in this domain, and pervasive media coverage characterized the *Prix* as a leading international competition in the field of digital media art.

Thanks to its yearly pace, its international scope and its leading position in the digital media art domain, nowadays the *Prix* retains one of the largest archives of media art from the last 30 years. Long-term archiving characterizes its treatment of participant projects. Textual and visual materials of all winning works since the competition’s inception, as well as information on the winning artists and jury members, are collected in the open *Prix* archive. Furthermore, a closed database gathers all applications submitted over the years in all categories, including non-winning entries. This database represents an extremely rich resource to map the evolution of digital culture. As such, it is used as a data source for the empirical analyses conducted in the second part of the book.

Established in 2004, the Prix’s *Digital Community* competition is meant to focus on the socio-political potential of digital networked systems. It aims to acknowledge important achievements by online communities, especially in the fields of social software, ubiquitous computing, mobile communications, peer-to-peer production, and net.art. It acknowledges innovations impacting human coexistence, bridging the geographical, economic, political or gender-based digital divide, sustaining cultural diversity and the freedom of artistic expression, enhancing accessibility of technological infrastructures. As the call for entries affirms, ‘the “Digital Communities” category is open to political, social, cultural and artistic projects, initiatives, groups, and scenes from all over the world utilizing digital technology to better society and assume social responsibility’.[[33]](#footnote-33) The competiton is open to non-profit projects developed by governments, businesses, and civil society organizations.

The designers of the new category dedicated to online communities explicitly referred to four leading paradigms of early 2000s: the counterculture legacy, the renaissance of political activism in the form of the Global Movement for Social Justice, the popularization of the web, and the wide diffusion of collaborative patterns of organization.[[34]](#footnote-34)

Despite this initial categorization, the cases analysed here have not been *a priori* labelled as occurrences of digital communities by the researcher. Rather, they have been identified as such by several expert actors. First, projects participating in the competition have been *said* to be occurrences of digital communities by the project representatives who submitted their application, or by the International Advisory Board who proposed some of the entries. Second, they have been *acknowledged* as such by the independent international jury who excluded those projects that did not fulfil the requirements. Projects which passed all these stages thus *became* digital communities, and are analysed and discussed in the second part of this book.

Methodologically, the Prix Ars Electronica’s *Digital Communities* competition is seen as a peculiar form of controversy dealing with the acknowledgement of the most innovative practices of online collaboration and sociability. Controversies are ideal methodological entry points whereby it is possible to penetrate the inner workings of science and technology before they get crystallized into a black box. Situations where techno-social ties are indeed made visible and graspable are those where meaning emerges from comparison and ‘polemic structures’:[[35]](#footnote-35) meetings, trials, and plans in science labs, distance in time or space, breakdowns and fractures, but also fiction, archives, and museum collections.[[36]](#footnote-36) Prix Ars Electronica’s *Digital Communities* competition thus constitutes an arena wherein the black box of techno-social assemblages is re-opened, contrasting meanings are made explicit, and the most innovative ones are selected by an internationally renowned board of experts.

Notably, the *Digital Communities* competition can be associated with a form of controversy in three respects. First, contests constitute a primeval form of polemic structure, an arena where meaning emerges from comparison between different projects. Projects struggle in order to be recognized as successful digital communities. Second, like controversies, competitions present some recurring elements like a spokesperson, anti-groups, limes, and accounts.[[37]](#footnote-37) The *Digital Communities* contest is the place where online networks achieve representation: it constitutes the moment in an unstable process of social innovation when spokespersons must emerge and – together with them – self-representations, identity, and opponents. In other words, online assemblages are caught in the moment in which they struggle to crystallize into the form of ‘digital community’. Third, to grasp controversies one needs accounts: agencies and actors are made visible into accounts. In this analysis I have been using as accounts the traces left behind by group-makers: the applications submitted from 2004 to 2007 by participants for the purpose of an award. Since the applications are produced in the moment when online assemblages fix the instant and take a picture of themselves, they represent accounts about what participants conceive of as digital communities.

## Quali-quantitative Methods

Given the epistemological considerations anticipated above, in order to answer the overarching question addressed in this book (i.e., under what conditions is it possible to conceptualize online sociability in the first decade of the 21st century?), the Prix Ars Elextronica data set was analysed by focusing on how actors speaking for online communities describe the theories of actions underpinning techno-social collaboration. Three sets of sub-questions were identified to operationalize the main question for analytical purposes.

The first sub-question asked community spokespersons what they mean by ‘online community’. To do so, concept profiling methods were adopted to explore the semantic elements *explicitly* associated with the notion of ‘online community’ in the submissions to Prix Ars Electronica. In chapter 4, the resulting semantic configuration was then compared to those of the early subcultures recalled in chapter 1. Furthermore, Wellman’s well-established distinction between communities as bounded groups vs. loose networks was tested.[[38]](#footnote-38) Chapter 4 thus attempts to provide a definition of online/digital community, as established by communities’ spokespersons. It shows which paths have been abandoned in the first decade of the 21st century with respect to the original cyberculture: cybernetic discourse and its reliance on technology as a neutral organizational agency and the immaterial gift as a way to maintain communities as social homeostats. All in all, it shows that new framings in the 2000s have taken the place of the old ‘online community’, which do not necessarily distinguish between bounded groups and loose networks.

While the first sub-question analysed how online communities are *explicitly* profiled, the second did it *implicitly*. It indeed identified the most recurring and central topics, and narratives addressed in the data set. Here, no prior concepts were profiled *a priori* – not even ‘online community’. Rather, as discussed in the previous sections, submission to a competition for ‘digital communities’ was conceived of as a performative act defining what this kind of techno-social assemblage is supposed to be. My aim here was identifying the matters of concern emerging from the whole data set, and related narratives. To do so, I extracted some concepts and narratives through quali-quantitative analysis supported by co-occurrence patterns. As discussed in chapter 5, those narratives only partially overlap with the discourses prompted by early cybercultures. Even when they do – like in the case of creative labour, public art, and social software – they articulate originally simplistic oppositions in more elaborated accounts of the peculiar mediation exerted by techno-social assemblages.

Finally, in order to map the different theories of action underpinning the digital communities participating in the competition, the third set of questions analysed the expected relationship between societal outcomes and role of technological artefacts, as it was laid down by communities’ spokespersons. In order to do so, I conducted narrative analyses of fewer cases. By focusing on the artefacts whereby groups are assembled, chapter 6 describes the theories of action underpinning the rationale of prize-winning techno-social assemblages self-labelled as digital/online communities, and proposes a typology. Chapter 7 expands this typology by focusing on a different type of materiality, and looks at the possibilities of access provided for on the project’s website.

The book argues that in order to conceptualize online sociability in the first decade of the 21st century, it is necessary to get over the foundational distinction between *gemeinschaft* and *gesellschaft*. It is only when the foundations of 21st century’s social theory are put into discussion – notably the demise of sociability and commitment in modern technological societies – that it is possible to grasp and theorize contemporary techno-social assemblages. In particular, such a move allows accounting for the performative role of (digital and analogue) artefacts in upkeeping communalist efforts.

In order to achieve this evidence, qualitative and quantitative analytical methods were developed. The choice of the techniques for data analysis had indeed to take into account two main constraints. First, the high number of applications made the Ars Electronica archive unsuitable for purely qualitative analysis. Original submissions for the period 2004-2007 amounted to 1411. Out of these, 920 participating projects and related applications resulted after excluding blank applications and submissions discharged by the International Advisory Board and the jury as non-representatives of digital communities. I tackled the problem by planning two distinct analytical moments. The first took into account the whole data set (N cases) and used mixed quali-quantitative techniques provided by textual co-occurrence analysis and Boolean analysis software applications, while the second concentrated on a selected number of case studies (n cases), using narrative analysis techniques.

As to the second constraint, I needed to avoid *a priori* postulating analytical categories. In line with a non-essentialist, bottom-up approach,no hidden forces nor actors could be assumed in advance. As a consequence, when analysing the whole data set (N cases) I chose to use relational analysis, a method based on measuring how often concepts occur close together within the text. Concepts co-occurrence turned out helpful in addressing my main epistemological concern: that *a priori* categories impose the reality of the investigator, rather than measuring the categories used by the authors of the text themselves. By using relational analysis, ‘relevant categories’ were defined as those that are most frequent *and* co-variate the most with other high-frequency words recurring in the text.[[39]](#footnote-39)

More details about this software-embedded definition of relevancy – and the diverse ways in which software was set to answer different questions – are discussed in chapters 4 and 5. For the time being, it suffices to highlight the coherence and consistency of techniques for data collection and analysis with epistemological choices, as outlined in Table 1.

|  |  |  |  |
| --- | --- | --- | --- |
| **Epistemological assumptions** | **Choice of the sample** | **Method** | |
| **Technique of data collection** | **Technique of data analysis** |
| Performative classification of digital communities (DC): DC definition is the result of clustering together objects *said* to be occurrences of the concept. Acknowledgement as distributed enuciative action | Objects of study are the projects participating in Ars Electronica’s competition. They are *said* and *acknowledged* as DCs by different social actors: the projects authors + Prix Ars Electronica’s International Advisory Board + independent jury | Submissionsexported from online archive as txt file with ASCII codification  Navigation of DCs’ websites | Quali-quantitative (for N cases) and qualitative (for n cases) analysis of submissions  Profile analysis of websites |
| Study of controversies  1) Meaning emerges from comparison and/or polemic structures.  2) Controversies and agency are made visible into accounts | 1) Prix Ars Electronica competition as a form of controversy, a situation where meaning emerges from comparison between different projects struggling to be defined as successful DC.  2) Use of archived submission forms as accounts: meaning emerges also from distance in time |

Table 1 – *Resume: from epistemological assumptions to techniques of data collection and analysis*

## Structure of the Book

This book is composed of two main parts. Drawing on offline literature and online sources, including mailing lists and email interviews, the first part recalls the heterogeneous origins of digital sociability. Even if diachronic comparison lies at the core of chapters 1-3, this book doesn’t intend to provide a comprehensive historical reconstruction of early online forms of communalism. A systematic history would deserve a research work in itself, and consistent attempts in this direction are numerous. More modestly, the first part aims to return the complexity and heterogeneity of cybercultures (in the plural!) before the 2000s crisis. Chapter 1 addresses the legacies of libertarian, civic, artistic, and activist utopias inherited by digital communitarian culture. Chapter 2 throws light on its aporiai, concerning both socio-economic developments and the politics of information. Chapter 3 discusses the arguments of those authors who have addressed the question on whether it is possible to talk of communitarian ties online today. After having discussed some of the ideologies linked to the societal potential of ICT, a few hypotheses on the current condition of digital communities in 2000s are sketched.

The second part engages in empirical analyses of contemporary forms of digital communities, and compares them with the literature discussed in the first part. Chapter 4 provides a first definition of ‘online community’ by explicitly exploring the elements associated with it in the applications submitted to Prix Ars Electronica’s Digital Communities competition. It also verifies a hypothetical counter-argument to Wellman’s thesis on weak ties by conducting co-occurrence analysis.

Chapter 5 identifies some relevant topics and narratives emerging from the whole data set and compares them with those prompted by early cybercultures. Continuing with a purely qualitative method, chapter 6 conducts a narrative analysis of the prize-winning projects. After a detailed description of all the projects that won a first or second prize from 2004 to 2007, it draws a map of the different techno-social theories of action underpinning those projects. Finally, chapter 7 suggests a system of classification for digital communities based on two diverse forms of materiality, while chapter 8 draws conclusions and proposes further directions of analysis.

1. Note from the 2018 Edition. As mentioned in the Foreword, the research underpinning this book was conducted on a data set created in the period 2004-2007. Ethnographic observation and participation in digital media groups, mailing lists, and online networks started however much earlier, in 2001. With the exception of the Foreword – written for the 2018 Edition, throughout the book the present tense refers to the period 2006-2009. [↑](#footnote-ref-1)
2. With ‘communitarian’, ‘communalism’ and ‘communitarianism’ I do not refer to those political philosophies whose most influential exponents are Alasdair MacIntyre, Michael Sandel, Charles Taylor, and Michael Walzer, quoted by D. Bell, ‘Communitarianism’, in E. N. Zalta (ed.) *The* *Stanford Encyclopedia of Philosophy*, Stanford CA: Stanford University, 2016,  
   https://plato.stanford.edu/archives/sum2016/entries/communitarianism/. Differently, I use these terms in their most mundane meaning of ‘related to community’, the goal of this work being to ask actors themselves what they mean by it. [↑](#footnote-ref-2)
3. Goldsmith and Wu, Who Controls the Internet? [↑](#footnote-ref-3)
4. H. Jenkins, *Convergence Culture: Where Old and New Media Collide*, New York-London: New York University Press, 2006. [↑](#footnote-ref-4)
5. F. Turner, From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism, Chicago and London: The University of Chicago Press, 2006. [↑](#footnote-ref-5)
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    J. Nielsen, ‘The 90-9-1 Rule for Participation Inequality in Social Media and Online Communities’, *Nielsen Norman Group Newsletter*, 9 October 2006, http://www.useit.com/alertbox/participation\_inequality.html. [↑](#footnote-ref-25)
26. I wish to thank Prof. Dieter Daniels for the suggestion of this label during my talk at the ‘Community vs Institution’ panel organized by the Boltzmann Institute Media.Art.Research at the *re:place* conference in Berlin, 14-18 November 2007. One can find an echo of this way of proceeding in Wittgenstein’s language games. In 1933 the philosopher introduced language games to his students as a technique aimed to address one of the major philosophical puzzles, namely the tendency to make questions about general substantives – ‘what is knowledge, space, numbers, etc.?’ – and to answer them by naming a substance. Wittgenstein substituted Platonic Form by ‘family resemblance’: ‘we tend to think that there must be something shared by, for instance, all games, and that this common property justifies the application of the general substantive “game” to all the games, while, on the contrary, games constitute a family whose members display family resemblances. Inside a family, some members share the same nose, some others the same eyebrow, some others the same gait. These resemblances combine and intertwine’. L. Wittgenstein, *The Blue and Brown Books*, Oxford: Blackwell, 1975, pp. 26-27. Author’s revised translation. Italic in the text. [↑](#footnote-ref-26)
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30. Notably, the terms ‘digital’, ‘virtual’, ‘cyber’ and ‘online’ community are used as synonymous. Similarly, we use the terms ‘group’, ‘assemblage’, ‘aggregate’ in their most plain meaning indicating a whole composed of heterogeneous elements. [↑](#footnote-ref-30)
31. The fluctuating meanings associated with the popular, market-driven label ‘Web 2.0’ is an excellent example of this. [↑](#footnote-ref-31)
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36. These situations are numbered in Latour, *Reassembling the* Social, pp. 79-82. [↑](#footnote-ref-36)
37. Latour, Reassembling the Social, pp. 52-58. [↑](#footnote-ref-37)
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