

**Sharing Publics: Democracy, Cooperation,
and Free Software Advocacy in France**

by

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ABSTRACT

This dissertation examines how culture helps shape the way people use and understand new information technologies. It is based on twenty months of online and offline ethnographic fieldwork conducted in 2004 and 2005 among French voluntary associations that promote free software. I argue that, energized by the worldwide accessibility of the internet and informed by developments in US-led global communications policy, free software advocates in France articulate their cause in terms of long-standing French debates about civic solidarity and stewarding of the common good, investing these with renewed significance in relation to processes of EU integration, post-Cold War “free market” globalization, and transformations of consumer advocacy. More broadly, through a focus on mobilization around global digital networks, my study contributes to understanding of (culturally diverse) ideas about cooperation, technical expertise, democratic engagement, and globalization.

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INTRODUCTION: GROUNDING DIGITAL NETWORKS ETHNOGRAPHICALLY

In the early 2000s, online sites and services have become ubiquitous within French business and mass media. In many ways, this development has upset long-established habits and expectations. An air of experimentation has permeated many businesses, for example, as they try to find a profitable balance between offering online services for a fee and those offered free of charge. French newspapers have accorded ample space to stories about successful efforts to develop and market digital intangibles elsewhere, whether among Brazilian music labels, the US market for online music services, or online markets offering items from networked fantasy games.

Court cases, pedagogical guidelines, and polemics surrounding file-sharing online further suggest that much remains open-ended with respect to acceptable uses of such goods and services. In France, penalties for illegal downloading were raised up to 300,000 Euro in fines and three years of prison. At least one accused downloader was acquitted in 2004 after he claimed that his 488 downloaded films were “private copies.”¹ Others have been sent to prison and paid tens of thousands of Euros in fees. In 2005, French consumer advocacy groups proposed a provisional, 3-5 year framework for negotiations, arguing that within that period, successful business frameworks balancing free and paying services would emerge, online commerce would become stabilized, and these developments would, in turn, appease then current antagonisms between “downloaders” (*internauts*) and “copyright holders” (*majors*).

1 “488 films gravés et le copieur est relaxé.” *Libération*. October 14, 2004.

These antagonisms entail struggles over meanings attributed to networked digital media, as well as over appropriate legal frameworks and material conditions for their use and development.

In the context of such uncertainties, on what terms are high-speed digital networks becoming a familiar part of daily life for a growing proportion of French? More broadly, how do culture-specific proclivities act to highlight or obscure specific aspects of software, digital media, and global communications networks? I address these questions through an ethnographic study of French voluntary associations that promote free software.

Free software aspires to ensure the rights of accessibility, modification, and copying to any user, as opposed to *proprietary software*, whose modification and distribution is restricted by copyright. So, free software guarantees to its users some important rights, which are ordinarily reserved for authors via copyright laws.² The “success” of free software developers in creating high-performance and robust computer programs has in the past ten years catalyzed a re-thinking of well-established frameworks of ownership and property rights in the US (Lessig 1999; Kelty 2005)³ and brought to the fore new “networked” conceptualizations of the information economy (Weber 2004; Ghosh 2004) and innovation policy (Benkler 2002, 2006; Love and

2 For a more elaborated definition, see “The Free Software Definition,” accessible online at <http://www.gnu.org/philosophy/free-sw.html>, last accessed 30 January 2005.

3 Scholars in the humanities have examined the political and cultural foundations of US copyright law (McGill 2003) and especially of the rationale of “balanced compromise” that forms the economic and legal foundation of copyright in the US in the 19th century (Vaidhyanathan 2001).

Hubbard 2005) as well as their historical precedents (David 2008).⁴ Sophisticated and widely disseminated free software projects, such as the operating system GNU/Linux, web browser Mozilla Firefox or the online encyclopedia Wikipedia, have provided a rehearsal space for experimenting with the implications of allowing unrestricted accessibility, modification, and distribution of information online.

Advocacy related to FS⁵ has taken on an especially prominent public life in France, where several voluntary associations committed to promoting FS are visible in public debates and national political platforms concerning copyright reform, patents, cultural industries, and democratic politics. FS advocates in France aim to articulate frameworks of cooperation proper to the digital domain. I argue that, although practices of copying and distributing digital files are widespread among millions of internet users around the world and are understood by free software advocates as determined by the inherent properties of the digital sphere in general, *they are also embedded in and productive of national debates, histories, and identities*. FS advocacy in France therefore offers an incisive site for understanding how mobilization around global networked media speaks to culturally diverse ideas about technical expertise, cooperation, and globalization.

Most immediately, this dissertation is an ethnographic account of voluntary associations that promote free software in France. I examine activists' ideas about

4 This research dovetails with the renewed multi-disciplinary interest in collaborative aspects of creativity and authorship, in areas ranging from scientific publishing (Biagioli 2003; Willinsky 2006) to traditional performance (Noyes 2006).

5 In this text and throughout the dissertation I often refer to free software by using shorthand “FS.” I use the terms “digital networks” and “information networks” interchangeably.

cooperative sharing and creativity as well as practical experiences that drive them to challenge the idea that innovation is best encouraged by the protection of property rights. Many members of these associations have been trained as engineers, and are thus knowledgeable and experienced with software and communication technologies. Yet, they strive to invest software with civic significance and to challenge conventional connotations of software as simply a matter of technical expertise. I examine why they deem civic engagement to be necessary in a context of rapid concentration of software-related capital through patents and copyright, as well as how this conviction guides their practical actions.

I argue that advocates' engagement and understandings of their online experiences are firmly situated in contemporary French society. On the one hand, I investigate the circumstances specific to the French and European context of the early 2000s that confer democratic connotations to certain geek practices—especially practices of public valuation, cooperative watching, and sharing according to FS principles. On the other hand, I track how French FS advocates, through their campaigns around globally-circulating free software, forge understandings of democracy that shape their perceptions of EU political and economic integration.

The French context offers an especially promising setting for examining the cultural dimensions of globally spread practices of online copying and sharing. In French debates about online copying and sharing, free software advocates have mobilized a stock of concepts pertaining to the common good (*patrimoine, bien public, bien commun*) and cooperation (*mutualisation, partage*). Many of these terms

imply a sense of social purpose and collectivity that are intimately linked to French conceptions of social life (*la vie commune*). Advocates' efforts extend to online fora long-standing French debates about the proper stewarding of the common good. Furthermore, they link software to the common good in ways that re-affirm some familiar French assumptions about the pertinence of technological innovation to social change and highlight some key tensions in French society .

Thus, I argue, French FS advocates' practices of circulation, distribution, use, and promotion of free software are imbued with cultural meanings that do not easily translate into global categories. But what kinds of global connections are facilitated as advocates use and promote globally disseminated free software? I address this question through a double focus: On the one hand, I document how FS advocacy in France is energized by the accessibility of the global medium of high-speed internet and informed by developments in US-led global communications policy. On the other hand, I track how French and European debates and histories inflect advocates' actually existing global engagements around, and through, free software. In this way, I analyze the conjugation of national debates and regional histories with transnational agendas and policies pertaining to electronic and networked media.

GLOBALIZATION

Globalization has been used as an umbrella term for a wide array of technological, economic, environmental, and political transformations since the late 1970s, but some key debates have revolved around the role of media and

communications technologies in the emergent world order (Mazzarella 2004; Sreberny-Mohammadi 2002). Since at least the 1960s, scholars have argued that communication technologies operate as important vehicles for the global homogenization of culture. Most famously perhaps, Marshall McLuhan claimed that, due to formal properties of broadcasting media, their global spread ushered in a single planetary society (McLuhan 1962). In this “global village,” mass media and new technologies were seen as creating affinities that were not based on spatial proximities but rather on shared interests and practices.

In some cases, as in the European Union, this assumption about the homogenizing power of media motivated policymakers to promulgate a set of audiovisual policies intended to foster a pan-national sense of community, identity, and belonging (Morley and Robins 1995). A variation of this same idea is the discourse of “cultural imperialism” in international communications, which rests on the assumption that the broadcasting and consumption of foreign media threatens the ability of people around the world to make their own sense of their experiences (Tomlinson 1996; Sreberny-Mohammadi 2002). The domination of the US in the export of films provoked claims that it was, by the same token, imposing an American value system upon the rest of the world (Miller et al. 2001). More recently, the concentration of ownership and increased transnational acquisitions of communications and media companies have led some critics to argue that oligopolistic structures have undermined the capacity of communications technologies to augment cross-national creativity and diversity (Bettig 1996).

Anthropologists have joined these debates through close examination of the social and cultural changes that have emerged with the intensification of transnational production, circulation, and consumption of commodities. Concerned to understand the role of culture in these processes, anthropologists often analyze the processes by which heterogeneous meanings emerge from transnational cultural forms. For example, Watson et al. (1997) have in their studies of East Asian McDonald's restaurants asserted the primacy of local circumstances and consumption patterns that have enabled specific configurations of international business. They argued that the consumption of standardized food, in fact, highlights the local distinctiveness of various foods and eating practices, rather than simply create a homogeneous global space of consumption. In a similar vein, Marie Gillespie shows how young Punjabi Londoners consume Coca-Cola in ways that affirm their aspirations to freedom, pleasure, equality, and generational identities as strategically distinct from their parents' (Gillespie 1995). In her study of Barbadian women employed in data processing, Carla Freeman argues that consumption of foreign clothes and other transnational commodities enables women workers to realize forms of agency and identity that correspond to specifically Barbadian ideals of feminine, autonomous, and empowered womanhood (Freeman 2000). These ethnographic studies suggest that the worldwide circulation and consumption of a relatively narrow range of cultural forms is nonetheless associated with widely varying meanings which are, in turn, fundamentally implicated in historically-specific aspirations, as well as senses of attachment to particular places and of belonging to identifiable groups (Appadurai

1996; Miller 1995).

Michael Kearney has drawn a clear distinction between the more institutionalized and intentional processes of transnationalism, on the one hand, and, on the other, more intangible “technological developments in mass international communication” that are, in his view, key vehicles of “universal and impersonal” globalization (Kearney 1995:548, 550). Several studies have since focused on processes of online reconstruction of belonging and (ethnic and national) identities (Miller and Slater 2001; Bernal 2005; Schain 2002). Ethnographic work on the global circulation of software has, however, been conspicuously rare. One obvious problem lies in the challenge of making the production or use of software amenable to ethnographic analysis. While it is possible to observe people making or eating fast food, and to identify patterns of doing so that are common to one or another group, for example, this is less obvious for software. Anthropologists working with mass media arguably face a similar problem, at least with respect to reception. This may account for why much of the anthropology of media focuses on production processes (Dornfeld 1998), identifiable groups such as newsgroups (Baym 2000), and textual analysis contextualized at specific sites of consumption (Abu-Lughod 1997). An additional difficulty facing research on free software is that there may be considerably less distinction (in terms of time, place, or actors) between production and consumption.

Further, global digital networks still are most often associated with the kind of “abstruse technological and informational expertise” that constitutes the scapes of “occult” capital-making (Comaroff and Comaroff 2000:315). While there is clearly

some connection between the diffusion of software and the circulation of commodities, the exact nature and implications of this relationship remain unclear. For example, what exactly does it mean to advocate for (globally circulating) non-proprietary software in the context of rapid privatization and accumulation of wealth through global digital networks? My dissertation tackles this issue through an ethnographic analysis of claims and counter-claims about desirable circumstances for the production, circulation, and use of software.

Arjun Appadurai has instigated a body of work interrogating the uneven worldwide circulation of technologies, media, finance, ideas, and people (Appadurai 1996). Tracking the cultural flows through these global fields and the disjunctures among them, Appadurai argues, makes it possible to address debates about global homogenization and differentiation. International newsmaking is one such area, in which long-distance relationships and communications flows are translocal and transnational, and yet territorializing (Boyer and Hannerz 2006; Klinenberg 2005; Pedelty 1995). Amahl Bishara has documented the unacknowledged contributions that US journalists in Palestine receive from local Palestinian journalists in enabling material contacts with local interlocutors (through translating, guiding, selecting interlocutors, setting up interviews) (Bishara 2006). Even though the messages that are ultimately broadcast to the US do not reflect Palestinians journalists' perspectives, Bishara argues, they reflect the choices of Palestinian journalists in contact situations as well as some key features of Palestinian society. Ulf Hannerz has examined global news networks through professional foreign correspondents, arguing that they might

enable certain kinds of global, or cosmopolitan, imagination that reflect the predominance of US and European powers (2004).⁶

Another body of research has “decentered” analysis so as to investigate media circuits that do not have Europe and the US as an obligatory passage point. Mayfair Yang has argued that satellite TV programs from Hong Kong and Taiwan have fostered the creation of transnational ethnic Chinese publics that bypass the Chinese state (Yang 2002). Brian Larkin has argued that the popularity of Indian film in Nigeria offers Hausa viewers occasions to negotiate difference and sameness, modernity and tradition, and political significance (Larkin 2003).⁷ The broader point of this literature is that imaginative spaces facilitated by global media need to be socially, culturally, and historically contextualized at every location (Ginsburg et al. 2002; Sreberny-Mohammadi 2002).

Anthropologists investigating transnational processes have frequently argued that the appearance of globally uniform meanings is an accomplishment rather than a given. Transnational financial integration, for example, has been shown to mask the highly varied meanings, practices, and approaches that may in fact be associated with

6 Steven Feld has analyzed “world music” as another domain in which cosmopolitan identifications and caricature imaginings of “otherness” reflect the relations of power in musical, industrial, and political cosmologies of power (Feld 1996).

7 Some media studies and communications scholars accompanied anthropologists in this project. They argued that a focus on TV production of countries that are peripheral in global flows has since the mid-1980s revealed relations and patterns of distribution other than from putative center to the periphery (Sinclair et al. 1996; Curran and Park 2000) and called for “relational” and “polycentric” analyses of ethnicity, race, nation, and culture in transnational cinema and new media (Shohat and Stam 2003:4,7).

the global. Karen Ho has highlighted the contingencies and internal contradictions in the ways in which financial executives imagine their “global presence,” while Caitlin Zaloom has argued that global futures traders exhibit different rationalizations, bodily performances, and forms of sociality face-to-face and online (Ho 2005:73; Zaloom 2003, 2005). Having a “global presence” thus reflects the positioning and goals of the actors—in the self-serving marketing pronouncements about all-encompassing, global spread of uniform financial regimes and markets—rather than a physical manifestation which, in the case of Wall Street banks abroad, often takes the form of an empty office (Ho 2005:86; cf. Applbaum 2000). My dissertation examines the extent to which the global reach of communications technologies can be ethnographically traced in specific practices and locales (such as the recruitment and training sessions, promotional materials, and interviews in Ho's account).

This work contends that global phenomena could be understood as congeries of projects that do not necessarily align (Collier and Ong 2005). More generally, Stephen Collier and Aihwa Ong have identified technoscience, exchange circuits, administrative systems, and ethical “regimes” as driving forces of globalization. The transformations of these regimes, Collier and Ong argue, bring about heterogeneous “global assemblages” through specific trajectories of change that are at the same time broadly encompassing and yet contingent (Collier and Ong 2005:12, 15). The presence of software and communications networks in all these “regimes” carries particularly uncertain implications. My dissertation documents the trajectory of one broadly encompassing project that addresses the technologies and infrastructures of

globalization, while being grounded in institutions, histories, and meanings contingent to 21st century France and the European Union.

Anna Tsing has distinguished three approaches to analyzing globalization (Tsing 2000). She points to a set of “culturally specific commitments” and the assumptions about the world that they express; specific social practices, infrastructures, institutions and relations through which global projects work; and dilemmas posed by the practitioners in the programs of globalization (Tsing 2000:330). A combination of these three approaches delineated by Tsing allows me to address what global forms mean to FS advocates. First, how are ideas about civic engagement around (global) internet and software culturally specific? What kinds of identities are enabled through these engagements? Second, how is the actually existing globalization project of French FS advocates structured online and through voluntary associations, and how is that reflected in their imagining of possibilities and scope of advocacy? And, finally, how could activists' attempts to self-consciously shift the cultural significance of software and their concerns with the limited public oversight of seemingly “technical” issues speak to anthropological interest in globalizing technologies?

I argue that French FS advocacy groups ground the global dimensions of digital networks in national institutional contexts and postulate long-standing national debates as a key framework of advocacy. Although their actions aim to incite national and EU debates, advocates see them as contributing to global FS issues. That is, although I analyze advocates' engagements, online practices, and understandings of FS

software as a specific trajectory in French and European life in the 21st century, this is not necessarily the way they see “the global” and “the local” in FS advocacy.

DIGITAL TECHNOLOGIES AND NEW MEDIA

In this section, I explore some intersections of the anthropologies of emergent technologies and of new media, together with interdisciplinary science and technology studies, especially as these concern computing and digital networks.

A number of scholars have noted that science and technology are meaningful domains of social action, implicated in more general cultural, political, and economic processes in contemporary societies (Martin 1998; Traweek 1993; Hess 1995). On the one hand, new technologies can force us to rethink our sense of social connections and of ourselves (Downey and Dumit 1997); on the other hand, alternative representations and practices associated with technologies and their use are apt to be consistent with (or indicative of) more general cultural developments in our societies (Fischer 1999b).⁸ The ways that people engage with technologies can, therefore, be seen as one key to understanding the social relations, cultural meanings, and political actions in any society (Rapp 1999). Digital technologies are a particularly interesting focus for this kind of research: business and media draw attention to a small set of (highly marketable) cutting-edge developments in this domain, but in many settings, these are accompanied by a “combination of systemic, technologically supported social

8 Constructivist approaches in interdisciplinary technology studies have advanced a version of this argument as well, for computers (Edwards 1995) and more generally (Pinch and Bijker 1987).

possibilities and lawlike constraints” through which digital technologies amount to an increasingly taken-for-granted infrastructure (Edwards 2004:191). My research examines one specific configuration that addresses the selective character of this conventional double focus for understanding the cultural significance of digital technologies: I attend both to emergent uses of digital technologies among skilled internet activists and to their efforts to raise questions about the commitments embedded in the constructions of digital networks that might become more difficult to discern as they become naturalized.

Countering the claims of technology and science as “culture of no culture,” considerable anthropological work centers on the circulation of metaphors and images as useful points of entry into the power relations that are articulated through, or translatable into, scientific and technical domains (Traweek 1988:162; cf. Martin 1992, 1994).⁹ Joe Dumit, for example, has explored the cultural assumptions about brain-imaging technologies that drive people to create brain-types out of ambiguous images and, in turn, take those categories as acceptable and essential truths about personalities (Dumit 2004). Stephane Palmié has argued that emergent genomic research re-inscribes racial categories as biologically grounded phenomena (Palmié 2007; cf. El-Haj 2007). Computing is also a rich field for metaphors: for example,

9 In keeping with this reasoning, not only did anthropologists and STS scholars study computing as a meaningful cultural domain, but also computing has provided some analytic metaphors. Donna Haraway's feminist recasting of “cyborg,” in particular, has been useful for thinking about the dualisms of human/nonhuman, organism/machine, and cultural investment in the sciences and especially computing and biotechnologies (Downey et al. 1995; Haraway 1991; Casper 1994).

Stefan Helmreich has studied metaphors of gender, kinship, and race, as well as mythical origin stories reminiscent of religious narratives, among the scientists in the field of artificial life (Helmreich 1998). Recently, anthropologists have begun to investigate the emergent interest among American hackers concerned with US software policy in the implications of free software for free speech, a powerful mobilizing metaphor in the US (Coleman 2004; Kelty 2005).¹⁰ In France, I encountered somewhat different themes: French voluntary associations promote FS claim that free software raises questions of concern “to everyone.” In the campaign against software patents, some European activists have gone so far as to assert that the association of software with technology is regrettable. What makes such culturally and historically specific causes overlap, online and offline? I highlight French FS advocates' practices, circumstances, and assumptions in order to contribute to understanding of varied social and cultural spaces in which digital networks are developed and used.

Early research on the internet was dominated by scholars in media, communications, and cultural studies. They were often concerned to analyze the role of “cyberspace” in redefining subjectivity (Stone 1999; Turkle 1995), emerging countercultures (Ross 1991; Lovink 2002), and new identities (Nakamura 2000). Anthropologists have emphasized the importance of existing cultural categories and

¹⁰ Along these lines, legal scholar Michael Froomkin has argued that in the mid-1990s debates around cryptography, the choice of an appropriate metaphor for cryptography influenced the US Supreme court's decision to restrict public access to this technology (cited in Fischer 1999a).

practices both for current understandings of cyberspace and for imagining its transformative potential (Escobar 1994; Miller and Slater 2000). They have insisted on the importance of situating within political, economic and social context both liberating claims and luddite theories about the potentials of informatics and the internet (Hakken 1999; Pfaffenberger 1988). They argue that “cyberspace ethnography” should account for such factors as policy objectives and regional or national variation (Hakken 1999). Arturo Escobar has proposed an alternative formulation by emphasizing the need to account both for the “political ecology” of cyberspace and the political relations in non-virtual contexts (Escobar 1999; cf. Wilson and Peterson 2002). Miller and Slater have pushed this approach further by analytically “disaggregating” the internet “into a range of practices, software and hardware technologies, modes of representation and interaction” in order to delineate some continuities in the ways Trinidadians think about and use the internet in their daily lives (Miller and Slater 2000:14). My approach also attempts to draw correspondences between French FS advocates' range of understandings and uses of digital networks and a broader range of social and cultural preoccupations.

Since the early 1990s, anthropologists and communication researchers have explored online forms of sociality, modes of interaction, and representations, focusing mostly on the exchange of online messages in newsgroups (Baym 2000; Smith and Kollock 1999) chatrooms (Markham 1998, 2005), and websites (Hine 2000; Heath et al 1999). Researchers in these (primarily textual) environments have deployed the methods of discourse analysis, online surveys and interviews, website analysis, and

participant observation. Despite the textual orientation of most of that early research, non-English speakers attracted relatively little attention (Livia 1999; cf. Cook 2004; cf. Wilson and Peterson 2002). Pre-dot-com era virtual ethnographies emphasized the internet as a playful medium and focused on various devices of information collection, enactment, performance, and management of voice and public face (Danet 2001). My exploration of a significant overlap of online and offline networks among French FS advocates suggests that advocates' online interactions are to a large extent structured by offline social networks, shared commitments, and historical and political contexts of advocacy.

Online contexts have also challenged the conduct of fieldwork research, as social scientists grappled with finding ways to apply ethnographic methods to online data (Beaulieu 2004; Hine 2000, 2005; Lyman and Wakeford 1999). This research raised questions about the relationship between offline and online interactions, as well as about ways in which how online interactions are shaped by the social structures within which communication technologies are embedded, at local, national and transnational levels (Lyman and Wakeford 1999). Interdisciplinary research on the links between online and offline involvement has often focused on the relatively well-defined political or social positioning of the participants: patient advocacy groups (Heath et al. 1999), women's rights activists (Ayers 2003), anti-corporate globalization activists (Juris 2005), software developers and new media industry employees (O'Mahony and Ferraro 2004; Neff 2005), academics (Koku et al. 2001), and diasporas (Miller and Slater 2000; Bernal 2005; Schain 2002). These studies emphasize the

need for analyses of on-line interaction to take account of the broader cultural contexts in order to understand how on-line interaction complements or contrasts with off-line action (Heath et al. 1999; McLagan 2003). The implications of this, and especially the relationship of online traces to offline relations, remain difficult to generalize.

The increasing use and diversity of online platforms and technologies, as well as their mutual interrelations, compounds the problem of interpretation of online data. In my research, I have relied on some archives that were publicly accessible but standards for their public use remain ill-defined. In some respects, consideration of the relationship between online and offline production of materials raises similar issues as does research on mass media or language (Anderson 1983). For example, online interaction can extend and complement pre-existing cultural identities and political actions. Among Trinidadians in Trinidad and abroad (Miller and Slater 2000), Tibetan activists outside Tibet (McLagan 1996), or feminist and environmentalist social movements (Escobar 1999), ethnographic studies of political and cultural action via the internet have emphasized its grounding in place- and identity-based politics. My project advances the agenda of thinking about “the enlistment of the Internet into the formation of national and transnational space” by considering the social implications of the medium itself as well as the social uses to which it is put (Helmreich 2003:27).

The double nature of software, as both an infrastructure and the object of activism, makes free software a particularly suitable venue for understanding activist engagements with new media. Ethnographic research on new media activists has

generally faced difficulties in addressing the institutional and corporate changes that affected the distribution and production of new media technologies (Marcus 1996). Yet software might be an auspicious site for analyzing precisely those kinds of connections. For example, Georgina Born has pointed out a tension between programming practices, legal regulations and institutional interests in the production of software at IRCAM (Born 1995, 1996). My study allows for a systematic examination of advocates' practices, as well as their efforts to reform legal regulations and property rights in media production and distribution. This consideration of FS advocates' practices as well as their oppositional discourses highlights the interplay between the institutional frameworks of such media and the uses to which it is put.

In the 1990s, dominant metaphors for information technology in the US shifted from computing and artificial intelligence to communication and networking (Ito forthcoming; Rheingold 1993). Christine Hine has pointed to the high expectations since the mid-1990s about the transformative potential of the internet for a wide variety of identities, relations, and practices (Hine 2000). I am particularly interested in the tension between this societal investment in software and digital networks, on the one hand, and their technical character, on the other. My consideration of the historical and political circumstances of FS advocacy in France permits me to examine the meanings of the opposition drawn between free and proprietary software, the chain of associations that links FS to European and French democracy, and the uneven power relations deployed in attributing public meaning to free software.

The late 1990s also saw increasing discussion about the formal properties and

practical aspects inherent in digital media (cf. Bolter and Grusin 2000). Business consultants, policymakers, venture capitalists, journalists and academics participating in these discussions worldwide, often presented digital networks as an icon of modernity (Miller and Slater 2003; Fischer 1999a). For example, communications theorist Manuel Castells proposed a macroscopic framework of contemporary social change in which information technologies featured prominently (1996).

Communications scholar Fred Turner has highlighted the role of a relatively small group of countercultural entrepreneurs who popularized the term “networked mode” of organizing the production of goods, information and social structure, utopian business hype, along with the new technologies and collaborative work styles of the post-World War II military-industrial research (Turner 2006: 239). The second part of Turner's argument is less convincing: he suggests that these cultural-entrepreneurs-turned-internet-visionaries have produced the long-term “social infrastructure to support, legitimate, and disseminate those [conceptual] frames” and thus durably shaped understandings of the internet (Turner 2006: 255). I nonetheless share his interest in understanding how digital networks are embedded in a particular generational engagement with the historical, cultural, and political transformations of the broader society. Following this line of inquiry, I ask to what extent in other places, with different generational experiences and social concerns, the cultural significance of digital networks might differ.

Anthropologists working with marginalized peoples have tended to emphasize the ethnocentrism that undergirds discourses of the “network society” and emphasized

a range of new projects through which indigenous groups make themselves “at home” online on terms of their own choosing (Ginsburg forthcoming, Landzelius 2006). Legal scholarship has emphasized the culture-specific assumptions upon which the idea of commons was based historically, suggesting that these also shape current discussions about digital networks (Anderson and Bowrey 2006). I would push this argument further, aiming to show that ways of understanding and using digital networks reflect and reproduce cultural difference.

The development of new forms of commerce, advertising, and aggregation of marketing information have also drawn considerable attention. For example, a forthcoming edited collection proposes the term “networked publics” to designate specific kinds of engagement with digital networks: “networked publics” could be understood as an overlap of people who have easy access to multimedia and broadband network infrastructure, those who experiment with peer-to-peer communication and distribution, and/or who are active in special-interest groups that aggregate content and competences and thus produce meaningful knowledge, forms of belonging, and lucrative markets (Ito forthcoming).¹¹ Recent studies also examine the role of digital networks in restructuring and incorporating media ownership across platforms (Klinenberg 2005) and the place of online participation under such circumstances (Jenkins 2006). I am interested in disentangling some of these threads, through highlighting the significant public life of free software in France while also examining how the practices of FS advocates are woven with other aspects of

¹¹ While Ito focuses on the emergent nature of these publics, my Chapter 5 suggests that their spread is less even and less emergent than they appear in her account.

advocates' lives.

CULTURAL MEANINGS OF DIGITAL TECHNOLOGIES IN FRANCE

One of the goals of this dissertation is to make the case that information technologies and their use are shaped in culturally-specific ways. I argue that FS advocacy in France reflects some preoccupations that are broadly shared in the French cultural and historical context. My ethnographic insights suggest that the range of possibilities for redefining cultural meanings of software in France is structured by long-standing debates about the proper stewarding of common good and the connection of technological innovation to social change. Historical circumstances also matter: the experiences of French free software advocates reflect some concerns about European integration that became prominent among French population during my fieldwork. In this section I sketch out how these long-standing French debates and emergent concerns have been addressed in multi-disciplinary social science literature about French society.

Technological innovation and social change in France

In various ways state-of-the-art technologies (e.g. in transportation, communications, etc.) have long been promoted in France as a way to effect directed, nation-wide, social and economic change. Within the scholarly literature on technology in France, for example, the causal relationship between technological innovation and social change was one major theme treated by the social scientists

associated with the journal *Annales* during the decades following World War I. They typically argued that technical inventions only spread when people in a particular society find them useful or meaningful: change in the structure of society precedes the invention and adoption of technical innovations (Bloch 1967a [1948], 1967b [1935]; Haudricourt 1936). For example, historian Marc Bloch argues that it was the decline in slavery that led to inventions using natural forces more effectively to economize human labor (Bloch 1989 [1935]). Bloch also insists that “the recognition of the importance of technical facts” is an issue independent of actual technical and social changes: “the reaction of a society to phenomena controlling its existence will differ according to the way it sees (or fails to see) their importance” (Bloch 1967b [1935]: 133, 135).

The *Annales* framework for the investigation of technology encompasses very broad temporal, geographical, and methodological scope. For example, historian Lucien Febvre envisages a history of technology that includes the accounts of practitioners (technicians, scientists), historians and other scholars such as geographers, ethnographers, sociologists, linguists (Febvre 1989 [1935]). In a similarly broad optic, anthropologist Marcel Mauss defines technique as an “efficient traditional action” that has mechanical, physical, or chemical manifestations (Mauss 1934; cf. Haudricourt 1964). By using the term “tradition,” Mauss emphasizes that seemingly natural actions, such as giving birth or sleeping, are to be understood as culturally-specific performances rather than biologically-determined actions. Technique is thus inherently connected to culture and society. As a consequence,

change in techniques go hand-in-hand with social change: Mauss' observations of changing styles of swimming and walking in his lifetime, indeed, inspired his thoughts on the culturally-specific nature of bodily techniques.

Another approach defining scholarly understandings of technological innovation involves less emphasis on the origins and processes of diffusion and more on the impact of new technologies on contemporary society. For example, in post-war sociological reflexions on the “modernization” of French society, technology occupies a prominent place. Sociologist Henri Mendras argued that the application of new technologies in agriculture, such as farm mechanization or corn hybridization, has doomed “peasants” to extinction and ushered in a new era of societal change (Mendras 1967). Other analysts argued that a similar shift had already taken place concurrently with, among other developments, the nineteenth-century expansion of transportation and communication technologies that helped consolidate state control over rural territories (Weber 1976).

This research emphasizes the possibility of bringing about directed change in political, economic and social organization by making certain technological interventions. Historians researching the development of industrial technologies point out that there is consensus about the powers of tech innovation to bring about change, but lack of consensus about how it should be harnessed or channeled. They note that new technologies have been broadly understood as a site of political struggle within the French society, whether between Labor unions and employers (Chapman 1991), Paris-based “technocrats” and provincial inhabitants (Frost 1985), or between

“technocrats” and “workers” (Hecht 1998). Sociologists examining the development and deployment of techno-scientific expertise of have also highlighted the involvement of various groups in the promotion of innovations, from vaccines to trains (Latour 1988, 1996; Callon 1986; Callon and Rabearisoa 2008).

Nevertheless, the idea that technology could be used to bring about directed social change has persisted down to the present. The same idea reappears in the literature about state sponsorship of technological innovation in France, which emphasizes a “mystique” of societal progress, and economic innovation surrounding cutting-edge technology characteristic of the early 1950s (Hall 1986). This mystique informed Gaullist concerns with preserving national grandeur and independence through technological avant-gardism: “political leaders [associated] France's international prestige with the development of the nuclear *force de frappe*, the Concorde supersonic airliner, the Plan Calcul in computers, and such technical achievements as the construction of a uranium enrichment plant at Le Havre” (Hall 1986:179). For example, historian Gabrielle Hecht argues that drawing on this “mystique” helped to create a consensus among otherwise antagonistic constituencies in the development of nuclear reactors (Hecht 1998). In practice this meant constructing imaginary scenarios of the future, generally of two kinds: they either elaborated the theme of bringing modernity to rural France or the theme of national salvation, redemption and liberation ushered by new technologies. Political parties and elite civil servants have since the 1950s drawn upon this “mystique” in order to formulate diverse, and often conflicting, visions of modernity and social change, as

well as the desired role of the state therein.

The “mystique” is a very old phenomenon that has taken historically variable forms. For example, cultural historian Pascal Ory finds such spectacular presentations of science and technology in the service of French Republican values of meritocracy, secularism, and democracy in the 1930s (Ory 1991). Ory argues that such efforts should be understood in relation to other simultaneous attempts of ritual unification of the nation – and in particular, in contrast to Stalin’s agricultural collectivization, or Nazi rallies (Ory 1991:204). Misa et al situate the constitution of the same set of understandings of technology in the US somewhat earlier—roughly from the 1880s to the 1920. While this work suggests that spectacular presentation is not unique to France, the terms of this presentation might be so. In France, not only the “modern” was staged in this manner, but so was its putative opposite, “tradition”: the same general principle is visible in spectacular representation of folklore and regional diversity staged for the 1938 Paris World's Fair (Peer 1998).

...

State-sponsored development of cutting-edge technology (and the promise of positive social change) has in the past also served as a way of promoting national influence in the world. Invocations of national standing or grandeur are recurrent among French politicians since the Ancien Régime (Gildea 1994). This “myth of national greatness” has persisted in the face of military defeats and diminishing diplomatic clout in world politics (Gildea 1994: 112). National standing has been displayed and maintained in a variety of ways: through building museums or erecting

commemorative public statues, for example, but also by developing innovative technologies (Duncan 1995; Nora 1998; Cohen 1992). For example, historian Gabrielle Hecht (1998) has documented how technology was understood as a key site for the construction of national identity in the development of nuclear technology in postwar France. Hecht's account of struggles across a range of economic and political interests involved with the deployment of nuclear technology nevertheless suggests a broadly shared assumption that technology was key to securing a suitably dignified future for the nation. Based on this assumption, various actors came to see nuclear technology as “both French and indispensable to Frenchness” (Hecht 1998: 5). The same conviction that technology was key to national grandeur effectively brought together communists and industrialists in the common task of rebuilding the aviation industry in post-war France (Chapman 1991).

This literature suggests that the cultural meanings given to cutting-edge technology in France include a sense of global order and France's rank within it. There is a historical and political legacy to this notion: technological independence has long been a key element in French claims to international standing. Charles de Gaulle and his political heirs, for example, have privileged technological prowess, demonstrated through innovations in nuclear technology and transportation, as an indicator of French national grandeur and as a pathway for redefining the nation in the wake of WWII's humiliations (Gilpin 1968; cf. Chapman 1999). For my purposes it is especially important that beyond any particular political ideology, thinking about social change in France has at least since the 1920s been formulated through a comparison to the

“American” referent. For example, right-wing French intellectuals in the 1930s claimed that the US was promoting a model of the future that was threatening to French society (cf. Peer 1998; Kuisel 1993). For instance, the French ideal of national prosperity at the time was “gradual, balanced growth, with all branches of the economy steadily advancing together, without the big eclipsing the small or the city emptying the countryside” (Kuisel 1981: 29-30). Shanny Peer argues that this ideal of balanced modernity led the organizers of the 1937 Paris World's Fair to display a specifically French—morally and aesthetically superior—version of modernity through setting up exhibits of regional diversity, rural life, and folklore alongside recent household appliances and achievements in technology.

While these French claims to modernity were defined in opposition to modes of industrialization, concentration and homogenization associated with American modernity, Peer argues, they were also sophisticated and effective French attempts at laying claim to and promoting social change. Furthermore, some commentators found such claims to modernity to be esthetically superior to the American model (because grounded in history and traditions), while others considered them to promote morally superior social arrangements. Invocations of “America” became even more pervasive in French reflections on post-war social changes, when the French sought ways “to possess American prosperity and economic power and yet to avoid what appeared to be the accompanying social and cultural costs” (Kuisel 1993: 3). By the 1980s, other themes, such as “immigration,” “Japanese business” and “European community” started to dominate French formulations of cultural difference and national identity,

although claims about inexorably different social values from the US persist as an important source of French specificity (Kuisel 1993, 2004). The diversification of referents, however, does not rule out the pertinence and presence in contemporary French society of promoting alternative, and possibly even distinctly French forms of modernity and technical prowess—often explicitly opposed to a putatively American model—that are claimed to be at least as sophisticated and effective, but grounded in morally/aesthetically superior engagements.

...

Some analysts have argued that in the context of post-Cold War geopolitics and wars against terrorism, both dominated by the US, France remains in the quandary of finding the means to preserve its sense of national identity as a medium-sized international power (Bozo 1999; Kuisel 2004). Yet the thesis that cutting-edge technology is a way of promoting national standing and influence in the world seems elusive in the literature on software and digital networks. While communications research on software has generally emphasized software as part of digital infrastructure that enables flows of information and communications, a brief account of the historical development of French telecommunications can clarify why thinking about software in France might rely on culturally specific ideas about the nation, the state involvement and the international context.

Indeed, communications technologies provide a convenient focus for examining how state-directed technology development influenced understandings of social change in France. In 1879 the communication infrastructure came under state

jurisdiction within the newly-created Ministry of Posts and Telegraph (which also included telephony beginning in 1889), a move consistent with the nationalization of communications networks in all other economically powerful European countries during the same period (Bertho-Lavenir 1988). In France, civil servants working for the Ministry were trained in *grandes écoles*—prestigious state-sponsored institutions of higher education. Despite the creation of this Ministry and the broad consolidation of a communications infrastructure in the late 19th century (Weber 1976), a series of financial and manufacturing crises, as well as two world wars, assured that through most of the twentieth century “despite the ambitions and the technical ability of a few engineers, the French telephone network remained mediocre: The number of subscribers, and above all the quality of service remained low” (Bertho-Lavenir 1988: 167).

Areas of major research investment were determined by state planners in research according to their projected economic and military importance. Centralized planning documents elaborated by the national government during the 1950s focused on developing infrastructure and capacities for scientific research. Thus plans for national industrial development emphasized—and financed most generously—defense, nuclear, aeronautical and space industries, while electronics and telecommunications were only of secondary importance (with the exception of the field of scientific computing). It was only in the Fifth Plan of 1965 that telecommunications infrastructure received significant attention from policymakers (Thatcher 1999). By 1970, there were less than 8 phone lines per 100 inhabitants in

France, as compared to 15.3 in Great Britain (Caron 1999: 763). Moreover, data on consumption preferences indicate that the French did not consider the telephone to be necessary for sociability or to be a symbol of a modern consumer lifestyle: “In 1968 an opinion poll asked the French what they thought the most important thing to possess was: The telephone came in sixth and practically last, just before the record player, but far behind the car and domestic electrical appliances” (Bertho-Lavenir 1988: 168). This was in stark contrast to aggressively-advertised consumption of other technologies such as cars, which some commentators interpreted as icons of the emergent middle-class consumer lifestyle (Barthes 1957; cf. Ross 1995).

This situation dramatically changed with improvements in the network that started in 1969 and led to a huge increase in subscribers from 1975 on, as well as a commitment to realizing truly nationwide telephone service that also emerged in the mid-1970s among telecommunications executives. Telecommunications then for the first time came to be associated with social change, in conjunction with then widely-read sociological and political accounts of France as a “stalemate society” (Crozier 1973; cf. Kuisel 1993). These studies argued that the post-war state-directed approaches to modernization doomed France in a US-led, rapidly changing, world. Despite very rapid economic development in post-war decades, Valéry Giscard-d’Estaing was elected President in 1974 on a platform of modernizing French society to “catch up” with other industrialized nations. One of his flagship projects entailed “computerizing” French society. This endeavor, intended to bring France squarely to the forefront of the post-industrial world, envisaged a state-funded industrial

restructuring that would both foster the development of a telecommunications infrastructure and aid French manufacturers of electronic equipment (Thatcher 1999).

This industrial project was ideologically bolstered in a 1978 French government-commissioned report on the social significance of electronic networks. The report, written by two high civil servants, asserted the imminent arrival of “a society based on communication and participation” that would require “initiative and adaptability” (Nora and Minc 1980: 6). The development of these qualities, Nora and Minc argued, required a “deliberate policy of social change” by the French state that would “favor,” rather than “impose,” computerization (Nora and Minc 1980 [1978]: 6). Such a policy would in turn help decentralize French society and usher in political change. The report also introduced into French the neologism “telematics” (*télematique*), referring to a combination of computing and communications. The term “telematics” carried political resonance comparable to that of the “information highway” in the US in a sense that they both attempted to turn digital networks into a societal project (*projet de société*).¹² Envisaging spectacular scenarios of societal transformations that might be ushered in by telematics, and linking computerization to France's sovereignty in the face of US domination in energy and telecommunications, Nora and Minc's 1978 report was a best-seller. For the first time, telecommunications and data processing became the topic of broad public

¹² The term *projet de société*, that I translate as “societal project,” refers to the notion of envisaging scenarios of societal transformations that might be ushered by certain development. A related term, *débat de société* or “societal debate,” refers to inciting broad public debate about social ramifications of particular choices and trajectories of change.

interest and debate about societal choices.

For the majority of French, the new field of telematics first became familiar in the form of the Minitel, first introduced to French consumers in 1980. An innovative means for carrying digital information to offices and homes through TV and phone lines,¹³ Minitel had a futuristic small TV-like screen and a simple keyboard with a few menu keys (see Figure 1). It was connected to the phone line, and the first three minutes of connection were free. After that, connection was charged per minute. People used it mostly for looking up addresses and phone numbers, banking, mail-order, transportation and weather alerts, and entertainment such as chatting.



Figure 1. *Minitel 1, introduced in 1982. Source: Wikipedia. “Minitel.” 2007. May 4 2007. <http://fr.wikipedia.org/wiki/Minitel>*

France Telecom distributed Minitels for free to phone subscribers as a replacement for phonebooks. This choice, somewhat paradoxically, amounted to a state-led creation of an electronic commercial market: the state attempted to develop

¹³ The service was in fact called Télétel. Minitel was the name of the terminal through which people connected to the network of Télétel services and was the term most commonly used in France for this service. I am simplifying here by calling the whole system Minitel.

new infrastructure for digital networks along with a pool of consumers and service providers that would make the Minitel network profitable (Trumbull 2004).¹⁴ As a result, France was “the first country in the world to create a functioning national digital network” and online market in services as well as a body of engineers who were trained with Minitel and became highly skilled in digital technologies (Trumbull 2004:64).

The state administrators successfully married this *grand projet* to commercial exigences. In the early 1990s, Minitel's business model of electronic commerce was perceived as more straightforward than the internet one: it benefited France Telecom, the semi-public company that provided infrastructure, as well as the companies that advertised their services on this digital network and received redistributed profits. In 1997 it was still possible to read that “the Minitel is everything the Internet needs to become [...] The hardware costs almost nothing, the system is safe and reliable for transactions, it guarantees a high degree of privacy, is amazingly simple to use, and generates revenues for both its operators and the merchants that venture into it.”¹⁵ In

14 The French state indeed controlled the telecommunication network, the production and distribution of terminals, and the telephone book service. However, the telecommunications network was decentralized (unlike British and German Videotex systems developed at that time) and all other services beyond the phone book were “a complete market solution” (Mayntz and Schneider 1988: 275). The contours of state intervention in this project, then differed greatly from the often imagined total top-down control.

15 Bruno Giussani. “France Gets Along with Pre-Web Technology.” Sep 23, 1997. Feb 25, 2007. The New York Times.

<http://www.nytimes.com/library/cyber/euro/092397euro.html>. Doubts about the commercial dimensions of the internet were widely spread in the US at that time: for example, anthropologist George Marcus, writing about new media, also considered

1999, there were about 20,000 services available via Minitel (Livia 1999).

The Minitel project failed internationally, although not for the lack of trying. Minitel's business model relied on a national standard imposed by the state and preferential treatment of national companies. This establishment of uniform technical standards was key to Minitel's success for private commerce as well as to its distinctly French identification. Minitel was remarkably successful in France: A 1995 survey by OECD indicated that about 7.5 million Minutels were in use, mainly in private homes; in contrast, only 400,000 microcomputers were in use, mostly in offices (Thatcher 1999:293; Berne 1997:101). At that time, there were about 32 million phone lines installed in France, corresponding to about 56 percent of households (Thatcher 1999:269). The French state actively promoted Minitel outside of France, but never succeeded in getting it adopted elsewhere. By 1987, more than 90% of the Minutels in the world were installed in France (Rincé 1990:93).

Generally accepted explanations for the failure of the Minitel abroad include the “multiplicity of competing standards, and the national industrial policies of most nations” that prevented both the international diffusion of Minitel and the imposition of videotex standards on which Minitel is based (Berne 1997:112). Thus, on the one hand, state-led development of a digital infrastructure and an online market had resulted in formidable technological innovation. On the other hand, efforts to export Minitel to other countries were faced with insurmountable difficulties. A similar failure awaited the 1970s initiative to internationalize the 1960s attempt at creating

internet to be an incredibly difficult sphere to commercialize (Marcus 1996:9).

national computer industry (*Plan calcul*), unsuccessful even within France (Cohen and Bauer 1985; Zysman 1977).

Free software presents a significant departure from the efforts associated with both Minitel and Plan calcul, both of which were developed and implemented in top-down fashion by the French state administration. In contrast, free software advocates promote global software, and they are organized through voluntary associations. My study of the themes that appear in FS advocacy, nevertheless, traces some broad continuities. FS advocates mobilize familiar themes of technological innovation, cooperation and the common good, in order to construct civic significance from software within a transformed institutional, economic, and (post-Cold War) political context. This study investigates ethnographically how the mobilization of these familiar themes allows FS advocates to make sense both of digital networks and of reconfigurations of contemporary French society.

Common good, cooperation, and voluntary associations in France

Reflections about the common good (*bien commun*) in France build on an ample heritage of debates about the jurisdiction of the state in administering collective well-being. “Common good” is a part of a constellation of distinct but similar terms such as “public utility,” “public good” and “common benefit” with origins in the Roman Law and Medieval Christian doctrines of common humanity (Guéry 1992). Historian Alain Guéry (1992) argues that, by the late Middle Ages, these terms already highlight the (central) place of the state in French conceptions of their society. With

the consolidation of monarchical state, common good appears as a rationale in state administration of justice, taxes, and public offices (*fonction publique*). In the Revolutionary period, it is the notion of public good, which draws its roots in Enlightenment debates and forms of sociability (Ihl 2002), that became indissociable from the state legitimacy: in 1790 the King's properties became properties of the nation, which is “a collective owner exclusively represented by the state... from now on, the public domain is that which everyone can access thanks to the newly established state control” (Ihl 2002: 231). While this specifically French consensus posited the state as a central social actor that provides the means for stewarding public good, it also obscured the broader scope of common good (notably in its religious connotations). At the turn of the twentieth century, the currency of “general interest,” in conjunction with theories of social solidarity and cohesion, further circumscribed the meanings of public good (Rosanvallon 2007; cf. Durkheim 1984 [1893]).

French administrative law defines public good as inalienable, stewarded by the state in the name of the nation, for the benefit of all citizens (Chapus 1992). The principled separation, or in some cases, opposition, of public and private sectors is at the root of the specifically French concept of *service public* (Ihl 2002). Historian Vida Azimi (2002) has proposed to translate the term *service public* in English as a combination of “public administration” and “public utilities.” *Service public* has been encoded in the Constitution starting in 1826 with the objective to provide public service and assure the general good. It exercises activities in the domains of defense, justice, foreign affairs, police, transportation, agriculture, education, and health care.

Service public is a large-scale administration characterized by meritocratic access to employment (which is assured through competitive entrance examinations) and equal working conditions of public servants. However, many invocations of public good refer to a broader idea of collectivity rather than merely its institutional manifestation through *service public*. For this reason, when the usage of the term public good has broader connotations than public service, in the rest of this section I will call it “common good” or “collective good.”

These legal and political specificities have made collective good one of the central elements of French political and social life. In her exploration of the social significance of farming in France, anthropologist Susan Carol Rogers has noted that in France, “making the claim that something is necessary to general social health amounts to a demand that it be made available to all by the collectivity and provides justification for subsidies or full coverage from the public treasury, as well as management by public authorities operating in the collective interest” (Rogers 2000:64). Moreover, Rogers argues, broad mobilization is in contemporary France achieved through appeals to the collective good in order to counter privatization of many public services under the pressure from the EU. In some instances, this interpretation of the public good and collective bonds (*liens sociaux*) is understood to stand in opposition to private interests, and the state is proclaimed to be the (sole) guarantor that would keep “particularisms” from endangering the common good. Along these lines, my Chapter 2 examines how similar claims about the collective good and the state stewardship are extended onto the internet, and specifically to the

practices of copying and distributing digital materials.

Although the differentiation between public and private domains has at times been understood in terms of an opposition, in practice there are many overlapping arrangements. For example, in spite of political limitation of religious expression in French public spaces, a priori ritual spaces such as the Paris Mosque and the Muslim Cemetery in Bobigny have been built and controlled by the French state (Bowen 2007). Furthermore, anthropologist John Bowen has noted an ingenious system of nesting private spaces within public ones that accommodates the confessional symbols in an a priori public space. A municipal administrator (i.e. a public servant) elaborated to Bowen why the presence of a confessional sign in a public space did not destabilize the conceptual separation of the public and the private: “I have noticed in [...] cemeteries that often there is a large cross in the center but when I look closer it is always on a grave, that of a priest usually, that they have arranged to be right in the center of the graveyard” (Bowen 2007: 47).

The actual contours of the state management of public good also highlight the flexible nature of the conceptual separation of public good and private interests. The ideas of who can best manage collective interests and redistribute the resulting benefits have varied across historical periods. For example, historian Patrick Fridenson (2002) has argued that nationalizations in France have been irregular measures and are inadequately interpreted as emanations of a consistent political ideology: for example, in addition to properties of the Church and of emigrants, the revolutionary nationalizations took over most royal companies as well as the arms industry. The 19th

century nationalizations have included companies producing matches, railroads, and phone infrastructure; however, many other 19th century projects of nationalization were abandoned. During the World War I, the state nationalizations strengthened chemical industry and provided cheap shoes, clothes and bicycles. The biggest wave of nationalizations came after the World War II, when coal, cars, electricity, natural gas, airplane industry, Parisian transportation, and insurance companies were nationalized. According to Fridenson (2002), such a massive expansion of the state domain, that had already started with the experiments in cooperative management in the 1930s, was further strengthened by the financial crisis of private sector and its politically compromising collaborations during the Occupation (cf. Kuisel 1981). Another wave of nationalizations followed the victory of the Socialist-led “Coalition of the Left” in 1981. This wave was politically motivated and started to recede as soon as the Right-wing parties took over the government (and continued this tendency to the present).

Furthermore, the act of nationalization did not lead to pursuing consistent policies in nationalized enterprises. Debates among institutional analysts about the relationship of state stewardship to private initiatives offer some evidence in support of this point. One influential perspective interprets legal and political separation of public and private interests as indicative of state power in France. This work approaches the state as a cohesive executive, legislative and judiciary unit, insulated from the demands of other social actors (Hall 1986). Policy-makers in such a system are trained by the state to represent and implement the public interest and capable of implementing its policies, even over objections of key social groups. Even in periods

of dramatic decline of state intervention, such as at the turn of the twenty-first century, the state has kept the monopoly on public interest in the domain of advanced technology through hybrid networks that organize research, production, and public demand for specific technological projects (Cohen 1992; Trumbull 2004). Such strategies of development can be variously interpreted as attempts to increase the grandeur of the state, to serve the consumer, or to serve corporate interests of national industries (Cohen 1992).

Others argue that the centralized French state administration is inherently “permeable” and point to its “clientelistic” relationships with private groups (Suleiman 1987; Schmidt 1996). For example, Vivien Schmidt (1996) has argued that post-war state directives have been arranged through informal state-firm arrangements rather than unilaterally imposed. For this reason, Schmidt argues, the agendas of nationalized firms have consistently reflected private industrial interests. In the similar general optics, Ezra Suleiman (1987) studied the *notaires* in France as an example of an ambiguous group, “publicly licensed and under some state control while being allowed to operate within a private, commercial context” (7). Such an arrangement, Suleiman argues, offers *notaires* (and other corporate groups) a double benefit of state protection from competition and the use of state legitimacy in their commercial engagement (Suleiman 1987: 56). These examples further suggest that ambiguous contours of the purported separation between collective good and private interests are pertinent to the actually existing political and legal life in France.

Historians Alain Chatriot and Claire Lemerrier (2002) offer a broader

perspective on this point: they argue that the French state has consistently relied on “intermediary institutions” to furnish local and sectoral expertise necessary for governance. Chambers of commerce, union cells, trade tribunals, associations, and various groups fulfill this consultative mission: “some of them turn into pressure groups, some of them collect fees, some of them are main local interlocutors regarding public works; some of them, knowledgeable about industrial work, were very influential in development of [nineteenth-century] social policies concerning child work and the length of workday” (Chatriot and Lemerrier 2002: 692). The diversity of “intermediary institutions” was also permanently in tension with the forms of organizing common well-being independent of the state. This is emphasized in the work of labor historians on mutual aid societies and other workers' organizations. For example, William Sewell (1980) in his study of re-appearance of corporate metaphors and organizing models among French workers after the Revolution emphasizes the flexible nature of the corporate language: Sewell argues that “the corporate idiom... was a complex and flexible set of practices, rituals and symbols—and of sentiments and commitments created by and given form in [them]—that could be rearranged, modified, or transformed to suit the requirements of different social groups at different times” (59). More specifically, Sewell argues, this evocative but malleable corporate idiom was mobilized by workers in 1848 to create class solidarity.

Mutualisation, which I translate as “cooperative sharing” in the rest of the dissertation, is another such flexible idiom that points to the intermediary bodies in balancing the public and private interests in France. Historical research on mutual aid

societies points to the key role of mutualist practices and the ideology of solidarity in “the growth in public acceptance of national social solidarity which frames the welfare system in France today” (Weintrob 2005: 192). The casual contemporary meaning of *mutualisme*, from which *mutualisation* is derived, is about supplementary insurance (Dreyfus 2001); *la mutualité* supplements the national health insurance for employees of modest income (Dessertine and Faure 1999). However, *mutualisation* has acquired a broader currency in relation to digital networks. French free software advocates use the term *mutualisation* to refer to an act of sharing with strong expectations of reciprocity. (*Mise en commun* is another frequently used term with the same meaning). However, other actors, such as state administrators, invoke *mutualisation* in relation to e-government projects that aim to provide *service public* online and encourage the development of internet literacy in the broad French population. They have reinterpreted *mutualisation* so as to re-affirm the importance of *service public* in providing and managing collective resources for all citizens. Their invocations of *mutualisation* thus destabilize the apparently rigid boundaries between private initiatives and the public good, reconfiguring the state as an actor that manages private initiative in order to strengthen collective interest.

My study centers on yet another set of intermediary bodies, called voluntary associations (*associations*). The literature on voluntary associations in France has been largely influenced by Alexis de Tocqueville's mid-nineteenth century comparative analysis of French and US democracies. He argued that voluntary associations, as he observed them in the US, were the bedrock of liberal democracy:

“An association for political, commercial, or manufacturing purposes, or even for those of science and literature, is a powerful and enlightened member of the community, which cannot be disposed of at pleasure, or oppressed without remonstrance; and which, by defending its own rights against the encroachments of the government, saves the common liberties of the country” (Tocqueville 1845: II.4.7, cited in Green forthcoming: n.d.). In France, unlike in the US, the Revolution created “an immense centralized power that attracted and ate away all the domains of authority and influence that were previously dispersed in a mass of secondary powers, orders, classes, professions, families and individuals, scattered throughout the social body” (Tocqueville 1967: 66). He attributed the lack of associations in France to the hold of centralized and overpowering state on the society.

Various legal measures since the Revolution have, indeed, sought to preserve state control over voluntary associations. A commonly cited genealogy of repression starts with the 1791 law which officially abolished corporations, then addresses the restriction to gatherings in the First Empire, draconian measures of the Second Empire, and the Vichy regime “that cemented the idea that corporations are incompatible with the Republic” (Chatriot and Lemerrier 2002: 691). The freedom of association in France has only been recognized as a constitutional right in 1971, and even then the state has kept the right to dissolve combative and paramilitary groups, as well as any other associations whose objectives are considered to be illegal or threatening the integrity of national territory or the *républicain* government (Debbash & Bourdon 2002:50-51). In 1936, the state banned certain far-right militant groups; in

the 1970s, this measure was also used against racists (Rebérioux 2002). Only in 1981 has the right to lead an association in France been extended to foreigners.

Furthermore, the activities of voluntary associations are limited to non-overtly political, non-overtly religious activities, and not-overt division of material benefits. The 1901 law defines and highly regulates voluntary associations: in order to have legal standing, an association is required to register its name, statutes and objectives with the Prefecture and in the state register *Journal Officiel*. It must also have an administrative board (e.g. *Conseil d'Administration* a.k.a. *CA*) and hold an annual meeting (*Assemblée Générale*) at which certain reports (treasury, past activities etc.) are presented to the membership. The law also limits private donations to the mission of advancing general interest, and more generally enables “contractual creation of spaces in which people gather in order to act and cultivate a sensibility that builds upon common links (*l'entre-soi*) oriented towards encounter with the others” (Rioux 1999: 858). Partly due to such requirements, voluntary associations in France generally make claims to expressing the collective interest, rather than to promoting particular interests (Alapuro 2005; cf. Barthélémy 2000).

The state regulation and support of voluntary associations has since 1983 been further institutionalized through a National Council of Associations (*CNVA, Conseil national de la vie associative*), accountable to the Prime Minister. The CNVA conducts surveys, compiles annual reviews of the development of associative life, and serves as the main associative interlocutor for state policies concerning voluntary associations (Conseil National de la Vie Associative 2007). Since 1985, some forms

of public financing, such as those in the National Fund for the Development of Associative Life (*Fonds national pour le développement de la vie associative*) can be disbursed only through a voluntary association.

Social scientists have repeatedly drawn on the dominant presence of the state and the revolutionary denial of intermediary bodies to illuminate peculiarly French patterns of associational life. An influential mid-twentieth-century analysis by sociologist Arnold Rose held that most French voluntary associations in the 1920-40s were oriented towards influencing governmental policy-making, relating this trait to the specific institutional context (especially, state regulation) of voluntary associations (Rose 1954). A recent comparative sociological study points to the French statist political form and a lack of intermediary corporate bodies in order to explain why new social movements (e.g. associations concerning women's rights, the environment, peace, and international development) are weaker in France than in other European countries (Schofer and Fourcade-Gourinchas 2001).

Historical research on voluntary associations in France has in recent years contradicted these findings. This research points to a substantial presence of workers' unions, civic associations and other forms of sociability in France in much of the nineteenth century and certainly throughout the twentieth. Political historian Pierre Rosanvallon argues that, as early as the 1820s, numerous French politicians and commentators started noting “the spirit of association” active in France (Rosanvallon 2007: 99). This term was used in three ways: it sometimes referred to a mode of sociability necessary for the well-being of society; sometimes to alternative, often

utopian, economic and social organizations; and, most recently, as a symbol of extending and implementing individual freedoms – notably, the aspiration to meet without government oversight and organize collectively (Rosanvallon 2007: 100). This scholarship argues that the 1901 law was a belated recognition, rather than a catalyst, of burgeoning associative life in France. For example, political historian Philip Nord emphasizes the importance of politicized sociability in daily life for understanding democratic developments in the political sphere in the late nineteenth century. He argues that the rise of new republican and democratic elites during the Second Empire, along with their rehearsal of democratic practices and associational activism, made possible two main conditions for a vibrant civic sociability, notably “dense and intertwined networks of communication and sociability [and] an informed citizenry, neither deferential nor defiant, which is committed to making public institutions work” (Nord 1995:7; cf. Habermas 1989). Similar dynamics might have been the case with the 1981 law, as suggested in the work by immigration historian Nancy Green (forthcoming), who argues that a large number of immigrant groups in France—de facto voluntary associations—preceded the 1981 law that allowed immigrants to form associations.

Research on daily forms of sociability has emphasized the multifunctional nature of voluntary associations: Maurice Agulhon argues that 19th century voluntary associations acted as vehicles for democratic change (in opposition to aristocratic forms of sociability such as salons), acting, for example, to integrate rural areas into national public life (Agulhon 1977; Agulhon and Bodiguel 1981). Ethnographic

studies have also highlighted the multidimensionality of voluntary associations as they mediate across multiple conceptual and institutional arenas. In some cases associations allow previously excluded people to claim locally meaningful forms of recognition (Rogers 1991), while in other cases they draw together political and financial support on the regional and national level in ways that sometimes challenge and sometimes reinforce local conceptions, whether in the fields of theater or AIDS activism (Ingram 1996; Poulin-Deltour 2002).

In connection with the centennial of the 1901 law, social scientists (Andrieu, Le Béguec et al. 2001; Chanial 2001) have joined public intellectuals and policy-makers (Belorgey 2000; Bloch-Lainé 1999; Sue 2001; Rebelle and Swiatly 1999) in promoting the understanding of voluntary associations as a privileged site for strengthening common links among French citizenry. For example, in a synthetic review of historical, legal, sociological and political context pertinent to voluntary associations in France, jurist Jean-Michel Belorgey lauded the 1901 law as “a historical compromise” that engendered “the birth of social policies, a theory of *service public* [and] the consolidation of political democracy [by] encouraging communication between the individual and the collective, as well as engagement in the service of general interest of energies that had been unnecessarily hampered until then” (Belorgey 2000: 21). While during the 1990s, “the number of associations formed reached unprecedented levels with approximately 60,000 new associations being created each year” (Waters 2003: 4), the largest number of these was oriented toward cultural rather than political activities (Duyvendak 1995). However, activist

associations have always been in minority and their proportion in overall number of French associations has been diminishing since the 1960s (Galland and Lemel 1998; cf. Ion 1997). Most likely associative members are professionals and other middle-class groups. Membership in associations also increases following the retirement (Galland and Lemel 1998: 108). In other words, attention to actual associative life may contribute to understanding the reconfigured forms and meanings of civic activity (Perrineau 1994; Tartakowsky 2001).

My literature review in this section has emphasized the malleability of the idioms of common good, cooperative sharing, and voluntary association. Internet has in the past fifteen years become a prominent theme in debates about changes in French politics as well as daily life (Beaudouin and Velkovska 2001; Blondeau 2007). My study centers on associations, mediating between these spheres, in order to contribute to this debate. Furthermore, my study also offers an in-depth look at how digital networks figure in activists' imaginations of the changing cultural and political landscape and of possibilities for broad public mobilization.

European integration and France in the European Union

The project of European unification has significantly expanded in scope since the first post-war treaties, which were concerned with the defense and the establishment of the Council of Europe. Subsequent treaties regulated the cooperative production of coal and steel, atomic energy, and trade. Until well into the 1980s, European decision-makers were mostly concerned with developing a free-trade zone

managed by high-level diplomatic treaties and trade agreements. The European entity per se was not of major concern for most ordinary citizens, whose support for European integration was “diffuse [and] coupled with public deference to elite choices” (Harmsen and Spiering 2004: 25). What anthropologist Cris Shore labels as “neo-functionalist theories of integration,” dominant among EU policymakers until the 1970s, assumed that economic integration would naturally lead to political integration: “‘building Europe’ was perceived primarily in terms of dismantling barriers to the free movement of capital, goods, services and labour, and this was a task for economists and lawyers” (Shore 2000: 42). Accordingly, discussions about Europe in France, as in other European countries, were “dominated by technical discourse and specialists from interest groups, with whom the government[s] dealt directly” in negotiating the scope and form of liberalization of industrial trade in the 1950s, agricultural subsidies starting in the 1960s, monetary union from the late 1970s, and a single market in the 1980s (Moravcsik 1999: 116). This expert-dominated European integration in many ways went hand-in-hand with, rather than challenged, convenient ways of conceptualizing national influence. For example, political scientist Andrew Moravcsik argues that French government was committed to Europe as a means to achieve independence and bargaining power in relation to the US, and to acquire advantage over other emergent economic competitors (Moravcsik 1999).

The sequence of names given to the project of European unification illustrates how EU policymakers' priorities shifted throughout the years: from the “European Coal and Steel Community,” “European Economic Community,” “European

Communities,” “European Community,” to the present “European Union.” Among other developments, the European Commission has in the 1970s started to promulgate “ambiguous and contested terms like 'Europe's heritage,' 'the European identity' and 'European civilization' [that] were reified into major organizing concepts in the discourse on European construction” in order to secure popular support for the project of European institutional unification (Shore 2006: 13). The 1992 referendum on the Maastricht Treaty was a turning point in two respects. First, the Treaty inaugurated a EU-led effort to create cultural and political unity, and simultaneously to foster the idea of European belonging and citizenship. Second, the Treaty was rejected by the Danish voters and nearly rejected by the French population. The consistently low voter turnout in elections for the European Parliament and especially the difficult ratification of the Maastricht Treaty further convinced the EU Parliament, the Commission, and the Council of the importance of efforts to articulate a European identity and to engineer, through cultural policies, “a common sense of heritage, history, and belonging” (Shore 2006: 10). Ensuing EU cultural policy has ranged from creating an official European Union iconography (e.g. flag, anthem) and documents (e.g. European passport), student exchange programs, audiovisual media (Morley and Robins 1995), to funding social science research on the identity construction in the European Union (Culpat 2007; cf. Shore and Black 1993) and the role of technological infrastructures therein (Misa and Schot 2005).

Communications scholars such as David Morley and Kevin Robins argue that EU policymakers' attempts to foster a European identity were thoroughly entangled

with their economic and geopolitical ambitions. These scholars claim, for example, that one of the principal questions at stake in the development of pan-European audiovisual policies was, “how Europe is to come to terms with the forces of globalization that are reshaping the contemporary world system” (Morley and Robins 1995: 19). In other words, by creating a putatively “European audiovisual space,” EU policymakers aimed to enable European media corporations to compete with the Japanese and American industries (Schlesinger 1994). This required externally-oriented measures (such as importation quotas) as well as the internal restructuring of the market in order to foster the development of media companies and the consumer base for European products. These geopolitical ambitions, combined with the global patterns of media restructuring amounted to top-down development of media conglomerations. For example, in his study of EuroNews TV channel, Philip Schlesinger has argued, “inasmuch as a media-sustained, supranational communicative space is emerging because of EU integration, this is class-inflected and predominantly the domain of political and economic elites, not that of a wider European public” (Schlesinger 2002: 36).

Anthropologists have also kept a critical eye on EU attempts to foster certain (reductive) kinds of European identity through cultural policies (Shore 2000). Bellier and Wilson (2000) have discerned three themes around which the EU policies envisage to engender European identity. The first two themes, the “European model of society” and “shared common interest,” develop an internal image of Europe (Bellier and Wilson 2000: 3). As Verena Stolcke (1995) and others have argued, this

attempt at internal reconfiguration of a singular, bounded European identity whitewashes the diversity of contemporary European populations, including migrant and diasporic ones, and promotes “rhetorics of exclusion” (cf. Mandel 1993). The third theme promoted by the EU Commission refers to “European external identity” (Bellier and Wilson 2000: 3). This one is constructed around the perceived threats from “America,” “Islam,” “China,” and other discursive constructions that conflate the EU policymakers' economic and geopolitical ambitions with essentializing discourses about cultural difference. My discussion of debates about software patents in the European Parliament documents further instances in which such simplistic conceptions of identity pervade high-level EU debates.

Anthropologists have also pursued a broad analytic focus on continuous redefining of relations and legitimizing the differences that come to stand for Europe and European identities, in countries looking to join the EU (Gal 1991), those ambivalently in the EU (Darian-Smith 1999), as well as in key sites of European policymaking. This included the “laboratories of European identity” (Bellier 1995) such as the European Parliament (Abélès 1992, 1993, 1996), the European Commission (Belier 1995, 2000; McDonald 1993; Shore 2000), or the European Space Agency (Zabusky 1995, 2000). This work suggests that European identities, or identities that European nationals form in relation to the changes taking place in European societies, are formed and managed on many levels simultaneously, partly “as a strategy of self-representation” (Borneman and Fowler 1997: 489).

Furthermore, in contrast to the instrumental conceptions of European identity

fostered through EU cultural policies, anthropologists have proposed to focus on the processes of Europeanization. Robert Harmsen and Thomas Wilson survey at least eight distinct research orientations that this umbrella term covers in several disciplines; nevertheless, Harmsen and Wilson argue, all these approaches are “concerned with the multidimensional processes of change occurring in contemporary Europe” (Harmsen and Wilson 2000: 20). Europeanization, in their perspective, “raises awareness of the complex environment which both sustains and limits the narrower project of European integration” (24). For example, Thomas Wilson has argued that the processes of European integration were connected or disjointed on different levels: regional, local and national agendas accompany or appropriate EU policies in ways that in some ways run parallel, and in other ways contest, the EU objectives (Wilson 1998, 2000). The focus on Europeanization can, thus, highlight the divergence in the terms of the European integration assumed by the EU policymakers and those that matter among European populations (Bellier and Wilson 2000). Borneman and Fowler (1997) develop a similarly broad framework for understanding Europeanization that encompasses not only contemporary changes but also historical processes of state- and nation-building in Europe. Furthermore, they argue, this framework is applicable to understanding daily practices (e.g. watching sport events) and face-to-face encounters with the people from various parts of Europe (e.g. through tourism), as contemporary instances of Europeanization that are distinct from the European integration but driven, or facilitated, by the organizational and administrative changes that it induces.

...

Bellier and Wilson's (2000) useful analytic distinction among the activities of imagining, building and experiencing Europe might also bring a fresh perspective the growing scholarly interest, in France and in other European countries, on understanding ambivalence among European populations about the EU. The literature centered on the French context, mainly in political sciences, provides important analyses of French ambivalences about limited democratic oversight of European policy-making as well as about transferring parts of national sovereignty in areas such as social policies and labor regulations, and to a lesser extent in economic, monetary and financial policies (Capdevielle 2002; Gueldry 2001; Josselin 2004; Milner 2004). However, it remains unclear in what forms, and to what extent, these concerns are present in the lives of ordinary French citizens.

Indeed, some political scientists have conceptualized the divergences in imaging, building and experiencing Europe around the term “Euroscepticism” (Menno and Spiering 2004). They argue that Euroscepticism in European countries (other than Great Britain) is limited to the far ends of the political spectrum parties, rather than a broad phenomenon. Furthermore, they argue, “much Eurosceptic discourse seeks to vaunt the particular merits of distinctive national practices and values, seen as threatened by a 'homogenizing' European influence” (Menno and Spiering 2004: 33). One such analysis argues that French “strong nationalist sentiments, a long history of nation-state construction and an assimilationist-minded imperialism” are main ingredients of Euroscepticism in the French (far) right (Hainsworth et al. 2004: 37).

French left-voting constituencies emit reservations about the proposed model of European integration also based on some common elements of French political culture, such as “appeals for stronger social regulation, the protection of public services and economic government” (Milner 2004: 64). Anthropologists Douglas Holmes's study of integralism further theorizes radical models for alternative European societies (2000). He interprets the political mobilization around “integralist sensibilities” to be a response to dominant discourses on social modernism and the Catholic social doctrine, which are both foundational elements of technocratic European unification.

Yet, in contrast to the 1992 referendum when only the far-left and far-right parties campaigned against the Treaty, the French campaign about the ECT and 2005 referendum vote made clear that the majority of French population harbored some misgivings about the charted project of further European integration. My dissertation addresses this question empirically through ethnographic research that took place during the campaign around the ECT. Theoretically informed by anthropological understandings that Europeanization is not necessarily limited to the EU institutions and processes of political and economic integration, I argue that the ECT vote as well as the European activist movement against software patents could be interpreted as an instance of Europeanization around the newly emergent common European causes and divisive issues.

FIELD SITES AND RESEARCH METHODS

This study investigates mobilization around global digital networks by focusing on French free software advocates involved in local, national, and/or European frameworks in the early 2000s. FS advocates are men and (in fewer numbers) women from a variety of socioeconomic backgrounds who, motivated by a criticism of technical meanings attached to software and its place in society, self-consciously attempt to make technology into a matter of public scrutiny and raise questions about democratic societal choices pertaining to digital networks. The “sharing publics” in the title of my dissertation refers to the idea that French voluntary associations brought together around FS advocacy facilitate productive tensions in envisaging certain kinds of public engagement that combine technical expertise, global digital networks, and ideas about democratic public engagement. Chris Kelty has examined FS developers and advocates as “publics” that share an interest in technical forms, protocols and practices that allow for their existence (Kelty 2005). Kelty argues that, through public debates about these technical interests, geeks have elaborated a “recursive public,” i.e. a specific vision of politics that is possible thanks to (and, in this way, proper to) the internet. Biella Coleman has foregrounded elements of hacker counterculture and explicit claims of “political agnosticism” in the (related) US-oriented open source movement (Coleman 2004). Oriented by such research, I explore how French FS advocates make their debates about technical standards, software patents, and copyright relevant to other French and European citizens, and more broadly highlight the culturally specific nature of debates about digital networks.

My research grounds salient traits of engagement around free software in advocates' attempts to orient themselves in constant streams of online interactions, organize through voluntary associations, and engage with public debates and political action that have been the purview of intellectual property lawyers, politicians, engineers and policy experts. David Hess has recently turned attention to hybrid phenomena that combine traits of social movements with such activities as “the creation of alternative businesses, household activities, and non-profit organizations” which are not necessarily contentious activities (Hess 2007:4). FS advocates' actions and visions are not consistently alternative but rather (in some important ways) draw on, deploy and reflect broadly held French ideas; however, their practices and conceptual frameworks adhere to Hess' proposed analytic concept of “alternative pathways”.¹⁶

Practices, devices, and discourses that bring advocates together in a sustained manner provide insights into logistics and discursive bases of FS advocacy. I collected data about networks through which FS popularization is organized, cultural and historical frameworks that give significance to the FS advocacy, and practices that endow FS with personal and political importance. Inspired by Miller and Slater's attention to “a series of 'alignments' or 'elective affinities' between Internet use and particular facets of what being Trinidadian was supposed to mean,” this dissertation examines whether there are elective affinities between digital networks and FS

¹⁶ The term “pathway” is suitable because it implies a trajectory which might depend on certain choices, akin to “societal choices” sometimes that French FS advocates sometimes referred to.

advocacy (2003:3).

In France, free software advocacy is organized through voluntary associations, which are much more formally structured and state-regulated than, for instance, in the United States. My time in the field was spent mainly with three voluntary associations, chosen from numerous others to represent a cross-section of engagements and missions among French free software advocates. My own different role and weight in each of these associations provided insights about the nature of social relationships among FS advocates.

Physically, I was mostly located in the Île-de-France region, which includes Paris and its suburbs. While this choice might not be representative of France, it is a key locality of French free software advocacy because most national-level activists live and do daily advocacy activities in this region, which results in frequent face-to-face meetings and other events. Furthermore, in this region many institutions of national relevance are located, such as the French Parliament and the Senate, UNESCO, and the main national technical museum *Cité des Sciences et des Techniques* (with *Carrefour Numérique*, a prime national showcase of *Espaces Publiques Numériques*¹⁷). Since FS advocacy takes place online in addition to face-to-face interactions, my field encompassed both online and offline constitutions of the field (Heath et al. 1999; Hine 2000; Miller and Slater 2000). By grounding my research in a cross-section of voluntary associations promoting free software, I was able to trace ethnographically a significant overlap of online and offline networks.

17 *Espaces Publiques Numériques* are publicly accessible, largely publicly-funded spaces for initiation into computer literacy, located all over French territory.

Ethnographic research was conducted from March to June 2002 and then from January 2004 through August 2005. The first stage involved preliminary research and the establishment of contacts. When I returned to Paris a year and a half later, my preliminary contacts were not only still engaged in advocacy but had become more intensely involved in the associative boards. This facilitated my acceptance in the community. In January 2004, I joined the three voluntary associations selected for comparison and concentrated on formal interviewing of key persons affiliated with them. I also collected basic socio-demographic data about their membership and analyzed their online documents. Eleven months into the fieldwork, I became an intern in one of the two national FS advocacy associations and a member of the board of the local Parisian FS user group. This was a turning point in my research, which allowed me to gain valuable insights into quotidian advocacy work. Throughout a year and a half I documented associative actions, interviewed their members and studied their web sites; systematically tracked collective blogs, wikis, chats and online discussion lists; attended many informal events with activists such as dinners, picnics, movies, construction work, and birthday parties; tracked mass media representations of FS movement and popular discussions about digital networks, software, copyright, patents, public good, “access to culture,” and national heritage.

Because several active groups were working on free software advocacy simultaneously, and because activists in the Parisian region actually met with each other, there was far more face-to-face work than I expected. I spent several hours daily going to various meetings and public events with activists, in addition to interviews

and meetings that I arranged for my research. In several trade fairs and public events I was present at the “Free Software Village” booth sometimes for days in a row. I became known for my assiduousness. Sometimes I would share my audio recordings of public speeches, and twice I was invited to an event specifically in order to make a good-quality audio recording so that the debate could later be transcribed and archived. This face-to-face social networking is characteristic of ways in which free software advocacy is organized in Paris, and it is a key to the kinds of data and insights that I was able to gather.

While anthropologists have emphasized continuous presence among the groups studied and interactive participant observation as key to the ethnographic experience, they have tended to leave open the question of what would constitute a properly ethnographic form of sustained presence online (Hine 2000).¹⁸ As a novice in the field, the first skills that I learnt from my informants concerned my attempts to manage the overwhelming amount of data that I was receiving and the long stretches of time that I spent online. In the beginning I was reluctant to permanently track online interactions, mostly because my informants were ambivalent about anyone continuously capturing data: specifically, they loathed unacknowledged tracking even though they knew it was always a possibility. I always made sure to identify myself by my full name (and eventually my logging server also bore my name). This was not

¹⁸ While Hine emphasizes being an active participant as key to understanding the creation of meaning (2000:23), I argue that, because of specific “lurker-friendly” openness of FS advocacy, being “passive” still constitutes a form of participation. In addition, I tried not to privilege the fewer active participants, focusing rather on multiple ways in which one can be regarded as a “participant.”

unusual, as many other activists held on to their authentic identities in online chats as well as on discussion lists.¹⁹ As I eventually set up a server to permanently log online chats, I discovered that my informants were acquiescent to it, as other people were doing it as well: my logging robot joined other “creatures” online, such as *barbot*, a robot that replied if someone wanted to order anything to drink.²⁰

Turning chat logs into texts was only useful as a search and some statistical analysis database; my most important insights from chats came from my being in person, in front of the screen, tracking several channels and simultaneously interacting with people. This approach has allowed me to understand the playful episodes, notably “passing” as another person. Eventually I learned to track culturally and socially important sites guided by what my informants regarded as useful, particularly important or annoying. When I had time, I would look at the rest that they did not find to be of great interest.

I experimented with a variety of frameworks for meeting advocates. I conducted formal interviews with intensely involved advocates or otherwise prominent persons, but also with former leaders or those who, for various reasons, considered

19 While I announced my project in all online arenas, I did not identify myself permanently as an anthropologist. Most often people remembered me either through my name or through meeting me in person; and at least one occasion someone was reminded of “who I was” by referring to an unidentified photo of me online. Although I was offline at the moment, I found out about this specific event and about the existence of that photo by looking at IRC logs of the channel, which were publicly accessible.

20 In this interaction, *barbot* offers to *abec0* a coffee from *cvjetic*:

<cvjetic> !barbot un café pour abec0!

<barbot> Et un café pour abec0! !

themselves at odds with the current thrust of advocacy. Most of my interviewees were male. Interviews allowed me to ascertain what kinds of accounts could be obtained from a formal frame in otherwise more informal relationships. My interview questions, broadly covering similar topics, were adjusted for each interviewee by researching traces of a person's involvement in FS advocacy online. My interviewees often talked about what they wanted regardless of what I asked them; the interviews mostly lasted about 2-3 hours. On several occasions, especially toward the beginning of my fieldwork, interviews acted as a formal introduction to further daily contact.

My regular presence gave me a certain weight in this world, testifying to the scale of the community and to the extent of my own involvement. Within a few months of my fieldwork I had gotten to know and be known by almost all activists in the Paris area, although that did take considerable full-time effort. Moreover, I knew and was known by most people that I encountered on-line, suggesting that online participation was to a considerable degree structured by associational membership and face-to-face networking. Even when people “passed” on IRC as another person, they “passed” as someone familiar.²¹ Most often, for activists who lived outside of Île-de-France, I would first encounter a person on chat, a discussion list, or someone else would mention the person, then at some point I would meet them in person at a conference or convention, and after that we would continue meeting mostly online and occasionally in person. This might be in general true for those French free software

²¹ Appendix B presents a joking episode of “passing” as a female free software advocate, a former president of the association who used to have an account on one of the association's servers.

activists involved at the national level. Other activists, who were not actively involved in national associations or were not living in Paris region, would know fellow members of local users' associations and would see them more often. They would meet activists from other regions in person at least once or twice a year at large conventions: one of them is a three day salon Solutions GNU/Linux, that takes place in February in Paris, and another one is the Libre Software Meeting, which takes place for five days in July (time of summer vacations), in a different city each year.

The questions about the kind of commitment that I had towards associative projects, and the kind of project that I was pursuing through my participation in their activities, became more prominent as I continued to attend all public events and all membership meetings, track anything related to free software in media, and became friends with a number of activists. My decisions to become a more active participant, whether it meant joining the Administrative Council of a users' association, or doing an internship with an activist association, provided me with significant insights from a participant's perspective. At the same time, my informants found various ways to draw me in while furthering their own agendas. Three ways in particular strike me as significant in this respect: First, my questionnaire about collaborations among voluntary associations and my status as a researcher were invoked in the subsequent debates about the desirability of an overarching structure that would “federate” efforts of all French free software associations. On another occasion, an informant asked me to forward controversial information on another association's mailing list, believing that nobody would criticize me because of my status as a young woman and

newcomer. Finally, my commitment of time and effort was on one occasion invoked as a model of a sustained research-related involvement in free software (and implicitly used to characterize another researcher's involvement as not serious enough).

Aside from data generated by these relationships, my research encompasses rich collections of documents that advocacy associations have made available online: meeting minutes, associative digests and reports, surveys, photos and audio-visual recordings of FS-related conferences and public events, academic studies, and thousands of other internet documents.²² Abundant production of “native” documents was a great help, informing my understanding, interactions with activists, and preparation of interviews.²³ Online photos and reports from events that I attended marked significant differences in our respective understanding of what was important. Such documents were mostly publicly accessible online but their status was ambiguous: they addressed at the same time the general public, concerned associations' members, other people engaged in promotion of free software, and newcomers curious about it. Appropriate framing was always an issue, as was the awareness that documents could easily be misinterpreted or “leak” from their intended contexts of use (especially in the case of messages on e-mail discussion lists). My informants

22 The abundance of online documents compiled and produced by associations, and the related ideas of “promotion” (*mise en valeur*) and community-building, are further discussed in Chapter 3.

23 Moreover, throughout my research FS advocates alerted me about sociological, economic, legal, journalistic, and documentary film accounts of free software. I suspect that my work will supplement these genres of writing and that some of my informants might read at least some of my publications (Forsythe 2001; cf. Fischer 1999a).

disapproved of manipulative possibilities inherent in such “leaking” of online messages outside of immediate contexts, but were also aware of the possibility and acquiescent to it. As a consequence, there was among them a degree of permanent “watchfulness” and care about re-framing online documents.²⁴

Already in 1995 researchers on usenet groups noted that the “embarrassment of riches” online challenged the researcher; as Henry Jenkins argued, “the problem working with the net becomes not how to attract sufficient responses to allow for adequate analysis but how to select and process materials from the endless flow of information and commentary” (Jenkins 2006:117). Free software websites constantly exhibited the tension between archiving, indexing, and making documents accessible (*mise en évidence*) and the abundance of data through automatic generation of logs, circulation and commenting on news, and reliance on free time. This was not necessarily limited to online documents. At least two persons mentioned that they owned collections of community products such as early journals devoted to free software. These collections were kept in their homes in hope of some future effort at organizing documents and possibly presenting them online.

I was particularly interested in the locations and activities that linked online and offline sites, as well as the kinds of inferences that could be drawn from face-to-face and online interaction. In some instances, online interactions and websites

²⁴ One activist, who was member of a major French political party, understood this “watchfulness” to be an indicator of marginal political status of FS advocacy: although he regularly engaged in passionate discussions on e-mail lists, he believed that true politicians were much more reluctant to use public e-mail discussions, because their archiving could return to haunt them in the future.

offered few clues as to the social location of the participants, in contrast to the meetings in person that, through eating, drinking, talking, and spending hours together at public event, were reputed to catalyze familiarity, enthusiasm, and new projects. In other cases (ex. with associative websites), online interactions presented traces of activities that were since abandoned and people who had left. The existence of online resources or links was not a reliable indicator of their contemporary significance. At the same time, the lack of online traces did not mean that the issue was not remembered or unimportant. Although perceived failures or controversies were easily removed from websites, I have encountered this practice much more frequently with respect to business and news sites than with associative sites. A coherent website generally indicated a sustained effort at maintaining public face. It was a rarely achieved ideal, whether for lack of time or continuous voluntary engagement, as I elaborate in Chapter 1. However, the exact nature of the relationship between online and offline sites was never obvious. I have ploughed through myriad sites that bore traces of attempts at restructuring, as well as through wiki sites that were intended as support for collective note-taking and were abandoned but still publicly accessible in more-or-less coherent states that bore traces of one-time dynamic activities. It was relatively easy for me to elicit the stories about people and activities related to most of these sites. At least one web page was created following my request for a story. Because it has been only ten years since the foundation of the first FS voluntary association in France, most of the individuals who have been involved in this movement were still around and willing to talk.

Presenting data

The unclear expectations surrounding the collection, archiving, and public presentation of online data are a continuing concern for my own citations. When attributing statements, e-mail messages and other texts, I have changed some personal details which were irrelevant to the analysis but protect the confidentiality of persons involved. These details include names and sometimes gender. Some of the cited e-mail messages were sent to mailing lists open only to members of the association in question. These were semi-public messages, intended for list's subscribers but not necessarily outside of that context. I treat such messages as interview data and indicate their source in a general way that prevents easy traceability of the author. In other cases, when messages were published on blogs or websites and clearly intended as public texts, I attribute the message to its author.

As most interactions took place among French-speaking informants, I took notes in French and I am translating only cited fragments of data into English. This provides for a degree of confidentiality, as it makes it difficult to paste specific fragments of text into a search engine and find out who produced them (which would be a significant concern for data that is otherwise to a large extent accessible and indexed online). At the same time, some kinds of data do not allow for easy translations. In particular, IRC²⁵ interactions have proven to be a very rich source of data but also very hard to cite. Regularly such interactions switched between four

25 IRC, or Internet-Relay Chat, is a platform for online chatting.

registers: "instant messaging" references which come from English, French translations of these terms, French shorthand appropriate for instant messaging, and ordinary French language. In addition, sometimes my informants translate their texts into English using automatic translators, and sometimes they relied on their own English skills—in both cases often producing confusing variations of English. Because I am primarily interested in the content of interactions rather than in their linguistic aspects, I have not directly marked transformations of such data in my translations.

I use both present and past tense throughout the dissertation. The present tense highlights how FS advocacy and the public discussions about properties of software and digital networks reflect some long-term French understandings about technology and society. I employ the past tense in order to ground the advocates' references in the particular historical and political conjuncture in which I did my fieldwork. This is especially important for understanding advocates' invocations of the European Union and of globalization.

Two important European events took place while I was in the field: in early May 2004, ten new member countries joined the European Union. A year later, French voters rejected the European Constitution. The run-up to these two events was beginning in January 2004, when I started my fieldwork. Thus, throughout my fieldwork, French public debates increasingly revolved around the European Union, its democratic functioning, and comparisons of the kind of Europe that was acceptable to French voters and the one meant to be “consecrated” by the proposed Constitution.

This historical juncture facilitated advocates' attempts to relate their experiences gained in the campaign against software patents to the images, fears, and arguments about European Constitution that were hovering in the media. A common link between the two debates was the assumption of “technicity” of issues (Constitution and software patents) that, in advocates' perspectives, obstructed the attempts to meaningfully address the complexities of proposed documents in broad public debates.

Global frameworks were also pervasive in the media, with “culture” at the forefront of media interest around the UNESCO's 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions. The French media widely applauded UNESCO for having recognized, for the first time by an international treaty, the doctrine of cultural exception. The 2005 Convention premised that “cultural activities, goods, and services” are endowed by a double nature, economical and cultural, because they carry identity, value, and meaning; thus, they could not be treated as having an exclusively commercial value.

Invocations of “culture” and globalization also abounded in negotiations and proposals to change French institutional structures of funding for art and entertainment: The French Minister of Culture proposed a reform of the system of national film subventions in order to encourage US producers to invest in “culturally French” films. The main national museum Louvre attempted to cancel free entrance for artists, art students and teachers, who rallied in front of the museum denouncing the *marchandisation* of museums and “globalization” that served as its pretext.

THE ORGANIZATION OF THIS STUDY

French FS advocates have embarked on a project to create a public that can tackle in an informed manner questions about digital networks that have until now been relegated to politicians, lawyers, and technical experts. The following chapters explore how voluntary associations promoting FS in France work to convince a broader public to recognize a set of principles associated with free software, maintain vigilance around these issues, draw connections among seemingly distinct technical issues, and connect them to unfolding debates in other arenas. Through this focus, I explore how culture acts to highlight or obscure specific aspects of software, digital media and global communications networks in daily lives of FS advocates. I argue that, through their practices of public valuation, FS advocates make ideas about online collaboration speak to some conventional French conceptualizations of the common good. Advocates' mobilization around notions of sharing and of public valuation, based on globally circulating software, recreate national and EU frameworks as relevant fora and, in turn, inform advocates' identities as French and European citizens, consumers, and business owners.

Chapter 1 centers on the everyday experiences and life narratives of FS advocates in France to examine why people who share an interest in software and the internet have organized themselves into formal offline structures. Analysis of this material provides an entry-point for exploring how local and national contexts inform the online practices and transnational frameworks of FS advocacy. I track how online multiplicity, collaboration, and openness—familiar tropes associated with free

software—translate into an array of distinct voluntary associations.

Chapter 2 focuses on the interplay of national and global contexts through the example of advocates' positions on the “freedom to copy.” I investigate how copying—commonly understood as an inherent property of digital media and widespread among millions of internet users across the world—is embedded in national debates and productive of national identities. FS advocates worldwide have asserted unlimited copying to be one of key FS principles enabling cooperative creativity (e.g. “freedom to share”) and emblematic of hacker ideology of unimpeded circulation (“freedom of information”). In France, FS advocates seek to galvanize a debate about societal choices (*débat de société*). They draw on French legal, historical and cultural precedents (“right to make private copies”) in order to claim the “freedom to copy” as an essential right in a digital age. Advocates' elaborations of “freedom to copy” translate ambiguities of digitization and circulation of digitized contents into long-standing national debates about commodification and fee-free access (*gratuité*).

Chapter 3 centers on the online practices and connections that shape FS advocacy in order to understand how advocates' modes of organizing around digital networks are shaped by online possibilities. I focus on relations of vigilance (*veille*) and practices of public valuation (*mise en évidence*), through which FS advocates triangulate, redistribute, and comment on FS-related news to, and through, a network of public fori. Triangulating frameworks of *veille* and *mise en évidence* are examples of realizing and imagining multiplicity, collaboration, and openness in accordance with FS principles. They are explicitly modeled against other influential models of

mass communication online, such as spam and rumors.

In Chapter 4, I analyze how FS advocates, along with other European activists opposed to software patents, have attached software to a much larger issue of democracy and citizen engagement in the European Union. Many FS advocates in this campaign articulated new meanings to their identities as European citizens and, in turn, mobilized these newly meaningful European identities as a resource in challenging the idea that patents were a necessary element of EU integration. When making arguments about the kinds of encouragement and protection that European inventions need, activists opposed to software patents made direct claims about European institutions and the processes of EU integration and “harmonization.” They denounced the abandonment of policy-making to experts under the pretext of the “technical character” of the debates and established devices for collective oversight (and occasional denunciations) of expertise and decisions around software patents.

Chapter 5 explores some practical implications for FS advocacy of widespread adoption of FS. I suggest that successful promotion of FS may in fact undermine some of the objectives of its advocates. I focus on some apparent successes in state adoption of FS that have in practice raised questions about French FS advocates' assumptions about “sharing,” objectives of “success,” and means of “participating.” I argue that the wide adoption of FS may marginalize FS advocates' contributions and may not catalyze coherent public reasoning on issues that advocates deem to be key for civic engagement around digital networks.

CHAPTER 1: “FREE SOFTWARE IS FOR FREE MEN:”
VOLUNTARY ASSOCIATIONS AND FREE SOFTWARE ADVOCACY IN FRANCE

In March 2002, I carefully kept my eye out as I walked across the dingy central Parisian neighborhood of Les Halles towards my first face-to-face encounter with free software advocates. Les Halles are the former site of the central Parisian wholesale marketplace and the setting of several detective films. The neighborhood was rebuilt in the late 1970s as the hub of the suburban rail system and an underground shopping center, and has since been the site of only occasional drug raids. A few days earlier I had found a website announcing that the monthly meeting of *Parinux*, an association of Parisian free software users, would take place that evening at the nearby La Taverne des Halles. I had walked through this area many times, mostly at daytime, and never noticed La Taverne.

It was a Thursday night, the third Thursday of the month, and the meeting was called *Third Jeudi*. The linguistic hybridity of that name—composed of the English word “Third” and the French word “Thursday”—raised my hopes that there would be something strikingly and maybe ambiguously French among the people I was about to meet, something that was overlooked in the sociological literature that had initially piqued my interest in free software. The 1994 Toubon Law, decreeing that all commercial messages had to be completely translated into standard French, made France infamous in the English-speaking press that suggested that the French were clinging to their nationalist ways in the face of the English-language internet. Yet I

was going to meet a group of people whose web pages proudly exhibited texts about free software in French with interspersed words that sounded English: “Install-party” or “Da Geek Contest(r)(tm).”

As I walked into the dark spacious place that exuded the odor of beer, I realized that I had no idea how to recognize *Parinux* among the three small groups sitting in different sections of the tavern. I had checked out their photos online but the maroon walls of the beer hall made the place too dark to recognize anyone without approaching them. I looked again at the three groups, more attentively, still hoping that somehow it would be obvious which one of them was a bunch of computer geeks having a meeting. They were all pretty similar: a few guys, dressed inconspicuously, having a beer and talking. One of the groups included a woman as well. No special signs; no computers; no cell phones. In desperation, I remembered the reputation of free software as a challenging technology and searched the room again to find the most geeky-looking person, even though I was not exactly sure what that would entail. My eyes rested on a man who had just walked over to one of the three groups and who reminded me of a friend from my math-oriented high school: same dark old-fashioned glasses, similar plain clothes, same expression of partial observation and half-involvement with the group. I walked over and asked him if he was there for a *Parinux* meeting, to which he nodded enthusiastically and took me to meet the president, Amélie—a 30-year old blonde woman who welcomed me to the meeting. The other six people, all men in their early 30s, were drinking beer, eating *steak tartare* or *moules*, and having an animated conversation. When I said I was an

anthropology student looking for a site where I could study free software advocacy and was wondering whether I could do research on *Parinux*, Amélie exclaimed “Ha! I knew this would happen!” Seeing my baffled face, she briefly explained that in the past months they had been cracking jokes about what kind of group they were. The arrival of an anthropologist confirmed that they could indeed be considered a “tribe.”

Afterwards I realized that the “tribe” idiom drew upon a burgeoning rhetoric within communications studies. In the early 1990s and then again in the 2000s, French communication scholar Philippe Breton argued that the internet encouraged “tribe-like” allegiances among its users, while others likened absorption of “internet addicts” to that of autism.²⁶ Even though the dot-com boom in France took place later and in a milder form than in the US, *Parinux* members were familiar with various theories of how the internet was transforming sociability and were very interested in what their own practices might contribute to understanding the potential of the

26 On “tribes,” “autistics,” and the dangers that the internet poses to “social ties,” (*liens sociaux*) see, for example, Philippe Breton's books La Tribu informatique (published in 1990) and Le culte de l'Internet : une menace pour le lien social ? (2000). One early internet activist and free software advocate proclaimed Breton's theses worthy of a paleontologist, rather than a sociologist, asserting “thanks to the Internet, I was able to meet (in real life as well) enthralling people, many of whom became new friends. And also some annoying ones who became such new enemies that I prefer not to meet at all. Using this tool to express my own opinions and to confront them with those of others, I realized that my opinions are as valid as those of any other human being, as worthy to be listened and discussed, as long as they are a bit original. Meeting people, creating associations, acting in the (physical) society that surrounds me..., it does not seem to me that this is the behavior of a modern autistic person.” See Laurent Chemla, Confessions d'un voleur. Internet: la liberté confisquée (2002).

internet. Moreover, free software lent itself well to speculation about the societal effects of the internet: a well-known US open source activist has drawn upon a peculiar version of Marcel Mauss' writings on the gift in order to convey the novelty and transformative possibilities that FS opened for software development in general.²⁷

As we continued chatting, one of the men in the group, a schoolteacher in his early thirties named Bernard, asked how I had recognized which group was *Parinux*. When I indicated the person whom I had first approached (not mentioning my looking for signs of “geekiness”), Bernard looked at him and said “Damn! That one really *does* look like a computer scientist” (*Putain, celui-là a vraiment une gueule d'informaticien*) and then asserted that he did not know him at all. I made sense of this comment only two years later, when I discovered that the person whom I had initially approached had kept a vivid memory of that evening: not only was this my first encounter with *Parinux*, but also his.

...

Why would people who share an interest in software and internet want to organize themselves in formal offline structures? Ethnographic research on diasporas and transnational activist groups emphasizes the internet as an arena both for cultural reproduction (Miller and Slater 2000) and for significant new possibilities for transforming the notions of citizenship (Bernal 2005) and activism (McLagan 2003). Free software advocacy is constituted both *through* participation in transnational online arenas and projects, as well as *around* informatics as its object of activism.

²⁷ Eric Raymond. 1998. “Homesteading the Noosphere.” *First Monday* 3(10). Available at http://www.firstmonday.org/issues/issue3_10/raymond/index.html

Free software advocacy thus brings together concerns about the social, methodological and political dimensions of computing in a particularly cogent way.

Most of the existing research on free software has focused on projects of software development. Existing scholarly analyses have grounded free and open source software in an ethics of access to information, freedom of expression, passionate pursuit of projects valued by peers, all emergent in the transnational communities of hackers and their daily practices (Himanen 2001; Jordan and Taylor 2004).²⁸ Conceptual frameworks and practices of FS have provided a model for tracing the contours of the “network logic” and of peer production made possible through digital networks (Weber 2004). Anthropologists have regarded actors in such communities as technophilic tinkerers concerned with legal and technical conditions necessary for preserving freedom of expression, as this concept is extended to apply to programming (Kelty 2005). These accounts maintain the widespread perception of computing as the proper domain of technical (if uncommonly talented) enthusiasts and experts.

My project departs from this framework by focusing on the relatively neglected domain of advocacy. Further, I am interested in the degree to which the possibilities of organization around free software in France are grounded in local and national circumstances. I focus on the social contexts of free software advocacy in France,

28 Jordan and Taylor argue that free software “revitalized the hacking community and gave it a relevance far greater than many could have imagined possible in the early 1990s” (2004:16). Along similar lines, Jeffrey Juris (2005) traces affinities between free software and anti-corporate activism.

where there is a significant overlap between online networks and formal structures in the form of voluntary associations as defined by French law. By drawing on ethnographic research among a cross-section of voluntary associations promoting free software in France, I explore how the practices and rhetoric of online multiplicity, collaboration, and openness—familiar tropes associated with free software—translate into a differentiated map of distinct voluntary associations. I argue that voluntary associations' activities and frameworks give crucial meanings to free software advocacy in France, which shares certain dynamics with other French voluntary associations. More broadly, I explore how online networks interact with existing social structures and cultural identities. This chapter, then, provides an entry-point for exploring how online practices and transnational frameworks of FS advocacy are informed by, and gain meanings through, local and national political and social contexts.

TRACKING FREE SOFTWARE ADVOCACY THROUGH FRENCH VOLUNTARY ASSOCIATIONS

Free software advocacy in France has, since the mid-1990s, been organized around informal on-line discussion fora and mailing lists. With the spread of high-speed access to the internet, number of voluntary associations regrouping free software advocates and developers has increased. These associations have also expanded the breadth of membership as well as aims and styles of action. In a documentary produced by a FS advocate and a volunteer community TV crew of the Parisian suburb

of Evry, the President of *Parinux* explained that the associations were the meeting points with non-geeks. They provided occasions to share knowledge about the usage of software, promote free software through word-of-mouth and privileged contact that was not possible in a relation of provider to a client. His phrase “to give back to the community” summed up his concern with reproduction of these principles through associative action.²⁹

Voluntary associations conjoin technically-oriented practices, formalized structures of citizen engagement, and overtly political strategies of public intervention. The result intersects a historically and culturally specific constellation of geek subjectivities, technical skills, and rhetoric of importance of the internet in social life.

Overview of three associations in focus of my study

The association *Parinux* was founded in 1998 as an association of Parisian free software users. At least one free software users' group exists in every French *département*³⁰ (more than 100 in total); *Parinux* is one of the largest, with about 120 members, including 5 women (one of whom was president of *Parinux* for two years). Members are of mixed ages: most are in their late 20s and early 30s, but a number of retirees also belong. According to a questionnaire distributed at the 2005 *Parinux* annual meeting, their occupations were mostly technical although not necessarily in

29 Lionel Allorge, “Le Temps du libre.” 2005, accessible online at http://www.lunerouge.org/spip/article.php3?id_article=813.

30 “AFUL : Liste des GUL francophones (coordonnées),” Accessible online at <http://www.aful.org/gul/liste#fr-07>, last accessed February 1, 2006.

informatics, and they tended to be comfortable using free software.³¹ Their expectations from the association included improving their skills in configuring materials and manipulating free software; increasing outreach towards general public, state administration and public schools; and organizing informal gatherings such as picnics, dinners and parties. However, *Parinux* also had a number of inactive members who had joined after a successful install-party,³² and then never appeared again. Those memberships were commonly understood as thank-yous for help with installation and expressions of support for *Parinux* by giving money (yearly *Parinux* membership fee is about 30 dollars). *Parinux*' activities mainly consisted in organizing installation-parties in Parisian public digital labs (*Espaces Publiques Numériques*), talks and workshops, free software booths at many Parisian events, and many informal gatherings for members and non-members, such as picnics and monthly meetings in a Parisian tavern near Les Halles. I joined *Parinux* in January 2004 and assiduously attended all events and meetings that they organized. After 11 months, I asked *Parinux* board members for access to their administrative mailing list because I had the impression of missing out on an important part of organizing activities. In turn, as I had been very actively following their activities, they invited me to join their

31 “Depouillement du questionnaire de l'AG,” a message sent to Parinux members' discussion list on January 19, 2006.

32 Install-party is a public event, often organized by a local group of free software users, that people attend with their computers. Organizers of the event help visitors install free software operating system on their machine, configure the parameters and device drivers, make their wireless cards work, etc. These parties have historically been main occasions for obtaining first-hand help with installing and configuring GNU/Linux on a computer, an activity that often took several weeks to achieve a fully functional installation.

Administrative Council. We agreed that I would not vote on any issue as I did not want to influence their decisions. I stayed as a member of their board for about a year, when I resigned because I had moved back to New York and no longer had time to read all my e-mail.

APRIL (*Association pour la Promotion et la Recherche en Informatique Libre*) was the first formal association in France dedicated to free software: it was founded in 1996 by a group of students at the University of Paris Saint-Denis, inspired by a visit of Richard Stallman, a US hacker who is generally regarded as the founding father of free software. *APRIL* aims to promote and encourage research, development and democratization of free informatics. Its 250 members, from various French regions, are mostly about 25-35 years old, and there are fewer retired people than at Parinux. *APRIL* has a reputation of being a “political” association: its activities include writing press releases, participating in public and political debates, organizing talks and workshops about free software, helping organize conventions such as Libre Software Meetings. Since early 2004, *APRIL* has sought to expand its actions and become a recognized interlocutor in public and political debates concerning free software. To this end, the association hired a full-time staff person, rented office space, and put increasing pressure on members of *APRIL*'s Administrative Council who expected considerable daily dedication to the “cause” from each other. I joined *APRIL* in January 2004, and in November I started a 7-month internship which was originally meant to be 2 days a week but soon turned into an as-needed arrangement, so I would stop by almost every day. My internship work consisted in putting together a list of

media contacts from various databases that they had used through the years, so that they could more effectively distribute their press releases. This experience offered me the most detailed insights about free software advocacy on a daily basis.

AFUL (*Association Francophone des Utilisateurs de Linux et des Logiciels Libres*) promotes free software and open standards. This association was created in 1998 by an informatics researcher and a small-business owner, at a conference at INRIA, a French national institute for informatics research. *AFUL* has about 200 individual members who are generally older than the ones in *APRIL* and emphasize their identities as free software users and professionals, i.e. “those who want to understand and not just use computers.”³³ *AFUL* also includes several enterprises and user groups, mostly from France. The association did not have frequent face-to-face membership meetings aside from the annual meeting and the monthly Parisian meetings of all free software users. Its headquarters was in Soissons, a town about an hour away from Paris by train—in Picardy's regional pole of technical excellence and economic development (*technopôle*) related to free software. In this association I was much more of an observer than a participant. Aside from interviewing Administrative Council and rank-and-file members, I mostly followed *AFUL*'s e-mail lists and I would see my friends from *AFUL* at public events. *AFUL*'s actions consisted in giving talks, writing press releases, funding advocacy actions, promoting commercial companies that uphold free and open source software. *AFUL* also hosted two very active working groups whose activities were well documented online, on listservs and wiki websites:

33 “AFUL : Pourquoi adhérer à l'AFUL ?” Accessible online at http://www.aful.org/aful/pourquoi_adherer, last accessed 28 January 2006.

Interop was dedicated to promoting accessibility of web sites and interoperability of file formats, while *Detaxe* was dedicated to obtaining consumers' reimbursement for copies of Microsoft Windows that were pre-installed on new computers.

Overlap of membership and collaborations among associations

Precise points of differentiation among various French free software associations, and especially between *APRIL* and *AFUL*, were a very common question and a constant source of jokes among activists. In an attempt to differentiate their missions in a mutually acceptable way, both of these associations had published a text on their respective web sites stating that they were friendly (*une association amie*) and that their actions were complementary. The text further suggested, “AFUL primarily emphasizes the concrete advantages of the use of free software. While APRIL also promotes the quality of certain free software programs, APRIL mainly promotes the philosophical and political stakes of free informatics.”³⁴ Such clarifications were formulated in an attempt to orient newcomers to the mission and style of action that would be more appealing to them.³⁵

34 Accessible online at <http://www.april.org/articles/faq/faq.html> and, with some minor changes, also at http://www.iful.org/iful/differences_iful_april, last accessed 28 January 2005.

35 Please see Appendix A for a particularly amusing performance of “newbie's questions” (*questions de neuneu*) that took place online, at the IRC chat channel of *APRIL*. In this case, a long-term free software advocate pretended, under an assumed name, that he was a prospective candidate for joining the association *APRIL*. He was familiar with the kinds of arguments that *APRIL* and *AFUL* habitually made to situate themselves in the map of free software advocacy in France. In his performance as a newbie, he elicited these

However, an explicit comparison of the narratives about the founding of the three associations, which I pieced up from their websites and from interviews with their founding members, indicates clearly their different aims and institutional connections:

Parinux. At a dinner following the annual meeting of Parinux, I asked Darien, a founding member of Parinux, for an opinion on how the association had changed. As Darien started recollecting key moments, he noted that only one other founding member was still around, and that everyone else seemed to enjoy hearing his stories. Afterwards he started a wiki page “Beginnings of Parinux” on the Parinux website. His narrative attributes the original idea of creating the association to a 1998 e-mail sent to the newsgroup fr.comp.os.linux. The e-mail complained, “there are LUGs³⁶ everywhere across the world, even in Hungary, even in Brittany... But in Paris, it's a catastrophe! The only association that I found did not update its web page in the past six months and does not respond to e-mails!!!!” A few days later, nine Parisian geeks met face-to-face for the first time in a restaurant next to the Jussieu University. They chose the name for the association, created a mailing list, and developed the first web site. The first public action was an install-party³⁷ at another university. The narrative does not specifically mention the registration date of the association, but I was told

different points while poking fun, at another IRC channel, at the appeasing answers that he received to his knowingly provocative questions.

36 LUG is a shorthand for “Linux User Group” and generally includes local free software users.

37 Install-party is an public event to which people arrive with their computers and have free software users and advocates help them with installing a free software operating system.

that “it must have happened” because they earned some money and needed a structure to manage it.

APRIL.³⁸ Founding members of APRIL were all computer science students at the Parisian University Saint-Denis who were also doubling as administrators of the free-access student computer lab. A visit by Richard Stallman incited their interest in free software and the fears that the access to the student lab would be imminently taken over by the university administration drove them to create an association that would represent their interests. The association was ultimately created by five of them with a mission to promote free software in France. (Most of them have remained on the administrative board since the founding.) After a series of meetings to establish the statutes and find the name of the association, they declared the association at the *Prefecture*, elected the extended administrative board, set up the website, opened a bank account, collected computing equipment, found the internet service provider and set up the server platforms for various projects, bought the domain name, organized the first lectures on free software, and started translating documentation.

AFUL.³⁹ The idea for an association arose among an INRIA researcher and an ENS-educated⁴⁰ entrepreneur, as they were organizing an INRIA-sponsored *Festival of the internet '98*. The association was declared in April 1998, and within a few weeks

38 This story is pieced together from my interviews and the written account on *APRIL* website.

39 This story is pieced together from my interviews and the written account on the *AFUL* website.

40 INRIA is the National Institute for the Research in Computer Science, and ENS is École Normale Supérieure. Both of these institutions enjoy great prestige in France.

the newspaper *Libération* wrote about the event and announced the composition of the administrative board, consisting of “Assistant Professor at University Paris VII [and entrepreneur]... INRIA researcher... State Controller... Professor at the University of Montreal... Assistant Director of the UNESCO [and] general director of Netscape France.” Two months later, *AFUL* signed an agreement with the Ministry of Education to facilitate the use of free software in education, designating *AFUL* as the “rallying point” for the support of these products.

The most active advocates often belonged to several associations. Most often, they would join a local users' group and at least one of the two national associations. Persons who wore “multiple hats” (*multiple casquettes*), i.e. people who participated or were interested in several associations and projects, provided connections among different associations. At the offline events organized together, each member would help carrying a “hat” that signified her or his affiliation in the associative landscape. In such situations, membership was indicated by wearing a T-shirt or a (literal) hat with the logo of the association which the person represented.

In February 2005, following a major free software trade fair where many associations ran booths, a question arose whether there was need for a coordinating structure that could contribute to more efficacious collaborations among Francophone free software associations. I was asked by one activist to design a survey that might clarify the connections among different groups of users, developers, and/or advocates of free software.⁴¹ Twenty-two associations replied to this questionnaire, indicating

41 Karanovic, Jelena. 2005. “Synthèse du questionnaire inter-associatif,” presented at the Libre Software Meeting. Accessible online at <http://www.interlug-fr.org/article.php3?>

that all of these groups were structured as formal associations. Most associations were in touch with at least one national or international free software group. Users' associations were often in contact when in proximity with each other. National advocacy associations (eg. *APRIL*, *AFUL*) tended to see local groups as relays for the local contacts and organizing of local actions. All of the associations noted that it was easier to organize inter-association collaborations for occasional, well-defined and short-term projects, than for long-term projects. The president of Parinux asserted, “we can mobilize ten people full-time for one day but it is much more difficult to get two people to work an hour weekly on a common project.” Collaborations, then, most often took the form of manning a booth at a free software event, organizing an install-party, conference or workshop, donating books and materials, distributing informations and ideas. Associations also often shared resources in the sense that each association would bring their own competences and their own material to the event. In practice, that amounted to sharing a car for longer trips, or providing housing and food to participants; sharing computers, CD-ROMs, posters, network connections, servers, meeting rooms, income from events, documents and contacts. Here is an expression of enthusiasm that such collaborations brought:

It's a success of collective work, first at long distance (by e-mail and a little by phone), later on site by everyone's giving of themselves for a common passion. With festival-goers, during 10 days from 11am to 10pm, we have multiplied contacts, and their curiosity for free software has motivated us all the more. Every day we were able to make several demonstrations of installation (mepis 2004), and address specific requests. We were in touch with at least 200 people who have, for a 2-Euro fee, taken with them a CDROM of a Linux installation. A positive outcome for our two associations. (P:L:O:U:G)

id_article=44, last accessed 25 January 2006.

WHO IS FS FOR? FORMS OF COMMITMENT IN FS ADVOCACY

FS advocates to variable extent recognize their engagement to be primarily centered on software. The following section surveys principal forms of engagement related to FS advocacy.

“Free software is for everyone”

Rather than referring to “the community,” FS advocates referred to “*le Libre*” which indicated a constellation of people who are interested in FS. This imagery—of common cause rather than a common structure—was a preferred one and allowed them to maintain various internal divisions. FS advocates tended to see those as a strength in being able to direct any kind of person to a group that might be the most appropriate to the person's interests. When I asked who they saw as most likely to be interested in free software, my interviewees most often responded “free software is for everyone” or “anyone could find some reason to support free software.”

Yet, advocates shared some social characteristics. Advocacy activities tended to interest the specific age group from the early 20s to the late 30s. Many of these advocates started with an interest in the development of software and liked the technical challenge that free software stood for in the 1990s. Gradually they started to be interested in the possibilities of sharing code and getting help from like-minded fellows in online fori. The following two narratives, based on my 2004 interviews, provide insights into the weaving of sustained voluntary activism, paid work and

family obligations in activists' lives. Both stories illustrate a process of acquiring an awareness about public significance of free software advocacy as a source of personal transformation or identity. Both stories come from activists who had found ways to participate in free software advocacy in long-term and personally gratifying ways. The first story outlines how an activist has juggled paid jobs and part-time work, enormous investment in free software advocacy, and other resources, such as unemployment benefits. While this story assumes a context of rather high unemployment and a fairly considerable social safety net specific to French voluntary organizing, it is also crucially related to workplaces where one can be connected online during worktime (more likely to be the case in IT professions). Thanks to periods of unemployment, Olivier was able to do the kind of advocacy that was gratifying to him:

Olivier has always been surrounded by computers – his father is an IT manager since the beginnings of industry, and his brother is also a geek. He is 30 years old, has a 2-year technical college degree, and lives alone. He became interested in free software in 1999 in a company⁴² where he worked as a computer technician, at first as a technical challenge and then also for “philosophical” reasons – from helping each other with making their software function, to discussing the reasons for choosing a certain license and the reasons why different licenses functioned as they did. Furthermore it brought him pleasure to use the software that was legal, to which he could contribute and have access to source code. He is associated with *EUCD.info*, a public-awareness- and fund-raising initiative aiming to defend the rights of the public and propose alternative solutions to the copyright reform. He writes amendments to the project of copyright reform and proposes them to different interlocutors. This work is unpaid and he is doing it because he believes in it. He lost his job in November 2004, and lived for a couple of months off unemployment benefits, then he went back to work for a couple of months so that he could benefit from unemployment again. In the periods of unemployment, *FSF France*, an association supporting the initiative *EUCD.info*, would contribute toward paying his living expenses. When he had a job, he had trouble managing *EUCD.info*. Notably, he was working when the copyright reform project was presented to the French Parliament. Journalists would call him on his cell phone in

42 In 1999 very few French households had broadband internet access.

the middle of his workday, ask for some information and for his comments, and he did not want to refuse them. However, he could not spend his whole work-time responding to journalists who had a different notion of time. He also found that it was intruding into his private life. For him, the voluntary project was a citizen engagement, like that of political organizers – but different when you do it full time. In the last couple of months, he works only for the voluntary project: he gets up in the morning, reads his e-mails right away, he works with a friend so they are synchronized. This has become his structured work, “like the guys who work in a company 8 hours per day.” For him advocacy work takes 13-14 rather than 8 hours a day, but he can have moments away from it, which are pure leisure time. And that would not be possible if he worked full time.

The second narrative emphasizes a consciousness about the transnational aspect and the very large-scale impact of free software advocacy as a motivating factor. It also illustrates the extended and rich network of support for free software advocacy, both in person and online (which might be in part due to the fact that most of daily advocacy work is facilitated by the internet and done at home alone, rather than at meetings or in institutionalized settings).

Thomas has a BA in computer science but he says that he is a computer geek by chance. Nevertheless, studying at Saint-Denis was crucial for his discovery of free software as well as for the development of his political sensibility: the students there were allowed to administer machines (i.e. there were no passwords nor habitual administrative hierarchies) and were free to install what they wanted on them. Lots of software running was free software. In 1996 the “founding father” of free software, US hacker Richard Stalman, came to Paris 8 to talk about the GNU project. The encounter with the “philosophy” of GNU project inspired Thomas to found a voluntary association that would promote free software. In 1996 there were already informal groups around free software in France, but no formally constituted associations. He was the president of this association, *APRIL*, for 9 years. As associative activities have grown in number and were taking more and more of his time, it has become hard for him to manage the professional, associative and private life, so he decided to stop his paid job as IT professional and devote himself principally to lobbying. He thought that he was more useful as a lobbyist than as developer of free software. He had given himself one year (while he was on unemployment benefits) to find the financial support for this project. Until then, lobbying was done part-time, in free time, and by beginners who did not necessarily

understand the stakes in free software, and he found it inefficient. *APRIL* succeeded in raising the funds so in March 2005, Thomas became its first full-time employee. He was working in the newly rented office space, in principle from 9-5 but it was mostly longer than that, except when he had to take care of his daughter. He affirmed that free software corresponded to essential things in his life. He has always been interested in helping others, in being useful to others, he liked politics in the sense of the “vie de la cité,” he liked having intellectual reflections, cooperation and access to knowledge, and he found that all that existed in free software. Free software was the first grassroots political movement that had cooperatively produced not only knowledge but also functioning code; this was in his eyes the most astonishing feature of free software movement. Moreover, an extraordinary wealth of people participate in this movement. Intellectually and socially, he found the movement to be really passionate. Of course, it was necessary to find a partner who would be ready to make concessions to this lifestyle -- because there were lots of concessions to be made. He could spend 12 hours daily on these activities, so his wife asserted that time was one of principal concessions that she made.

The younger FS geeks whom I encountered at conventions tended to be developers who did not necessarily care about advocacy. Many of them learned FS in engineering schools, at a time when high-speed internet connections was much more broadly accessible, and there was more free software-related content in French online. The spread of FS on servers and its technical viability might have made it possible again to just care about FS as a platform and not care about its societal implications. Sometimes FS advocates managed to mobilize these younger FS developers—especially around issues of software patenting—but their support was mostly occasional.

The older “non-geeks” who were involved in voluntary associations were either retirees who enjoyed learning about, or helping with, technical questions, or activists who have had experience with other sorts of activism since the late 1960s.

“Free software is for free men”

Focus on the practical logistics of advocacy offers another way for understanding FS advocates' commitments and expectations. On one occasion, a female FS advocate asserted to me bitterly that “to do free software, you have to be a free man” and explained that she felt that she could allow herself considerably less free time than if she were a man, notably because she had numerous family obligations and spent much of her time with her children. Her expression of frustration has prompted me to think about the kinds of free time, or time more generally, that is necessary for free software advocacy in contemporary France. The ways in which people make or have time for free software on a daily basis, and the ways in which that affects the selection or self-selection of contributors, is likely to vary cross-culturally but also depend on inter-weaving of voluntary activism with paid work and family life.⁴³ These, in turn, partially depend on stratifications of gender and social class in a particular society, and on the ways in which people experience them.

For at least one other of my female informants, the difference in priorities and preferences for using free time appeared to be gender-based. In addition to full-time job on Mondays she had clarinet lessons, on Tuesdays and Thursdays choir singing, on Fridays horse-riding, on Saturdays she spent time with her family or her boyfriend

⁴³ This concurs with some of the findings of the FLOSSPOLS project on gendered involvement in the development of free software. See Nafus, Dawn, James Leach, and Bernhard Krieger. 2006. “D16 - Gender: Integrated Report of Findings.” March 2006. July 10, 2007. Available online at http://flosspols.org/deliverables/FLOSSPOLS-D16-Gender_Integrated_Report_of_Findings.pdf

(after music lessons), and on Sundays she had roller-blade classes. She also attended and helped organize many free software events and denied that her gender made any difference in her engagement. In contrast, her geek boyfriend rarely accompanied her in going out, to the extent that some people doubted that she had a boyfriend at all.

At the major national free software fair in 2005, I noticed that one of my acquaintances bore the registration badge with the affiliation ASSEDIC—the national agency for assistance to unemployed. It turned out that he had been recently laid off from a software development company and was now reconsidering his options. He attended the fair with the whole group of his former co-workers, all of whom had been laid off and bore various imaginative and ironic professional affiliations.

FS advocates' time and voluntary work, entangled as they were with personal circumstances and job market fluctuations, were the most fundamental contributions to free software advocacy associations.⁴⁴ This became particularly clear in *APRIL*'s project to establish durable and acknowledged engagement in advocacy, and had resulted in explicitly addressing the topic of “free time” in meetings and discussions, interviews, and informal occasions. In an attempt to make voluntary work more accountable, *APRIL* has initiated a system of “valorized voluntary work” (*bénévolat valorisé*), calculating the value of volunteer labor and other kinds of contributions.

For example,

44 Tiziana Terranova has argued that FS is a key area of a broader restructuration of online production—understood broadly to encompass producing identities, connections among users, discussions and archives, and capital. Terranova argued that these activities, online and offline, were sustained by (affective and cultural) “free labor” that is both “voluntarily given and unwaged, enjoyed and exploited” (Terranova 2000:33).

- + when a volunteer uses her/his vehicle for a project, the association saves money,
- + when somebody lodges a guest, lecturer... the association saves one night of hotel
- + when a volunteer devotes X hours on a project, the association saves the price of somebody paid for that
- +...

Valorized voluntary work makes it possible to see real costs of an associative project, apart from simple financial flows. It also legally increases the budget of association, which can be useful in particular for grants applications.”⁴⁵

This initiative offered systematic insights into the extent to which advocates involved their “free time.” After a couple of months, such public logging showed that the activists were putting many more hours into voluntary work than they had realized: some of the most involved activists logged around 40-60 hours a month. Some activists expressed concerns that drawing attention to their numerous hours dedicated to free software could raise questions of how they could find so many free hours outside of their full-time jobs. Moreover, certain kinds of work, such as the translation of documents, could easily be accounted for, while other “costs” were more difficult to track. Those typically included using the facilities (ex. photocopying machines, chat clients) at one's workplace for voluntary activities.

The periods of most intense online activity suggest that a number of activists make “free” moments during the workday: most e-mail messages were sent Mon-Fri, 10am-midnight, with peaks around lunchtime, around 6pm, and in the case of *April*, around 11pm.⁴⁶ That suggests that most people have access to internet at their work, and that they consult and reply to associative mails in work pauses, just before the

45 Benevolat Valorise, accessible online at <http://wiki.april.org/BenevolatValorise>, last accessed February 1, 2006.

46 Statistics produced using MailListStat program on my 2-year e-mail archives of FS advocacy discussion lists.

lunch breaks or at the end of the workday. Also, substantive work is done at night, this time from home. Online chat usage statistics⁴⁷ confirm this pattern. Typically, activists would log in when they were online, and then periodically throw a glance to see whether anyone was looking for them. Many of them were logged on at work, while a small number of people were logged on permanently. However, not all interactions took place on public channels. Indeed, at least in the case of April, most task-oriented conversation was in private channels. Most public conversations took place before lunch, throughout the afternoon, and then in the evening – the peak of IRC activity was between 10-11pm. Lack of public conversation was notable early in the morning, during lunch (suggesting that they did not eat in front of their computer), and at 6pm (which would be the time of commute from work).

“Everyone wants to be a geek”

The meanings that French FS advocates associated with the term “geek” provide a sense of how the public life of free software has shifted in the past ten years. In preparation for a summer *Parinux* picnic at the foot of the Eiffel Tower, the President of the association announced that a photographer for a revue L'Express would be present in order to make photos that would illustrate their upcoming reportage on *geeks*.⁴⁸ Thus, the President invited participants to bring their laptops and

47 These statistics were obtained by running PISG program on my IRC logs. I logged IRC interactions on #april and #parinux channels systematically for 10 months, from September '04 to July '05. (*AFUL* did not have permanent IRC channel.) I also logged some other channels for several months at a time.

48 I have heard people pronounce this word [gik] and sometimes also [zhik].

thus offer nice occasions for photographing *geeks*. (There would have been no computers at the picnic otherwise, especially considering the humid weather.) He continued, “Use this occasion to make a tour of Frozen Bubble [a popular computer game] and please watch carefully your equipment (theft, bad weather, breakage...)”⁴⁹ He was aware of the public image of *geeks* as technophiles, and although he felt that members of *Parinux* did not necessarily match such caricatural images, he was willing to stage it on an occasion, in an ironic sort of way. He explained to me in an earlier interview:

I looked up in a dictionary of American slang two days ago: geek means loser (*connard*) and nerd means total loser (*un gros con*). These terms are symptomatic of a computer scientist who is in his corner, does not speak to others and is generally asocial. He is doing things that might be amazing but other people do not understand them. I think that geeks were insulted by that name for a long time before they appropriated the word. [...] Although the French have picked up the term without necessarily having adopted its whole history, sociologically this phenomenon exists in France as well: that would be the guy who is in his corner, and who is affirmed through his occupation (*métier*).

He attributed the shift in the meaning of the word to the fact that in the late 1990s geeks were in high demand and able to negotiate relatively high salaries. FS has allowed the geeks to apply their skills and interests in a less hierarchically organized manner:

“With free software, geeks only—and that means with no managers—could create a super-association, or a multinational corporation of software. With no need for a CEO. Their work is tangible and valued at millions of dollars: if you translate in monetary terms the GNU/Linux software that is installed on all the computers and servers on the planet, you get a significant amount. But it is not centralized, it's like internet, you cannot say that there is a CEO that takes

49 “Re: Et comment fait on pour se reconnaître ?,” a message sent to the list parinux@parinux.org in July 2005.

care of it. It does not belong to a CEO but rather to these losers (*connards*).” He affirmed, “everyone wants to be a geek now” (*il faut prendre un ticket pour être un geek maintenant*). Anthropologist Leo Hsu (2007) has interpreted similar narratives among US technology enthusiasts involved in technology transfer and development as both a habitus and a strategic choice with an increasing social and economic capital.

“I am less and less of a geek”

Nevertheless, aside from a few marked occasions such as this photo shoot for *L'Express*, FS advocacy associations did not emphasize geek imagery, and even less that of being hackers. Their ambivalence about popular images of geeks indicated that they desired rather to broaden the constellation of people interested in free software. Even more importantly, it endowed free software, as well as images of geeks and of online collaborations, with a kind of civic significance that in France is usually attributed to voluntary associations. By developing vibrant associative life around the implications and uses of computer technology during the last ten years, activists have situated free software in France within popular notions of “associative citizenship,” i.e. belonging to associative forms of civic life that are accountable to state-regulated structures and to the general public but not directly tied to any partisan political group (Barthélémy 2000). Free software associations emphasized this sense of social purpose in contrast to imagery of geeks as technophiles and consumers of gadgets, or that of hackers as asocial, dangerous intruders lurking online.

Acceptable militant imagery was fashioned in instructions on public

presentation of associations, in daily conversations and messages, in discussions of strategies for collective action, and in humorous venues such as *copinedegeek* website. In such various sites, the categories of *geek*, *copine de geek* and *geekette* gendered individual involvement in free software advocacy.

When preparing public presentations, or booths in public events, associations' members were instructed to avoid using computer jargon, being glued to the computer screen, turning one's back to the public, and, above all, showing command window or source code to newcomers.⁵⁰ These specific traits were identified with the imagery of “bearded activists”⁵¹ that were reputed to scare away the non-computer savvy visitors. This imagery illustrates what FS advocates considered to be the “soft” approach to promoting free software: Long beard and hair were generally understood to be hackers' bodily ornaments (too technical), and activist engagement was avoided as too radical. The metaphor of a sect and the accusations of software purism, both poking fun at the intense commitment and conviction of FS advocates, were among the favorite “community” themes guaranteed to incite interminable debates. While I have met few FS advocates who insisted on using only free software all the time, many FS advocates liked to point out that they were not “sectarian” or “integrist.” These stigmatizing labels were widely popular, among advocates but also in the French media to discount various demands for political representation that were seen as threatening *republicain*

50 “Charte Expositant,” available at <http://wiki.april.org/CharteExpositant>, last accessed February 1, 2006.

51 “Le logiciel libre n'est plus un choix partisan,” available at <http://www.01net.com/editorial/302610/sondage/le-logiciel-libre-n-est-plus-un-choix-partisan/>, last accessed February 1, 2006.

ideals.

Desirable behaviors of association members promoting free software included receiving visitors, offering to inform them, being very clear and patient with beginners (either on technical matters or on the concept of free software and its implications), and offering them fliers to further their knowledge if they were so inclined. Some advocates at these booths readily affirmed that they were not geeks and that they were not interested in spending time with computers for its own sake, but that they were still comfortable using free software. They insisted that their organizations were not limited to hackers or technical specialists and suggested that free software should be accessible to anyone as an important locus for democratic engagement in the digital society.

The term that many of them preferred for their engagement was that of “*militant*.” Although throughout the twentieth century this term connoted political engagement, since the 1970s the majority of *militants* can be found in voluntary associations rather than in political parties (Wieviorka 1999; Perrineau 1994).

Historian Michel Wieviorka offers this synthetic sketch of the connotations:

“Through the practices that it promotes, militancy postulates the gift of oneself (*le don de soi*). On a daily basis, the *militant* indeed invests (him)self in actions which, in spite of their diversity, aim primarily to convince and to mobilize. Distribution of fliers, making of posters, participation in the meetings and the congresses, organization of demonstrations or strikes absorb the energy of the volunteers who, against winds and tides, endeavor to make the cause triumph. Monotonous and repetitive, these mobilizing tasks require a considerable time that the militant, by definition, does not spare (*ne marchande pas*), not hesitating to neglect his/her career or to forsake his/her hearth. Engagement resembles here an asceticism, a secular form of sacrifice that intensifies the Judeo-Christian culture. But, in contrast to the heaven promised through the belief in beyond, in this case the material or symbolic

remunerations are devoted to the general interest” (Wieviorka 1999: 617).

This excerpt echoes the choice of terms through which French FS advocates like to describe their own actions. During one interview in particular, I pressed my informant Nicolas, who was a very articulate public speaker, to describe his vision of FS advocacy in France. Nicolas was a primary school teacher in his late thirties and did FS advocacy in his free time. He pointed out intense proselytizing orientation and his own engagement in this direction, but shied away from claiming the title of *prosélyte* himself, arguing that the term was connoted as religious and scholarly. He found the term *militant* to be clearer in spite of its, mainly Left-wing, political connotations.

Activiste was too radical, evoking the ETA and violent “actions.” *Informateur* connoted spies and double-agents, who were to inform the external actors about the activities with a specific milieu. *Évangéliste* was a term adopted by the main advocate of open formats, but the term clearly connoted the “Anglo-Saxon culture.” There was altogether one such *évangéliste* in France, and he acquired the title of “technological evangelist” during his employment with the first known (US-owned) company that released their software under a FS license. When his employer bankrupted, the “technological evangelist” kept the title. His subsequent prominence as a spokesperson for open standards endowed the title of *évangéliste* with a prestigious reputation. “Advocate” (*avocat*) implies making of apology for a noble cause (“like Desmond Tutu or Mandela,” Nicolas explained), *sympathisant* does not necessarily imply an actively engaged person, and *acteur* is “not bad but somehow sounded overly vague.” Nicolas' classification highlighted similar traits to those delineated by Wieviorka:

active engagement open towards the new people unfamiliar with the issues, enthusiasm and abstaining from “radicalism.”

Not everyone agreed with this development. Another of my interviewees, who was working as a freelance journalist and programmer at the time, complained about what he saw as “the increasingly proselytizing” character of FS advocacy. Being a geek was for him more of a countercultural attitude, and as FS advocacy became organized through voluntary associations, he felt “less and less of a geek.” He was about to move away from Paris and was counting on this opportunity to distance himself from most FS advocacy-related activities.

Other people who refused to join any FS associations tended to be more radical and/or confrontational. Nevertheless, they sometimes attended the monthly *First Jeudi* gatherings. On one such occasion, one FS developer in his late 40s explained to me that he abstained from joining associations because he found them symptomatic of conformism in thinking about politics and social change (*la pensée unique*).

Geek girlfriends and geekettes

A major French reference point for understanding the meanings of the term “geek” was a website made by a few girlfriends of geeks. This website, *copinedegeek.org*, offered advice on “how to find and live with a geek,” humorously mimicking the “how to do it”-style of technical manuals. The site also published testimonials of events “resulting from years of daily living with a geek”⁵² and

52 <http://www.copinedegeek.com>, last accessed February 1, 2006.

described significant traits of geek life (diet, sense of time, dress style, machines, jokes, vocabulary, first date, geek couple, parties, holidays, shopping, or geek at home). Their definition of a geek stated, “Geeks are human beings crazy about informatics, who live only for informatics and who conceive computing applications. Geeks are implicated in a community that lives through the internet.”⁵³

The website offered insight into, and made fun of, other important phenomena associated with being a geek. The photo-stories featured computer-incompetent people that included corporate bosses, ambitious corporate employees, and girlfriends (often in the roles of secretaries). There was no article devoted to defining the geek's girlfriend, but the site made fun of a certain vision of femininity: all in pink, offering funny psychotests, dating section, and virtual greeting cards. *Geeks* were assumed to be male and heterosexual.⁵⁴ Moreover, although the website made *copines* famous worldwide and some articles and photo-stories were eventually translated into English, some geeks understood *copines* to be a Parisian phenomenon. One of my informants, who knew several *copines* from offline contexts, highlighted this local and yet very potent international image jokingly: “After all, Paris is a city in which love is on all the

53 “Définition,” available at http://copinedegeek.com/rubrique.php3?id_rubrique=64, last accessed February 1, 2006.

54 One male informant told me a story that “Copines de geek” have received an e-mail of a gay man who was ready to write articles for the website. This person was gay and boyfriend of a geek who truly resembled the geek traits described by *copines*. He often found himself adopting *copines'* strategies in dealing with his boyfriend. My informant took this story to mean that there are no sexual rules on that issue but that there is a majority: geeks are mostly male and mostly heterosexual, so women were the first to make the public statement “look how my partner lives.”

street corners when the weather is nice. I am not surprised that geek's girlfriends appeared here [laughs]" (fieldnotes).

This website became a major cultural reference among free software advocates, to the point that the creators of this site had their own booth at most important free software events. But their presence and "success" as an official association in the world of free software drew criticisms that they had "taken themselves too seriously" (interview notes). While their humorous playing with stereotypes made the free software community more visible and sympathetic to many internet users, it also meant that all women participants were defined in terms of whether or not they were *copines de geek*.

Alternately a woman FS advocate could participate as a *geekette*, i.e. a woman skilled and passionately interested in free software. While geek's girlfriends were also to a great extent interested and skilled in free software, their insistence on being girlfriends suggested a preference for involvement in the community mainly through a relationship with a man. In contrast, despite their often having geek boyfriends or husbands, *geekettes* felt very strongly about their autonomous commitment to the community. One of my male interlocutors, a practicing Catholic, understood the difference between *geekettes* and geek girlfriends in the following terms:

Geek girlfriends are often computer scientists in their own right as well, or at least interested in computers; therefore, *geekettes* might want to join their association. But I think that being a partner of a guy who spends his life in front of his computer is a different phenomenon, one that implies a certain idea of modernity. When you look at our parents, we imagine them with a father who reads the newspaper in front of TV... while the mother cooks. And here, geek girlfriend, she is preparing the food, ironing the shirts—actually more likely T-shirts, T-shirts that have lost their shape—while the guy is on IRC

downloading code and patching the kernel. So, the image is somewhat the same; of course I am stereotyping it, but it nevertheless corresponds to a certain idea of reality. I don't think that we all grew up with parents where the father was in front of TV reading the newspaper.

Finally, many geeks had girlfriends and wives who rarely, if ever, came to any public events; in several conversations that I had with such persons, they did not know whether they were *copines de geek*.

Widely held conceptions involving women included seeing women as consensus figures and persons who would be treated with more tolerance if they were involved in controversial actions. Several years ago, when members of the Parinux *CA* wanted to replace the president whom they deemed too detached from associative activities, they considered that the person best suited to carry out the “coup” was a recently arrived female member who was also very enthusiastic and involved in many activities. At the annual meeting, she was unanimously voted in as new president of the association.

The word that I heard employed about my own involvement, when I was learning how to use the collaborative online repository CVS, was *étonnant* -- which means formidable or surprising. This term referred to various ways in which advocates found my (relational, linguistic and organizing) skills useful, to my determination to figure out ways to participate, as well as to the amount of time that I dedicated to being in the free software world. By the end of my stay, I was called *geekette* several times, but just as I was starting to believe it, somebody pointed me out to a journalist as an example of a person who is “not a geek's girlfriend nor even a *geekette*”! This occasion reminded me of my insider/outsider status and, more

importantly, confirmed the fault lines between different categories of participation for women. As an anthropologist, I was seen as interested more in geeks than in free software (unlike a *geekette*); but my interest in geeks was not romantic (unlike a *geek girlfriend*).

Sometimes my presence increased the number of women working on the stand, which defied stereotypes of free software being a male domain, but reinforced other stereotypes, notably ideas about gender and technical skills. This became clear to me during the European IT Week fair, when I spent three days on the stand with the badge “exhibitor.” I had that badge in order to have free entrance to the event and access to refreshments that were reserved for exhibitors. When someone came to ask me a question and I realized I could not answer it, in embarrassment I tried to switch my badge “exhibitor” with the one that said “visitor.” Mario, FS advocate who was on the stand with me, told me I didn't have to worry about it too much: if I did not know the answer, I could just ask someone. But I did not want to reinforce the impression that women are on the stand in order to attract visitors and that the knowledgeable people were male. My other point of reference, aside from hostesses on several private company stands, was Yvonne, a *geekette* who seemed to enjoy publicly demonstrating her knowledge and skills in FS software. She was very aware of the prejudices against women as knowledgeable in FS, and loved to prove those prejudices misplaced. Although I felt uncomfortable because I did not know very much, I decided to stay on the stand because it was interesting for my research.

Although activists largely regretted the small number of “girls” (*filles*) coming

to public events, they assumed that free software gatherings to be spaces of predominantly masculine sociability. This was clear, for example, at a party in a Parisian tavern celebrating the rejection of the European directive on software patents. Among about 30 people, there were more women than usual: some of them were accompanying their male partners, some of them would rarely come for an informal gathering otherwise, and some, such as a sociology student, appeared for the first time. One of them, Sandrine, a partner of a geek, was pregnant and monopolized the conversation at my table by talking about child-slings and birthing techniques. Upon hearing her, one of my neighbors mentioned that his wife, who was not present, was also pregnant and intended to give birth at home. As Sandrine then enthusiastically continued to explain the details of the *technical plateau* and the *doula* necessary for giving birth at home, he started joking at first, but after a couple of minutes he admitted, “Oh la la, I thought I was coming to an evening with the guys, to discussion among guys, but now we keep talking about birthing... I am all nervous about it, and I thought I could forget it at least for a moment!” This provocative joke ironically recalls habitual complaints about lack of female participation in FS by emphasizing the anxiety-laden gender mixity of other daily contexts.

MEANS AND MEANINGS OF ENGAGEMENT

Free software associations in France shared some important characteristics with many other voluntary associations, in France and elsewhere. Those included an overwhelming presence of “passive” and “disappearing” members in associations, or

styles of associative work that relied on volunteers' "free time."⁵⁵ At the same time, skillfulness and readiness to work together using online collaborative tools made free software associations different from the majority of French voluntary associations. The internet increased the potential for working together, as one could work at any time, anywhere, as long as one had internet connection.⁵⁶

FS advocates' idea about copying and sharing contentiously emphasized the differences between online and offline contexts. At the same time, socialization and work for most FS advocates constantly combined offline and online presence. During my internship with *APRIL*, much of my online participant observation took place in the presence of at least two other people working with me. We were sitting in the same room, sitting at an angle so that we faced away and did not distract each other, with no talking but typing on the chat in order to share our conversation with other people. Sometimes it was easier to get a reply from a person sitting next to me by addressing him or her on the chat than by calling his/her name.

The possibility to work online increased tendencies to do voluntary work at home. A related problem was that doing work online/at home made it difficult to

55 A 1999 survey has shown that although 80 percent of French were members of some kind of voluntary association, only 13% of them were actively involved (Fourel & Loisel 1999).

56 I analyze in Chapter 3 how blogs, chats, e-mail digests, wikis, and websites enabled distributed "watching" practices and provided frameworks to trace legal policies and political strategies, articulate possible choices and evaluate their effects. The contents of these online documents expressed associations' visions of mobilizing public concern about software, patents and copyright. Their form (web pages accessible to everyone) enabled public recognition of associative activities and publicly accessible places for "lurking," entrance and primary sensitization to free software issues.

realize when activists “disappeared;” this might be the reason why face-to-face meetings had a high priority, happened frequently, and were regularly briefed either to the *CA* or to the membership of the association. Giving one's three hours to associative work online and face-to-face then had very different outcomes and sometimes gave rise to tensions between opposed views and expectations of voluntary action. For example, at a *Parinux CA* meeting, Marc, one of *Parinux* officers, announced his intention to develop the association's web site so that the rest of adherents could be testers or users. Baptiste, the president of the association, disagreed:

“We are an association, the needs are developed in usage; it is not enough that you take care of it alone! I've had enough of guys who pull a “one-shot” and then run off! Who set up excellent install-parties and then run off to Bordeaux! Who set up mailing lists and then disappear! Philippe, we ask him to open an account, we have to wait one month because he's the only one who has the root password!” (fieldnotes)

In this excerpt, Baptiste mentioned three persons who decided to take initiative, became involved in a project in a very intense and consuming way, and eventually disappeared with no one invested closely enough in the particular project to be able to pick up with the same personal involvement after they left. He was unwilling to concentrate too much power in a single individual for the fourth time. Marc, in contrast to Baptiste, was frustrated because of numerous meetings at which we discussed remake of web page with no concrete results. He repeated his wish to use meetings to do work (“*CA* could meet for 4 hours on online chat and everyone could do work at their respective homes during that time”) and aim towards achieving concrete results, rather than discuss means to achieve results without necessarily

following through with action. But such “working meetings” required enough working space, tables, several computers, etc. This meeting, like other meetings of the Administrative Council, took place each month in the apartment of a different CA member. Sometimes that involved traveling to the suburbs, which was especially difficult for people who were coming from another suburb. Work schedules limited the days available for meetings. When we were finally able to meet, we would plan actions and afterwards everyone would go home to do the work – and that meant going to already well-filled lives, with different rhythms of work and leisure time. Sometimes there was little or no follow through on the plans.

Ambiguities of openness

Although advocates mostly rejected the notion of “proselytizing” which they identified with religious activism, the potential openness of almost all associative activities to general public and non-members was widely accepted as a mark of their public engagement. This resulted in many ambiguities and unknowns in imagining who exactly was being addressed. FS advocates tended to interpret silent and disappearing interlocutors—both online and offline—drawing upon three idioms: lurking, disappearance, and silence.

While the three terms might be interchangeable from the perspectives of individuals doing it, advocates attributed different valences to these terms. Disappearance was seen as related to weaknesses of voluntary (associations') action, while lurking was rather a strategic opening allowing relay of information, i.e. a

specific strength of a culture of sharing and helping. Associations regretted disappearances but wanted to accommodate lurkers and allow for certain kinds of openness. *Parinux* had a special mailing list open to public, while *APRIL* established a special mailing lists for lurkers, relaying key announcements only, in an attempt to accommodate demands of members who were overwhelmed with the amount of e-mails on the general membership mailing list.

The Administrative Councils of associations generally consisted of the most active volunteers. However, in all three associations there were one or more Council members who almost never came to meetings, participated in associations, or sent any e-mails. Typically such persons would be geeks who had been very active in the past and then “disappeared.” The absence of these members was acknowledged and regretted but without formal consequences; for example, meeting minutes would indicate such persons as “excused,” “non-excused,” or “didn't show up but we don't love them less for that reason.”⁵⁷ The one attempt to formally exclude a Council member, duly recorded in the meeting minutes that were posted on the website, earned serious reprobation from members and outside observers.⁵⁸ Those who were present on that occasion claimed that inclusion of this half-joking attempt in the official meeting minutes had given it much more weight than had been intended.

Working via internet made people disappear in strange ways. For example,

57 “Compte rendu de la réunion du CA du jeudi 23 juin 2005,” available online at <http://parinux.org/assoc/ca/20050623.html>, last accessed 29 January 2006.

58 “Compte-rendu de la réunion du CA Parinux du 09 novembre 2004,” available online at <http://www.parinux.org/assoc/ca/20041109.html>, last accessed 25 January 2006.

members would never write anything nor come to any events but they would still receive the messages until they were officially taken off the list. Moreover, some of the Council members had accounts on associations' servers, so they retained quite a bit of administrative power although they disappeared. Please see Appendix B for a playful performance of how they expected the person to react when she noticed that her account on the server was deactivated.

Analysis of e-mails sent to discussion lists provide insights into numbers of advocates who were “silent.”⁵⁹ In all three associations, ten members (mostly from the Administrative Council) sent about half of the total number of messages. In *APRIL*, 130 people sent the other 50%, leaving about 100 members who have not sent any messages. On the *Parinux* list, 65 people have sent the other 50% of messages, which leaves about 60 people who have not sent any messages. On *AFUL* members' mailing list, 97 people have sent the other 50%, which leaves about 100 people who have not sent any messages. In each case, 10 members regularly interacted via the public mailing list, half of membership occasionally sent a message, and roughly half of membership posted no messages. People who posted no messages during the preceding year could be seen as lurkers but also as disappeared, where disappearance could have a more troublesome connotation.

The number of “silent members” is approximate because membership fluctuated although it remained quantitatively more or less stable; thus, the numbers of

⁵⁹ These statistics were produced using MailListStat program on my archives of three membership mailing lists (*APRIL*, *AFUL* and *Parinux*) for about 2 years (Jan 2004-February 2006).

“silent” members could be larger. All of these associations had a big turnover of members, i.e. a significant number of members did not renew their membership from one year to another. At a *Parinux CA* meeting in December 2004, aside from about twenty “core members” (*noyau dur*), officers noted that they did not know the membership very well. Because all of their events were open to public, it was difficult to estimate how many participants in these events were members; indeed, joining the association provided no privileges beyond those available to anyone. Moreover, they estimated that about half of the members had joined the association in order to support the association financially, and that those people “disappeared” right away. It was also suggested that a certain turn-over was inevitable and even desirable in a voluntary association, replacing “active” members as they became tired or had to attend to other activities.⁶⁰ However, other signs indicated that *Parinux* faced increasing “passivity” of membership. The association had organized free workshops, but they had very low attendance; moreover, it was impossible to predict which topics would attract attendance, as both advanced technical ateliers and introductory ones occasionally drew many people, and on other occasions almost none.

The problem of a membership that was formally quite large but practically much smaller was discussed every year in preparation for the annual meeting. Legally, annual financial and activity reports must be approved by a quorum of the membership gathered at each year's annual meeting. Even with the possibilities to vote online or via proxy, it regularly happened that no quorum was present for annual meetings. In

60 “[long] Reunion CA elargi du mardi 14 decembre,” e-mail sent to the Parinux membership list in December 2004.

an attempt to avoid repeatedly organizing Assemblies for lack of quorums, in 2004 APRIL lowered its quorum to 30% of members; AFUL's quorum was 30% as well, while Parinux' quorum was fixed at 25%.

In 2004, Parinux was very successful, with success measured by the increased numbers of events and participants. However, in the first few months of 2005 a few officers stopped organizing events and the association abruptly lost steam. Such “disappearance” of a few volunteers and its disproportionate effect on associative activities was a notorious feature of voluntary work and no-one particularly condemned it: typically, unemployed members would become very active, only to literally disappear overnight after they found a job, or after they run into personal troubles. However, such dynamics posed a problem if such a person, through previous intense personal commitment, had acquired responsibilities. Because associations relied disproportionately on individual work, the departure of a particular person left those who had established trust in that person up in the air, whether it was the association, journalists, or MEPs. Transitions were not seamless even though in most cases there were other volunteers willing to pick up where previous person left. For this reason, free software advocates referred to the fluidity of leadership as a “problem of assuring the continuity of associative action” (interview).

CONCLUSION

In this chapter, I have explored the social contexts of free software advocacy in

France and introduced some culturally important categories. I focused on the aspects of FS advocacy that are attributable to national legal and political frameworks of voluntary associative action. Particular, formal regulation of voluntary associations and the prominence of free software advocacy, both in French-speaking free software and open source community and in French public and political debates, make France a particularly salient context for conducting such a study. Other qualities that might be specific to the French FS advocacy include significant overlap between face-to-face and online networks, due to frequent inter-associational activities. The ways in which advocates interweave activism, paid work and family life depend on French unemployment benefits and a relatively high number of paid vacation days, which are often used for advocacy-related activities. These dimensions suggest that free software advocacy might be expected to vary cross-culturally, and to be related to national institutional and political organization.

An ethnographic case study approach refines our understanding of different socio-cultural contexts and political agendas that free software advocacy can take in a decidedly “Western” context. I have organized the presentation of my ethnographic data around five themes that elucidate free software advocacy: its peculiar boundedness (through voluntary associations) and strategic openness (to newcomers and to general public), overlapping of face-to-face and online social networks, reliance on doing work at home (being savvy about the uses of IT), fluidity of membership and of leadership but also the possibility of permanent intense involvement for several key members, and many forms of lurking and disappearance.

Free software advocates navigate these seemingly contradictory dimensions daily; my analysis contextualizes their commitments to FS advocacy with other aspects of advocates' daily lives.

CHAPTER 2: SOFTWARE FREEDOM, THE RIGHT TO COPY, AND COPYRIGHT IN FRANCE

“They could be pleased with the ensuing diffusion of the culture. But no. They are crying thief.”⁶¹ In these words, an article in a satirical newspaper Charlie Hebdo highlighted the irony of criminalizing copying of digital materials. The article referred to a prior consensus in which high art and literature were considered parts of national heritage to which French citizens had rights of access.⁶² The article opposed cultural industries (*Majors*) to internet users (*internautes*) and proposed that a new consensus about digital copyright could be established by taxing the beneficiaries of emergent practices—internet access providers and makers of empty digital supports.

The vulgar title of this article, “The Hand of *Gratuité* in the Panties of Majors,” matched the vulgarity of an advertising campaign that had started a month earlier. This campaign showcased a stylized hand, highly reminiscent of an image of a cursor pointing to a hyperlink, except that in this case the middle finger was raised instead of the index finger. Below, the same hand with the raised middle finger was put behind prison bars, with a legend “Free music has a price... exchange of music online is theft and now it is punishable with up to 300,000 Euros in fines and 3 years of prison” (See Figure 2).

61 “La main de la gratuité dans la culotte des majors.” Charlie Hebdo. 16 June 2004.

62 The French state has subsidized cost-free access to arts, literature, and other national heritage at least since 1959, when Malraux founded the Ministry of Culture.

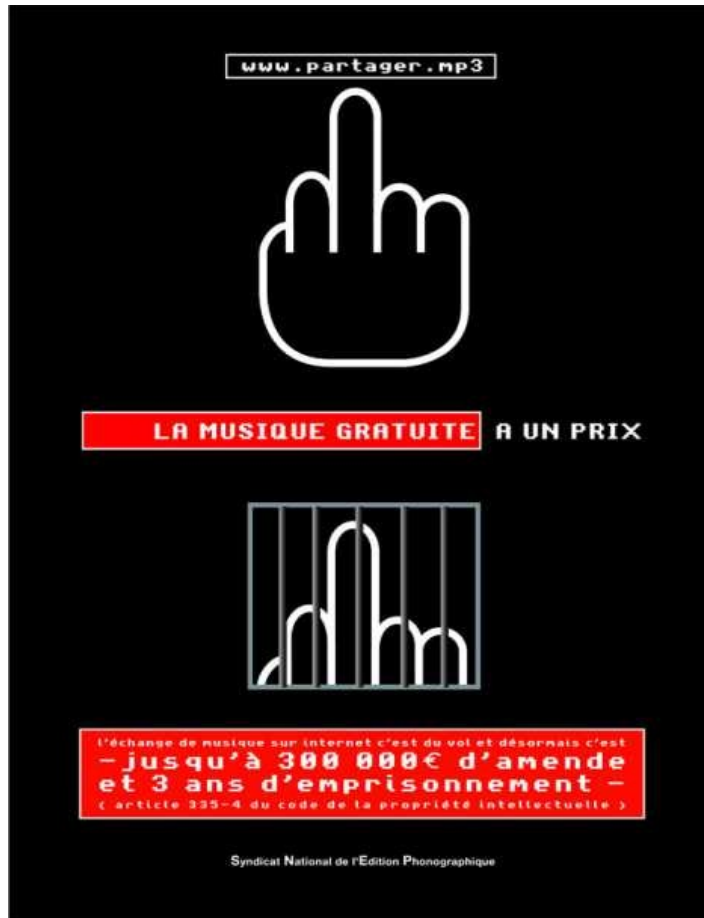


Figure 2: Offensive advertisement, paid by the union of music producers SNEP, threatening internet users with fines up to 300,00 Euros and 3 years in prison for illegal downloading of music. *L'affiche de la campagne menée par le SNEP.* *Journal du Net*, 5 May 2004. Available online at <http://www.journaldunet.com/0405/040505snep.shtml#>, last accessed 5 May 2008.

The finger in question could have been understood as symbolizing the defiance of *internauts* who downloaded illegal copies and disregarded the threat of criminal prosecution; but the President of SNEP, the group of CD producers that paid for the ad, suggested that in fact the offensive finger belonged to SNEP and symbolized the beginning of criminal prosecutions for illegal sharing of files on peer-to-peer

networks: “We give the finger to pirates who illegally download music online.”⁶³ This advertisement generated outcry as exceptionally vulgar and, after several newspapers refused to print it, was subsequently edited in order to raise the index instead of the middle finger.

The advertisement opposes, on the one side, entertainment industry groups that have decried “generalized theft online,” prosecuted certain users for infringing authorship laws, and characterized unlimited copying and sharing of digital materials as a threat to artistic production and creativity; on the other side, advocates for the right to copy draw on legal, historical and cultural precedents specific to the French national context. This includes the right to make private copies, taxes on media used for archiving these copies, preservation of national cultural heritage, or commitment to facilitating broad “access to culture.” Both sides share an assumption that a new compromise is needed among consumers, creators, and owners of authorship rights. This conflict has galvanized a debate about societal choices (*débat de société*) in a more general contemporary questioning about circulation of digitized contents and access at no charge (*gratuité*).

...

Practices of copying are widespread among millions of internet users across the world and commonly understood as an inherent property of digital media. For example, some scholars and activists in the US have called for a reform of authorship law in order to encourage vibrant cultural expression online (Vaidhyathan 2001,

63 “L’industrie du disque lance un signal clair aux pirates.” Journal du Net. 5 May 2004. 28 April 2006. <http://www.journaldunet.com/0405/040505snep.shtml>

Lessig 2004, Boyle 2003). Other critics have highlighted the faultlines of race, class, gender, and colonialism that denoted some digital copying practices as enabling genuine (collaborative) creativity and distinguished them from illegitimate forms of copying, popularly called “piracy” (Philip 2005; Anderson and Bowrey 2006). Thus, there are varied, sometimes contested, scenarios of exactly how, and on what bases, a vibrant online culture could be organized. In this chapter, I take a closer look at some of these scenarios in France, as well as the questions and assumptions that inform them. I address in more detail FS advocates' efforts to articulate a civic meaning of unlimited copying in order to address how culturally specific meanings are established around digital copying in France. I argue that the contentions about online copying translate ambiguities of digitization into long-standing French debates about stewarding of the common good and the role of technologies in social change.

REVISING THE SOCIAL PURPOSE OF *GRATUITÉ*

The term *gratuité* (the quality of being costless in an economic sense) indexes a specifically French sense of conceptual, legal, and political separation of the public good and private interests. In this section, I analyze how *gratuité* is invoked in French public debates about internet, in order to highlight the challenges and the urgency in France of articulating how the concept of public good could be extended online, as well as ingenious ways in which FS advocates have drawn on this concept in order to fashion civic meanings to their practices.

In the French media, notions of exemption from payment have been discussed

in very different terms with respect to museums and internet. French national museums have been understood as repositories of national heritage and pride stewarded by the state, as well as expressions of the French state's commitment to provide access to culture that unites French citizens (Duncan 1995; Poulot 1997). In 2004-5, state sponsorship of museum funding and entrance fees was debated in national newspapers as the last protection left against turning museums into marketplaces (*marchandisation*) and against market-driven “globalization” of cultural policies.⁶⁴ When in early 2005 the Louvre limited its policies of cost-free entrance for artists and teachers, demonstrations ensued. The demonstrators argued that cost-free “access to culture” and learning from the past was neither a commodity (*marchandise*) nor a privilege, but a right.⁶⁵ In relation to the museums, *gratuité* is associated with state sponsorship financed by citizens' taxes, for the general good.

In contrast, *gratuité* online was publicly denounced by high civil servants as fake and self-interested, indicative of global corporate capitalist expansion and privatization. For example, the President of the French National Library Jeanneney incited a polemic against the Google Books project by denouncing their use of resources in a way that obliterates the (French and European) priorities in stewarding their literary heritage:

“I wouldn't want to see--though I'm amused by the thought--the text of Saint-Exupéry's Le Petit Prince accompanied by an ad for a sheep merchant, Proust's À la Recherche du temps perdu by an ad for a manufacturer of madeleines, Don Quixote by an ad for a windmill manufacturer, or Andersen by an ad for a company that sells matches” (Jeanneney 2005: 31).

64 “Les prix d'entrée divisent les grands musées du monde,” *Le Monde*, 17 January 2005.

65 “Le Louvre gratuit, mais à quel prix ?” *Libération*, 17 January 2005.

In order to prevent this catastrophic scenario, Jeanneney voiced a need for protection against “perverse effects of [Google's] search for profit hidden under an appearance of disinterest.”⁶⁶ The French Minister of Culture and the President subsequently announced that funding a European book digitization project was of vital national interest. They proposed a European online library and search engine that would be financed by taxpayers and exhibit indexation in accordance with European priorities, as opposed to the commercial priorities of Google. This proposal was countered in subsequent newspaper articles that condemned state-sponsored *grands projets*.⁶⁷

French economists, legal scholars, and journalists have contributed to a rise of concern about the emergent phenomenon of *gratuité* online. They allude to the emergence of undesirable or even harmful forms of *gratuité*, understood to be a mix of lawless downloading and of corporate-sponsored advertising, that would devalue the status of “culture” as a link uniting French citizens. The economist Joëlle Farchy, member of the CSPLA,⁶⁸ summarized the situation as follows:

Culture becomes a loss leader (*un produit d'appel*) to sell everything and anything. These commercial models of financing no-payment (*la gratuité*) are

66 “Quand Google défie l'Europe.” *Le Monde*. 23-24 Jan 2005.

67 One editorial re-baptized the proposed “French Google” plan into “the *plan calcul* of the Bibliothèque Nationale,” referring to a failed attempt to create state-financed French computing in the 1970s that was intended to rival the world leadership of the IBM. Bertrand Le Gendre. “Le plan calcul de la BNF.” *Le Monde*. 22 April 2005.

68 *Conseil Supérieur de la Propriété Littéraire et Artistique* (CSPLA), created in 2000 under the auspices of the French Ministry of Culture and Communication, brings together legal experts and industry representatives concerned with applications of intellectual property to internet and information society. See <http://www.culture.gouv.fr/culture/cspla/index-cspla.htm>, last accessed 14 May, 2006.

terribly effective from an economic point of view, but also involve risks: notably, the risk of devaluing cultural creation in public's view, as well as the risk of reducing cultural diversity in a way that would only benefit a few extremely known star-products.⁶⁹

Farchy sought to establish criteria for discriminating between various exemptions from payment, interweaving them with artistic models of dominant cultural industries and notions of cultural diversity. The term “cultural diversity,” when used in French media or by French politicians, usually refers to the defense of the “cultural exception” that the French representatives have established within the World Trade organization for limiting and taxing distribution of US films and music in France. The denunciations of *gratuité* in the media were similar to the logic of the cultural exception in that they could both be understood as a response to US entertainment industry power.

Alternatively, the internet was denounced as a major site of the “culture of non-payment” as internet users had supposedly become used to downloading anything (and notably mainstream entertainment contents) without paying authorship royalties. Some of these arguments have been made since the early 1980s, related to photocopying and audio and videorecording on tapes. The remuneration for private copies was established in 1985 as an outcome of a similar public debate about taping and the future of French cultural industries. Tax revenues from the sale of videotapes were redistributed through authors' unions in order to compensate authors and producers for presumed income loss due to allowing private copying (“remuneration

69 Joëlle Farchy, “Il faut apprivoiser la gratuité sur Internet,” *Libération*, 28-29 May 2005.

for private copies”).

However, while in the 1980s only the cinema and music industries were affected by videotaping and the publishing industry was affected by photocopying, in 2005, claims about the “culture of non-payment online” were made as many businesses and public services were experimenting with mixed models online, trying to determine a balance of what goods and services could be profitable and what should stay accessible free of charge.⁷⁰ Anxieties about online *gratuité* then in large part derived from the specific context in which they were becoming visible (these include privatization and downsizing of public services, transformation and rethinking of museum policies of access, looking for commercially viable online models).⁷¹

70 In June 2004, Météo France, which is a public service (*établissement public*), decided to turn its weather forecast beyond 24-hours into a paying service. Following tens of thousands of e-mails of internet users who protested this decision, the CEO of Météo France asserted that their decision ran up, among other things, against “culture of non-payment online” (*culture de la gratuité sur le Net*). Acknowledging “the mistake in situating the cursor between free and paying spaces,” Météo France moved the payment line to forecast at the scale of administrative districts. “Météo France, beau temps sur le site,” *Libération*, 24 November 2004.

71 For example, a spectacularly successful business model of Apple's iTunes, selling cheap music online that can be transferred only to (Apple-manufactured) iPods—thus music serves only as a “lure” to make money on selling iPods—has been denounced in the French National Parliament as an effort to lock consumers into dependence on Apple for consuming of goods (i.e. music) that they bought. See “Minister in France defends ipod law,” *International Herald Tribune*, accessible online at http://www.ihf.com/bin/print_ipob.php?file=/articles/2006/04/28/technology/itunes.php, last accessed April 30, 2006. Other online music retailers have been prosecuted by French consumers' associations for trying to do the same. See, for example, “Musique en ligne: l'UFC poursuit Apple et Sony,”

Moreover, although the debates about *gratuité* purported to address all digital contents, they focused on the domains in which the market potential was seen as promising and yet, successful economic models and the technical possibilities for enforcing them were still in an experimental phase. Thus, the French Minister of Culture asserted that “digital technology cannot claim to spread knowledge without taking account of the conditions of production of that knowledge,”⁷² but (with the exception of Jeanneney's plea), books were conspicuously absent from the debates. Rather, these revolved around downloading of music and prospects for regulating future downloading of films.

WHAT DOES SOFTWARE FREEDOM MEAN?

Unlike the English term “free” which ambiguously refers to an economic quality (cost-free) or a moral one (liberty), the French name of free software is *logiciel libre*, which points unambiguously to the idea of liberty. Free software allows the user to obtain the code from the authors and to copy, modify and freely redistribute it. So, free software gives to users some important rights – rights which are ordinarily reserved for authors via authorship laws. “Freedom to copy,” developed by free software advocates, refers to the right to copy without control—because controlling copying, as it has been developed by technical and legal means, requires invasive

<http://www.zdnet.fr/actualites/internet/0,39020774,39206572,00.htm>, last accessed April 30, 2006.

72 “Le numérique ne saurait prétendre déployer le savoir au mépris des conditions de production de ce savoir,” Renaud Donnedieu de Vabres, “Google n'est pas la fin de l'histoire,” *Le Monde*, 18 March 2005.

measures for surveiling uses of digital materials and prevents certain legitimate uses. Now, the term *gratuité* means “giving free of charge,” “exemption from payment” or “taking without paying.” Each of these translations carries different connotations, but none connote liberty. These are distinct terms and ambiguities do not come linguistically; nonetheless, the omnipresence of *gratuité* in debates about internet presented FS advocates with two concrete challenges.

First, highly mediatized denunciations of *gratuité* such as Jeanneney and Farchy's particularly incriminated means that were necessary for using free software systems in a world in which very few digitized commercial products were designed for free software. FS advocates routinely performed practices that the discourse on *gratuité* made highly controversial: this included exchanging files on P2P networks or breaking the digital-rights-management schemes in order to watch DVDs that were legally bought but unplayable on free software systems.⁷³ The looming prospects of stigmatizing and outlawing such practices directly motivated free software advocates to join an ongoing public and political debates about the reform of authorship law. Indirectly, more general and vague motivations lay in advocates' understanding of the kinds of liberties that are related to FS. These include the “freedom of information” and the “freedom to share.” Both of these are distinct from proprietary authorship rights, but they also counter popular notions of “non-commercial use” and of “exemption from payment.” FS advocates draw on such notions of software freedom

⁷³ As free software was still regarded as marginal in terms of market size, most commercial products were not compatible with free software operating systems and needed to be “hacked” in order to function.

as well as a range of legal tools (licenses) to articulate the importance of unrestricted right to copy.

Second, FS advocates find *gratuité* to be problematic because it does not imply reciprocity, which is essential for cooperative sharing. This lack of cooperative ambition, in turn, distorts the significance of the “freedom to copy” that FS advocates promote. For this reason, FS advocates also seek to articulate a meaning of unlimited copying that would be independent from the *gratuité* financed by advertising. For them, unlike for Jeanneney, the principal challenge is not securing the state patronage, but rather harnessing the potential of like-minded “users” online. I elaborate some of the meanings of software freedom among French FS advocates in the rest of this section.

The legal panoply of a free software program

Authorship rights pertaining to software are expressed through licenses: these stipulate rights to copy, modify and distribute a program, and sometimes also the right to execute and use a program. Proprietary licenses usually restrict copying of software, limit number of users who can access the code simultaneously on a local network, or forbid studying the program (reverse engineering). Free software also has author(s) and a license; free software licenses provide four freedoms to users—the freedom to run, study, redistribute (often re-phrased as “share”), and improve the software.

FS licences can be divided in two groups according to whether they are

“copyleft” or non-copyleft. Like copyright, copyleft regulates the rights to distribution and derived versions of software. Drawing on copyright law provisions, copyleft stipulates that all ulterior or derived versions of software will be licensed under the same terms; thus, all users who receive an ulterior version of software are also entitled to all four software freedoms.⁷⁴ In other words, copyleft works cannot be privatized while non-copyleft FS licenses authorize asserting property rights. Copyleft and non-copyleft licenses could be understood to refer to different visions of freedom: copyleft fosters reciprocity—in which a developer contributes her work under the same terms that she received it—while non-copyleft corresponds to a more unconditional view of freedoms.

In order to make a program free under the terms of the GNU General Public License, one of the most popular FS licenses, the copyright holder needs to add a copyright notice and a statement of copying permission to each source file of the program, along with a copy of the license somewhere in the program package.⁷⁵

Freedom of information

FS activists worldwide share the assumption that digital technologies have radically changed the world and that copying is one of fundamental acts of the digital

74 Some FS advocates argue that copyleft exists as the best possible strategy for assuring software freedom in the long-term within the existing legal framework; it is unclear whether they would instead prefer to abolish copyright and strong authorship rights, if that were a possibility.

75 “How to use the GPL or LGPL,” accessible online at <http://www.gnu.org/license/gpl-howto.html>, last accessed April 30, 2006.

domain.⁷⁶ In this perspective, which is usually associated with hacking approaches, mass media industries are an obstacle to realizing the possibilities of this digital domain. The control of copying is a major means through which media corporations attempt to artificially maintain scarcity of intangibles, maintain their market dominance, and extend broadcasting models to online communication. They have endeavored to obstruct this ability to copy and share online by extending authorship and patenting rights, and enforcing these exclusive rights through both legal and technical means to reduce (and sometimes outright forbid) the margin of exceptions.

Through their practices of copying, sharing and circulating information online, FS advocates have developed alternatives to conceptions of (individual) creative genius that they see as a romantic myth perpetrated by the entertainment industry, as well as to hierarchical corporate production in the software industry.⁷⁷ They argue that patents and copyright were established in order to balance the interests of creators with those of society. As society has radically changed, there is a need to re-think IP and find a new balance, a new social consensus—that will protect the rights of the public (“users”). More generally, they aim to energize a wider societal debate about essential freedoms in the digital age in which the right to copy is seen as crucial to notions of creativity and consumers' rights. Based on their notions of collaborative creativity, FS advocates encourage a debate about societal choices (*débat de société*).

⁷⁶ There can be no computer without the capacity to copy because all instructions are executed at a machine level by copying series of 1 and 0.

⁷⁷ Eric Raymond, “The Cathedral and the Bazaar,” available online at <http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/>, last accessed 26 November 2007.

Freedom to share

The meaning of software freedom was historically ambiguous: Richard Stallman in the 1985 GNU Manifesto, one of the first texts written about free software, repeatedly referred to obtaining software free of cost. He later annotated these references as “careless wording” because they established an ambiguous correspondence between cost and rights provided by free software.⁷⁸ The connotations of software freedom in terms of rights, rather than cost, have been clarified in the meantime through the phrase “free as in speech, not as in beer.” However, ambiguities persist about what exactly freedom to share would be and why it would matter to a FS user. In my interviews, many FS advocates have started using FS because they were able to conveniently download it for free and make legal copies without having to pay for license. Only gradually did they develop interest in the rights that FS provides.

...

How do FS advocates and developers translate legal terms and ideas of freedom into practical decisions and expectations? The following section clarifies some meanings of software freedom by documenting the questions that FS advocates and developers consider when turning a piece of software into free software. I emphasize the significance of enabling cooperation, reciprocity and public diffusion of code. I highlight the ambiguities and worries that advocates and developers address in the process of making software free, and track how meanings of free software change

⁷⁸ Richard Stallman, “The GNU Manifesto,” accessible at <http://www.gnu.org/gnu/manifesto.html>, last accessed April 30, 2006.

in practice.

Making software free

I accompanied FS advocates to several meetings with Xavier, the technical director of a humanitarian non-profit organization (ALTA), whose board wished to reconsider their politics of licensing and distribution of their software tools. Curious about capacities of “collective intelligence” that could be achieved through free software networks, ALTA leaders were interested in experimenting with similar possibilities for making their research and administrative reports widely available online. At a preliminary meeting with several FS advocates, members of ALTA's legal and administrative council concluded that ideas about intellectual property were the most advanced regarding software; more consultations were necessary to understand implications of free licenses for contents other than software. They decided to start by turning the software that ALTA had developed for their own administrative purposes into free software. They hoped that, released as free software, their administrative software might be useful to other similar organizations. Moreover, they wanted to document this process as a guidebook for developers and users interested in free software; the book would address the practical steps involved in making software free as well as attempts to create a vibrant community of developers and informed users. For FS advocates, this project of writing a guidebook offered a pedagogical opportunity, a financial resource, as well as contacts with convergent projects with which ALTA had developed relationships over the years.

After the general direction of the project was agreed upon, Xavier and a seasoned FS advocate, David, took charge of writing the guidebook. At the several meetings I attended, in spite of the obviously shared interest and commitment to collaborate on a showcase manual and a piece of free software, the project stayed at a general discussion level with few concrete results. We spent considerable time rehashing Xavier's motivations and ambitions for this project. In an effort to sort out some of Xavier's hesitations, David invited Jean-Pierre, a renowned FS hacker and advocate, to one meeting.

Xavier was in his thirties, with an engineering background, and was until that moment the sole developer of the piece of software in question; he did not have any prior experience with developing free software. Jean-Pierre was in his forties and, in contrast to Xavier, had 20 years of personal experience in writing free software and dealing with the FS “community.” Both Xavier and Jean-Pierre were skilled software developers, with a capacity to imagine how licensing stipulations translated into technical terms, and an interest in legal and political ramifications of their software writing practices.

Jean-Pierre opened the conversation by asking Xavier, “What is your aim, deeply?” After a brief pause to collect his thoughts, Xavier came up with three aims. First, it was a matter of self-discipline: he was convinced that documenting the software and making it readily available to the public would provide a framework for reflection and would discipline Xavier's work as developer. Second, it allowed diffusing the software widely in the most effective way. Third, it offered him an

opportunity to take part in a broader movement and to benefit from a more general reflection on software diffusion, widespread usage, and the relevant legal environment (authorship royalties and patents). It turned out that Xavier had a broad notion of the legal environment, beyond legal texts, aiming to explore practical implications of widespread usage of free software and the dynamics of collaboration that FS licences enabled.

Publishing unpolished software: public scrutiny and peer reciprocity

Although Xavier acknowledged that in order to make his software free, he only needed to choose a FS license and post the code on a publicly-accessible internet site (both possible to do immediately), he hesitated to do so.⁷⁹ He explained that the program needed some more polishing before it would be readable and smoothly executable. Making his software publicly accessible under a FS license was an important passage to a peer community of developers: not only was it a necessary step towards making his code free but also it would expose his personal skills as a developer to an unknown and potentially enormous online public. Publishing the code online thus acquired a personal dimension. Jean-Pierre empathized with Xavier's reservations, acknowledging the weight of the developer's personal pride and bantering about it as he recollected questions that he considered before posting his first code

⁷⁹ Hosting FS project online is not required, but in practice it assures the greatest visibility to possible collaborators. For this reason, FS code exists crucially in cyberspace. See Chapter 3 for an analysis on how advocacy practices draw in significant ways on online repositories.

online (“When you put code online, fellow professionals can see it and comment”). Nevertheless, Jean-Pierre insisted, the sole act of publishing code was a non-event. He asserted, “when you publish a piece of code online and announce it, nothing actually happens! There is an absolutely remarkable compartmentalization. Possibly people in the professional field are interested” (fieldnotes).

Jean-Pierre then described his vision of the lifecycle of a software program and of appropriation of software by the public: he suggested that publication of code online could best be understood as just a step on the way to further improving software. Publishing source code and documentation online in the early stages of the project, while inconsequential in the short-run, could ultimately facilitate encounters among collaborators who might be interested in helping to “polish” the software. It could be best understood, Jean-Pierre suggested, as a passage from one developer to several developers: the developer gives up controlling everything alone because other people have the right to change published FS code.

Osmosis-like diffusion of information online, Jean-Pierre continued, favors software that is made publicly accessible online at an early stage of its development. Information about the software would gradually be diffused to the appropriate sites while the developer(s) improved the program and modified documentation in public. Without having to do any marketing, within a year or two the code in question would be at all the desired places. During this time, as the software evolved in public, the questions posed to the FS developer would move from relatively general and naive queries that are easily answered, to increasingly specific questions, comprehensible

only to people familiar with a specialized type of software, a language, a specific architecture, and a certain class of developers.

Jean-Pierre's vision of software freedom proposed a model of authorship and responsibility based on reciprocity and exchange among fellow peers: a developer entered the community by contributing her or his efforts in the form of making the code available under the terms that allowed other people to appropriate it in creative ways.

Choice of license

The choice of license encapsulated legal, technical and social quandaries. For Xavier, at stake was facilitating specific kinds of long-term cooperation among developers and users. He wanted “robustness,” i.e., knowledge that others had experimented with the particular license before him.⁸⁰ The most widespread copyleft license, GNU GPL, seemed like an obvious choice to him, and one that would appeal to his collaborators (notably the company that made the configuration files for ALTA's software). He asserted that the philosophy of ALTA, like that of GNU GPL, was based on the ethical principle “if I benefit from others' work, I will share mine as

⁸⁰ This might be a way to reassure oneself of a legal viability of the chosen license. Until now, there have been only one or two court cases worldwide involving the most common free software license (GNU General Public License). Although GNU GPL has been upheld in these two court cases, some intellectual property lawyers nonetheless insist that the lack of established legal precedent amounts to “legal uncertainty” of free software licenses. Free software advocates claim that the low number of court cases involving GPL attests to the legal robustness of GNU GPL—almost all infringement cases have been resolved through compliance settlements before going into court.

well.” He wanted to exchange and contribute to the common cause (*mutualiser*), as long as it was with people who shared the same objectives, kept informed, and contributed to collective dynamics. This cooperative sharing would lay ground for creating a community of informed users and developers that would contribute to improving the software.

He thought that the choice of a license possibly directed the development of code towards a certain kind of architecture. A copyleft license, he reasoned, dictated the ways in which copylefted and non-copylefted software could be “linked.” In a later summary of the meeting via e-mail, Xavier rephrased his aims in terms of technical design, envisioning the ways in which different parts of code might be re-used and serve as a building block for other developers:

“Beyond the legal framework, what really pushes me to write free software, what I want to make out of my software and what future do I envisage for it? [...] Indeed, the idea of free software connotes software that is self-sufficient, whereas for the libraries [a different part of code] the idea is that of integration in a larger unit (and thus tactical choices are different)” (personal e-mail).

Jean-Pierre encouraged Xavier to think about his choice of licence in terms of the dynamic of cooperation that it entailed, rather than as a personal decision affecting solely the future of software in question. Jean-Pierre asserted that contributing to a copylefted project was essential to him: he was willing to give away his work free of charge under the condition that others would do it as well. Copyleft guaranteed the reciprocity upon which his philosophy of cooperation relied. After we left the meeting, Jean-Pierre said that Xavier's hesitation to use copyleft probably indicated his intention to make the code proprietary in the future. Jean-Pierre would not take part in

such projects: “Why would you make money on my work that I gave you free of charge?” However, the insistence on copyleft collaborative dynamic exposed Jean-Pierre to pressures from people who were prohibited from contributing because their work could be appropriated by institutions that employed them.⁸¹ Jean-Pierre found it very difficult to explain his insistence on a copyleft FS license to people in such situations who seemed to be disappointed and partly angry at the entities that had made the choices; instead, he had on several occasions apologized for his choice.

By juxtaposing expectations and questions that a new FS developer finds significant with those of a more experienced one, this episode highlights their awareness that FS development is crucially about imagining and enabling cooperation among developers and informed users (i.e. people who are at least informed and dedicated in some ways). The organization of difference among contributors allowed for a broad scope of cooperation, while visions of the potential utility of FS to general public added weight to its purpose.

Contested meanings of software freedom

At the annual Parisian free software convention Solutions GNU/Linux 2005,

81 This is another “freedom” that needs to be accounted for when deciding to engage in FS development: FS is developed in leisure, “free” time (see Chapter 1) or in other contexts in which employers allow dissemination of the results of employees' work under FS terms. One of ongoing concerns among FS developers and advocates centers on facilitating negotiations among FS developers and their employers about terms of employment and dissemination of their work. While this work grew in importance with the broadening of FS advocacy, it was still only a minority of FS advocates who were employed as developers of FS. I was not able to trace these accounts in a sustained way.

one of the best-attended roundtables was entitled “Feedback about experiences” (*retour d'expérience*). In front of about 70 people, four representatives of state administrative institutions that had adopted the FS office suite (called OpenOffice) presented their accounts. The main paradigms included saving money and a return on investment in the medium- and long-term. Other reasons to use FS, beyond saving money on the cost of licenses, were only an afterthought: as a representative of the Direction of Departmental Customs asserted, “We have passed to OpenOffice initially for economic reasons, and only later we have discovered its strategic aspects.”

The audience in this session, aside from a few FS advocates, included mostly people I was seeing for the first time, some of whom seemed to be employees of other state institutions. Their questions following the presentations were mainly congratulatory: One person asserted that the French administration was largely in advance with respect to private companies in adopting FS. Another person made a joke that “the administration has a duty to protect economic and social space, so they prefer exporting rather than importing software.”⁸² A third one added that “we are all sufficiently conditioned by Microsoft—like when you drink Coca-Cola—and we don't ask ourselves good questions any more: for example, that of durability of our data and programs.”

82 There was a hint of global positioning in this comment about FS produced and “exported” by the national administration; no-one else ever thought of distributing of software as “exporting.” In other contexts people mostly used the metaphor of “sharing,” which they then diligently dissociated from marketing-sounding notion of “giving for free of charge.”

A FS advocate who was himself involved in migrating the administration of his *département* to FS and attended this session, commented afterwards that the money-saving argument was wrong because, “the development of software is expensive, both for FS and for proprietary software. The cost of selling it is only about one-third of the price of investment. What would be their choice between proprietary software that was free of charge, and FS that needed to be paid?” In his opinion, the strategic reasons that the users should worry about included durability (use of free and open data formats which allow other programs to read the data generated by the program assured that the data would not become obsolete), independence (the possibility to maintain software if the original creators abandoned it), localized economic development. He deplored that attention focused on the possibility of downloading and copying the software legally without having to pay for the license (with awkward connotations of “*la gratuité*”). He went to that session to see whether there was a broader reflection, a more inclusive vision for using FS, and was disappointed by the lack of such vision in the state administration.

ACCESS TO DIGITIZED CONTENTS: COMMODITIZATION AND FREE CIRCULATION

The definition of free software establishes a regime of rights, specifying royalties (the author has no right to charge for the license) and rights of exploitation (users have a right to make changes and distribute the software). However, when articulating the implications of software freedom, FS advocates are frequently obliged to address notions of “taking without paying” and of “non-commercial use”—both

when explaining their own objectives and when articulating why applying these notions to FS results in misconceptions. FS advocates are non-committal about the idea of exemption from payment and have repeatedly insisted that the four software freedoms do not prevent anyone from making money by selling free software.⁸³ In fact, FS advocates are opposed to the idea of restricting software usage to non-commercial contexts, arguing that any restrictions of uses of software would obstruct the usability of FS in the long-term.

Gratuité was ambiguously related to FS advocates' expectations that digital economic models might allow for a commons independent from state governance or contest dominant economic models of entertainment industries. If freedom to copy stands in opposition to the criminal enforcement of exclusive property rights for software, does it augur an alternative regime of (property) rights, exchange, and circulation for other digitized products? Several initiatives, claiming some affinity with free software, maintained that digital copying did not threaten art but rather offered new opportunities for reaching new publics. I analyze more closely two such initiatives, chosen because the discussion of their divergences and common points provides a sense of a range of ways in which FS is appropriated in other domains. While these two initiatives overlapped in some general objectives, such as advocating greater accessibility of digitized contents, they disagreed on the ways, publics, and objectives of “access.” This section tracks how ideas about exchange and reciprocity among FS advocates have informed their thinking about authorship royalties,

⁸³ See, for example, <http://www.gnu.org/licenses/gpl-faq.html#DoesTheGPLAllowMoney>, last accessed on 14 May 2006.

circulation free of charge, and the right to copy.

Exploring creativity and cultural power of FS: Art Libre

In contrast to claims that the status of art could be threatened by copying, project Art Libre explored the consequence of an artistic practice open to copying, diffusion and transformation. In order to do this, “Art Libre” embraced the concept of copyleft as a defining property of free software and applied it to the domain of art. They developed a license for artistic works, analogous to GNU GPL: the LAL (*Licence Art Libre*) allows anyone to experience, study, distribute the art piece and make derivative artistic works. Articulating a vision of art as cooperative and democratizing activity, Art Libre claimed copyleft not as an alternative to nor an abandon of copyright, but rather as “re-forming of authorship rights to take into account digital material, netlike transportation and qualities of the economy proper to art and to creativity in general.”⁸⁴ Assuming that the internet had transformed the work of the production, diffusion and reception of artworks, Antoine Moreau, one of the key actors in this initiative wrote a MFA thesis, drawing on the philosophy of FS to explore how art has changed in fabrication of its objects.⁸⁵ He had understood the principles of FS to be “a certain abandon. To let go in order to conceive the sharing of wealth, information, work, like a true source of wealth, information and work.”⁸⁶

84 Antoine Moreau. “Le copyleft appliqué à la création artistique. Le collectif Copyleft Attitude et la Licence Art Libre.” June 2005. Available online at http://antomoro.free.fr/left/dea/DEA_copyleft.html, last accessed 23 November 2007. p. 16.

85 Idem, p. 34.

86 Idem, p. 59.

This “partial connection” (Strathern 1991), establishing correspondences that transform artistic production so as to reveal the neglected (collective and machine-like) dimensions of creativity, was relatively marginal (in terms of numbers) and contested by some FS advocates, by representatives of cultural industries, artists' unions, and by activists with different ideas of what democratizing art would look like. FS advocates were curious but wary of extending FS principles into domains that might have their own dynamics of contribution and symbolic value. One of them asserted, “I am fine with bringing closer and establishing bridges between domains, but I disagree with denying what distinguishes each domain in order to accomplish this.”⁸⁷ Artistic unions and Socialist Party's cultural policy figures were outraged because Art Libre, by giving art away, undermined the mechanisms of accountability and remuneration that artistic unions had enforced. Art Libre also co-existed uneasily with much more prominently advertised activist initiatives for relaxing of copyright restrictions and for allowing freer circulation of digitized contents online. These were really different projects, and the difference was sometimes articulated in antagonistic terms. For example, while an Art Libre advocate affirmed that distributing contents online without charge but also without giving people the right to modify them amounted to advertising, an advocate for this initiative in turn insulted Moreau by contesting his status as artist and saying “I don't think that this guy has ever created anything in his life” (fieldnotes).

⁸⁷ Idem, p. 163.

Non-commercial use: Creative Commons

Why do FS advocates find restricting copying of software to non-commercial purposes to be problematic? Would the arguments articulated with software in mind be applicable to other expressive domains? The establishment of a French Creative Commons (CC) initiative brought raised these questions with special urgency.

Creative Commons is a non-profit US organization (with branches in a growing number of countries) that aimed to assure a vibrant and legal cultural production (that increasingly involved digitized content) by drafting a range of licenses with varying copyright provisions. By presenting a palette of legally sound licenses, CC simplified the “legalese” but also aimed to augment the numbers of people willing to renounce some rights that copyright automatically reserved for authors, and enrich the common pool of contents that could be drawn upon (without explicit copyright permissions and without worrying about being sued for copyright infringement). The translation of CC licenses into French law was undertaken by a group of law Ph.D. students and encouraged by various actors seeking easier access to digitized contents, the reform of authorship law, or the development of vibrant online “commons.”

This movement, much more publicly visible than Art Libre, to a certain extent overlapped with FS advocacy: some FS advocates were very active in CC movement as well, and most of FS advocates thought that CC licences were a welcome contribution to activism that enabled collaborative and incremental creativity. Moreover, FS advocates were unsure as to whether principles of FS could be translated into non-computing domains, and CC had made an attempt at translation

that seemed to have gained public attention (both in the US and in France).

However, considering CC and FS in the same breath also created problems for FS advocates: it muddled the references that FS advocates had cleared with respect to software development. One such sore point was the clause allowing “non-commercial” distribution only, which was included in the most frequently used CC licenses. As the licenses in question failed to specify what exactly was meant by “commercial” or “non-commercial” distribution, the limits of “non-commercial” could be understood as were seen as lying alternately in not making profit through intermediaries (typically imagined as multinational entertainment corporations), not handling any kind of money (even for covering the expenses of communication), or not having any value exchange (“the goods itself, the quality of the relation between the offerer and the receiver, the reputation, and so many other things matter”).⁸⁸ Some FS advocates took this ill-defined “non-commercial” clause to be a step back from attention to users' rights, while others emphasized long-term incompatibility of various licenses. They had ample experience with the proliferation of licenses among themselves: while multiple licenses might have offered some “choices,” they were also often mutually incompatible and prevented integrating parts of code that were under different licenses. The restriction on commercial reuse of contents without specifying what practices would be considered commercial presented a problem for any long-term project.

While some CC activists dismissed the concern with defining the meaning of

⁸⁸ “Re: [cc-fr] non-commercial,” message sent to the liste Creative Commons France, 14 March 2005.

“non-commercial” as an obsession with purity, FS advocates drew on their own uncertainty about long-term accessibility of different “free” contents, the use of the term “free” to denote various projects that did not necessarily fulfill the premises of free software, proliferation of various “free” licenses and their mutual “incompatibility,” or the need to articulate a minimum set of requirements that were necessary in order to consider a piece of work “really free.”

MAKING SOCIETAL CHOICES: A CACOPHONY OF VOICES

The campaign around the revision of authorship laws drew these movements into an uneasy alliance that highlighted their differences. In December 2004, activists and journalists covering copyright and free software issues assembled at a small café in the Marais for a public debate entitled “From free software to free cultures.” The invitation to the debate, sent to a mailing list regrouping many FS activists, proposed to clarify what “free culture” stood for, as well as its genealogy and history in relation to free software. It further envisioned to discuss whether initiatives claiming affinity with FS could be a way for artists, whether musicians or in fine arts, to understand the stakes of *Libre*⁸⁹ and to adopt practices that welcome sharing.⁹⁰

The debate took off with the representative of ArteRadio, the first French institution that had officially adopted a more permissive authorship license for its

89 The term *le Libre* refers to the field of cultural production related to free software and includes software, documentation, developers and advocates, and conceptual frameworks that contest the need for strong property rights in order to encourage innovation.

90 “Débat 'Du logiciel libre aux cultures libres ?'” Message sent to the list escape_1 on 19 Nov 2004.

contents.⁹¹ ArteRadio's principal interest in more permissive terms of diffusion sprung from concern with assuring the freedom of circulation (understood as the greatest possible circulation) at zero cost (*gratuité*). This was in harmony with the mission of Arte—being a public service—while it also supported a “soft” counter-cultural globalization that accompanied commercial globalization.

An artist from Art Libre promptly reacted, asserting that “a marketer who wants to diffuse ads could have the same discourse: at stake is mass circulation of his/her message. One could think of a work diffused in such massive way, that it is inflicted upon everyone!”

This reaction elicited a response by an activist and internet entrepreneur who insisted on pragmatic advantages of lowering authorship protections, regardless of software freedoms:

Free software was always better than proprietary software, and as long as it stays better, it will exist. But in order to liberate culture, is it enough to lower the authorship protection? In developing of this new culture online, at stake is, whether we will convince the best, or whether we will stay at the “island” of *Libre*?

He was concerned with the support of “major artists,” i.e. those that make news and have big contracts in the entertainment industry (*qui font avancer des choses*) and was convinced that movement of *Libre* was not, and was not going to become, major—neither in aesthetic/artistic terms nor in cultural values.

A journalist covering digital issues in *Libération*, who had recently published a

⁹¹ ArteRadio released their programs online with a copyright license by Creative Commons, that allowed non-commercial diffusion with no modifications.

book about copyright and “free culture,” reminded everyone that their shared concern lay in the fight against instrumentalizing the notion of author, against instrumentalizing the romantic myth of individual genius; but it was not clear how to proceed. Was there a dynamic proper to the artistic domain? Could philosophy from one domain be “slapped onto” another? Their discussion seemed to have made them differentiate and cement their prior positions rather than find a common strategy that could be implemented from such a common cause.

...

In the debates about applicability of free software to other domains, as in French media, *gratuité* was a key element in efforts to reconcile (economic, technological, and social) transformations, in which sharing of files online is seen as a challenge. The search for a new balance is predicated on “taming” the negative effects of the capacity for unlimited digital copying. For example, the economist Joëlle Farchy explained,

More psychological than real, *gratuité* must cohabit with other means of financing in order to respect production diversity. This is the only way to avoid devaluing of artistic creation among the general public... It's better to tame *gratuité* than to try to attack it head on.⁹²

Free software advocates also drew on metaphors of taming: one of them argued that copyleft allowed to “bridle devouring and devastating flames of freedom in order to conserve its warmth. To counter liberal fanaticism with love of a calorific form [that] takes care of its embers and knows how to grapple with what it consumes.”⁹³ Some of

92 Joëlle Farchy, “Il faut apprivoiser la gratuité sur Internet,” *Libération*, 28-29 May 2005.

93 Antoine Moreau, “Le copyleft appliqué à la création artistique. Le collectif Copyleft Attitude et la Licence Art Libre.” Masters' Thesis (*DEA*). University of Paris 8. June 2005.

these comments were in explicit opposition to GW Bush's celebration of unfettered freedom.

The search for a new consensus relied on precedents such as radio licenses and “remuneration for private copying” in order to find a balance between public interest and commercial viability of producers and authors. This proposal, put forward by several consumer associations, drew on econometric data about the trends in profitability of music, film, and CD markets that allegedly suffered decline due to P2P downloading.⁹⁴ Internet users would have access to all online materials older than four years, while producers and authors would be compensated by raising the price of high-speed internet connections for about 5 Euros per month.⁹⁵ This proposal perpetuated a vision of tax-sponsored *gratuité* online.

Taming *gratuité* also took the form of a public campaign that included a guide to responsible and legal downloading for elementary school kids, warnings about illegal copying that were recorded as voice-overs in music files and then pushed into circulation on peer-to-peer networks, videos that likened illegal downloading with a swarm of grasshoppers that “ate” the possibilities for artistic production, and ads distributed in all major newspapers.⁹⁶ In confronting a whole generation for which

http://antomoro.free.fr/left/dea/DEA_copyleft.html

94 Union Fédérale des Consommateurs-Que Choisir. “Peer-to-peer et téléchargement de fichiers. L'impact d'une rémunération alternative.” 3 June 2005. 1 Nov 2006.

<http://www.quechoisir.org>

95 The conditions of opting-in or out of this kind of arrangement, named “legal license,” were to be negotiated among representatives of entertainment industries, state, and consumer associations.

96 Free software advocates insisted that moral campaigns that denounced illegal copying also

downloading and sharing of digitized goods was “natural” and not considered to be reprehensible in the same way in which stealing from a physical store would be, this campaign sought to teach youth about the importance of authorship rights and the “chain of creation.”⁹⁷ Generally, ministers, politicians and representatives of entertainment industries agreed that action should combine pedagogy, repression, and developing of (legal and secure) film offers online. But the actions taken in the name of this approach embarrassed many of participants. For example, Socialist representative Patrick Bloche was annoyed with the moratorium on lawsuits against P2P downloaders. Film producers confronted internet access providers, claiming that these were benefiting from the availability on films for free online; while internet providers claimed they had no bearing over illegal downloading.⁹⁸

The French Parliament voted a revision of the copyright law at 11pm on Christmas night 2005, with only 32 (of 577) representatives present. Several of these referred to thousands of spectators who were following the vote via online streaming from the Parliament's website. They voted to introduce the possibility of a global license that would decriminalize downloading on P2P networks. The Minister of

neglected the growing domains of free software and free art that could be copied and shared legally, and warned that the criminalization of copying intruded into private and consumer rights. In defending the principles of software freedom, the rights of public and consumer rights were seen to be at stake besides those of free software developers and users.

97 Isabelle Falque-Pierrotin. “Introduction: Les défis du P2P.” Etat des lieux sur le P2P et la musique en ligne en France: La propriété intellectuelle face au Peer-to-Peer. Le Forum des droits sur l'internet. 2004.

98 “Le cinéma pris dans la Toile.” *Libération* 25 October 2004.

Culture immediately called for a re-vote in order to reject this controversial provision; this happened a couple of months later. Right now the French authorship law is theoretically similar to the US copyright law but unenforceable. The debates are expected to continue following the 2007 Presidential campaign. Activists have set up websites for easy public inspection of candidates' stands on the revision of copyright, and potential presidential candidates have started giving public speeches about downloading in order to attract young voters.

CONCLUSION

In this chapter, I have argued that FS advocates' discourses and understandings of software freedom are partly formulated in relation to the ongoing French debates about acceptable ways to enforce property rights online, search for commercially viable models of circulation of digitized contents, and revision of authorship law. In addition to more globally widespread notions of enabling cooperative creativity (“freedom to share” in the definition of free software) and unimpeded circulation of information (“freedom of information”), I have tracked how “the right to copy,” as articulated by French FS advocates, has become a basis for engendering an informed societal debate about the possible scenarios of social change. “Non-commercial” or “free of charge” distribution of software and other online information sidesteps a major concern, shared among varied constituencies in France, with encouraging the kinds of online behaviors that would durably strengthen the common good. The precise ways to go about enabling and stewarding this common good are contested, as

I have suggested in my survey of several scenarios present in French public debates about social ramifications of allowing certain kinds of digital copying.

I have also delineated a range of projects that claim some kind of affinity with free software and briefly touched upon the questions and assumptions that inform them. On the one hand, these projects share some of FS advocates' preoccupations with the regulation of copying and circulation of digitized materials, whether software, art, music, films, or books. On the other hand, the specific ways in which these emergent projects have established or proclaimed their affinities with FS do not translate into terms that would be immediately clear and understandable to FS advocates. The next chapter addresses how FS advocates use the internet to engage with, and keep track of, the proliferation of such projects.

CHAPTER 3:

“YOU FIND THE ANSWERS TO QUESTIONS THAT YOU HAVEN’T ASKED”

Anthropologist Michael Fischer in 1999 invited anthropologists to chart how the internet juxtaposed contradictory elements of “political economy, cultural elaborations, liberating and subjugating potentials, new information-based sciences, alternative engineering designs, and their social implications” (Fischer 1999b:247). This multifaceted character of the internet, Fischer argued, poses some fundamental challenges to ethnographic fieldwork. He proposed to address these challenges by drawing on emergent interests, at the nexus of anthropology of science and technology with science and technology studies, in “two kinds of knowledge [that] can no longer do without one another—explanatory structures that are breaks with normal experience that can only be arrived at through the prostheses of instruments, experiments, models and simulations; and experiential, embodied, sensorial knowledge that acts as situated feedback” (Fischer 1999b:251). This chapter explores the connections between such explanatory structures and experiential knowledge in online practices and devices in FS advocacy in France. The following chapter explores how FS advocates bring knowledge, acquired through such connections, to bear upon other explanatory structures, specifically narratives about the European Union.

Free software advocates produce knowledge about seemingly highly technical matters of software production, enforcement of copyright, and patent law. However, I

argue that, in early 2000s France, free software advocates are less concerned with establishing alternative expert knowledge than in publicly demonstrating the mechanisms by which expertise is disconnected from public oversight. They are concerned primarily with reaching diverse publics (journalists, consumer associations, French and European policymakers), facilitating involvement in advocacy, and enabling informed public debate about seemingly technical matters such as software patents, interoperability, or digital rights management. The internet has an important role in initially connecting advocates, allowing primary familiarization with FS issues, “lurking” and relay of information, and apprenticeship in public debate for many FS advocates. Yet, as addressed in Chapter 1, online FS advocacy considerably overlaps with face-to-face networks that are organized through voluntary associations. Free software advocacy online is then simultaneously shaped by advocates' skillful approach to internet and computer technology, emphasis on “open” collaborative work, and commitment to accessible public communication.

SOCIALIZING ENTHUSIASM

While dedicated to making accessible a wealth of documents online, FS advocates want to counter what they see as dominant broadcasting models of spam and rumors. I first realized that spam (and its equivalent among French FS advocates, “proselytism” [*prosélytisme*]) was a standing matter of concern for FS advocates during an interview with a 34-year-old Parisian free software advocate, Frédéric. He discovered the internet in 1997 and instantly developed a passion for it as a means to

both change his vocation of construction worker and to reach people across the world. A former construction worker seeking to propel himself into the entrepreneurial hustle of the dot-com era, he completed a one-year degree in communications and got a job as a webmaster in one of the first French free software companies. He considered spam to be an undesirable strategy that attracted enthusiasm among newcomers to the internet and from which they needed to be weaned. “Spam,” Frédéric explained, is that which is “non-solicited,” sent to people without their agreement: “It tarnishes the message. The person can have the best message, but because of inadequate means, he (*sic*) is not credible any more” (fieldnotes). This suggested that at stake, and endangered by spam, are proper ways to distribute messages while maintaining the credibility of the person or organization that is identified with those messages.

The growth and visibility of FS-related advocacy in France since 1999, along with the proliferation of initiatives claiming affinity with free software, have driven FS advocates to self-consciously articulate means of (re-)distributing information and credibility, in ways that contrast with “spam” and demonstrate the strengths of the kinds of sharing enabled through free software. Douglas Holmes and George Marcus have argued that networks of experts can be ethnographically studied as habituses for cultivation of specific sensibilities in which experts were sometimes proficiently guided in their practices by their experiential “intuition” (Holmes and Marcus 2005:237). French FS advocates have developed two auspicious networked contexts for this kind of ethnographic investigation: relations of vigilance (*veille*) and practices of public valuation (*mise en évidence*). *Veille* and *mise en évidence* are logistical

devices through which FS advocates triangulate, redistribute, and comment on FS-related news to, and through, a network of public fori. They are also highly polyvalent metaphors through which free software advocates work to convince a broader public to value free software principles, maintain vigilance around these issues, draw connections among seemingly distinct technical issues, and in turn connect them to unfolding debates in other arenas. Finally, they enable FS advocates to demonstrate the effervescence (of actors, practices, knowledge, means of engagement) facilitated through, and around, FS and allow advocates to engage in spheres that are indirectly related to free software without detracting from their primary focus on advocacy. Those aspects of *veille* and *mise en évidence* enable FS advocates to reflect upon FS advocacy and transform its scope.

COLLABORATIVE VIGILANCE (*VEILLE*)

Preparing an annual summary of activities of his working group, a free software advocate wrote “it was rather a vigilance group than a real work done.”⁹⁹ In addition to “being vigilant,” the verb *veiller* that he employed also signifies “to look after” and “to attend to.”¹⁰⁰ Free software advocates invoke the term *veille* to denote everything from directing attention to highlighting certain classes of information to encouraging public debate.

Members of *APRIL*, one of the major Francophone associations devoted to FS advocacy, at their annual 2003 meeting indicated the need to enlarge their scope of

⁹⁹ Message sent to APRIL's member-only e-mail discussion list.

¹⁰⁰The Collins French Dictionary. HarperCollins Publishers, 2002.

interest to include a sustained engagement with the question of the information technology commons. Of central concern to them was how to integrate this new focus on IT commons without diluting the central purpose of promoting FS. The wiki page dedicated to this topic explains their desire to broaden their political scope to intervene in a pertinent and pedagogical manner in this new domain of interest, if necessary. However, this new reflection should not compromise the public image of the association:

[The association] needs to remain focused on free software: On the one hand, to prevent confusing its message. On the other hand, it is hard to know what will emerge from this “effervescence,” and it is hard to position us in relation to something that is not defined. [The association] has to, however, take part in these debates as soon as free software is implicated, making a pedagogical effort towards the outside as well as towards its members, in order to make explicit our positions and the reasons supporting them.¹⁰¹

Rather than creating a working group that might confuse the public image of the association, they felt a “vigilance” group would provide enough resources for attending to this new cultural concern with the commons. The activities of this informal vigilance group consisted in gathering and organizing resources that might help inform whether the association *APRIL* should intervene in areas normally outside of its usual scope. For example, this included translating an issue of a journal dedicated to “open knowledge,” or listing online repositories of contents that are in the public domain or under free licences. In this particular case, the relatively low-intensity involvement was extended over several months, coordinated through wiki pages, and included five people. Through such a vigilance group, they could tactically attend to the question of

¹⁰¹ Accessible at <http://wiki.april.org/ITCommons>, last accessed 24 April 2006.

the “commons” but in a way that would not detract from their primary message as advocates of free software.

Weaving of activism with professional and personal engagements

Through collaborative vigilance to the developments on the “margins” of free software advocacy, the practices of *veille* allow advocates to create affinities between different spheres of individual action. For example, Clément, who is a researcher, teacher, and a free software advocate, considered “vigilance” as an integral part of his professional researching and teaching activity. During my interview with him, he spontaneously invoked *veille* in the context of his everyday work, describing it as follows: “It consists in following a bit the things that are on the side, in computing,¹⁰² to see their benefits and drawbacks, to follow a bit the movement and to integrate it directly in my applications.” On the one hand, vigilance was an integral part of his work as a researcher. On the other hand, Clément also considered vigilance as an extension of free software advocacy into his professional activity. He “applied” the knowledge acquired through the *veille* not only to his teaching but also to his active promotion of free software among his co-workers (fellow teachers and researchers). Indeed, he has made himself an example and a conduit for free software advocacy. As he affirmed, “My laptop is running on Linux, my work computer is in dual-boot and the team server is on Linux. I will soon teach an introduction to LaTeX to my colleagues, and I will show it in Linux.” And if any of his colleagues encountered

¹⁰²Clément is not an IT professional.

problems in using free software, he would know at least where to relay their questions.

However, while Clément considered the *veille* as a complementary and integral part of being a researcher and teacher, in the particular case of “vigilance” around free software, the *veille* was his personal engagement rather than an institutionalized one (contrary to being researcher and teacher). The success of Clément's strategy also revealed its limits: With exponentially increasing numbers of people asking him about free software, he was eventually forced to re-establish the barriers between his professional and voluntary efforts by asserting, “it [was] not my job to show the machines working under Linux.” While he easily integrated tracking of free software developments into the context of his research and teaching, its' effects—and notably becoming “the free software enthusiast” in the department—lacked the infrastructure that would support and justify such voluntary involvement in his work context. The *veille* could then be understood as not only encouraging extensions of the free software advocacy into other domains, but also as establishing the boundaries to such, voluntary-based, advocacy efforts.

Practices and devices for *veille*

Collaborative vigilance is supported by a technological infrastructure of weblogs, wikis, web sites, as well as numerous discursive texts like articles and digests distributed through mailing lists. Each of these online devices allows for easy redistribution of the information as copies or links to the original source. However, in the activities of collaborative vigilance, the emphasis is on adapting the content that

will be re-distributed (rather than on following the link and circulating the original document). As the vigilance is not necessarily done in French forums, many of these adaptations consist in literally translating key documents into French in order to orient the debate toward Francophones. Summarizing key documents, another frequent translation activity, enables skimming of enormous quantities of text and thus provides one means of making manageable vast quantities of online information. Adaptations aim to improve accessibility, multiply the perspectives on a single document, encourage new discussions, orient the discussion towards more or less related topics, and facilitate the tracing of content published online. Moreover, the same approach of sustained collaborative vigilance is used to attend to appropriate “uses” of online materials.

On the site LinuxFr, one of the main Francophone weblogs dedicated to free software, the “news” consists of summaries or articles that are brought to attention, links to sources of the “news” if they are available online, as well as several other links to sites or documents that might provide a nuanced perspective on a given topic. Before the news is published, the moderators verify its factuality, links, grammatical errors or typos, and often reformulate the wording to avoid plagiarism. Large-scale weblogs such as LinuxFr can elicit great numbers of comments and “divert” (*dériver*) the discussion from the topic of primary news. Although the “news” is published together with all accompanying comments and links to source documents, discussion is regularly generated from the summaries, and the comments do not necessarily have much to do with the documents to which the summaries refer. Laurent, one of the

webmasters and moderators of LinuxFr, pointed out in an interview, “We know that there will be debate around certain topics, but we don't know what will come out of it. Sometimes it is possible to learn interesting things [and] often you find the answers to questions that you haven't asked!” (fieldnotes). For example, in 2002 a summary of news concerning the release of new debugging techniques for FS introduced a new term for debugging—*déverminage*—and instigated a long discussion about the making of computer jargon, the role of the French *Académie* in proposing the correct (or standardized) terms, as well as other proposed linguistic and political positionings such as the “feminization of vocational titles.”¹⁰³ A memorable discussion, Laurent reminisced upon it two years later (in 2004) as an excellent source of information about the competence of the French *Académie* in French computer jargon and about the political stakes in translating computer terms.

As a webmaster, Laurent's task was to translate, connect and frame the “news;” and yet he found it memorable when the discussion “stumbled upon” answers to questions that he did not ask but nevertheless appreciated knowing. Laurent's exhilaration at the seeming randomness of the diverted thread of discussion, and his impression that his hunches were generally confirmed, share some traits with experiential knowledge in Fischer's account, as well as with the “intuition” manifested in the form of a “physical feeling [and a] sense in the stomach” in Marcus and Holmes' account (2005:240). In my attempt to understand how instances of “stumbling upon” are related to “searching” and “indexing,” in the next section I examine practices of

¹⁰³ Les outils de *déverminage* sous Linux, available at <http://linuxfr.org/2002/08/19/9315.html>, last accessed 31 May 2006.

public valuation through which FS advocates self-consciously engage questions of accountability in technical expertise.

PUBLIC VALUATION (*MISE EN ÉVIDENCE*)

Mise en évidence, or, in my usage, public valuation, might also be translated as “increasing public visibility” or “raising public awareness” around an issue. It refers to advocates' experience of participating in broader sharing and open cultural discourses online, but it also includes a possibility to present strategic data at key moments. Such instances included publishing of all invocations of free software by politicians before national elections, analyzing the frequency of votes by the European Parliament Members (in order to let advocates know which members were likely not to appear at the vote, so time could be spent more efficiently talking to other MEPs who were more likely to vote), or debating the articles of the European Constitution related to software patents, so as to articulate the ramifications of ratifying such a document.

I heard another interpretation of *public valuation* from a very respected hacker, Stéphane, as he was trying to explain to a newbie how he could become socialized into an acceptable vision and commitment to freedom of information. Stéphane wanted to archive their pedagogical conversation and invited me in order to record it. He wanted to record specifically “raw data” and post it online in hope that other people later could

... recover mistakes, stammerings, and implicit understanding that took place... see what we could not clearly formulate, or questions and hesitations that were only implicit. The mistakes and the stammerings are always “covered” by brilliant final syntheses. Many things, said at the beginning, are forgotten at

the time of the synthesis. Questions that seem utterly implicit, or stupid... The idea is to recover the process of acquiring awareness: finally one manages to understand things that one hasn't explained. Perhaps, listening to a recording, one could understand some things whereas one did not arrive at an explanation, implicit things which one did not discuss. When various ways were explored, one ends up closing a point which was not clarified. The rough materials make it possible to find these implicit dimensions (interview).

This attempt at accountability could be interpreted as both arising from, and in contrast to, “mediation” or “dissemination” of a message (i.e. a proselytizing or advertising model of communication). Like Laurent's “stumbling upon” answers, Stéphane's idiom of making “stammerings” publicly accessible expresses his commitment to enabling broader inspection and re-interpretation of implicit connections between explanation and experience.

...

If *veille* and *mise en évidence* encourage the proliferation of documents, arguments and debates, they also orient advocates in the resulting multiplicity. They provide a way to attend to similar but distinct social concerns and indicate possible or desirable directions for expansion of free software advocacy. They amount to a valuable network supervising the developments relevant to free software in the national and international media, in the legal and political spheres, or in grassroots action. In a long-term perspective, they lay the possibility of an informed and timely advocate intervention into existing legal, political and pedagogical structures.

Spaces for familiarization with free software issues

The spaces of distributed vigilance and public valuation are important points of entrance and primary familiarization with free software issues. One such space, the weblog LinuxFr, was first created in 1998 to alert free software enthusiasts to recent developments. During my fieldwork in 2004-05, this website had become one of the main points of entry into cultural values associated with free software. Two kinds of evidence support the contention about the augmentation (or amateurization) of contributors drawn to this weblog: First, the comments often reinvigorate debates that might have been thought concluded in the past, revealing the lack of familiarity with the “grand classics” of free software. The new members then become acquainted with the crucial free software texts and principles by participating in weblog-style of commenting and debating. Second, long-time contributors often state that they follow LinuxFr as a main source of news, but while in the beginning they were engaged in reading the comments as well, eventually they gave up on the comments because they found them to be of an inferior level of interest.¹⁰⁴ One way of managing the level of discussion is through ratings: LinuxFr contributors, in addition to writing comments, can vote on others' contributors comments by giving them one positive or negative points. This system is less elaborated but nevertheless reminiscent of a voting and karma system put in place at the main Anglophone open source news site Slashdot. In order to express their lack of appreciation for the value of comments and debates on LinuxFr, some contributors undermine the system for rating comments by giving up-

¹⁰⁴Although, for certain topics which have the potential for broad public attention, such as the reform of the authorship law, long-term FS advocates do not hesitate to consistently surveil comments and pedagogically reply to them.

points to clearly terrible comments. One contributor, disappointed about dismissive reactions to the news about the upcoming activities of his association, “graded up” a particularly offensive comment, asserting on IRC, “it is so bloody stupid that it pleases me... it is heavy, not constructive, in short, all the qualities to upgrade it” (fieldnotes). The augmentation/amateurization of contributors is related to the goal of drawing a larger public, but the transformation that it entails—especially the difficulty to maintain a quality of debate—can be a source of disappointment for the contributors who might have hoped to find and sustain a kind of “critical internet culture” (Lovink 2003).

Another transition seems to confirm my point about the transformation of this website's public. In 2004, the news on LinuxFr was categorized mostly in relation to projects of software development; the only categories unrelated to specific development projects were “community” and “press.” Since mid-2005, another website, Framasoft, seems to have taken over this role as a primary entrance point into FS advocacy. An outgrowth of a compilation of educative programs, Framasoft proposes to introduce the visitors to the world of free software by enabling them to gradually replacing Microsoft Windows programs by FS programs of equivalent functionalities. The site addresses a broad public interested in uses and implications of free software but also in “Free Culture” and Creative Commons licenses (that are intended for regulating distribution of creative works other than software). The growing prominence of Framasoft reinforces the idea that the “publics” interested in FS are less developer-oriented and more concerned with general cultural changes that

they see somehow to be in affinity with FS.

Extending the network tactically

Not all topics can be presented as "news" on main weblogs, and not all of them generate discussion. Some continuous projects, such as software patenting legislation, although crucially affecting free software, rarely offer an occasion to be presented as "news." Media digests make possible sustained tracking of such long-term legal and political developments. Distributed through online mailing lists and often also accessible via associative websites, media digests provide summaries with exhaustive links to articles of interest. In contrast to weblog commentators, digest readers are expected to follow the links and read the source documents. The writers of these digests typically subscribe to many mailing lists and creating the digest enables them to distribute the information that the others, not subscribed to those specific mailing lists, might miss. These authors are often among the most active advocates, who also write arguments, press releases of association activities, and often intervene on mailing lists. The founder of one such digest emphasized that it was intended to function as a repository, "so that one doesn't need to look for information elsewhere." However, his intention was neither exclusive nor competitive: He welcomed multiple press reviews, especially if they were profiled towards a specific type of readership. Indeed, online digests often point to other "desirable" press reviews, to give them visibility and to give a sense of their own alignment.

Counterpoint online mediations: Literal understandings of transparency online

Articulating the multiplicity of devices and actors upon which *veille* and *mise en évidence* thrive calls for similar approach of collaborative vigilance. The collaborative production of documents is accompanied by pedagogical efforts to remind the advocates of the appropriate usage of such resources. It is further elaborated in debating, usually through the mailing lists of a particular group or association, usages that are considered inappropriate. A notable case among FS advocates included exploitation of the information from a website created by a free software advocate and regrouping the information about the newly passed French law LEN.¹⁰⁵ The site contained a comprehensive introduction, suggestions for further reading and the list of deputies that needed to be informed of the stakes in voting about this law. In preparation for a major FS convention, one advocate copied from this website the list of names and planned to distribute it to the visitors under the title “Liste of deputies to contact about the LEN.” After being harshly criticized in the associative mailing list for removing the pedagogical context, he modified it to include the reference to the website and incite the prospective letter-writers to familiarize themselves with the arguments and issues at stake before taking any action.

Veille and *mise en évidence* could also be understood as advocates' attempts to address deleterious effects of specific manifestations of the ideology of online

¹⁰⁵*Loi sur la confiance dans l'Économie Numérique*, law n° 2004-575 of 21 June 2004, published in Journal Officiel n° 143, on 22 June 2004. This was the latest in a series of legislative and policy-making initiatives intended to regulate expression and commerce online. The legal documentation about this law can be found online at <http://www.senat.fr/dossierleg/pjl02-195.html>.

transparency. Mario was one such person determined to draw on the wealth of online discussion fori around FS and notorious among French FS advocates for his uncompromising and troublesome public address. He was in his late 20s, worked as part-time software developer and researcher, and had been active in several radical initiatives in the past. He was against the idea of trying to resolve any problems by referring to some hierarchical or institutional instance, including FS associations: “In many domains of activism, unless you are a researcher, a well-known advocate, or a president of an association, you cannot make public statements. In FS advocacy, though, the non-vertical organization of discussion allows you to argue and ask questions publicly” (interview data). He did not join any associations but contributed to a blog about free software with ambitions of public reflexion and criticism. He refused my attempt to compare him to an “animator” (*animateur*) and jokingly qualified himself as a “perturber of public discussion,” focused especially on perturbing “complacent” public discussion. He was well known for his arguing in online public fora, and especially for his zeal to correct the claims that he saw as tarnished by lies and approximation.

Mario was literally applying some ideas that are widely spread among FS advocates: he was committed to “horizontality” and “transparency,” insisting that the right way to go about resolving any issue was to air it completely in public. Yet, other FS advocates did not like to be designated as problematic in public. Mario's “perturbations” tackled problems that needed to be addressed or resolved in a more subtle way. Sometimes people whom Mario publicly designated as problematic would

ask their friends to advocate for them in online public fora, affirming that they did not know that they were wrong, that the problems did not have to be indicated by attacking them publicly, and that there were more considerate ways to resolve problems (rather than the attack on the person in question) if indeed that was the intention. They experienced Mario's practices as denunciatory and were bothered by them.

HOW CAN *VEILLE* MATERIALIZE OFFLINE?

The weight and influence of publics facilitated through *veille* and *mise en évidence* on “public reasoning”¹⁰⁶ are unclear. For free software advocates, the first experiences of trying to follow up on the strategies and experiences learned through online organizing and shift online public debate to public reasoning were rather dismaying. I discuss two such attempts and the difficulties that they encountered.

Consumer advocacy

The *Detaxe* project “defends” hardware consumers “against forced and illegal selling of software.”¹⁰⁷ French FS advocates began this initiative in early 1999 with an assumption that consumers would be more likely to install a free software operating system if (proprietary) Microsoft's operating system was not pre-installed on newly

106The webs of reciprocal promotion among certain French politicians, intellectuals, and media producers foster consensual public reasoning in France (Bowen 2007:3).

107Retrospective APRIL 2004, available at

<http://www.april.org/articles/divers/retro2004/retrospective/detaxe.html>, last accessed 27 May 2006.

bought computers.¹⁰⁸ *Detaxe* brought together people from various FS associations as well as consumers who wanted pre-assembled and fully functioning computer but did not want Microsoft Windows on it and did not want to pay for it.¹⁰⁹ *Detaxe* was not chaperoned by any association in particular, although the online logistics were hosted by the association *AFUL*, which was one of the two main national FS associations. In 2006, the *Detaxe* mailing list had about 250 subscribers.

Detaxe initially aimed to convince distributors of computer equipment to offer a choice of at least two operating systems on new computers. The name of the initiative alludes to this early period when the primary purpose of the project was canceling the “Microsoft tax” on new computers. In 2004 and 2005, the activities have expanded from addressing the principal problem, i.e. obligation to buy a Microsoft operating system with every new brand-name PC, towards aiming to

108This argument about establishment of monopoly resembles that of internet browser wars of the mid-1990s. At that time Microsoft started preinstalling its browser Internet Explorer on all Microsoft Windows operating systems. This practice of bundling eventually reinforced the market dominance of Microsoft's web browser (against the competition of Netscape and others) and served as ground for indictment of Microsoft for anti-competitive behavior.

109Traditionally, geeks assembled their computers from parts that corresponded closely to their needs. This assemblage demonstrated the knowledge, skills, and control that the geek exercised over her or, more often, his, machine. With laptops the possibility to assemble one's own computer has diminished. Nevertheless, some FS advocates described such pre-assembled computers as perfect for their kin: mothers, daughters, grandparents. Kin metaphors also abounded in talking about the industrial arrangements: for example, bundling was sometimes referred to as forced marriage. Unfortunately I have no space here to analyze these metaphors further.

establish the possibility to buy material without pre-installed software, oblige vendors' to prominently display the software that is bundled with hardware and its conditions of use, and oblige hardware manufacturers to respect the terms of their contracts with consumers through end-user license agreements. In other words, they have repositioned activities towards consumers' rights.

Tracing *Detaxe* actions as they happen is coordinated through mailing lists (for news and discussions) and wiki webpages (for regrouping and public presenting of large amounts of data). Wikis are editable webpages used for collective note-taking.¹¹⁰ Notes are taken in the forms of stories, which are posted in order to encourage discussion, tracking, or for easier future reference. Such stories are written as first-person accounts but with the attention to documenting that would allow other consumers to orient themselves in their own individual cases. Appendix C translates one such story. This particular story is titled "Success2" -- it was the second in a series of individual cases and it ended by consumer obtaining refund. The particular kind of "success," namely the fact that it took place as a gesture of good customer service rather than as indicator of some broader change in commercial practices, was not marked in the title of the case. Nevertheless, the accumulation of such cases is generally seen as enabling participants to learn distinctions between constructors and distributors, familiarize themselves with consumers' rights laws, trace all active actions, discern successful and unsuccessful arguments, document sales agents' strategies and ways to outwit them.

¹¹⁰The most famous wiki project, online encyclopedia Wikipedia, kept the principle of collaborative note-taking in that everyone can re-write its pages.

Although this case was a “success,” in most other cases consumers either lost or abandoned their cause. For several years, vibrant online organizing has repeatedly failed to enroll on their side government agencies DDCCRF and DGCCRF¹¹¹ as well as consumers' interest associations. Internet was more of a place for “vigilance” (*veille*) and presenting evidence than a device for coordinating. This became clearer as the narratives of software refund started unfolding in courts, government agencies, and consumer rights organizations.

In 2004, after hearing that a person who was not in touch with *Detaxe* pursued a court case demanding software refund and ultimately lost the case, *Detaxe* announced that all persons looking for reimbursement should join the mailing list in order to adequately prepare their case. Every lost case could create a judicial precedent detrimental to the group cause (and to the 16 ongoing individual actions).

The interest of French consumer associations in issues related to information technology is new. The principal interlocutor on these issues was an economist, representative of the organization *UFC-Que Choisir*, who described himself as trying to represent an “average consumer” against “abusive, anti-consumerist, and anti-economical practices” (fieldnotes). He regretted that *UFC*'s vision of “average

¹¹¹ General Directorate of Competition, Consumption and Repression of Frauds (*Direction Générale de la Concurrence, de la Consommation et de la Répression des fraudes* (DGCCRF)), under the auspices of the ministry of the Economy, Finances and Industry, regulates the ensemble of economic actors, consumers, companies and local communities to assure fair, balanced, and safe operating of markets, which implies the development of rules, controls and, if necessary, sanctions. See <http://www.minefi.gouv.fr/DGCCRF/>, last accessed May 31, 2006. DDCCRF assures the same functions within respective administrative *départements*.

consumer” until recently apparently did not include informed internet users. *UFC* wanted to avoid framing IT issues in a way that seemed to pit free software against proprietary software. They wanted everyone to be able to find a place in the market that was being constituted.

The specter of introducing class actions into the French legislature brought *UFC* closer to *Detaxe*. In April 2005, when President Chirac announced these forthcoming developments, many interested parties diverged on how class actions could be most fruitfully implemented in France. *UFC* saw their own engagement in this emergent area as an opportunity to introduce fair class actions, which would be modeled upon the Quebec legislature and not the US litigation (fieldnotes). Others saw their chance, too: a website aptly named “classaction.fr” called willing participants for a collective litigation on the part of DVD owners who, due to faulty systems of digital rights management imposed by the editing company, could not read their DVDs. This website claimed that they would request 1000 Euros on the part of each claimant. A similar tension ensued in relation to *Detaxe*, because participants had been pursuing this topic for years and it seemed that a class lawsuit could finally bring a tangible legislative success. A day after a *UFC* representative announced that they were in the medium- or long-term interested in pursuing a class lawsuit on behalf of *Detaxe*, a young law researcher who had been informally consulting *Detaxe* proposed the same thing, starting immediately, with the cabinet of one of his friends. His proposal bore no mention of the *UFC*'s announcement that he heard the previous afternoon at the meeting of *UFC* and a branch of the Socialist Party. This caused much turmoil with

UFC, among FS advocates and associations, and with some Socialist Party members, until he finally renounced this idea. The principal difficulty in this case was, again, disciplining participants in order to avoid difficulties in organizing a future class action.

Materializing FS networks in a street demonstration

The high value placed on a multiplicity of devices, sites, and fronts reaffirms the frequently-heard allegations that any unified presentation is inherently an instance of partisan “siding;” this clearly affects the strategies of collective action. In May 2004, free software advocates took part in a procession of various associations that demonstrated on Parisian streets against the ratifying of the law LEN. The call to demonstrate was supported by about fifty organizations, most of them related to the internet but also including the gay rights organization Act Up Paris, alterglobalizing organization Confédération Paysanne, and radical unions such as SUD Education, SUD PTT, and CNT. Of formal political parties, only the Communists and the Greens were present. The march proceeded from the Place of Colonel Fabian, next to the siege of the French Communist Party, along the Canal St. Martin, to Place de la Bastille. The Place de la Bastille is a common endpoint to many street marches, but the rest of the route for this march reinforced its relatively marginal character.¹¹²

Although FS advocates had done various public performances in the preceding years, this was their first Parisian street demonstration. The march was organized in

¹¹²More important marches went through the Latin Quarter, along Avenue de l'Opéra, or through Place de République.

the name of internet users (*internautes*), but when the bodies materialized on the street, it turned out that the (anarchist) political group that was in charge of maintaining the order (*service d'ordre*) was by far the best marked of all other organizations.¹¹³ Their supporters bore many flags and panels that surrounded the demonstration. (They also ran a car with beer in the procession.) FS advocates came to the demonstration with their partners; several of them brought their children. Numerous FS advocates wore T-shirts with the logo of their favorite free software project or association. One woman brought a plush toy penguin draped in a yellow T-shirt usually worn by opponents of software patents; someone else brought a didgeridoo; one family brought a big banner protesting software patents. Some of my other acquaintances brought a banner with “Free the Net” written in English. Others, more entrepreneurial, brought their books and business guides to distribute.

During the march, I noticed the reporters from Radio France Internationale, France Info, iTV, and Canal Plus, some of them interviewing the Green Party politicians who were also marching. While marching, I heard that the Socialist Party did not want to sign the call for demonstration. My anarchist neighbor commented that Socialists were politicking and would not care to march in an anarchist-organized demonstration. My neighbor on the other side, it turns out, was a Socialist but did not carry any insignia. He retorted that it was the Socialist Party rather than the anarchists that would place this issue on the agendas of the French and European Parliaments. As they continued to talk about a recent occasion in which Socialists and anarchists

¹¹³Organizers of French street demonstrations usually mobilize an internal *service d'ordre* in addition to police accompaniment necessary for obtaining the permit to demonstrate.

clashed in a street march, someone took the photo of us and later posted it online under the title “Two minutes of march, five minutes of debate.”

The great number of cameras in the procession and the subsequent online publication of these photos fueled a vigorous debate about the extent to which the demonstration was “appropriated” by this particular political party. Some of these online photo reports emphasized the omnipresence of party flags and denounced the “political appropriation,” emphasizing the bird-view photos taken from a bridge near the Canal St. Martin where the demonstration unfolded. The countering accounts focused on close-ups and framed them with angles that diminished the visibility of party flags around FS advocates. Some demonstrators felt like they and their photos were unwillingly pushed into supporting one of these two camps. The people who denounced the photos of the demonstration had beforehand decided not to participate in the demonstration; looking at the online photos just reinforced their suspicion about the uselessness of street demonstrations in making free software visible in France. It provided a ground for a public, though heated, discussion about the changing strategies of public protest that brought up propositions for alternative public actions. In the subsequent months, the association *APRIL* undertook to make their own flags and balloons, so as to prevent any similar future confusion.

A broader problem, however, persisted. Attempts to materialize the network, in a sense of bringing the bodies together, showed FS advocates as much more marginal than they had hoped for. They confronted circumstances that were also extremely difficult to control, this time not because of online practices, but because of

institutional organization. For example, the date chosen for demonstration was relatively inconvenient for many FS advocates, but it was the only one for which they could obtain police permit. I was told by one of the organizers that all the better dates were already occupied by other demonstrations. Although it was summer, when many people are on vacation outside of Paris, the demonstration took place in Paris. The disputed *service d'ordre* was organized by the anarchist group CNT which by no means harbors ambitions of changing mainstream politics. These elements placed many restrictions upon the organizational structure of demonstration and its online representations. The most important aspect in advocates' reactions to the photos of the demonstration, however, lies in their shared distrust of manipulative possibilities in the attempt to regroup a multiplicity of actors with respect to a single cause.

CONCLUSION

FS advocacy has faced the challenge of potentially overwhelming, abundant and constant stream of information online by creating a public that will sift through it. This public assures collaborative vigilance (*veille*), achieved by a core of intensely involved individuals and a large number of occasional contributors and lurkers. It encourages the proliferation of documents, arguments and debates, but also allows triangulating and public valuing (*mise en évidence*) of richly contextualized information, orienting FS advocates among a growing number of domains and actors who are asserting inspiration or affinity with the principles of free informatics.

I have argued that FS advocates' practices of *veille* and *mise en évidence*

articulate a specific approach to digital networks that is both part of FS advocates' utopian project and a means of socialization. From a repertoire of practices that are possible at a massive scale online, FS advocates make deliberate choices and assign priorities to some of them. *Veille* and *mise en évidence* allow FS advocates to track online the developments in other domains, draw upon their professional engagements, enable a multiplicity of engagements and positionings under the umbrella of FS advocacy. At the same time, coordination into a visible, coherent course of action is difficult and even undesirable from the perspective of some FS advocates.

My analysis of online practices emphasizes the importance of changing historical offline contexts (expansion of FS advocacy, possibility of introducing class lawsuits, etc.) for understanding the emergence of *veille* and *mise en évidence* as metaphors and online practices among FS advocates. This highlights the ways in which free software publics, and online publics more broadly, are shaped in relation to historical and socio-cultural contexts.

How does a consideration of cultural meanings that practices of distribution and aggregation of information have for FS advocates in early 2000s France further ethnographic interest in agencies, connections, and knowledge facilitated through online devices? Although *veille* and *mise en évidence* are not immediately translated into strategies for interventions, FS advocates feel that these relations and practices lay groundwork for advocates' timely and informed interventions in public debates and policymaking. Yet, in my fieldnotes I have documented repeated occasions on which advocates' attempts to follow up on apparently endless online potential and

“materialize” vibrant publics that they glimpsed, created, or become accustomed at experimenting with online. In striving to make sense of this disjuncture between advocates' acute sense of multiple possibilities and trajectories, on the one hand, and their repeated failures to articulate this multiplicity into coherent actions or discourses, on the other, I propose that FS advocates address other unfolding narrative—among others, narratives of being French and European.

Since 1999, two concrete campaigns of what FS advocates perceive to be (mis-)appropriations of technical expertise and technicity have taken place: one is the transposition of the European Copyright Directive in the French law, and the other one is the European software patenting directive. Grappling with the concrete challenges of these campaigns since 1999 has driven FS advocates to broaden the aims of advocacy, engage in public valuation of their engagements, and maintain collaborative vigilance around related issues. In the next chapter, I examine how FS advocates conjugated their experience and expertise in a campaign that successfully linked software to unfolding narratives of being French and European.

CHAPTER 4: EUROPEAN CITIZENS AND PRIVILEGED WITNESSES : ACTIVISM AGAINST SOFTWARE PATENTS IN EUROPE



Figure 3. Photo by Gustavo Broos, entitled "David and Goliath / giant, goliath, behemoth, monster: someone or something that is abnormally large and powerful" available online at http://gallery.ffii.org/Strasbourg050705/00071_G, last accessed 28 June 2006.

This photo was taken in July 2005 from a bridge that joins two wings of the European Parliament in Strasbourg. On that day Members of the European Parliament (MEPs) voted on the European directive on patenting of software – or, as the yacht suggests, “CII” (computer-implemented inventions). This seemingly arcane technical

topic, patenting of computer-implemented innovation, brought an extraordinarily large number of MEPs back to the European Parliament to vote, even though many had already left for the long summer holiday period. The vote was the culmination of a six-year controversy that I was able to follow during the twenty months of my fieldwork among free software advocates. One activist described this scene to me in following words:

We were in front of the Parliament building, tired from the all-night ride to Strasbourg, standing there since 7am, wet and cold because it was raining. Then we heard that there was a yacht on the channel, on the other side of the Parliament building. It was so symbolic of the inequalities that we were fighting: On one side, 100 geeks in yellow T-shirts, and on the other side, somebody from the rich pro-patent lobby had made a phone call and rented a yacht to lobby the Parliament members! (fieldnotes)

He continued, “We were shocked, and then somebody said 'Then we will surround them with canoes!’” They found some kayaks for rent and, carrying counter-banners, paddled to the yacht. Parliament members who were on their way to the session started laughing when they saw the scene under the bridge. In the words of another activist, “This naval battle proved that innovation and creativity were on our side!”

This contentious activist performance skillfully draws on EU symbols in order to formulate both an alternative vision of innovation and a coherent EU political platform, all within sight of European Parliament Members. Both the yacht and the protesters on the photo are carrying banners in the colors of the European Union, blue and yellow. Their messages are opposed: the yacht, rented by a pro-patent organization called *Campaign for Creativity*, states “Patents = European innovation”

while the protesters' banner in the kayaks asserts "Software patents kill innovation." The protesters are wearing yellow T-shirts with inscriptions "No Software Patents" on the front and "Power to the Parliament!" on the back. Their action opposes the imagery of grassroots Europe to that of Europe governed by lobbies with no legitimate accountability. Most importantly, it maintains the cause of software patenting as a democratic cause.

The relationship between democracy and software patents is not obvious. For example, what to think of the European Parliament, which had that morning sided with the activists and rejected the software patents directive in a nearly unanimous vote, 648:14? And what can we make of activists' comments that this vote was "unheard of" (*du jamais vu*) and "resembled a banana republic"?

...

In this chapter, I analyze the experiences, images, and constructions of Europe through which activists linked democracy, European policy-making, and software patents. I argue that the controversy about software patenting ultimately provided a vehicle—however unlikely—for effective activist involvement in articulating visions of Europe as a space of innovation, democracy, and citizen engagement. As activists countered the software patenting directive in its various stages throughout six years, they developed their own understandings of the European integration and means to conceive of themselves as part of the European Union. They drew on insights about the European institutions acquired in this campaign to associate the issue of software patents with the familiar tension that had already mobilized the members of the

Parliament in a struggle against the Commission and the Council. Furthermore, activists also relied on their newly acquired understandings of European democracy when debating and ultimately voting on the 2005 referendum about the European Constitutional Treaty.

My focus is on local group that I will call “activists.” By this term, I mean people mobilized to oppose the EU directive on software patenting. This multinational group included substantial numbers of Belgians, Dutch, Germans, Poles, as well as French. Several hundreds of them were willing to travel to Brussels or Strasbourg for conferences, demonstrations, or other actions. Many of these activists would self-identify as computer geeks or are close to that world. Some of them either owned an IT company or were employed in such businesses. They were predominantly men in their 30s and 40s. I knew French activists the best (about 50-60 persons).

Both the European directive on software patents and the European Constitutional Treaty (ECT), proposed by the EU commission as advances in European integration, were rejected in activist-led campaigns in 2005. Yet, the activists who opposed them saw themselves as making a more democratic Europe. This paper emphasizes the convergence of activist intellectual production (that drew on longstanding objections to democratic accountability in EU institutions), outreach to policy-makers, and political contingencies that allowed activists opposed to software patents to marry the “political” and the “technical” and draw analogies between the two EU initiatives. The purported “technicity” of issues under discussion

(software patents and ECT) was a new, key element that connected contingencies and long-standing objections about democratic accountability in a particularly grating way and gave weight to activist efforts in both campaigns.

Activists' success in making a political cause out of software patents lay in implicating European institutions at a particularly sensitive moment, when the European Union was being enlarged to include ten new member-states and was in the run-up to adopt an European Constitution (ECT). In France, where most of my observations were drawn, Europe was a prominent topic of reflexion among all social groups over the six months leading up to the May 2005 referendum: the European Constitutional Treaty was under discussion, its implications for European societies were subject to lively debate, and although the outcome of referendum was impossible to predict (and a rejection of the Treaty was for a long time unthinkable, especially in the press), discussions were dominated by the alarming predictions about the consequences of either rejection or approval of the Constitutional Treaty.

Another important European development, enlargement to include ten Central and Eastern European nations, had given rise to many speculations about its implications for the French welfare system. In particular, the European Commissioner Bolkenstein proposed to liberalize services within EU by permitting employers to hire workers in one country under the tax regime of another European country, thus providing a cheaper foreign workforce. His proposal, which might have passed relatively unnoticed at another time, had caused a great uproar. To make things worse, Bolkenstein attempted to illustrate the benefits of this directive by promising that there

would be “no tsunami of Polish workers in France” (Grunberg 2005: 134) but that there were too few plumbers in France and that hiring plumbers from Poland might remedy this situation. This affair was promptly labeled as the “Bolkenstein Directive,” a name which the French pundits pronounced in a manner that rhymed with “Frankenstein,” alluding to the monstrous qualities of the proposal. The image of the Polish plumber became an icon of the menace of liberalization.

Three further contingencies facilitated activists' attempts to link software patents to broader narratives about the EU. Timing was important: the final stages of the campaign against software patenting were simultaneous with the French campaign in preparation for the ECT referendum. Furthermore, the fact that the issue of software patenting in Europe was introduced as an EU policy directive, rather than established through successive court decisions as in the US, helped situate software patents squarely in the policy and politics-making realm. Finally, the concern about European enlargement was linked to on-going rhetoric about Europe's position in the economic world order (especially with respect to the United States, but increasingly also China in the economic domain); patents and industrial innovation had a controversial role in such geopolitical positioning.

I analyze long-term activist work in translating technical issues while insisting on the contingent timing of the closure of this controversy. That is, while my case sketches out the main elements involved in activist re-framing of what might have been seen as a technical issue into a policy debate, my analysis represents a strategic account of activists' piggybacking on other issues at a particular moment. Advocates

opposed to software patents drew on the language that was used to talk about the ECT, democratic deficit and high-handedness of the Eurocrats in the Commission, in order to make their seemingly narrow purpose into an example of long-standing issues that were on people's minds.

PATENTS, SOFTWARE, AND EUROPEAN ECONOMIC DEVELOPMENT

“One Europe, One Currency, One Patent”

How could one make a cause out of opposition to software patenting?

Pharmaceutical patents have been broken in several countries on public health grounds, but there is less precedent for opposing software patents. In the US and Japan, software patents have been regularized without much public debate (Kahin 2001). A patent is a legal title granting its holder certain exclusive rights to an invention.¹¹⁴ According to the European Patent Office's (EPO) promotional materials, “Patents indicate the level of innovative activity in a particular market. They generate new investment and are a motivating force behind technical progress.”¹¹⁵

In 1997, the European Commission initiated the harmonization of national patent policies as part of wider European integration and economic development. Their documents argued that a uniform European patenting policy would make it easier and cheaper to protect inventions across Europe and allow the European Union

¹¹⁴European Patent Office. “Granting a European Patent.” 1997. 14 Nov 2005.

<http://www.european-patent-office.org/granting.htm>

¹¹⁵European Patent Office. “The European Patent.” 1 Sep 2003. 14 Nov 2005.

http://www.european-patent-office.org/gr_index.htm

to compete more effectively within a globalized (often US-driven) economy.¹¹⁶ The President of the European Patent Office conspicuously inscribed patents in the project of European integration by the slogan “One Europe, one currency, one patent.”¹¹⁷

In addition to reinforcing European integration, harmonization of patent policies was meant to expand the domains of patentability. The 1973 European patent convention holds that patents can be granted “for any inventions which are susceptible of industrial application, which are new and which involve an inventive step.”¹¹⁸ Although intangibles, including computer programs, have been explicitly excluded from patentability, over the last 20 years the EPO has granted some 30,000 patents for computer-related inventions. In conjunction with the US and Japanese patent offices, EPO in 2000 introduced the term “computer-implemented inventions” for those kinds of patent claims; but in contrast to the US, where software patents had been introduced gradually through successive court cases, the extension of patentability in Europe has encountered vigorous opposition (Kahin 2003). This unexpected and broad opposition became visible for the first time in 2000, when more than 400,000 supporters signed a “Petition for a Software Patent Free Europe.”¹¹⁹

116European Commission, "Promoting innovation through patents — Green Paper on the Community patent and the patent system in Europe." 1997. 17 Nov 2005.

http://www.europa.eu.int/comm/internal_market/en/indprop/patent/paten.pdf

117Ingo Kober, Preface to the Annual Report of the EPO. 1997. 13 July 2006.

<http://swpat.ffii.org/papri/eporep97/index.en.html>

118“European Patent Convention.” 2006 [1973]. 14 Nov 2005. <http://www.european-patent-office.org/legal/epc/e/ma1.html#CVN>

119“Petition for a Software Patent Free Europe.” June 2000. 14 July 2005.

<http://petition.eurolinux.org>

Movement against software patents

The earliest formal European group mobilized against software patents was EuroLinux Alliance, created in 1998 as a coalition of companies and non-profit associations. Its mission included the pan-European promotion of “open standards, open competition and open source software.”¹²⁰ Its membership was by invitation, and its actions were not widely publicized. The organization did, however, sponsor an online petition for a software patent free Europe, signed by almost half-million people and companies. Free software advocates were among the first Eurolinux members and first mobilized against software patents in significant numbers, but they rapidly turned their effort to attracting broader constituency around this issue.

Soon afterwards in 1998, many of the same actors established another organization named FFII (Foundation for Free Information Infrastructure). FFII was based in Munich according to German law but its members came from all over Europe, and the organization rented an office in Brussels not far from the European Patent Office. FFII did not have explicit links to free software nor open source, although free software activists are among most active members.¹²¹ It was also politically neutral: As one activist explained to me, “If software patents were perceived as a left wing cause, we would have lost. Thus it was absolutely necessary

¹²⁰“EUROLINUX Alliance.” June 2000. 24 Oct 2006. <http://www.eurolinux.org/>

¹²¹Nevertheless, French newspapers regularly identified anti-patent movement with free software advocates and reduced campaign against software patenting to a confrontation between Microsoft and free software activists. See, for example, “Brevetage des logiciels: l'UE trouve un accord,” *Libération*, 8 March 2005.

to develop right-wing arguments against software patenting, or so-called political neutrality of software patenting” (fieldnotes). To this end, FFII organized several conferences, in which experts on European and US patent policy shared panels with EP representatives talking about incentives for European economic and industrial development.

Most of FFII actions relied on work of numerous activists: FFII funds one lobbyist while the rest of the work is coordinated online and done by volunteers with erratic involvement. The intense but short-lived involvement of most activists creates obstacles to assuring long-term strategy, but it also assures an image of FFII as grounded in citizen engagement.¹²² Members and sympathizers of the FFII from different European countries would travel to Brussels to individually approach left- and (mostly) right-wing Parliamentary representatives from their respective countries in order to emphasize that, as electors, they cared about software patenting. FFII also coordinated large-scale actions such as sending individual letters to European Parliamentary representatives and published contact information for reaching European representatives (including their e-mails, phone and fax numbers). Thus, while many voluntary activists working with FFII were also free software activists, the demands of FFII were different from those of FS activists; especially in 2005, when FFII articulated a broad alliance with the software business world. Countering the

¹²²This image of FFII had reappeared in the debates preceding the referendum on ECT: the claims of “citizen victory” in the rebuttal of software patenting directive, based on the FFII style of organizing, were extended to the other purported “citizen victory” that consisted in rejecting ECT.

claims of the European Commission that the majority of European IT companies want patents, FFII organized the initiative Economic Majority, in which 2000 European companies of about 30,000 employees total signed the statement that they were against software patents and that they entrusted FFII to represent their interests. In this way, FFII and the anti-software patent movement were legitimized as representatives of European software companies and of European industrial and commercial interests.

FFII's potentially most important role consisted in producing public knowledge about patent law, European procedures of institutional “co-decision,” and software production. All three of these domains could be qualified as highly specialized technical matters. FFII's role in all three cases consisted less in establishing alternative expert knowledge than in publicly demonstrating or denouncing the mechanisms by which expertise was disconnected from public oversight.¹²³ Their strategy was to bring these three domains under public scrutiny. FFII relied heavily on the internet and computer skills of its members in these attempts. For example, one FFII member explained to me that he wrote a program that automatically searched for specific phrases in the EPO's patent database that might indicate a potential software patent. If such patents were identified, other members would then try to demonstrate that the patent indeed covered an algorithm, i.e., that it was a software patent. Establishing that a patent is a software patent often takes a long time, as they are never labeled as such – the phrasing is always much more abstract. Habitually done by lawyers, this work was

¹²³The conferences that FFII organized, with invited international experts on industrial policy, evolution of patenting, and its role in digital economy, could be seen as part of the strategy for influencing decision-makers rather than creating scientific knowledge.

for FFII done by volunteers with little formal law training, who were drawing on previously established collective knowledge about typical phrasings of software patents—accessible via FFII websites, and also presented in workshops.

FFII members also used the internet as a resource for making accessible written transcripts and video-recordings of voting on software patents in European institutions. Some of these negotiations were streamed on the web from the European Union website, but FFII converts them to open digital formats that can be viewed in GNU/Linux system, archives them and makes them accessible for download via FFII web pages. Many other events and conferences, that were not transmitted via the Europa website are videorecorded by FFII members themselves.

FFII funds one lobbyist while the rest of the work is done by volunteers with erratic involvement similar to those in free software associations described in Chapter 1. Although the intense but short-lived involvement of most activists creates obstacles to assuring a long-term strategy, it simultaneously assures the image of FFII as a fruit of citizen engagement. This had an important implication in the debates preceding the referendum on the EU Constitution, when the claims of “citizen victory” in the rebuttal to the software patenting directive were based on the FFII style of organizing.

Innovation and software's “unhappy association” with technicity¹²⁴

Article 52(2) of the European Patent Convention establishes that patentable inventions have to be new, susceptible of industrial application, and involve an

¹²⁴Slawomir Kosz, President of the Polish association of software editors and IT service companies, used this phrase at a conference organized by FFII in June 2005.

inventive step.¹²⁵ It also specifies that software and presentations of information are excluded from patentability. In 1986, however, the European Patent Office (EPO) reinterpreted the guidelines for examination of patent claims and has since then relied on a criterion of “technical character” to identify patentable inventions. This undefined notion of “technical character” has allowed the EPO to accept patents in domains which were explicitly non-patentable by the Article 52(2). The rationale for patenting of software was as follows:

While "programs for computers" are included among the items listed in Art. 52(2), if the claimed subject-matter has a technical character it is not excluded from patentability by the provisions of Art. 52(2) and (3). [... T]he execution of a program always involves physical effects, e.g. electrical currents. [... S]uch normal physical effects are not in themselves sufficient to lend a computer program technical character. But if a computer program is capable of bringing about, when running on a computer, a further technical effect going beyond these normal physical effects, it is not excluded from patentability, irrespective of whether it is claimed by itself or as a record on a carrier.¹²⁶

In other words, software would become patentable as soon as it had an “effect” whose “technical character” could somehow be established by patent filers and approved by the EPO. In a 1998 paper, an EPO official proposed to replace the criterion of “technical” with that of “a practical and repeatable solution.”¹²⁷ In 2000, the EPO

125“European Patent Convention.” 2006[1973]. 8 July 2006. http://www.european-patent-office.org/legal/epc/e/ar52.html#A52_1

126European Patent Office. “Guidelines for Examination.” 2005[1996]. 8 July 2006. http://www.european-patent-office.org/legal/gui_lines/e/c_iv_2_3_6.htm

127Schar, Mark. “What is 'Technical'? A Contribution to the Concept of 'Technicality' in the Light of the European Patent Convention.” *Journal of World Intellectual Property* 2:1, 1999.

proposed a revision of Article 52(2) to include the TRIPs¹²⁸ formula in which patents could be given to inventions “in all fields of technology”—without defining the term “technology.” Activists especially attacked EPO's provision that computer programs “as such” were non-patentable: it was deceptive, they argued, because it apparently exempted software from patentability but really allowed to patent computer programs as soon as they could run on a machine—and was the case for most computer programs. In an interview to *Le Monde*, Michel Rocard,¹²⁹ rapporteur of the software patenting directive in the European Parliament and one of its leading opponents, clarified the terms of the debate. He reminded readers that the EPO was financed by patent royalties and continued,

What is patentable, is what has technical character. But what justifies technical character? And the generally received case law answer is “the use of technical means.” We are in an absolute tautology. Moreover, the courts consider “technical” all that is complicated. All of a sudden, there are no more limits.¹³⁰

Activists opposed to software patenting pointed out that “technicity” drew on German patent doctrine in which “technical contribution” was understood as a contribution “valuable to the specialist of applied natural science, providing him [*sic*]

128TRIPs (The Agreement on Trade Related Aspects of Intellectual Property Rights) is an international treaty negotiated during 1994 GATT negotiations and administered by the World Trade Organization.

129A key figure of French Socialist Party's politics in the 1980s, Michel Rocard has held many important positions in French political life: a former presidential candidate, a former prime minister, a former head of Socialist Party, he became a Member of the European Parliament in 1999. Although his position in the European Parliament is a sort of retreat from national politics, French audiences are familiar with his name.

130“Michel Rocard ferraille contre le brevet logiciel,” *Le Monde*, 18 February 2005.

with new insights on how to 'use natural forces to directly achieve a causally overseeable useful effect.'"¹³¹ Their argument is grounded on a set of dichotomies that oppose human intellectual activity to natural forces, logical functionality to physical causality, mind to matter.¹³² These dichotomies allow activists to re-claim software as expressions of mathematical algorithms—a product of logical functioning of human mind. Patentable technical innovation, contrary to software, refers to planned utilisation of controllable natural forces and not to human mental activity.¹³³ Claiming the technical character of software and accepting patents upon it, activists argued, amounted to allowing monopolies on ideas. Following this line of reasoning, the European Parliament proposed that software be patentable only if its creation implies usage of “forces of nature.” Rocard traced the “red line” for distinguishing what is patentable as follows:

Software whose devising requires usage of energy, equipment or matter, deserves to be patented. Software whose conditions of production are a sheet of paper, a pencil and a good mathematical brain does not deserve to be patented. This builds on the 1972 Munich Convention, that says that software is not patentable.¹³⁴

131FFII. “Mark Schar 1998: What is Technical?”2005[1998]. 8 July 2006.

<http://swpat.ffii.org/papri/jwip-schar98/index.en.html>

132FFII. “Patent Jurisprudence on a Slippery Slope.” 2004. 8 July 2006.

<http://swpat.ffii.org/analysis/invention/index.en.html>

133FFII. “BGH 1976-06-22: Dispositioinsprogramm.”2005[2001]. 8 July 2006.

<http://swpat.ffii.org/papers/bgh-dispo76/index.en.html>

134“Interview: Michel Rocard, député européen.” *Décision informatique* 624, 28 February 2005. *Décision informatique* is a weekly newspaper aimed at companies providing computer services.

Rocard's interview was highlighted on the cover by his quotation “It's the future, not just free software, that is most threatened by software patents.”

Continued tensions about setting limits to patentability and disagreements on whether proposed limits exempted software pitted the European Parliament and the activists against the Commission and the Council. In 2003 The European Parliament proposed an amended directive which defined “technical” and “technical contribution” but these definitions were rejected by the Council as too vague. The Council's next proposed directive, in 2004, did not delimit the meaning of “technical” and was again denounced by activists as a trick to assure unlimited patentability.¹³⁵ By this point, activists had started to regard the insistence on “technical character” as a political strategy that sought to keep the debate and decision-making about patents behind closed doors under the pretext of entrusting decisions to experts in a technical domain. One of the activists asserted, “we, as well as MEPs, have realized that patent offices were defining national and European politics under the pretext of technical nature (*la technicité*)” (interview with the author).

Innovation and strategies of patenting: Positioning European software industry with respect to the US and “Asia”

Another line of argument frequently used by activists drew on expertise about the patenting field itself to argue that patenting of software would be detrimental to innovation in Europe.¹³⁶ In this view, computer science and software can be expressed

135FFII. “EU Council 2004 Proposal on Software Patents.” 10 Feb 2004. 25 Oct 2006.

<http://swpat.ffii.org/papers/euoparl0309/cons0401/#tech>

136In 2003, for example, economists across Europe signed “An Open Letter to the European

entirely as algorithms or mathematical theories, and any invention in this field is bound to be incremental;¹³⁷ because patent claims are often broad and trivial, any piece of software might unknowingly infringe on hundreds of software patents.¹³⁸ Moreover, collections of patents, or patent portfolios, rather than single patents, are the only way to benefit from software patents—a situation often referred to as a “minefield in incremental innovation.”¹³⁹ As European software companies are predominantly small or medium enterprises, legalizing patents in Europe would essentially hand over the European software industry to US giants that have the economic power to create patent portfolios.¹⁴⁰

Parliament Concerning the Proposed *Directive on the Patentability of Computer-Implemented Inventions*” and thirty renowned computer scientists signed “Petition to the European Parliament” against software patents.

137Bessen, James and Eric Maskin. 2002[1999]. “Sequential Innovation, Patents, and Imitation.” Working Paper. Accessible online at <http://www.researchoninnovation.org/patrev.pdf>, last accessed 25 Oct 2006.

138Bessen, James and Robert Hunt. 2004. “An Empirical Look at Software Patents.” Federal Reserve Bank of Philadelphia Working Paper 03-17R, March 2004. Accessible online at <http://www.researchoninnovation.org/swpat.pdf>, last accessed 25 Oct 2006. See also Bessen, James. 2003. “Patent Thickets: Strategic Patenting of Complex Technologies,” ROI Working Paper. See as well Shapiro, Carl. 2001. “Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting,” in Adam Jaffe, Joshua Lerner, and Scott Stern, eds. *Innovation Policy and the Economy*. National Bureau of Economic Research.

139Gallini, Nancy T. 2002. “The Economics of Patents: Lessons from Recent U.S. Patent Reform.” *Journal of Economic Perspectives* 16(2): 131-54. See also Wagner, Polk R. and Gideon Parchomovsky. 2004. “Patent Portfolios.” University of Pennsylvania, Public Law Working Paper 56.

140Lanjouw, Jean O. and Mark Schankerman. 2004. “Protecting Intellectual Property Rights:

Most of this literature and arguments drew on case studies by policy experts about patent enforcement in the US software industry. Other frequently invoked models for European geopolitical positioning were India and especially China, often referred to indiscriminately by a popular rhetorical figure of “Asia.” Their bans on software patenting, which allegedly made them more competitive than the US, were regarded as a counterpoint to the US-led expansion of intellectual property rights. Both proponents and opponents of software patents referred to this geopolitical situation with a sense of urgency, pointing to the specter of the European economy being overtaken by global competitors. For example, the Director of Legal and Public Affairs of Microsoft France claimed, at a public debate about software patenting at the French Parliament in February 2005, that the lack of software patents would impede the capacity of European economy to compete internationally. Others accused opponents of software patents of being “anti-globalization, anti-American, anti-big business.”¹⁴¹ FFII, however, adopted as a motto “freedom to innovate and compete in the digital economy”¹⁴² and highlighted their claim that patents are state-granted

Are Small Firms Handicapped?” *Journal of Law and Economics* 47:45-74. See also Moore, Kimberly A. 2004. “Worthless Patents.” George Mason Law & Economics Research Paper No. 04-29.

141 “Software patent opposition linked to 'anti-Americanism and anti-big business protests.’” *The Parliament.com: European Politics and Policy*. 5 July 2005. 9 July 2006. <http://www.eupolitix.com/EN/News/200507/5d049d10-690a-4977-b116-4295c1a42937.htm>

142 FFII. “Economic Majority News.” July 2006. 9 July 2006. <http://www.economic-majority.com/news.en.php>. But actually this line can be found on many places on FFII pages – this is one of general FFII mottos.

monopolies that threaten such freedoms, “a means a quelling competition and free-riding on the creative work of others.”¹⁴³ Michel Rocard celebrated the ultimate victory of his side in the European Parliament by publishing a press release entitled, “The defense of our European industry goes better through freedom.”¹⁴⁴ Such rhetorical and political positioning games allowed anti-patent activists, allied experts, and politicians to duck accusations that they were against EU economic liberalization or free markets.

In addition to raising these arguments about Europe and the European software industry, activists also organized a counter-movement to EPO's claims that patents would benefit small and medium-sized companies. Countering the claim of the European Commission that the majority of European IT companies want software patents, in May 2005 FFII launched the “Economic Majority” campaign, in which some 2000 European software companies, employing a total of about 30,000 persons, signed a statement of opposition to software patents and endorsement of FFII to represent their interests. This petition was posted on the FFII website and publicized throughout the IT industry across Europe in an effort to recruit signatures. Organized a month before their second Parliamentary vote on the directive, this petition was aimed at MEPs. To this end, FFII claimed to be pitting “respected programmers, and software entrepreneurs and economists” against “patent lawyers, patent bureaucrats

143FFII. “Organising the Economic Majority in 2005.” March 2005. 10 July 2006.

<http://www.ffii.org/proj/plan/>

144“Michel Rocard : la défense de notre industrie européenne passe mieux par la liberté.” 5 July 2005. 25 Oct 2006. http://tic.parti-socialiste.fr/article.php3?id_article=236

and patent departments of large corporations from neighboring hardware field” that had “invaded” the software industry since 1990.¹⁴⁵ The testimonies of small business owners about the damage that software patents would bring to their business also implied that the European software industry is dominated by small companies, and that FFII and movement against software patents adequately represents such small companies—and, by extension, European industrial and commercial interests in the software field.

European “democratic deficit” and “banana union”

Arguments based on mathematical concepts of software, on the deleterious role of patents in the software market, or even on criticisms of the self-interested role of patent offices, can easily become too technical or narrow to inspire wide public scrutiny; analogous arguments have been rehearsed by opponents of software patents in the US without attracting much public attention. In the European context, however, claims about Europe itself have been effectively woven into the software patent saga. Aside from business-oriented claims that addressed the structure of European software industry and geopolitical positioning of the European Union, many claims about Europe challenged the political legitimacy in European institutions. In particular, the concept of “democratic deficit” invoked a widely meaningful vision of European Union governed by bureaucrats whose decisions lacked accountability. This concept of “democratic deficit” in the European institutions has been mobilized by politicians

¹⁴⁵“Organising the Economic Majority in 2005.” March 2005. 10 July 2006.

<http://www.ffii.org/proj/plan/>

and activists in relation to many other issues at least since the late 1980s (Darian-Smith 1999; Schlesinger 2002; Shore 2000, 2006).

Political claims about the European Union were energized by the drastically different access and responsiveness among the European Commission, the Council of Ministers, and the European Parliament to activists opposing software patents. In order for a directive to be adopted by the EU, the Commission, the Council and the Parliament must agree to a common text in a harmonization procedure called “co-decision.” In the case of the software patent directive, there was a marked divergence between the Parliament (largely opposed to the software patents), and the Commission and the Council (generally favorable to patenting of software).¹⁴⁶ Of the three, the Parliament is the only institution whose members are elected by popular vote. MEPs are also the only European politicians to whom activists opposed to software patents had access. Considering these relations of institutional power, activists were quick to denounce the “democratic deficit” in Europe which allowed the Commission and the Council to disregard the only directly elected political body, the only one that was accountable to European citizens. As one Irish free software activist put it:

Although, currently, campaigning for the European Constitution referenda is dominating European politics at the moment, the importance of contacting your MEPs on [the issue of software patents] should not be underestimated.

¹⁴⁶In addition these tensions, in late 2004 the President of the Commission Barroso insisted on appointing as Commissioner of Justice a person denounced by the EU Parliament as homophobic, and to other positions Commissioners who were accused by several national parliaments of having conflicts of interest. Barroso ultimately renounced and modified the composition of the Commission in order to avert the EU Parliament's threat of disclaiming the Commission.

Only by paying attention to their actions, and calling them to account for them (whatever your personal views), can citizens begin to reduce the democratic deficit manifest in EU institutions.¹⁴⁷

“Democratic deficit” is a highly polemical topic. Literally understood, the claim that the European Parliament is somehow more legitimately representative of the European democracy than the Council is not necessarily self-evident. On the one hand, the Council of Ministers could be seen as a decision-making body delegated by the democratic member states of the EU. On the other hand, there is habitually a high abstention rate in the direct election for members of the European Parliament. However, FS advocates and EU Parliament members alike invoked the “democratic deficit” of the EU bureaucracy, invoking the familiar complaints about the opaque decision-making in the European Union institutions and the “irresponsibility of the Commission members [and] insufficient powers of the Parliament” (Hoffmann 1999: 916). Such alignments reflected and reinforced both the institutional tensions in the EU and the familiar assumptions about inherent undemocratic nature of EU institutions: activists' emphasized their understandings of the European Parliament as a democratic institution always in explicit contrast to two other key EU institutions—the Commission and the Council—that incited activist assertions that “democratic deficit” persisted in the EU realms.

Another important meaning in invoking “democratic deficit” might lay in activist attempts to establish FFII as a legitimate collective representative as a democratic force, and, analogously, the cause of fighting against software patents as a

147“Linux Gazette News Bytes.” May 2005. 17 Nov 2005.

http://linuxgazette.net/114/lg_bytes.html

democratic cause.¹⁴⁸ This was demonstrated by publishing transcripts of Council's voting sessions, recorded via the online TV channel of the European Union, that appeared to show abuses of power. MEPs in their press statements bolstered activists' efforts at drawing public scrutiny to putative abuses of power and procedure at the Council and the Commission: "The Irish Presidency attempted to adopt the text of the Commission in the Council of Ministers as an A-point, thus without discussion, probably under Microsoft's pressure. That happened three times, twice during the meetings dedicated to fishery!"¹⁴⁹

After watching one particular video transmission of the Council vote about the directive and deeming the decision process coercive and undemocratic, FFII members incited three national parliaments to reverse the agreement that their representatives in the Council had initially accepted. A Council diplomat commented on this attempt to undermine the consensus by saying: "This is not a banana republic!" This provided a leit-motif for an online demonstration, in which banners displayed bananas instead of the stars of the EU.¹⁵⁰ In July 2005, at a public panel in Dijon celebrating the failure of the directive, a major lobbyist against software patents humorously referred to this idea of undemocratic "banana" vote: "Yesterday, in the plenary session, 680 members of the Parliament were present. This alone has never been seen before;¹⁵¹ plus, 648 of them voted against the directive! The voting resembled a banana republic!" This

148As suggested by the photo on Figure 3.

149"Michel Rocard, député européen." *Décision informatique* 624, 23 Feb 2005.

150"[demo.ffii.org]." 1 Nov 2005. 18 Nov 2005. <http://demo.ffii.org/demo0502/banners.php>

151It has "never been seen before" that the MEPs came back to the Parliament for a vote in such large numbers during summer holidays.

proclamation was greeted by a thunderous applause of some 100 computer geeks. In the run-up to and aftermath of the referendum on the European Constitutional Treaty, European Union remained identified with such derisive imagery even when the outcome of such “banana” vote fulfilled activists' demands.

Europeanization of activism

The campaign against software patents largely confirmed French activists' cynical understandings of EU politics. Some activists argued that, as European political representatives were elected according to national considerations rather than directly on European stakes, the French government was able to hide behind the European Union to justify and escape responsibility for unpopular policies. While some national Parliaments, such as the Dutch, attempted to revoke the actions of their Council representatives, there was no similar action in France. Activists pointed out that, because of the perceived technical nature of software patents, the French Parliament could not be mobilized around this issue. Accordingly, French national policy was dictated largely by patent officers, who had a stake in allowing for the greatest possible scope of patentability. The French activists were also remarkably little involved in talking to the French MEPs; this was in contrast to activists from other European countries who thought they had the best chances when lobbying “their MEPs,” i.e., MEPs of the same nationality, about the need to reject software patents.

In contrast to the fears of European enlargement that were widely circulated via media images, in particular following the “Bolkenstein affair,” activists had started to

make connections with potential allies in other countries well before the 10 new countries officially joined the European Union. They quickly learned that an enlarged Europe could be a resource: For example, the Polish minister of science and technology had on two occasions blocked the Council's attempts to pass the software patents directive without debate or vote in the European Parliament. So, while the French media and politicians debated the imagery of the “Polish plumber” that was seen as threatening the French system of social safety nets, French opponents of software patenting joined 30,000 computer programmers worldwide in signing a petition entitled “Thank you Poland” which was ceremonially given to the Polish Prime Minister. The text of the petition expressed thanks to the Polish government for preventing the European Union from making the “horrible mistake” of adopting the “Software Patent Directive.”¹⁵² Activist descriptions of the Minister's heroic resistance in the Council suggested that Poland had decidedly earned a place in Europe.

EU DECISION-MAKING AND THE CONSTITUTIONAL TREATY

As arguments about software patents turned into arguments about democracy and decision-making in EU institutions, activism increasingly became an exercise in cultivating Euro-scepticism. As an unanticipated result of the software patenting campaign, French FS advocates were equipped with arguments and experience to talk about the European Constitutional Treaty (ECT). This section of the chapter explores how the suspicion of the proclaimed technical nature of discussions as well as the

¹⁵²Norbert Bollow. “Thank you, Poland!” Feb 2005. 15 Nov 2005.

<http://www.thankpoland.info>

rhetoric of having been “privileged witnesses” during the software patenting affair of the abuses in the European Union's co-decision procedure—two leitmotifs of the activist campaign against patenting of software—provided a ground for French free software advocates to reject the European Constitutional Treaty.

The debate preceding the ECT referendum in France included MEPs and other European politicians, activist organizations, scientists, workers' unions, academics, journalists, pollsters, bloggers, and marketing agencies. Many commentators noted that this was the first time in the history of the European experiment that there was much evidence of broad public interest in the fate of Europe as an entity. In the realm of partisan politics, most political parties had voted to approve the ECT, but there were significant minorities within each of these parties that were opposed to the ECT. The existence of a heterogeneous “collective for NON,” (*collectif du non*) made of various groups opposed to the ECT and ranging from far left to far right, was both hailed as a proof that French politicians were divorced from the population and criticized as (another) expression of the naive revolt against partisan politics that brought Le Pen to the run-offs in the infamous 2002 Presidential elections. The debates revolved around questions and speculations such as: Would the ECT advance or stymy democracy in the EU? Did the procedure of co-decision increase the power of the European Parliament in EU policy-making with respect to the Commission and the Council of Ministers? Was there a “core” European project that was threatened by the Constitution? Would a rejection of the treaty displace the French-German “social

model” in favor of a “very liberal and pro-American Italo-Britannic axis”?¹⁵³ Could a better treaty be negotiated? The debates among activists were informed both by these widely shared concerns and by the knowledge about EU politics gathered through organizing against the software patenting directive.

The debates about the ECT were particularly vigorous among French activists because France was one of the few European countries that attempted to ratify the Constitution by a referendum.¹⁵⁴ Free software advocates drew on substantial press coverage, televised discussions, and set up devices for reading, searching and commenting on the ECT online in a collaborative manner. Their online installations explicitly connected relevant articles of the treaty and allowed for visitors' comments, in an effort to facilitate reading of this 474-page long text:

To my knowledge only one article relates to intellectual property and thus FS: Article II-17.2 of the charter of basic rights, in its entirety: “Intellectual property is protected.” With no further definition. It should be noted that the article II-17.1, which talks about material property, anticipates exceptions (if useful to the public and fairly compensated), but the one on the intellectual property does not. It's silent on the issue of the interest of the public vs. that of the authors, which is present in the US constitution, for example, and which could usher different laws on the subject. According to my reading, in Europe this will be no more possible without a constitutional change.¹⁵⁵

This interpretation of the relevant ECT article was sent to the mailing list by Julien, a free software developer and advocate who was also a member of the French Socialist Party (although his view on the ECT was in minority among the Socialists). Julien's

¹⁵³Claude Allègre. “Si le non gagne, Bush gagne.” *Libération*. 12 October 2004.

¹⁵⁴The Constitution had to be ratified by all member-states, but each was free to choose its own means of ratification. Most opted for a vote in the national parliament.

¹⁵⁵“Re: [APRIL] Constitution Européenne et Logiciels Libres?,” a message sent to the e-mail discussion list for members of *APRIL*, 30 September 2004.

pointing out of the unspecified nature of the mention of intellectual property rights was an implicit reference to the software patenting campaign and the arguments about technicity that everyone was familiar with.

The direct connection between the software patenting directive and the European Constitutional Treaty was first drawn by a renowned free software advocate and a professor of computer science who published an online call for rejection of the ECT two months before the referendum. In this text, targeting computer geeks but addressed to “citizens,” he drew a parallel between the discourse surrounding the ECT, and the discourse about the necessity of computerization. In both of these cases, he argued, citizens were invited to approve proposals by default under the pretext of their technical nature:

“There is in both cases the same schizophrenia: on the one side, we are presented something (the computer, a European Constitution), declared essential, and that, seen at a distance, is full of promises; on the other hand, we are politely informed that we will never have the competences necessary to understand these complex objects (functioning of millions of transistors on the one hand, that of the institutions managing millions of citizens on the other), therefore we should buy them or approve them as they are proposed to us, well packaged, without allowing ourselves to express the slightest reservation, or to propose a slightest change. ... can we allow that to ourselves? [...] Very fortunately, right before the vote in France about the European Constitution, the community of European computer scientists could follow step by step the implementation of this procedure of joint decision [*codécision*] on the European directive that aimed at introducing in Europe software patents, which were previously prohibited by the 1973 Munich convention and by the 1991 European directive; it is a history which has merited chronicling on several occasions for more than four years. Unfortunately, under the pretext of technicity (ah, technicity, over and over!) this affair was not sufficiently brought to the attention of citizens. You don't know what a software patent is? That is serious, because the future of European computer industry and millions of skilled jobs all over Europe depend on it, as do many of our freedoms and our independence, in a broadest sense: I advise you to inform yourself as fast as possible, for example by consulting the website of the campaign against

software patents.”¹⁵⁶

Encouraged by the attention that the ECT referendum campaign brought to the Bolkenstein directive, some activists wanted to benefit from the ECT referendum to bring the software patents directive to the spotlight of the media. Others considered it harmful to link opposition to software patents with the opposition to ECT:

The fight against patents is groundwork (*un travail de fond*), very technical, which consists in collecting precise information and informing deputies and decision-makers, day after day. Making a simple-minded amalgam with groundless televised arguments is likely to hamper the cause more than anything. ... The stakes of the [ECT] treaty are even greater than those of patents, and “patentability” is a very technical topic and does not thrill crowds at the moment when, as you will notice, politics represents for 90+% of people “shock phrases” cast around vague reductive concepts in a few sound bites for large-audience shows. In short, between “catastrophe of historical proportions,” “social Europe” and other demagogical concepts, do you really see “patentability of inventions implemented by computer” as resonating with the gigantic soft mass of the undecided?¹⁵⁷

A prominent public campaign against ECT also could have weakened legitimacy of key political opponents of software patents in the European Parliament who were campaigning in favor of ECT.¹⁵⁸

156Roberto Di Cosmo. “Aux Urnes, Citoyens! Disons NON au projet de constitution européenne pour dire OUI à l'Europe.” 23 March 2005. 27 June 2006.

<http://www.pps.jussieu.fr/~dicosmo/Opinions/ConstitutionEuropeenne.html>

157“Re: [APRIL] Deux soirées débats sur les DRM et leurs implications.” Message sent to APRIL members' mailing list. 4 April 2005.

158In particular, Michel Rocard pleaded for the approval of the ECT. In the name of the French Socialist delegation, Rocard objected to the “incoherent mixing of genres” that led several “internet users” (*internauts*) to reject the Constitution because of the Commission's position on patents, and invited them to instead contribute to the

The debate among activists focused on two elements proclaimed to be major contributions of ECT to strengthening democratic governance in Europe: the first was giving European citizens a voice in the form of a right to petition the Commission to propose specific laws, and the second one was the co-decision procedure that expanded the role of the European Parliament in EU policymaking. As a result of six years of activism against software patents, advocates had become acutely aware of the limited reach of both of these proposed measures: the campaign against software patenting became symptomatic both of the limited influence of European citizens in Commission's affairs, and of the limited power of the EU Parliament against the Council and the Commission. Activists' claims and strategies about software patenting paralleled those about ECT more broadly. The Commission's attempts to adopt the software patent directive were understood as betrayals of democracy and directly served as a model for imagining a non-democratic Europe that might come into existence with the adoption of the Constitution.

In this spirit, a week before the referendum a group of free software advocates publicly announced their decision to vote against the Constitution. Labeling themselves "privileged witnesses" of an undemocratic process, they replied to often repeated arguments that the ECT would give more power to the Parliament: they rejected ECT based on their understanding (acquired first-hand through activism

“reinforcement of democracy in Europe and of the powers of Parliament [...] that the Constitutional project will help bring about.” “Re: [Membres] Fw: URGENT : Appel de 200 informaticiens pour le Non a la constitution europeennes - Attention risque d'effet inverse.” Message relayed to AFUL membership mailing list. 22 March 2005.

against software patenting) of the power relationships among the Council, the Commission and Parliament in the process of co-decision, and of little influence that citizens had in this process.¹⁵⁹

Citizens' engagement and the right to petition

At a roundtable celebrating the Parliament's vote against software patents, an activist presented as “one of the architects of victory in the European Parliament” asserted that a generation of technophiles, trained in this activist campaign (e.g., learned how to talk to MEPs etc), would eventually enter ministerial cabinets – they were formed by pioneers who identified a menace and who undertook pedagogical work aimed not at deputies but at the lobbyist community because it was impossible to do everything alone (ex. EuroLinux, FFII), to address journalists, politicians, users, while spreading the workload to many people. The next staging ground for mobilizing support, he suggested, might be law schools—nurseries for tomorrow's high civil servants and government administrators. This strategy could mean that in the near future (5-10 years) many cogs in the wheels of the government would be aware of these issues. He saw the Parliament vote as a result of a broad lobbying effort, a political affirmation of popular suffrage, and the taking of a stance of the Parliament against the Commission and the Council. All of these ideas were in harmony with FFII claims and style of work.

Afterwards I talked to Philippe, a FS advocate and a Socialist Party member,

¹⁵⁹“Au NON de la Démocratie.” 23 May 2005. 14 Nov 2006.

http://gibuskro.lautre.net/news/article.php3?id_article=7

who was unhappy about simplifying of continuous and sensitive political work under the label of “citizen victory.” He found the denunciations of partisan political negotiations to be unmerited. Even worse, from his perspective, such rhetoric gave FS advocates a false impression of “citizen victory” when the “victory” was mainly due to long-term partisan pressure that politicians and a small number of very dedicated citizen-activists, who also happened to be very knowledgeable about software and very politically inclined, were able to do through negotiating acceptable partisan arguments with expert lobbyists.

CONCLUSION

When the European Parliament rejected software patents for the second and final time, the vote was “the most unanimous ever registered,” with 648 votes for the rejection, against only 14 opposed and 18 abstentions. It was also the most contradictory vote of the Parliament, for “despite the unanimity of the vote, the text has profoundly divided the Parliament, and both camps 'preferred to reject it out of hand, rather than risk having the other camp's position adopted.’”¹⁶⁰ Neither side was strong enough to win over a coherent implementation of its amendments and preferred to reject the directive than to have some of its opponents' amendments adopted.

US commentators attributed the considerable influence that activists opposed to software patents were able to exert on the Members of the European Parliament to

¹⁶⁰“Le Parlement européen rejette en bloc une directive visant à breveter les logiciels.” *Le Monde*. 8 July 2005.

the relative novelty and prior lack of interest in the Parliament as an institution. Mainstream French commentators saw the rejection of the Directive as a proof of the ineffectiveness and powerlessness of the European Parliament in the European procedure of co-decision.¹⁶¹ In contrast, MEP Michel Rocard denounced the “complete, arrogant and sarcastic contempt” of the Commission and the Council, arguing that “the Parliament has in this way expressed a 'collective anger' against the 'intolerable' manner in which it was treated by the Commission and the Council, that had refused to consider its amendments from the first reading.”¹⁶² Free software advocates proclaimed it a victory of the European Parliament, a NON to patenting but a YES to innovation in Europe.¹⁶³

The campaign against software patents illustrates how, in Irène Bellier and Thomas Wilson's words, “building and imagining Europe are flip sides of the same coin” (Bellier and Wilson 2000). At a roundtable celebrating the Parliament's rejection of software patents (at the Libre Software Meeting in Dijon), an activist announced as “one of the architects of victory in the European Parliament” asserted the importance of a generation of technophiles who were trained in this activist campaign to address journalists, politicians, and European software users. He saw the Parliament vote as a result of a broad lobbying effort, a political affirmation of popular

161Jean Quatremer. “En Europe, les logiciels resteront libres.” *Libération*. 7 July 7 2005.

162“Le Parlement européen rejette en bloc une directive visant à breveter les logiciels.” *Le Monde*. 8 July 2005.

163Gérald Sédrati-Dinet. “Le Parlement européen dit NON aux brevets logiciels et OUI à l'innovation.” 6 July 2005. 29 Oct 2006. <http://www.ffii.fr/Le-Parlement-europeen-dit-NON-aux-brevets-logiciels-et-OUI-a-l-innovation>

suffrage, and Parliament's independence from the Commission and the Council. All of these ideas were in harmony with FFII's claims and style of work: the pioneers who identified a menace from software patents undertook pedagogical work aimed not at deputies but at creating the lobbyist community because it was impossible to do all necessary work alone. Spreading the workload to many new activists assured the longevity of fight against software patents. Law schools, he suggested, might be the next staging ground for mobilizing support—so that tomorrow's high civil servants and government administrators would be aware of these issues. The audience of about 150 free software geeks then honored him with a standing ovation, which moved him to tears.

...

Until the 2005 referendum on the European Constitutional Treaty, there was a massive indifference about the EU in France. In the campaign preceding the referendum, far-Left parties and some far-Right groups associated the European integration with deepening of social and economic crisis in France, as well as with the lack of support for the governing political options. A significant minority in the center-Left Socialist Party also vocally denounced the Party's nominal support of the Constitutional Treaty. The public opinion wavered until the end, and the final rejection of the Treaty left many observers confounded. There are several interpretations about what this vote means: refusal of Europe, or of the proposed trajectory of European unification, or of national politicians (Grunberg 2005). Nevertheless, immediately after the ECT referendum, the proponents of the

Constitution charged in the media that populism, xenophobia, and inward-looking tendencies (*repli sur soi*) have won. One of my friends who voted against the ECT became so embarrassed upon hearing the high-profiled denouncements of the vote that it took her several days to admit that she—a middle-class, left-wing teacher—voted against the Constitution and thus, as media and most national politicians claimed, undermined “Europe.”

In an attempt to challenge simplistic analyses, in this chapter I have argued that French free software activists who rejected the ECT were to large degree motivated by their experiences in mobilizing MEPs against software patents. Moreover, in these experiences, activists organized Europe-wide cooperation, albeit one that opposed the Commission's narrative of the European integration. For many activists, organizing against software patents provided the first occasions to become familiar with European institutions, through protest marches on the streets of Brussels, public conferences in the European Parliament, or individual meetings as European citizens and voters with their MEPs. In opposing patenting, activists saw themselves as making a more democratic Europe. They had the impression of having served a successful “apprenticeship” of EU policymaking and having found a way to implicate themselves. The evocative force of such competing images of European institutions was cogently formulated in French activists' debates about the ECT.

In both campaigns, free software activists strove to engage broader social implications not only of software patenting or of ECT, but of “technicity” itself. When the European Commission ignored the expert testimonies of computer scientists and

economists against software patents, activists turned to forging expertise aimed to win over the MEPs. Their pan-European activism sought to establish the bases for European citizens and their representatives to understand presumably technical issues and their democratic implications. Informed by widely spread conceptions of “technocratic” European Union, activists assumed the identities of EU citizens who, additionally, have “witnessed” how expert “technicalities” were instrumentalized in order to prevent a broad civic debate that software patents merited. By denouncing “technicity,” activists invited political debate in domains of presumably expert decision-making and linked software patents to European integration in a way that allowed them to effectively confront the EU Commission, Council, and the European Patent Office, while championing their own cause as an instance of democratic Europeanization. By linking activist experiences of the campaign against software patents and their vote on the European Constitution, in this chapter I have argued that a rejection of a specific agenda of EU integration can be interpreted as a form of Europeanization (Borneman and Fowler 1997; Bellier and Wilson 2000; Harmsen and Wilson 2000).

CHAPTER 5: “DEMATERIALIZING” THE REPUBLIC: REDEFINING PUBLIC GOOD AND PRIVATE ENTREPRENEURSHIP

A VISION OF E-ADMINISTRATION

In February 2004, the French Prime Minister announced the “E-Government Strategic Plan for 2004-2007.” Its foreword personifies the plan in the character of 59-year old Mme. Adèle¹⁶⁴ P., visualized as a round gray-haired woman with big glasses in front of a computer screen (see Figure 4). Adèle has until recently “resisted computing and the internet, and didn't have a PC or internet access” until her son, a more experienced user of online government services, told her that she could “declare her change of address” online:

Using “39 39 Allo service public”, the one-stop government information and assistance telephone line, which came into general service at the end of 2004, she obtained a list of the information she needed, then went to the town hall where, using a public terminal and with the assistance of the reception staff, she was able to notify all the government departments, the Post Office, her telephone company, the electricity company, her bank, and her insurance company of her change of address, all at the same time.¹⁶⁵

¹⁶⁴In profile, Adèle resembles French national symbol Marianne. The portal to online government services carries the name Adèle (probably a shorthand for *administration électronique*). See <http://www.adele.gouv.fr/>.

¹⁶⁵“The E-Government Strategic Plan (PSAE) 2004-2007,” available at http://www.adele.gouv.fr/spip/IMG/doc/Le_plan_strategique-GB.doc, last accessed 18 July 2006.



Figure 4. Imagery of Adèle P.

Source: Ministère de l'Économie, des finances et de l'industrie. "Administration 24h/24 – Accueil particuliers." 2007. 1 Apr 2007. <https://www.administration24h24.gouv.fr/index.php>

Adèle P. uses "the electronic national identity card" for all public and private online services: "She finds it much simpler to have just one card for all the services... and as a plus, she feels reassured by [...] using an official documents(*sic*) for secure access to her personal details" stored in her online account. Further, Adèle is "aware of the fact that this ease of use didn't mean that her details are passed backwards and forwards between different departments." Adèle's husband and their two youngest children, "reluctant to place [their] trust in just one tool," have exercised their "freedom of choice" to obtain an Administrative Services ID card, which the children can use at the school canteen and the parents for accessing online school records.

This document, published in English, Spanish, and German, in addition to French, envisages e-government as a state-sponsored hand-up into the digital age for French citizens. Societal transformation is represented in the form of an extended family that is involved with business initiatives, state services, public education, and civic life. The projected multifaceted change to daily life ushered by e-government celebrates the potential of widely available internet access, individual online profiles,

and the simplicity and choice provided by online services. These motifs recall the era of dot-com entrepreneurship in order to advertise longstanding French ideas that the state is a crucial sponsor of innovation, proper steward of the public interest, and the disinterested guarantor of private citizens' interests in a way that private companies cannot supplant. The text concludes idyllically, “everyone finds it hard to remember a time 'before' these on-line services, and is amused by the red tape image of the civil service only a few years ago.”

In this chapter, I focus on one apparent success of free software advocacy in France: adoption of free software in French projects of e-government. French e-government administrators draw on global phenomenon of free software to encourage development based on private entrepreneurship, while simultaneously preserving the state's role in sponsoring the proclivity to innovate, maintaining national pride associated with technological innovation, and protecting citizens' interests. In my interpretation, their adoption of free software reflects on the positioning of France in the world of the 21st century.

Moreover, I argue, the growing use of FS has not brought about the intended objectives for FS advocates. I investigate more closely two initiatives of state administration to explore how the success of FS advocacy contradicts some FS advocates' utopian assumptions about sharing, success, and participation enabled by FS. In analyzing how this happened, I point to specific historical circumstances and commonly held ideas about the role of the state in technological development and transformations of French society.

...

Turn-of-the-century state-led entrepreneurship in telecommunications

The public significance of telecommunications, as it first emerged in widely-read accounts in the 1970s, roughly corresponds to what Michael Fischer has termed the “ambivalent transitions [...] in outlook, in historical horizon” in understanding the implications of computing (Fischer 1999b:252-3). According to Fischer, the first such moment was in the late 1970s, marked by publishing of Jean-François Lyotard's book The Postmodern Condition and especially the appearance of the field of telematics—a combination of informatics and telecommunications, better known under the name of Minitel.¹⁶⁶ Fischer situates the second “ambivalent transition” in the early 1990s, “marked by the reorganization of the Internet, changes in the global competitive structure of the semiconductor and information technology industries, the introduction of new user-oriented tools, and the huge influx of general users to the Internet—previously inhabited by relatively small, technically knowledgeable communities of hackers, students, researchers, engineers, and programmers” (Fischer 1999b:254). This periodization seems to be mainly US-oriented. More general use of the Internet took hold in France only in the late 1990s and early 2000s. With this adjustment, Fischer's framework is convincing.

The French experience with Minitel—a commercial digital network that existed before personal computers—challenges the close association frequently made between personal computers and internet in thinking about digital networks. This, in

¹⁶⁶The introductory chapter of this dissertation provides a more extended discussion of the development of telecommunications in France in the 1970s.

turn, raises questions about the strong association of the early internet with US counterculture that has durably inflected debates about digital networks around their emancipatory and entrepreneurial possibilities (cf. Turner 2006). For example, philosopher of technology Andrew Feenberg has argued that the strong oppositional public culture in post-1968 France have contributed to Minitel's success as a user communication device, as manifested in the profusion of various chat services (Feenberg 1995:146). Feenberg sees this broad appropriation of Minitel as a challenge to the visions of the technocratic supporters of the project, visible in the French administration's ideology of national public service and an explicitly politicized approach to modernization. My account, however, highlights the double nature of Minitel as a commercial platform and an exhibition of state-funded top-down entrepreneurial ambitions in developing digital networks.

By the 1990s many of the civil servants who had experience with digital networks through Minitel were also interested in the internet. Yet France was perceived as lagging behind US and the rest of Europe in adopting the internet—a symbol of innovation based on entrepreneurship and private venture capital. The new government mobilized some of the arguments from the 1970s, applying them to the internet in the late 1990s. In a widely reported 1997 speech, newly elected Socialist Prime Minister Jospin announced that the achievements of Minitel belonged to the outdated framework of state-led innovation, and that France was lagging behind the US and most of Europe in adopting the internet—a symbol of innovation based on

entrepreneurship and (private) venture capital.¹⁶⁷ A member of the French Socialist Party's internet section, which was founded shortly after Jospin's speech, described the importance of this speech to me as “the first clear articulation by a national politician of the importance of internet for the future of France” (fieldnotes).

Jospin's Socialist government focused on new technologies in an attempt to mark a distinction from previous left- and right-wing governments that had purportedly neglected internet in favor of Minitel.¹⁶⁸ While earlier regimes were associated with the Minitel, the Internet was now employed as a symbol of entrepreneurship that would be compatible with Socialist political values of equality and social solidarity; this would in turn mitigate the contentious political and social implications of privatization and regulatory liberalization (Trumbull 2004).¹⁶⁹

The new innovation policy sought to encourage the growth of small IT

167Lionel Jospin, “Discours prononcé lors de l'inauguration de l'Université de la communication : Préparer l'entrée de la France dans la société de l'information, à Hourtin (Gironde),” 25 August 1997, available at http://www.archives.premier-ministre.gouv.fr/jospin_version3/fr/ie4/contenu/5519.htm, last accessed 11 August 2006.

168Relationship with the business sector did not break out neatly between Right and Left.

169The interest in understanding of the proper relationship between public good and entrepreneurship can also be glimpsed in the ethnographic work undertaken in the late 1990s by the anthropologist Marc Abélès on the development of venture forms of philanthropy in the Silicon Valley (Abélès 2002). Abélès focused on “a mythical site where innovation symbolizes success and prosperity” in order to examine how a large sector of activities of giving that are in France considered part of state-sponsored and implemented public service, are among the young Silicon Valley philanthropists organized according to market rationales of profitability, (social) return, and community independence from the state (Abélès 2002:7).

businesses and commercialization of new technologies along with developing internet access, French “cultural presence” online, and electronic administration (Trumbull 2004:10). At the time, free software was a marginal business phenomenon, and no mention was made of it.¹⁷⁰ The government's political support of the internet was accompanied by minimal financial assistance for the new entrepreneurial economy.

FREE SOFTWARE AS A METAPHOR FOR ADEQUATE STATE APPROACH TO INNOVATION AND ENTREPRENEURSHIP

Anthropologists have long argued that attention to “key symbols” can provide insights into central tensions and contested domains in a society (Ortner 1973). In France, such figures condense the opposition of traditional and modern visions of French society and can be drawn upon to project various ideas about social change. Literature on political, economic and cultural transformations of post-war France stresses the importance of metaphors of modernity in the redefinition of national identity, whether in the figure of the peasant, nuclear reactors, or airplanes (Chapman 1970). In order to make this section easier to follow, I outline a chronology of partisan changes in the French Presidency and Government from 1997 to 2007:

<i>Year</i>	<i>President</i>	<i>Prime Minister and the Government</i>
1995	Chirac (Right)	Juppé (Right)
1997	Chirac (Right)	Jospin (Left) -- <i>period of cohabitation in which Right and Left parties share power</i>
2002	Chirac (Right)	Raffarin (Right)
June 2005-07	Chirac (Right)	Villepin (Right)

Source: “Archives des sites des Premiers ministres français.” 30 Mar 2007.
<http://www.archives.premier-ministre.gouv.fr>

1999; Hecht 1998; Rogers 1987).¹⁷¹ Anthropologist Susan Carol Rogers has argued that the trope of “the peasant” is periodically mobilized by French intellectuals and politicians as “good to think” about French heritage, identity, modernization, cultural diversity and state power (Rogers 1987). Historian Gabrielle Hecht has identified nuclear technology as another powerful image endowed with national grandeur. Hecht argued that such varied groups as technocrats, workers' unions, government officials and even residents living close to nuclear sites, developed a consensus through common identification of nuclear technology with modernity and national power that contrasted or dovetailed with the images of traditional France, as in comparing the nuclear reactors to Loire Valley castles (Hecht 1998). Along these lines, I attend to how free software and interoperability are mobilized as organizing metaphors for elaborating the contours of the proper involvement of the state in social change in the early 2000s France.

To what extent does the adoption of free software by the French state administration extend long-standing discourses of modernization? Could FS be regarded as another expression of the persistent state management of the standing of the French nation in Europe and the world through development of technology? How, and how well, does FS function as a model of desired approach to state modernization?

The scale of projects undertaken under the umbrella of e-government was very ambitious: in 2005, this encompassed 225 projects intended to “dematerialize”

¹⁷¹This literature opens the door to understanding the role of metaphor and image in shaping the relationship between the public interest and technological development.

(*dématisation*) administrative procedures and access to public information.

Beyond making state-sponsored public services accessible online, the choice of the word “dematerialization” [attributed to the Prime Minister] implied re-purposing of state administration in order to maintain its efficacy and relevance in citizens' lives.¹⁷² This concretely involved such diverse endeavors as rehauling procedures for filing taxes, making legal texts and administrative documents available online, and developing broadband internet access across the French territory.

Free software and interoperability were mobilized as organizing metaphors for elaborating the contours of the proper involvement of e-government in innovation, sharing, and entrepreneurship. Some of the purported advantages of FS advanced by state administrators drew on a repertoire familiar to free software advocates: those included independence from technical providers, access to source code, flexibility, license management.¹⁷³ The director of the national tax office articulated his vision of

¹⁷²The article cites Prime Minister Raffarin to suggest that by overhauling and “dematerializing” the administrative procedures, the government aimed to “increase the productivity of public administration and ameliorate the efficacy of public action as well as the quality of services that are offered.” Pascal Caillerez, “Administration centrale : 225 chantiers ouverts,” 01 DSI, available at <http://www.01net.com/article/263192.html>, last accessed 5 August 2006.

¹⁷³The technical director of online fiscal services invoked the well-known figure of independence from technical providers, claiming that free software allowed a better mastery and reactivity of the information system through non-exclusive access to source code, and the possibility to experiment thanks to the flexibility of its components. This interpretation of independence echoes statements made since 1999 by several Right-wing senators, in which the access to code was key for providing independence from one specific foreign software company Microsoft. The departmental director of the national

social change, development of e-government, and the place of free software therein:

If we are facing a societal change, which might be at the same time perfectly imprinted with our social-liberal heritage and yet disruptive in its methods, and if [free software] objectively shows its superiority and its operational efficacy, then it will naturally impose itself. But we have to give it time and not create too strong and brutal a cultural rupture: “Freedom is not imposed, it's chosen.”¹⁷⁴

By attributing the adoption of free software to its technical prowess, i.e. to qualities inherent in the software code, this statement circumscribes the already limited possibilities of politicization of such technical choices and denies any relevance of (free software) advocacy in these decisions.¹⁷⁵ His ending quote echoes ideas of freedom among pioneers of US-led neoliberal reforms as well as in US open-source

tax office articulated another familiar theme, affirming that proprietary software licenses are difficult to manage for an administration. He claimed that administrative choices, which were articulated around norms, standards, and similar technical and economic criteria, confirmed the superiority of free software. Pascal Caillerez, “Administration centrale : 225 chantiers ouverts,” 01 DSI, available at <http://www.01net.com/article/263192.html>, last accessed 5 August 2006.

¹⁷⁴“Jean-Marie Lapeyre (Copernic) : “La liberté ne s'impose pas, elle se choisit,” interview available online at http://www.toolinux.com/news/opinion/jean-marie_lapeyre_copernic_la_liberte_ne_s_impose_pas_elle_se_choisit_ar5101.html, 2 August 2004, last accessed 5 August 2006.

¹⁷⁵The oppositional Socialist Party's report, published about a year earlier, echoes this reasoning in proposing the “right of interoperability” as a way to assure consistent public information systems and prevent having to profoundly transform all information systems in order to implement small changes. See “Vers une société en réseaux. Liberté, égalité ... Interopérabilité,” edited by French Socialist Party's Working Group “Information Technologies,” 21 January 2003, available online at http://tic.parti-socialiste.fr/article.php3%3Fid_article=21.html, last consulted 8 October 2007.

marketing to suggest that the consideration of any criteria other than purely technical superiority would hamper rational decision-making about technology. The association of rational technological management and supposedly natural societal evolution, in turn, asserts the value of a particular framework of e-government in harmony with the government's vision of “optimized” public service and the entrepreneurial state.¹⁷⁶

FRAMEWORKS OF INTEROPERABILITY AND VIRTUES OF COOPERATIVE SHARING

The concept of interoperability among free software advocates in France

For a completely free informatics, [in addition to using free software] file formats should be open to ensure interoperability between various software and information systems.¹⁷⁷

Broadly, interoperability refers to the capacity of two technical systems to work

176A 2005 article in the UK edition of ZDNet, online journal devoted to information technology, lauded the migration of the Parisian City Council to free software by comparing it, of all things, to the Wal-Mart's strategy “Think small, start small, scale up” and recommended this strategy as “a good advice for organizations looking to adopt open source.” This article judged the French tax agency to be “one of the most progressive public sector users of open source in Europe” with a “bold, yet measured” attitude to adopting open source, “initially treating open source and proprietary software as equal and then after a couple of successful large-scale deployment mandating the use of open source.” See Ingrid Marson, “French opt for laissez-faire Linux,” ZDNet UK, 5 November 2005, available online at <http://news.zdnet.co.uk/software/0,1000000121,39236214-3,00.htm>, last accessed 6 August 2006.

177Citation from a flyer that free software advocates were giving out to visitors at the stand devoted to free software at the fair European IT Week fair (*Semaine Europeene des Technologies d'Information*). Paris Expo, 30 March-1 April 2004.

together through common norms. It is a notoriously vague concept; in fact, its vague character might have contributed to its popularity. The scope of interoperability and the degree to which it is achieved, its implications for marketplace exchanges, as well as acceptable working notions of interoperability, have become an area of exciting legal, technical and policy research and diplomatic negotiations.¹⁷⁸

For French free software advocates, interoperability is part of a constellation of good programming practices which also includes open standards, open formats, opposition to patenting, and free software. The *Working Group on Interoperability*, whose name is often shortened to *Interop*, has been a main resource for maintaining this constellation among FS advocates. This is an informal, loosely coordinated, volunteer-based group. The group's activities are coordinated mostly via an e-mail list and a wiki site that are both hosted by the association *AFUL*, one of the two national FS advocacy associations. Through their commitment to interoperability, free software advocates attempt to raise questions about the power relations that become materialized as protocols for exchange and storage of data. Public outreach is essential in this process of asking questions about interoperability: shortly after the establishment of the wiki and mailing list, *Interop* collective undertook editing the

¹⁷⁸Because software is a product that can be used as a platform for developing other products, wide distribution and use of a specific software can have normative effects. Political economist Steven Weber has formalized this rationale by labeling free software as an anti-rival or network good, that is, a good whose value increases when it is distributed and widely used (Weber 2004). According to this argument, as the number of users of a particular piece of software grows, the software is more likely to become a standard supported by hardware constructors and companies providing services.

Wikipedia page in French dedicated to interoperability. They defined it as the capacity of various systems to “communicate without ambiguity and to operate together” by establishing and respecting common norms.¹⁷⁹ Those norms are defined by independent consortia rather than a specific software editor (i.e. Microsoft). However, consortia about data standards abound and their norms are often mutually incompatible. Interoperability is, thus, most often partial.¹⁸⁰

¹⁷⁹To underline this point, French activists insist on a difference between a norm and a standard, words which are easily interchangeable in English. In contrast to norms, technical standards are produced by a specific producer (often by technology manufacturers) and depend on that producer; or by national standard-setting consortia. The norm, and the recommendation that accompanies it, is established by an independent organism that limits unilateral modifications. The process of consultation is also different presumably it's more open and consensual. Source: Wikipedia article on interoperability, initially edited and maintained by the members of the *Interop* group. Available online at <http://fr.wikipedia.org/wiki/Interop%C3%A9abilit%C3%A9>, last visited 8 October 2007.

¹⁸⁰Among other factors, the definitions of interoperability and of its importance vary with interlocutors that are envisaged: for example, Interop's web site addresses a general public that is envisaged primarily as consisting of individual users and asserts that “interoperability and accessibility correspond above all to the right to use the web browser and software of one's choice, one that corresponds to an individual's needs.” See “AFUL: Group de travail sur l'interopérabilité.” 17 Jan 2007. <http://www.aful.org/gdt/interop/index>. 10 Feb 2007. Other groups and standards consortia, addressing business companies, define interoperability as equivalent of seamless information flow and a basis for fair business competition in an information society. For example, OpenGroup, one of the consortia that promote interoperability and includes companies Hewlett-Packard, IBM, HSBC, NEC, and Capgemini among its Platinum Members, has trademarked the phrase Boundaryless Information Flow.

Emergence of a discourse about interoperability and free software in state administration

The idea of interoperability gained public visibility in the national administration as a vague enough metaphor to provide a basis for building consensus about the entrepreneurial transformation of the state administration. In 1999, three Right-wing Senators argued that free software was essential to French independence and proposed to make the use of free software obligatory within the state administration.¹⁸¹ They also proposed to establish an agency that would coordinate the diffusion of free software within government agencies. Their proposal attracted great attention, which can still be glimpsed in a two-month, 1400-message long, discussion forum archived on the Senate's website.¹⁸² The then Socialist government proclaimed this proposal to be too radical. Instead of mandating free software, Socialists preferred to impose the use of open standards, which would in turn *encourage* the use of free software.¹⁸³ The arcane engineering concept of interoperability emerged as key to this maneuver.

The embrace of FS in discourse was meant to indicate a conceptual rather than a practical change in the treatment of FS. By 1999, certain branches of the state

181 Independence was here understood as independence from Microsoft, the company suspected of colluding with US interests. Lapeyre is echoing this point as well.

“Proposition de loi tendant à généraliser dans l'administration l'usage d'Internet et de logiciels libres.” 7 Dec 1999. 1 Apr 2007. <http://www.senat.fr/leg/pp199-117.html>

182 “Forum: RDSE.” Last accessed 1 April 2007. <http://www.senat.fr/Vforum/5/forum.html>

183 “Proposition de loi tendant à renforcer les libertés et la sécurité du consommateur et à améliorer la concurrence dans la société de l'information.” 20 May 2000. 1 Apr 2007. <http://www.assemblee-nationale.fr/11/propositions/pion2437.asp>

administration, and notably the Ministry of Culture, had already switched their servers to free software with no public announcement; these decisions were taken by the technical divisions of the departments in question.¹⁸⁴ The discursive change, however, implied a newly important idea that the state should not *impose* but rather *encourage* certain technical choices by imposing (fair) standards. By insisting on interoperability, I argue, the French state sought to take a lead in organizing seamless interaction between ideas and the practices associated with private entrepreneurship, on the one hand, and the public good, on the other. Interoperability recast the state as guarantor of public service and interest online, at the moment when regulations about information technologies were largely made either in the European Union or in international institutions.

Interoperability in French politics

By 2002, the Socialist Party's project for an information society argued that the concept of interoperability was “largely recognized” but still “preserves a radical charge. It conditions the effective exercise of competition, users' freedom of choice and the possibility to contest [market] leaders' domination by the innovation.”¹⁸⁵

¹⁸⁴In 2000, the Ministry of Public Affairs and State Reform started to use free software.

2001 saw the creation of the Agence des technologies de l'information (initially proposed as Agence du logiciel libre) with the mission to provide a basis for making recommendations, inventory already existing free software, and define a common framework for interoperability.

¹⁸⁵Maurice Ronai, Christian Paul et Jean-Noel Tronc. 2002. “Un projet politique pour la société de l'information. Vers la Cité numérique.” Preface by Dominique Strauss-Kahn. Les Notes de la Fondation Jean Jaurès 29.

Moreover, interoperability provided a platform to outline the Socialist project of a digital society:

against Darwinian liberals [but also distinct from] those, in the breathless and nostalgic Left, who believe that they have seized, through the digital revolution, a new territory to assert public action characterized by even more compulsive public spending, even more public works (*grands travaux*) on infrastructure accompanied by bureaucratic technological choices and even more strict regulations.¹⁸⁶

True to Jospin's ideals of entrepreneurship that would be propelled by the internet, interoperability emerged as a great guiding metaphor for Socialist agendas. Moreover, the similarity of Socialist discourse to that of the governing Right suggests that interoperability was vague enough a metaphor to provide a basis for building consensus about the transformation of state services.¹⁸⁷

<http://fondatn7.alias.domicile.fr/bdd/doc/Notes29.pdf>

186Ibid.

187On the governing Right wing of partisan politics, Minister of State Reform proclaimed that interoperability allowed developing a “readable and coherent repertoire of services, in spite of the heterogeneity of actors in e-government,” while free software enabled cooperative sharing of development among administrative instances that have similar needs but cannot federate their development efforts (in particular, local administration (*collectivités locales*)). Overall, the use of free software would guarantee “continuity, security, durability (*pérennité*), and maintenance of the system” of e-government. Moreover, he advocated “balanced and pragmatic approach [to free software in public administration that would] enable free competition that includes free software editors based on specifications (*cahiers de charges*) responding to administrations' needs.” Speech by Renaud Dutreil, Minister of Public Affairs and State Reform, pronounced at the convention *Trophées du Libre* in Soissons on 26 May 2005. “*Trophées du Logiciel Libre: Discours de Renaud Dutreil, Ministre de la fonction publique et de la réforme de l'Etat.*” 26 May 2005 in Soissons. <http://www.sil-cetril.org/IMG/pdf/discours-dutreil.pdf>

Virtues of vague guidelines

Interoperability is also codified in the policy guide for the French state administration, called *Référentiel Général de l'interopérabilité* (RGI), and EU legislation. RGI is inscribed by the French government's general strategy of modernization of the state and constructed largely by referring to international standards and recommendations, reference documents, and guides to best public and private practices. These are all intended to guarantee coherence, simple ulterior modifications, and durable public investments.

The European Union is a prime terrain for experimenting with the implications of interoperability in policy-making. In EU law and recommendations, interoperability is presented as the guarantee of a self-regulating, non-monopolistic common market.¹⁸⁸ These frameworks, however, do not provide a firm legislative basis for pressing claims against anti-competitive practices.¹⁸⁹

ENVISIONING SUCCESSES AND PURPOSES OF FREE SOFTWARE ADVOCACY

In my interviews with free software advocates, I systematically asked what would constitute a sign of success of FS advocacy in the short term, and in the longer term. The answers to this question were often phrased in terms of recognition, for

¹⁸⁸especially in the Lisbon Agenda and the eEurope Action Plan

¹⁸⁹Compare, for example, the successful invocation of interoperability by the European Commission in the Microsoft case, with the unsuccessful claims of French FS advocates that Digital Rights Management schemes obstructed interoperability.

example in the form of public mention of free software in speeches by national figures such as the Prime Minister or the President. My interviewees regularly envisioned success as improving the overall quality of software, fostering fair competition within the software industry, and preventing practices considered unfair, such as vendor lock-in, patenting, and peddling unfounded marketing rumors. Alternatively, success was envisioned as the recognition of FS advocacy associations by state institutions. For example, a clear sign of success in defending the interests of FS developers and community, one advocate mentioned, would be if FS advocacy associations obtained a position in major consultative bodies¹⁹⁰ along with other groups, already members of these bodies, that represented interests of private software editors.

...

The 2004 convention LinuxEdu in Archamps, a small town at the Franco-Swiss border a four-hour train ride from Paris, showcased a pioneering effort of the region Haute Savoie and its computing center: Haute-Savoyard public services had been connected to the internet since 1994, and its network servers have began running on free software in 1997. This second annual meeting Linuxedu was well organized and attended by teachers, school inspectors, librarians, and many important figures in the national educational system. A major event at this convention took place at

7:55am, on the radio: In an interview about modernization of state administration,

190CSPLA, or *Conseil supérieur de la propriété littéraire et artistique*, was created by the Prime Minister in 2000 under the auspices of the Ministry of Culture and Communication, with the mission to mediate among various actors concerned with questions of intellectual property in the digital society and online.

<http://www.culture.gouv.fr/culture/cspla/conseil.htm>

(right-wing) Prime Minister Raffarin mentioned free software. Small groups of people all over the convention hall were mulling over the exact wording used and the significance of the Premier's locution, as most of us missed the live interview. At the opening talk that morning, Adrien, a prominent FS advocate, described this mention of free software—broadcast on the national radio station France Inter during prime morning hours—as “an announcement that sounded like nothing special but was in fact a sign of a very important change.” The Prime Minister apparently said that he would make sure that inter-administrative communications take place online and through free software. Adrien then encouraged the audience to individually write to the Prime Minister, using their own words, in order to tell him that this was a very good idea, but it faced a serious danger. This danger took the form of software patents. Adrien concluded, “surely since this interview, the phones are ringing, and the headquarters of Microsoft in France are getting overheated (*ça s'échauffe*).”

Adrien considered that public invocations of free software and interoperability could lead to a tangible engagement with the issues important to FS advocates. Yet, although the state administration publicly embraced free software, it remained unresponsive to, or even actively undermined, the conditions that advocates considered to be fundamental for free software development. Thus, for example, in 2005 the Ministry of State Reform promoted interoperability, while the Ministries of Culture and of Industry encouraged software patents and Digital Rights Management schemes.

Advocates called this phenomenon “schizophrenia” of the state and of EU in

policy-making and explained that in part it happened because decision-makers in different industries decided on single issues such as software patents, authorship law, and modernization of the state, and did not necessarily see the connection among these policies. Through their engagement with national politicians and state administrators, FS advocates strove to articulate these connections and achieve coherent policies across different state agencies and institutions. The centrality of the state in discussions about social change made these state-oriented efforts a necessary complement to FS' attempts to raise public awareness through other associative actions.

DIVERGENCES IN COOPERATIVE SHARING

As some signs of institutional recognition of free software appeared, it became clear that these did not guarantee unambiguous “success” of free software advocacy. For example, an editorial in the June 2005 issue of a major informatics journal asserted that by encouraging the development of FS, “public funds are, in effect, financing development that competes with private sector efforts.”¹⁹¹ The director of

¹⁹¹Ludovic Nachury, “Le logiciel libre a-t-il le droit de se faire aider par l'Etat?” 16 Jun 2005. 6 Aug 2006. <http://www.01net.com/editorial/281582/services/le-logiciel-libre-a-t-il-le-droit-de-se-faire-aider-par-l-etat-/> . The article implies that state preference for free software was endangering private software development. Free software advocates mostly proclaimed this claim to be a stretch, pointing out that a fair number of private companies were providing IT services in free software. Some of them even turned this argument around: an IT director of a *département* and an ardent free software advocate asserted to me that one of the reasons why free software was not widely adopted earlier lay in the lack of companies that could provide IT services in free software on the scale needed for a

ADAE, the government agency charged with developing the use of digital technologies for the state administration, publicly raised the question of whether FS somehow possessed redistributive qualities that, with public financing, obstructed the work of private editors and reinstated a form of state monopoly that distorted competition in the software market. At stake were particular forms of cooperative sharing of code (*mutualisation*): “Do we have the right to redistribute the source code of software developed in the framework for public market? Should we explicitly anticipate it in our bids? Is it different if this code is made available to public or private actors?”¹⁹²

FS advocates considered that these questions had relatively straightforward answers. However, it gradually became clear that the consequential discussions on state policy and business around free software were taking place between state administrators and private enterprises, and did not include FS advocates or voluntary associations. The appearance of contractors on the scene—firms providing support for FS, as distinct from FS associations—was welcome as evidence of entrepreneurship. The director of state tax services proposed ways to compartmentalize the engagement of voluntary associations in this new area of exciting business opportunities: the free software “community,” he explained, assists users without guarantees as to the quality

public administration. Other FS advocates asserted that private companies could benefit from better software that was available to all under FS license – thus, their argument went, private entrepreneurship was in fact encouraged.

¹⁹²Ludovic Nachury, “Le logiciel libre a-t-il le droit de se faire aider par l'Etat?” 16 June 2005, available online at <http://www.01net.com/editorial/281582/services/le-logiciel-libre-a-t-il-le-droit-de-se-faire-aider-par-l-etat-/>, last accessed 6 August 2006.

of their services or their commitment to the client, while “contractors provide that commitment.”¹⁹³ Other entrepreneurs elided non-business actors by caricaturing FS developers and advocates who were likely to be members of FS voluntary associations as “libertarians” who were somehow opposed to “market, growth, innovation, jobs.”¹⁹⁴

...

In tracing two instances of the French government's institutional adoption of free software, I further analyze discordant understandings of cooperative sharing of software production among state administrators and free software advocates. This allows me to discuss more specifically how FS advocates were marginalized.

Creation of CeCILL

In early July 2004, three top French research institutions—CEA, INRIA, and CNRS—issued a software license called CeCILL¹⁹⁵ as part of “shared [*mutualisée*]

193Ingrid Marson, “French opt for laissez-faire Linux,” ZDNet UK, 5 November 2005, available online at <http://insight.zdnet.co.uk/software/linuxunix/0,39020472,39236214-2,00.htm>, last accessed 6 August 2006.

194Alexandre Zapolsky, “Il faut libérer le logiciel libre,” tribune published in *Libération*, 14 July 2006.

195CEA stands for *Commissariat à l'Energie Atomique*, INRIA refers to *Institut National de Recherche en Informatique et en Automatique*, and CNRS is *Centre National de la Recherche Scientifique*. The name CeCILL is composed from acronyms of these three institutions: Ce: CEA, C: CNRS, I: INRIA, LL: Logiciel Libre. “Contrat de Licence de Logiciel Libre CeCILL,” version dated 21 Jun 2004. For the citation, see “CeCILL : première licence française de logiciel libre élaborée par le CEA, le CNRS, et l'INRIA,” 5 Jul 2004, <http://www.inria.fr/presse/pre119.fr.html>, last accessed 26 Jan 2007.

elaboration of free software elements” within the scope of the e-government plan. The license CeCILL was intended to be compatible with the most widely used FS license GPL¹⁹⁶ while fully adapted to the French law, and thus available for use by French institutions. The web page devoted to CeCILL implied that GPL might raise some “legal issues [which] lead to uncertainties that may prevent some companies and organisations to contribute (*sic*) Free Software.”¹⁹⁷

Most free software advocates in France learned about the existence of CeCILL from the press release. The “shared” approach, flaunted in the press release, indeed optimized resources and objectives among the three research institutions in question, with their needs in mind, and using their legal departments, aside from the rest of free software community. The creation of CeCILL reinvigorated debate about what elements of FS were necessary to translate into national terms and institutional framework, and how this translation would affect the contributions to the global pool of free software programs. Furthermore, the questions that were raised by this legal translation of GPL endorsed by the state—about the scope, validity, and enforceability of a license that had effectively served as a tool for global distribution of FS despite such unresolved questions—were indeed significant. However, the weight of these questions varied according to how well the commentators were institutionally connected.

One of the French FS advocates who were “forgotten” during crafting of

196GNU GPL was written by the Free Software Foundation, in English, and based on the Berne Convention. While unofficial translations exist, only the English version of GNU GPL has legal validity.

197“CeCILL : Licence française de logiciel libre.” 27 Jan 2006. 27 Jan 2007.
<http://www.cecill.info/index.en.html>

CeCILL recalled the global vocation of free software and asserted that “creating a license for the French territory is absurd.”¹⁹⁸ Meanwhile, the US-based organization that created GNU GPL was not necessarily hostile to this recognition of free software by the powerful French institutional actors. Better connected French FS advocates, at least one of whom worked in one of the three research institutions that issued CeCILL, greeted its creation as “a sign of recognition of the role of FS for research and innovation, an effort to clarify the legal bases of FS in French law, and a significant contribution to promoting FS among political and economic actors.”¹⁹⁹

This case draws attention to a pragmatic global character of FS. Written in French and relying on French courts for arbitration, CeCILL could be understood as an absurd attempt to promote global projects of software development. However, as an institutionally recognized way to publish and use FS in French state-sponsored institutions, CeCILL is a welcome symbolic institutional validation of free software.

Adoption of SPIP by the Government's Information Services

The adoption of a web publishing free software program, SPIP, by the Government's Information Services (*SIG*) was narrated to me by the *SIG* manager as a “textbook case” of how principles of interoperability and cooperative sharing, shared

198Christophe Guillemin, “La première license française de logiciel libre déplaît aux créateurs de la GNU GPL,” 8 Jul 2004, <http://www.zdnet.fr/actualites/informatique/0,39040745,39160467,00.htm>, last accessed 26 Jan 2007.

199“AFUL : L'AFUL soutient la licence libre CeCILL,” 23 Aug 2004, <http://www.aful.org/presse/pr-20040823-cecill>, last accessed 26 Jan 2007.

both by FS developers and by the state agency in question, can result in divergent projects and antagonistic communities.²⁰⁰

SIG, employing about a hundred people, is the agency for coordinating information systems of all French governmental ministries, increasingly in charge of making websites and devices for cooperative content management. In 2002, *SIG* attempted to consolidate various disparate technologies for content management, licensing fees, and capacity. They decided to try SPIP, known as a mature and user-friendly free software package that was already in daily use by several editing teams (notably by the editors of the newspapers *Le Monde Diplomatique* and *l'Humanité*). Yet the *SIG* needed some extra features.²⁰¹ *SIG* embarked on developing these features and integrating them within the framework of SPIP. Their funding was organized through the model of public commission, which constrained the time-frame and limited funding for the development of the necessary SPIP features. The *SIG* then turned to the “SPIP community,” hoping that some developers might be interested in developing the desired features; but a few prominent developers in the “SPIP community” then embarked on negotiations that to the *SIG* manager resembled an interminable “round of charades” (*un tour de passe-passe*).

In an attempt to resolve this complicated issue, *SIG* had “forked,” i.e. started to develop their own version of SPIP that explicitly focused on their needs. They had

²⁰⁰Interview with the *SIG* manager, 21 Jun 2005.

²⁰¹Those features included interoperability with other databases (including proprietary ones), accessibility, more hierarchical organization that included sophisticated management of rights and validation of contents, and the use of forums and measuring audience feedback

employed a company to develop the desired features that “the SPIP community” disapproved of. This had resulted in divergent uses, in which *SIG*’s program, renamed SPIP-AGORA, became a “heavy” tool primarily used by ministries and some companies—this was a way for *SIG* to sustain a community of developers that could continue to maintain the SPIP-AGORA project. In a 2005 interview, one of the three main SPIP developers suggested that differences between SPIP and SPIP-AGORA were best understood in terms of their “attached communities.” In contrast to the institutional basis of SPIP-AGORA, the SPIP community encompassed hundreds of “users and contributors who shared affection for SPIP” (fieldnotes). The *SIG* manager also cited this event as an indicator of a structural divergence between the “world” of state administration and that of free software. It clarified to him the traits of “FS community,” which he delineated to me as a reverse reflection of state administration. He deplored the “artisan management” that linked FS projects to specific individuals and their relationships rather than their “positions” (*fonctions*). In contrast, he asserted, the *SIG* needed “clear and public rules” and guarantees that were specific to an “industrial” model of development. Finally, while he characterized public administration as one of paid services and key decisions made by leaders, he saw “FS community” as based on voluntary work and “consensus that was achieved by engaging in 6 months of debate and gambling on the possibility that one’s choices will be accepted” (fieldnotes).

...

Cooperative sharing of FS seemingly connected the two groups, yet it

exacerbated the perceived power differentials. The possibility of accommodation proved elusive as the two projects and “communities” were driven apart.

Some of the contingent matters that caused the tensions were more easily corrected: for example, while editing the second version of CeCILL, public administrators changed their strategy and promoted broader concertation with FS advocates' associations. Yet, the practical tensions enacted in the CeCILL and SPIP episodes have endowed advocates' and administrators' conceptions of “the state” in contrast to “the community” with coherence and considerable weight.

...

FS advocates' experiences of marginalization varied. Some advocates were more likely to be recognized in familiar institutional stratifications of prestige and power. This was an additional source of turmoil for other FS advocates who felt that their contributions were marginalized. They clearly enacted these differences and the tensions accompanying them at the Libre Software Meeting in July 2005. For this event, held at the University of Burgundy in Dijon, the city of Dijon and the Burgundy region extended financial and logistical support to FS associations. In addition to the program of FS-related conferences at the University, organized events included a visit of nearby village that was a renowned regional center of wine industry, tours of the old city, as well as the welcome reception and the plenary organized by the Mayor at the Dijon Town Hall.

As I rode the bus towards the center of the city, rushing to the plenary that was about to start at the City Hall, I noticed a group of Parisian free software advocates

lounging in the outside cafés not far from the City Hall. Surprised, I got off the bus and joined them to hear why they were still outside. It turned out that many FS advocates had ignored the Mayor's welcome reception organized the previous day in the City Hall and, instead, continued to socialize on the premises of the University of Dijon. The organizers of the Meeting, facing the prospect of another embarrassing reception in an empty City Hall, today decided to cut the internet connection at the University about half an hour before the City Hall reception started. These disciplinary measures, in turn, angered some of the FS developers and advocates, who showed their defiance by visibly avoiding the reception. We had a relaxed coffee as they told me in more detail about the contentious exchange that they had with one organizer (Michel) who insisted on cutting the internet connection and about their distaste for political speeches and ceremonies. They found it particularly insulting that foreigners, most of whom did not speak French, found themselves obliged to attend French political speeches. (There were no foreigners sitting with them.) Michel, who was a FS advocate himself very involved in political affairs, allegedly had made no apologies for interrupting the internet connection nor the inconvenience that this might have brought. He later told me that he found it intolerable that FS advocates could be so short-sighted and rude as to miss the Mayor's welcome ceremony.

About half an hour after the beginning of the plenary, their anger subsided and, having finished their coffees, they decided to check it out. I went along. Dijon Town Hall is a lavishly decorated Renaissance building with a magnificent staircase, wall paintings, chandeliers, and a marble arch in the main ballroom. The ballroom was

equipped with wireless simultaneous translation into English. There were many empty chairs and about 40 people in attendance. (This number had increased to 50 by the end of the plenary.)

We arrived as the Mayor was giving the plenary speech. He announced the completion of computer equipment updates at the Town Hall, where a free software operating system and office suite had been installed on all the computers. This announcement brought warm applause. We were also told that the University of Dijon had recently committed itself to establishing a program in information technology management, focused especially on free software and knowledge. During the Mayor's speech, the back door of the stage opened behind him and a disabled FS advocate in a wheelchair entered, accompanied by a friend who was making gestures which seemed to make a comments about the elevator and the building accessibility. They crossed the stage and joined the audience. The organizers then thanked the Burgundy Regional Council, University of Dijon, *département* of Côte d'Or, and the city of Dijon for their support. The President of the University then took a few minutes to present a proposal for campus development and the projected inauguration of regional online university (*Université numérique*). According to him, the University overall was more and more oriented towards free software, due to reduced licensing costs and increased efficiency of FS. It has, for example, been contributing to one free software project of “experimental e-learning,” as well as encouraging other kinds of FS use on a daily basis at University servers. He concluded, “may your debates be fruitful: long live freedom!” Next at the podium was the Representative of the Burgundy Regional

Council. He highlighted the international character of the FS community, new uses and accessibility that it has enabled, as well as what he called “virtuous dynamics of public data” which enabled “the best and the cheapest solutions” for citizens and business alike. He was followed by a representative of Brazilian government, accompanied by a Brazilian free software entrepreneur (both speaking in Portuguese), who presented the variety of usages and contexts of FS in Brazil. They both highlighted the Lula government's support for FS and asserted that the “FS community” in Brazil has become integrated with IT service companies into a “non-conformist form that resists the dominant software hegemony.” They also mentioned that Brazil had been instrumental in helping the poorest Spanish region, Extremadura, establish a robust network of public services based on free software.

These speeches were followed by a roundtable about software patents, which included one Socialist representative, one UMP representative, one of the main lobbyists against software patents, and the European Parliamentary Assistant who had been his greatest help in the campaign. This was a moving and cathartic experience, and the FS advocates (who had gathered in larger numbers for this moment) were happy to have an occasion to show their respect for “their” people (i.e. the lobbyist and the Parliamentary Assistant) with an ovation.

At the reception following the plenary, I met the journalist whose articles about FS in the *Libération* I had been admiring for almost two years. He was in his mid-thirties, wearing a pink T-shirt and sport pants, and came to promote his newly published book about the reform of the copyright law. He joked about my research

topic, “politicization of free software,” and pointedly asked some of my informants whether they were aware that I was writing about the politicization of geeks. The idea that FS advocacy might be a form of political engagement, a notion that was known to enrage some FS entrepreneurs, was all the more funny because the hall was buzzing with people who were still upset about the organizers' decision to shut down the network connections and thus force all geeks to attend a political event. I laughed along with them, happy that I got the joke this time.

CONCLUSION

I have raised some relevant cultural and historical parameters for understanding French state commitments to free software and interoperability. Free software has provided a new symbol around which which already existing debates (about the weight of state-led cooperative sharing in effecting social change) have led activists in an uneasy alliance with state administrators and entrepreneurs. For some of the activists, FS provided a new platform on which boundaries between the state administrators and the activists were re-affirmed. For other FS activists, the newly-found common interest in FS supplemented and re-affirmed familiar hierarchies of excellence and prestige that they shared with the state administrators, and thus provided an occasion to weave stronger institutional relationships. The recognition of FS for them meant a personal success as well.

This chapter also contextualizes some salient traits of e-government in France at the confluence of a legacy of state sponsorship of communications infrastructure,

negotiating the proper role of the state in citizens' affairs through technological development, and the interplay of contingent political constellations in long-standing debates about social change. By emphasizing FS advocates' perspectives and engagements with multiple manifestations of e-government, I have argued that e-government in specific instances acquires coherent and recognizable features of French state engagement in technological and economic entrepreneurship; simultaneously, in other activities, especially in policymaking, the electronic state has been divergent or even “schizophrenic.”

Most FS advocates regard institutional adoption of FS as a sign of success. Nevertheless, in this chapter I have argued that the actually existing state appropriation of FS has legitimized and fulfilled certain objectives of FS advocacy while undermining their other objectives and marginalizing some FS advocates. In particular, I have suggested that the state decision to adopt FS has a powerful impact on the development, advocacy, and conceptions of “community” associated with FS. The state involvement has also brought into question FS advocates' assumption that wide distribution of FS somehow automatically increases the cultural significance of free software, and as a side effect, the efficacy of FS advocacy.

CONCLUSION

When I started working on this topic, much of literature on online communications was concerned with the relationship between online and offline experiences (cf. Hine 2005). I set up my field site so that I could go back and forth between online and offline contexts. Encouraged by the thought that applying ethnographic methods always requires adaptation depending on the researched contexts and questions, I wanted to explore how offline ethnographic research portends in contextualizing online interactions.

As my fieldwork developed, I have nuanced my understanding of the distinction between online and offline interactions. On certain occasions, the distinction between online and offline modes of communication was conceptually clear and useful for understanding the relationships and experiences that my informants shared. This was particularly clear in my informants' enthusiastic discussions about ways in which online communications offered them the means to challenge, rather than extend, the inadequacies of offline world. At the same time, FS advocates' opposition of online and offline experiences was important to them because of the constant overlap of the two contexts. I have sat through many hours of face-to-face conversations that were sparked by weblog news or comments. To the extent that websites, blogs, and wiki pages rather than TV, print, or radio were the prime medium for (mass) public communication among free software advocates, I have found it misleading to assume that online/offline distinction had an immediately clear

meaning.

Perhaps most importantly, the insistence on the distinction between online and offline overshadows the existing variety of online platforms and experiences. Online diversity, and the sensitivity about the choice of software platforms, was especially important in my fieldwork: after all, I was studying people who advocate certain kinds of online platforms (e.g. free software programs) that they find preferable to others (e.g. closed-source programs). For my informants, the choice of online platforms was frequently contentious. The awareness of this tension was an integral part of my informants' online experiences and confirmed my doubts that online lacked precision as an analytic category for understanding my informants' experiences with digital networks.

Ultimately, one of the most intriguing questions emerging from my fieldwork turns around the implications of maintaining a conceptual distinction between online and offline. As I argue in Chapters 1-3, my informants find the conceptual distinction between online and offline modes of communication to be meaningful, while they skillfully (and sometimes imperceptibly) combine specific online and offline experiences in their daily lives. Challenged by this seeming paradox, I have pursued a double focus on online and offline interactions and developed an understanding of its strategic character: in my study, the meanings and significance of asserting the distinction between online and offline were contingent upon culturally, socially, and historically situated lived experiences of advocates.

My insights about the relevance of ethnographic work to understanding online

interactions correspond only to a portion of a growing array of online contexts, relationships and meanings. For example, the overlap in offline and online methods that I established in my fieldwork needs to be substantially revised in order to do participant observation in burgeoning online “synthetic worlds” (Boellstorff 2008; cf. Castronova 2005). Nevertheless, my research contributes to a recent interest in subtleties of ethnography and anthropological approaches to culture in research in/on other online contexts, in particular networked games and synthetic environments (Boellstorff 2006).

My methodological choices are also adapted to my analytic focus in another way: My central concern is in understanding the significance of ubiquitous high-speed digital networks, asking how this meaning is attributed beyond activists and beyond people with technological knowledge. The expansion of geek subculture that I was able to observe is less about software development than about coming to terms with meanings of literacy in the era of digital media convergence. Because of my focus on expansive nature of the movement, I have found it unnecessary to engage in programming or practices of software development in my study. Such approach, however, might prove useful for a research framework that is more explicitly oriented around materiality of free software development.

Plethora of data

Collecting data over a wide range of domains is a distinctive feature and an ongoing challenge of ethnographic fieldwork, typically resulting in a plethora of data.

While the abundance of online data presents a challenge in itself (as I have detailed in the Introduction), I have become aware of several other issues specific to online research as my fieldwork developed. First, much online data has a temporal immediacy similar to vernacular speech: it is designed to be dynamically generated (for example, in response to a search query) and is thus inherently difficult to archive. But it also often has accessibility that is very different from vernacular speech. For example, wiki pages are often set up with the intention to be available only temporarily but then no one bothers to take them down once they are not relevant any more. My point is that, although their relevance is apt to be as shortlived as much everyday oral expression, their longevity and accumulation leaves often only very loosely structured traces. The proper contextualization of such documents sometimes requires extended inquiry among participants into the kinds of detail that they recall only with difficulty. This is especially the case when reconstructing the meaning of a document that addresses a mundane topic.

Second, by no means does the abundance of online data constitute an exhaustive archive, nor would it be safe to assume some internal coherence to online data. Inconclusiveness abounds in online research, especially when it concerns the platforms that are not regularly used any more. This point has become poignantly clear in my research because of my focus on groups concerned with fostering accessibility of information across temporal and spatial distances. Free software advocates have set up extensive means for documenting programs, connections, and updates. Nevertheless, on many occasions (for example, when remaking websites of

voluntary associations) they had to weigh the desire to present the most current information with the need to maintain continuity and exhaustiveness of archives. Because of this inherent inconclusiveness and selectivity of online data, participant observation was a more reliable strategy than making sense of online data a posteriori. Both participant observation and textual analysis approaches, however, seem inevitable in online research.

Leaving the fieldsite

The three years of writing the dissertation have unexpectedly and poignantly helped me to understand the significance of physical proximity for free software advocacy in France. While the internet is the key organizing platform for free software advocates, face-to-face connections (along with the commitment of time and the ability to travel that they assume) are crucial to maintaining the active relationships on which their advocacy depends. This became especially clear after my fieldwork research ended. On the one hand, as I returned to New York, some aspects of “the field” have followed me. I continued reading mailing lists and paying membership dues to the three voluntary associations described in this study. I have kept in touch more easily with those among my informants who have continued to post online. Yet, online connections have not sufficed on their own for me to keep in touch in the face of material distance, time difference, and the demands of my daily life in NY. Associational conversations online gradually became a significant burden in my e-mail. Even then, my attempt to leave was only half-successful: when I announced I

would take a break and not pay my membership dues until I return to France again, my e-mail address has nevertheless remained subscribed to associative mailing lists.

...

Recapturing the newness of digital networks

As digital networks have become taken-for-granted, it is increasingly becoming a stretch to imagine the newness of this medium. Recapturing the newness of something that is no longer new has emerged as a major analytic challenge of my project. Addressing this issue, in turn, offers me an opportunity to reflect on the processes—both culturally specific and more universally shared—by which digital networks have become commonsense and transparent infrastructure in daily experiences of a growing number of people.

When I began writing this dissertation, I thought that the main challenge in my ethnographic descriptions lay in making intelligible the technical discussions and lifeways among French FS advocates. This challenge has since become compounded by the sense that many of these practices increasingly appear to be familiar and taken for granted. In my ethnographic descriptions (e.g., about moderation on large-scale weblogs), my main task now lays in providing a sense of how provisional the described practices used to be before they acquired common-sense pervasiveness and invisibility. When I started fieldwork, blogging was a collective activity involving many contributors; very few free software advocates in France had personal blogs. By late 2005, many of the advocates I knew had several topical personal blogs, and at least one association decided to aggregate on its webpage the personal blogs of all of

its members, and decided there was no need to filter the contents. Analysis of how advocates experienced this shift in conceptualizing public writing would be an interesting project, though one that concerns a turning point not yet on the horizon at the time I conducted my fieldwork, and one that is undoubtedly receding so rapidly from the memory of practitioners that it will soon become again impossible to investigate.

My other challenge, to paraphrase media historian Lisa Gitelman, has become to analyze the “pathways” by which digital networks have turned from “new media” into something more akin to “old hat” (2006: 6). Communications scholar Carolyn Marvin in her analysis of the early history of the electric media outlines a framework for understanding emerging media that is broadly applicable to my study as well:

It is impossible to separate public discussion of innovations in communication in the late nineteenth century with public fascination with the fruits of electrical possibility generally. [...] Electricians were as deeply involved in the field of cultural production as in the field of technical production (Marvin 1988: 6-7).

The process through which digital networks in contemporary France and the US have become taken for granted could be understood by employing the same approach of attending to the practices and claims constitutive of new technologies always with an eye to broader (yet specific) cultural and historical contexts. My study suggests that French free software advocates have facilitated this process, in circumstances not entirely of their own making, by making correspondences between software and the already familiar cultural concepts of cooperation and common good, on the one hand, and by fashioning the significance for digital networks in ongoing social changes, on

the other hand. My account insists on the ingenuous nature of this work, in which familiar is mixed with the new, and the new can be used to revive the familiar.

The new and the old

Digital technologies allow rethinking (or reproducing) familiar as well as new or faraway concepts and institutions. This dissertation documents the ways in which French free software advocates have actively contributed to developing means for nation-wide appropriation of free software platforms, practices, and ideas that, until the early 1990s were largely the product of a hacker counterculture that was centered in the U.S., had a global reach, and tended to be male-dominated. Many of the questions raised by FS advocates address preoccupations that are broadly shared in France and prominently present in the French mass media. French debates about access to and circulation of online resources are almost always also about the bonds that link French citizens.

On the one hand, my account of two years of free software advocacy in France has highlighted the relevance and persistence of some familiar references in thinking about social change ushered by global digital networks. On the other hand, I have shown that the process of reinventing familiar narratives in a new context requires considerable innovation if the reinvented forms are to remain recognizable and significant. The success with which FS advocates have reinvested worldwide digital networks with national significance despite their doubts as to how, and whether, these familiar narratives applied to online phenomena, also illustrates the innovative and

creative experiences of actually existing globalization. Whereas scholars have already argued that the global and the American is often mobilized in France in order to address different visions of the developments in the national society (ex. Poulin-Deltour 2002), my account suggests that the success of global advocacy effort may rely on its visibility in national debates and its framing in national terms.

“The era of free software is over”

Since 2004, when I started fieldwork research, media discourse about digital networks has started to emphasize forms of collaboration that are reminiscent of some free software principles. For example, the 2003 National Academies report on information technologies and creativity explored possibilities of collaboration among new media artists, designers and computer scientists, but there was no hint that “creativity” and “participation” would (or should) be extended to everyone who had access to a broadband internet connection (Mitchell et al 2003). Since then, buzzwords such as “open source,” Wikipedia, “user-generated content” on websites such as Flickr and YouTube, and “social networking” platforms such as MySpace and Facebook have attracted inordinate media and business interest. For these reasons, anthropologist Chris Kelty has wittily claimed that mass media emphasis on “Web 2.0” platforms for exploring online cooperation suggests that “the era of free software is over.”²⁰² (Yet he also argued that free software is, indeed, a useful prism for understanding a range of emergent phenomena, from the cultural meaning of software

²⁰²Kelty, Christopher. “It’s a book! Two bits” 6 June 2008. 15 July 2008. Accessible online at <http://savageminds.org/2008/06/06/its-a-book-two-bits/>

and internet to the global reorganization of work (Kelty 2008).)

At the same time, the intellectual and geographic span of debates is in many ways remarkably unchanged, even as previously under-represented populations (along with activists, academics, policymakers, and governments of developing countries) fashion their own voices in the debates about social and material meanings that are congealed in digital networks (A2K2 2007; Ginsburg forthcoming). Such developments make it all the more urgent to draw attention to the selective nature of terms and interlocutors in debates about digital networks.

In previous chapters, I point to some idiosyncratic ways in which the internet has become and remains a matter of public concern among French policymakers, activists, and journalists. The perspectives of French free software advocates remain of lasting interest for understanding how large-scale institutional and corporate changes relate to the ongoing burgeoning of online “appropriations,” “collaborations,” and the fashioning of identities and personhood through such online platforms. My dissertation lays groundwork for a more long-term research into understanding indispensable knowledge and skills in these circumstances. Moreover, it consistently highlights the value of ethnographic research for illuminating the intensity of activist commitments, practical challenges and the enthusiasm that animate the makeshift character of advocacy, and the selective recognition of activist efforts, as well as some activists' ambivalences about terms in which free software is broadly recognized. It is to the understanding of networked digital media through such layered experiences in their cultural and historical specificity that my ethnographic study seeks to contribute.

APPENDIX A: “NEWBIE'S QUESTIONS”

<fan> I would like to know what is the “advantage” of being a member of april
[...]
<esp2008> fan: the question is not what april can bring you, but what you can bring to april
[fan copies this line and posts it to another channel, indicating that he is about to crack of laughter; esp2008 does not realize that fan is teasing him]
<fan> ok
<esp2008> but we participate in numerous manifestations, commissions, etc.
<esp2008> look a bit on <http://wiki.april.org> if you want to know more
<esp2008> ouns
<fan> but when you are a member of a sport club for example then you can use club's terrain
<esp2008> yes but I think that you don't join a soccer club to do activism :)
<esp2008> joining april will mostly give you a structure for your engagement
<esp2008> you can participate in all manifestations, you are informed of all that's happening
<fan> ok
<esp2008> we also participate in some consultative commissions, I don't have their names in my mind but it has to be on the wiki
<fan> but at AFUL they told me the same thing
<fan> what to do?
<fan> is there whiter than white in free software like in detergents?
<fan> :)
<fesp2008> fan: you can join both, we are not competing
<nessie> fan: you should be in both ;o)
<nessie> esp2008: chut you were faster ;o)
<esp2008> :)
<fan> I don't mind that but the fees are really not nothing (*je veux bien mais les cotis c quand meme pas donné*)
<esp2008> finally at the april stand at “autour du libre” in Mai, half of people there were talking to me about aful
<fan> so I might just as well go to aful
<esp2008> well no, the other half talked about april :)=
<fan> it's hard
<nessie> fan: tell yourself that your money supports the cause of free software (*la cause du libre*) ;o)
<fan> yeah...
<fan> then I might just as well give it to the smaller ones who are rising
<fan> like a lug²⁰³

203 The term LUG refers to “Linux User Group,” a group of free software users who usually live in the same town or region and meet in person from time to time, for example Parinux.

APPENDIX B: “PASSING” AS AN ABSENT MEMBER

<nicolas> There are old accounts that I would like to close because we don't hear much from these members but they still have rights/power on the server
<nicolas> and they connect to it
[...]
<david> ok I won't delete them but at least I will de-activate them
[...]
<david> and eventually we will see with the CA what to do
[...]
[david deactivates moov's account]
--> moov (~parinux@81.80.163.136) has joined #parinux
<moov> david I can't connect to the server any more
<david> moov: of course
<moov> ha?
<david> the account has been deleted
<moov> snifff
<david> I invite you to discuss this with our dear president
<david> he is here :)
<moov> you prick (*enculé*)
<david> lol
<moov> lol
<david> nicolas: !!! I think someone is looking for you ;)

<david> moov is now known as surprise
<david> moov: but I assure you that we have done a backup of your home [directory], we are not pigs :))
<surprise> mdr
<--> surprise has quit (Client Quit)
<david> lol
* nicolas is being too silly
<david> mouarf
<david> it's too much after all
<david> see how she wakes up...
<nicolas> lol it's me
<david> it's a bit too violent (*c abusé ka mÃ^eme*)
<david> oh really ?
<nicolas> I'm farting of laughter (*ptdr*)
<nicolas> I got connected under her nick
<david> hm?
<david> :o
<nicolas> on a different machine
<david> ok :))
<nicolas> I could not resist to make this joke
<nicolas> :))
<david> in fact it wouldn't have surprised me too much to tell you the truth
<nicolas> ok I finished the backup
<david> like, she turns up
<david> it's true that I didn't expect her here, but I am expecting her email imho :)

<nicolas> please send me a copy of it will you
<nicolas> :)
<david> :)²⁰⁴

²⁰⁴Coherence is achieved by referring to marked aspects of identity of the person that they both know well.

“This page will try to convey as truthfully as possible the steps that enabled me to obtain a refund of 20% (274,84 Euros) of the price of a portable computer Dell and associated software (Win XP SP1, Works 7.0, Norton AV - 90 days -, Paint Shop Pro - trial version -, Image Expert - trial version - and a DVD software decoder whose name is not written on the invoice). This *detaxe* can be considered a success although it is not exactly a case of software refund—which is the objective of Detaxe working group—but rather a commercial gesture. Indeed, Dell did not want to take back the software.

In early February, I bought a laptop from the company Dell. They have not answered to my requests to know the contracts of software licenses that accompany the computer [...], so I have discovered the contract of Windows XP Familial OEM only when the computer was delivered.

As this contract comprised clauses that were far too restrictive, I have refused it and asked that they take back the software [...]. The software is indeed not sold but conceded under the license—by the manufacturer since it is an OEM contract—, thus it differs from hardware that is a material good and becomes the property of the buyer.

Company Dell has refused to take back the software despite the clause of the contract that made provisions for this return. They proposed to me a commercial gesture equivalent to 20% of the total value— that is, 275 Euros—if I keep the material as it is. After I accepted, I received a confirmation of this sum, and then eventually a wire transfer on the April 26, as they announced.

This commercial gesture shows that the price of the software, even though it is not specified, is far from negligible. It would be thus desirable that the prices of hardware and of software are indicated separately and that the software becomes again optional, the more so as the practice to bind the sale of the software to the hardware is prohibited by the Code of Consumption [...].

A posting separating the prices would also allow to reintroduce competition in the sector of operating systems. The use of an alternative system is all the more interesting because the restrictions are often smaller. For example, the version of Windows which they proposed to me was limited to 5 simultaneous long-distance connections.

It is also clear that the access to software license agreements is increasingly difficult: except the contract of Windows XP OEM, I could not see the contract of any other software that came with the computer. While software editors complain about piracy, this is, however, the only means for the user to know the rights pertaining to a program. Dell's refusal to take back the software—an act provisioned for by their contract—shows that the pirates are not the only ones that transgress these license agreements. I was allowed to legally own a copy of Windows XP whose license agreement I did not accept. Although I cannot run the code, because its execution

205I have taken out the links to accompanying documents. Their places are marked by ellipses ([...]).

would require acceptance of the contract, I can decompile, read and analyze the code, operations that are normally forbidden by the same contract.

This narrative is followed by two pages entitled “History” that retell the same events in more detail. Each paragraph in this extended narrative presents another piece of correspondence as contextualized it as evidence in building the case. The narrative ends with the scan of the person's bank statement with yellow highlighting on the line that indicates a refund from Dell.

This history is not completely exhaustive—it is missing some phone calls, e-mail and letters, in particular to *DG/DCCRF* and *UFC Que-Choisir*—but I think that it's already dense enough.”²⁰⁶

206 Reussie2. 14 July 2005. 22 July 2007. Available online at http://www.aful.org/wikis/detaxe/Reussie2/cps_wiki_pageview

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