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WiFi publics: defining community and technology at Montreal's Île Sans Fil

Book section

Wi-Fi Publics:

Defining community and technology at Montreal's

Ile Sans Fil

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Abstract

Community Wi-Fi projects motivate volunteers to participate in building technology and working towards shared social goals. They also hold the potential to shift the provision of communications access away from corporate and towards more public interest models. This chapter discusses how these two modes of engagement, expressed through the social relations between community Wi-Fi activists as well as through the technologies they build, develop both communities and publics. It identifies a tension between the "geek publics" produced among the volunteers in community Wi-Fi projects, and the "community-publics" that proponents imagine will be created through more localized, democratized access to the internet.

Keywords

community, public, democracy, socio-technical, Wi-Fi networks

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Introduction: From the Bar to the City Hall

In August 2004, I walked into an organic vegetarian co-op bar to meet Montreal's community Wi-Fi activists, a group known as Île Sans Fil (ISF) – "wireless island". Over pitchers of beer, they told me about their volunteer technology project: they were setting up free wireless connections to the Internet in parks and cafés, funded by a small arts grant. The young men and women I met that night talked about covering the city with Wi-Fi to create an alternative communications infrastructure that anyone could use to access the Internet, and that would also provide platforms for new media art projects. They felt that this infrastructure could connect local community organizations to one another, allowing them to exchange information without having to pay for expensive, commercialized Internet services. With intelligence and passion, they described how the technical flexibility of Wi-Fi would make it possible to create such a community-based infrastructure. They debated ways to organize among themselves to solve the technical and political challenges of this project as a "community" rather than a large hierarchical organization.

Three years later, some of the people I met that night voted to restructure their organization to create a more conventional non-profit administration structure, complete with a board of directors charged with making most financial and strategic decisions. In March, 2007 I sat in an oak and leather chair in the marble meeting room of the Montreal city hall and listened to the president of this council present a partnership project with the city of Montreal. The evolution of this Wi-Fi group suggests an important shift in the representation and impact of "community Wi-Fi" projects as wireless Internet becomes viewed as a public service. What can the history of ISF indicate about the relationship between community networks and public networks?

This chapter takes a more theoretical perspective on the ISF case, drawing out the tensions between the geek community created through participation in the ISF project and the broader Montreal community that

would be served by a partnership with City Hall. It specifically considers how "Wi-Fi geeks" became engaged in their community through the ISF project. The chapter then considers the tensions that emerge along the path leading from the bar to the City Hall. The chapter finishes with an assessment of the future role for initiatives like ISF.

Academic assessments of Wi-Fi projects

When I walked into the bar in 2004, theorists and proponents of Wi-Fi had been describing it as a disruptive technology associated with decentralized, local projects undertaken by small-scale organizations: neighbourhoods, community organizations, and municipal governments (Bar & Galpernin, 2004a, 2004b, 2005). Like the Internet (Abbate, 1999) the cable television system (de la Sola Pool, 1977), and radio (Douglas, 1987; Haring, 2006) this interpretation of Wi-Fi focused on its flexibility, its interoperability, and the fact that many innovative experiments with Wi-Fi were emerging from community groups like the one I met with in Montreal. The first assessments of these projects (Auray *et al.*, 2003; Sandvig 2004) focused on the explicitly technical focus of these first Wi-Fi communities, and argued that perhaps Wi-Fi was a particularly appropriate technology for small-scale, local endeavors. In the intervening years, Wi-Fi and other wireless technologies have begun to be represented by their activists, theorists, technologists and the mass media as means of providing Internet connectivity cheaply to broad areas. As Chapter 10 discusses, municipal Wi-Fi initiatives have boomed and busted across Canada and the United States. This chapter takes a different perspective, asking not *how* to maintain public Wi-Fi, but *what* Wi-Fi projects might tell us about the relationship between community and technology.

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Framing Wi-Fi communities

This chapter argues that local community Wi-Fi experiments are attempts to reestablish the community as an appropriate site for political and social action. As is the case for immigrant professionals gaining skills at community networking (CN) sites (see Dechief, this volume), or free and open source software advocates working with community organizations

(Proulx, this volume), the community emerges in unexpected ways and in new kinds of social sites. In community Wi-Fi, "community" refers both to the members of the community group who modify and develop Wi-Fi technology, as well as to the local geographic community around them. Because building Wi-Fi networks implies a process of debate and the creation of a shared space – the same kind of shared space that local democracy creates – we can refer to both of these communities as *publics*. In contrast to Chapter 10, which concentrates on the organizational innovations produced by ISF and their impact on the delivery of Wi-Fi in Canada, and Chapter 6, which reflects upon the gendered elements of voluntary labour as I experienced them during my fieldwork, this chapter concentrates on the theoretical terrain of this project. Specifically, it investigates the extent to which the ISF project (and, by extension other non-formal community informatics projects) establish more robustly public information and communication spaces.

Methods: Technology as Social and Technical

This chapter is based on an ethnography of the ISF project, conducted between August 2004 and May 2007. Drawing from methodological approaches in participatory action research (PAR) (see Lennie and Hearn, 1999 and Pinkett, 2003), my research strategy included observation of administrative council meetings, observation of and participation in general meetings, monitoring of the group's mailing list, and other types of active participation, including the supervision of an undergraduate intern, and participation in several conference presentations along with other members of ISF. Throughout, I produced daily and weekly field notes, research reports, interview transcripts, and a media file. Fifteen formal interviews with core members of ISF were conducted, as well as numerous informal interviews. In addition, I interviewed ISF's core collaborators including one of the city councillors involved in the partnership bid.

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In this context, my research activities certainly contributed to the construction, definition, and promotion of ISF. I consistently presented research results to ISF general meetings, and distributed reports and articles

produced for general readers to group members. For a period of two years I maintained this participatory stance, conducting regular meetings with core group members, especially Michael Lenczner, who had originally invited me to work with ISF. These privileged informants provided their perspective on the organization of the group, its technical choices, and their sense of its trajectory. I interviewed these core members several times over the two years of participatory research, and again one year later as fieldwork concluded. During the period of participatory research I was offered (and declined) a position on the board of the organization, but did attempt to contribute as much expertise as possible to describing the group's activities in a manner that would assist ISF in obtaining funding or developing a sustainable structure.

The main differences between the methodology described in this chapter and classical ethnography as described by Hammersly and Atkinson (1995) are the participatory element and the inclusion of the Wi-Fi technology itself as part of the object of study. The participatory nature of my fieldwork required a reflexive engagement with the structures, processes, and consequences that I observed and influenced (see Peddle, Powell, and Shade, this volume, for more detail on the nature of this engagement). The research concentrated not only on the self-organizing social structures of the ISF project but also upon the potential of the group's wireless internet technology to create an alternative form of community media. Thus, the technology's structure and materiality were also important. Drawing from actor-network theory as outlined by Latour (2005) I also paid attention to the role the wireless technologies themselves played in defining "community" or "public" Wi-Fi.

From Community to Public

As Mackenzie (2005) writes,

> The constant appearance of new gadgets, devices, and practices that modify, alter, or hybridize Wi-Fi suggests that hopes for other forms of sociality and openness associated with communication technology still

> persist. That hopefulness is conditioned by the recent history of new media, particularly by a consciousness of the almost total commercial ownership and control of Internet and communications infrastructure. (207)

In a turn away from the globally-scaled visions of the Internet as a democratic public sphere, (Papacharissi, 2002) the claims for the success of Wi-Fi are made primarily with reference to the local scale. The membership and values of these groups creates a community – or perhaps even a public -- in and of itself.

Taylor (2002) and Warner (2002) define a public as a social imaginary constituted through its discourse about itself. That is, a public is formed by its deliberations about ideas of shared interest, particularly those that are also concerned with some broader social good. Taylor (2002) claims that the precondition of a public is a "social imaginary" which includes the "ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations" (Taylor, 2002 p. 106). When these expectations and normative notions are constructed through discourse reproduced and circulated among people, a public forms. I argue that there are at least two publics invoked by the imagination of community Wi-Fi in Montreal: one, a "geek public" that volunteers aspire to become part of, and another, a "community public" whose existence helps to define the purpose of community Wi-Fi endeavors.

Community Wi-Fi in Montreal – Ile Sans Fil's Activities

Ile Sans Fil (ISF) helped to define and develop a set of discourses and practices (technical, organizational, and symbolic) that define "community Wi-Fi." Its approach has influenced discussions on wireless applications for local communities in the national and international context. The original vision of ISF was to "use new technology, especially wireless technology, to empower individuals and to foster a sense of community" (ISF, 2003)[i]. This

mission statement established normative expectations that community could – and should – be created through technology.

During the fieldwork period, ISF members undertook two main technical activities: they installed Wi-Fi hotspots and built software. They also formed partnerships with other individuals and groups. Installing hotspots was initially a response to a feeling among ISF members that Montreal did not have enough free Wi-Fi. Hotspots were – and are - located in places open to the public (though not, strictly speaking, always public places): parks, cafés, bars, restaurants, artist and community centres. While some hotspots have been sponsored by business development associations, most have been installed by volunteers in places that they themselves visited. The group's meetings are held every two weeks in one of the hotspots, where group members discuss priorities, plan software development, order food and drinks, and access the ISF network using their laptops and PDA devices.

ISF members also developed Wi-FiDog, an open-source software program that transforms off-the-shelf Wi-Fi modems into nodes in the group's network that display a unique opening page ("the portal page"). Members of ISF instigated this project in 2003. The software is meant to provide a unique media environment for each of the group's hotspots. Each modem equipped with this software connects users to a central server where their access is authenticated, and displays a portal page containing specific content related to the location. The portal page is meant to host local news, artwork and community content and to deliver social networking tools that will contribute to the culture of the hotspot. Its visual identity has been a source of intense debate within ISF, and the results of this debate are visible in the series of portal page designs (see Appendix).

In 2005, ISF developed a social software application for Wi-FiDog, as well as an associated multimedia distribution project[ii] with the hope of establishing Wi-Fi hotspots as unique social and cultural spaces. This social software was one in a series of projects that attempted to use Wi-Fi hotspots as community media sites. Inspired by a volunteer with experience as a

new media curator, ISF launched a series of interventions on the portal page: first, a series of curated location-specific art projects, then a distribution of emerging Canadian artists funded by Heritage Canada's Terminus1525 program, and finally an aggregation of political information in the weeks leading up to the Quebec provincial election. Some ISF members interviewed during fieldwork saw these projects as their real contribution to "community Wi-Fi" -- interventions in and explorations of using technology to achieve social goals. These members have always envisioned Wi-Fi as providing another way to be in a place with other people.

ISF also created partnerships with universities, research groups, and other community organizations. In addition to my own involvement through the CRACIN project, ISF partnered with the Mobile Digital Commons Network, which funded the development of its first fifteen hotspots. ISF subsequently won funding from Heritage Canada for the Terminus 1525 project. In exchange for Wi-Fi installations, the group has office space at Centre St-Pierre, a host site for community and religious organizations. Its relationships with established CN organizations like Communautique has been more tenuous: although ISF was recognized by Communautique as a winner of the Prix d'Innovation Sociale (social innovation prize) in 2005, its official partnerships with Communautique have been few: ISF provides Wi-Fi in Communautique's offices, and Communautique's director general was on ISF's board of directors in 2009. Notwithstanding these external links with other organizations, for many ISF volunteers meeting every two weeks and discussing Wi-Fi technology and its social impact has provided the most significant social value. For some, it has provided a way of feeling part of a larger process, one that draws from and valorizes technical skills. One ISF group member wrote on the group's mailing list, "I'm very happy at how Wireless Internet [sic] has taken me away from my indoor computer to the outside world. Today I meet many people, discuss how this technology can help communities, develop new potentials for people (list posting Feb 05)."

Geeks – Technical Experts with Social Status

The volunteer quoted above expressed how being part of ISF provided

him with an identity; made him part of something. As Dechief (this volume) notes, volunteering provides a means of defining ones identity as part of a community. Volunteers at ISF are students, professionals, or retired. Since 2003, there have been over 100 of them, some involved for months, others for years. They express different kinds of interest in Wi-Fi: for some, it is a medium for artistic interventions reflecting on nomadic work and everyday mobility; for others it is a practical service lacking in Montreal; for still others it can act as a means of engaging citizens in the life of their local community. This range of interests made ISF a dynamic, if chaotic organization throughout my fieldwork, provoking intense debates about the relative importance of software development, network expansion, or development of art and community context.

Yet all volunteers, regardless of their interest in Wi-Fi, described their involvement in ISF with relation to the term "geek." Kelty defines geeks as "technically competent individuals concerned with and engaged in defining, developing, and debating the technical and legal structures of the Internet and other computer networks" (Kelty, 2005 p. 185). Volunteers at ISF all seemed to be aspiring to achieve the status of "geek" – where this status meant a technical expert with some social influence. One female ISF member described herself as "lacking any geeky skills" before outlining the contribution she hoped to make in using Wi-Fi hotspots as diffusion sites for artistic content (MK, 2005). Within the context of a volunteer organization developing a new technology with potentially broad social implications, geeks are imagined as playing an influential role. Becoming a Wi-Fi geek means developing this identity – and the social capital that accompanies it. The development of a geek public at ISF created not only a set of debates about Wi-Fi technology and the construction of new Wi-Fi tools, but also led to collaborations between artists and members of community organizations, to political lobbying, and to other forms of civic engagement.[iii] These collaborations invoke another kind of public – a "community public" broader than the expert group of geeks.

Kelty (2005) calls geeks a "recursive public" because they are concerned with the production of their own means of communication and

self-definition. This includes not only talking and writing about the Internet, as Warner's (2002) definition of public implies, but also "hacking, coding, and compiling" (Kelty, 2005 p. 203) the technical platform upon which geeks' shared engagement depends. Wi-Fi geeks hack hardware and software in an attempt to change the way that Wi-Fi operates, so that the technology can become open. This hacking implies talk, collaboration, and modification of hardware and software. While it serves to reinforce the recursive "geek public" its stated goal is to expand access to Wi-Fi and promote its use.

Defining and building Wi-Fi public spheres

When they get together to talk about and build networks, Wi-Fi geeks are participating in the construction of their own public sphere of communication. Utopian public spheres proliferate in physical or mediated spaces, from Habermas' (1989) ideal public sphere based in the bourgeois café (but inaccessible to women or to the poor (Fraser, 1992)), to Dewey's (1964) newspaper containing the perfect information that would inspire democratic communication. As Mosco (2004) argues, the Internet has also represented the promise of a public sphere, one that could transcend a declining urban public space no longer capable of acting as a democratic public sphere. Community Wi-Fi promises this transcendence through the distribution of free Wi-Fi across the city to the community public. The imagined means to achieve this alternative infrastructure and more democratic community public is through the creation of a geek public of experts motivated by progressive social values.

These two imagined purposes: to create a space for communication and debate between experts, and to extend a communication infrastructure to a more generalized public, capture one of the rhetorical and practical tensions between different interpretations of "community" in Wi-Fi projects. Interviews with ISF volunteers conducted in November 2005 and February 2006 produced a variety of answers to the question "Who is community Wi-Fi for?": "for us, for people like us"; "for community organizations"; "for artists"; "for everyone" (Interviews with PA, FP, ML, DL). Geeks working on

community Wi-Fi projects presume that increased access to the Internet is desirable, not just for them, but for everyone, and they often first imagine themselves as “everyone” – thus the first hotspots established in locations where volunteers already visited. Their “building, coding, and compiling” (Kelty, 2005) is intended not only for the benefit of their recursive public, but also for a greater Internet-enabled public in Montreal. How are these balanced? What are their impacts?

Wi-Fi communities as publics

The tensions between recursive geek publics and community publics have been well discussed in previous work on community Wi-Fi. Sandvig (2004) argued that the first wave of European and American community Wi-Fi projects begun around 2000 did not offer real policy or technical challenges to the structure or function of the Internet. Subsequently, Wi-Fi technology has become more ubiquitous and commercialized, and a second wave of Wi-Fi communities (sometimes called Community Wireless Networks, or CWNs) described by Meinrath (2005), Powell & Shade (2006) and Cho (2006) developed a discourse and practice of community Wi-Fi. These projects later included a contextualization and politicization of Wi-Fi as an open network built by and for citizens. Many Wi-Fi communities were initially organized around the idea that they could provide an infrastructure *alternative* to that of the increasingly commercialized Internet; their design of independent meshed networks[iv] enabled the sharing of community and neighborly information. These projects, common to many of the second wave CWNs, are similar to the original community networking (CN) projects (Schuler, 1996) that envisioned computer networking as a platform for reinforcing local communities.

Like CNs, current community Wi-Fi projects link social goals to what were considered inward-looking technical tasks. Some of the normative themes that O’Neil (2002) describes as central to the CN movement: (1) “strong” democracy, (2) social capital, (3) individual empowerment, (4) sense of community, and (5) opportunities for economic development (p. 79-82) are articulated in current CWN projects, suggesting that the

oppositional, do-it-yourself ideologies of the first-generation Wi-Fi communities may be tempered. Historically, CN projects attempted to work with these themes by advocating for universal Internet access and computer literacy (Clement & Shade, 2000) and by integrating computing and information tools into the local community – for example, at neighbourhood centres, libraries, or language schools. CN attempted to mobilize existing community publics by improving access to networked communication.

If the CN movement was characterized by the development of community (networking) publics, current Wi-Fi communities are embedded in a more ambivalent production of both geek publics and community publics. CWNs, like some early CN projects including the Berkeley Community Memory project, are closely connected to free and open-source software development, known as the FLOSS movement, and to the "hacker ethic" of technical experimentation described by Levy (1984). Non-hierarchical, action-oriented, and meritocratic, this culture has roots in an ethic that valorizes decentralization and "conspicuous contribution". This, combined with an interest by some CWNs in resisting corporate structures, has meant that CWNs have attempted to do their work within non-hierarchical, consensus-based organizational forms.

Organizing a CWN – Structural Transformations

In 2004, ISF presented itself as an organization inspired by open-source values. Rejecting standard organizational structures including the use of protocols for running meetings, general meetings in 2004 and 2005 were held at a local bar, and all decisions were made based on consensus. Anyone could join as a member after attending three meetings. The innovation structure was open: any new idea was accepted if it was presented as a convincing improvement on another idea. In practice, this meant flame wars on the group mailing list and three-hour long face-to-face meetings.

This open structure attracted highly skilled volunteers from many different backgrounds whose various positions and demands formed a

heterarchy (see Stark, 1999), with different actors impassioned by different aspects of ISF. Some wanted a more robust network. Others wanted to use Wi-Fi hotspots to create network art. Still others wanted to build software.

Heterarchy to Hierarchy

Throughout the fieldwork period, as ISF's projects attracted more media attention, and as they renewed partnerships with the Mobile Digital Commons Network and CRACIN, both the hotspot network and the Wi-FiDog software required more stability. The release of Wi-FiDog as an open-source project with its own website separated the Wi-FiDog developer community from ISF, and the group introduced a more hierarchical management structure where the board made most decisions. This structure made possible several successful grant applications, because it facilitated drafting and commenting on work in progress. ISF also made a concerted effort to present a positive image to media and funders, in 2006 closing the wiki on its website because the messy works-in-progress looked unprofessional (ML post to mailing list, 2006). Still, ISF's organizational structure remained in a liminal space between that of an open-source software group and a community network. This liminal structure provided different challenges. One artistic collaborator remarked that although ISF was very open to partnerships, decision-making took a long time because the main contact "would say 'I have to go back and talk to the board and I have to talk to this person who is in charge of this.' And in another kind of environment that probably could have happened in a week but in a loosely coupled environment like ISF, sometimes it would take a month or something like that" (anonymous interview, July 07). Meanwhile, a longtime member of ISF found that the group had gone from being "geek friendly to geek unfriendly" because of the emphasis on maintaining a positive media image at the expense of maintaining records of ongoing or past projects (Interview with BG, 2007).

The partnership with the City of Montreal, framed by city decision-makers as responding to media coverage of ISF's activities and its "mind-share" with the public, attempted to retain a volunteer structure with the paid support of a director general. Volunteers would still create and maintain ISF hotspots (one hundred of them in city parks) and would be encouraged to work on more software projects. As of 2010, this promised partnership has yet to materialize. This suggests that the attempts by ISF's geeks to make their community WiFi project relevant outside of the geek-public is more complex than expected. This insight in turn suggests that the difficulty of broadening communities of practice such as ISF may be a central challenge for community informatics. As Chapter 6 of this volume indicates, numerous cultural (as well as organizational) factors combine to restrain, rather than expand, community networks.

Evoking Local Community

The actions of producing a geek public – constructing, debating, and modifying the structures of communication – can result in the creation of a collective identity providing legitimacy and social capital. This process can be compared to the process of legitimating "electricians" that Marvin (1988) describes: by establishing a discourse that separated electricians from non-electricians, early electric practitioners legitimated their activities and created a new profession. In some ways, community Wi-Fi in Montreal looks like it could be explained primarily in terms of social capital production. However, the Wi-Fi geeks in Montreal are proud of the fact that they are "do-ers, not talkers." What they do, is provide Wi-Fi in public places – to a community wider than their group.

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Escobar writes, "any technology represents a cultural invention, in the sense that it *brings forth a world*; it emerges out of particular cultural conditions and in turn helps to create new ones" (1994, p. 185). ISF's efforts resonate with a culture of community action and grassroots projects in Montreal. The city has a long tradition of grassroots organizing and mutual aid, extending back to the organizing efforts of the Catholic religious

colonists. More recently, decades of Quebec leftist governments have solidified in citizens the concept of a “shared good” and a connection between radical politics and community media (Raboy, 1984). Therefore, the idea of a community group providing a technical service is culturally resonant, and ISF’s contribution to the community public resonates with Montreal’s local history and culture.

The group’s organizational transformations suggest that over time, ISF aligned itself more and more with the image of the community public. The oppositional “hacker ethic” that originally evoked a geek identity made it difficult for ISF to collaborate with more conventionally structured organizations. But outside of these collaborations, what kind of impact has this hacking had on the development of a wider “Wi-Fi public” in Montreal through the use of the ISF network?

New Publics: Non-geek “Users” of the ISF Network

ISF’s community wireless network had over 110,000 registered users at the conclusion of fieldwork.[v] Survey data from online surveys conducted in January and April of 2006[vi] suggested that at the time, about two-thirds of these users were men, and that they primarily used ISF hotspots at cafés and restaurants, surfing the web and sending email. While the users surveyed said that they would seek out locations where free Wi-Fi was provided, they also indicated that they used free Wi-Fi wherever it was available, not necessarily only at ISF hotspots. The fact that the service was “free” – as in, free of charge – was considered more important than the fact that ISF’s network was freely open to submissions of content and to interactions between users, and that its technical and social structure were open to participation.

Fieldwork suggested that the users of the network did not have the same goals as ISF members. Observations and interviews conducted in November 2005 and May 2007 with people using ISF hotspots indicated that while the discourse of “community” is important to users, some user practices opposed ISF’s social goals. ISF users primarily want to gain access

to the Internet freely – one user described himself as “opportunistic – but aren’t we all? (M, Tribune)”. These opportunistic users picking up wireless signals are more interested in connectivity to the Internet than in socializing with people sitting nearby in a café. Viewing local content on the portal pages is perceived as a necessary impediment to connecting to the Internet to send email or surf the web. Despite the fact that Wi-FiDog provided the ability to see which users were online where and to create a personal profile accessible to other people online at the same hotspot, most users interviewed said that they did not use profiles, and some were opposed to the idea of putting personal information online where it would be visible to people in the same location. One person explained that he used the number of user names appearing on a hotspot’s page as a gauge for the amount of bandwidth available, avoiding locations with too many people online.

The activities of these users suggest that the ISF model did to a certain extent politicize Internet infrastructure. However, users seemed ambivalent at best about the group’s social goals, and seemed most interested in getting free Wi-Fi, not in participating in a mediated version of café society. Like Habermas’ 18th century bourgeois public sphere composed of men encountering one another in cafés, the recursive geek public in Montreal reinforces its own social connections in public spaces. ISF members “adopt” hotspots where they maintain the access point, and many hotspots were established in places that ISF geeks liked to go. The geeks are in cafés -- but the users may be elsewhere. Crow *et al.*, (2007) suggested that a significant number of ISF users were accessing the Internet from adjacent office buildings, restaurants, or homes. In addition, many of the people I interviewed would prefer to access the Wi-Fi network anonymously without having to register using an email address to provide authentication. The users of ISF are beginning to expect Wi-Fi to be an infrastructure. From this perspective, community Wi-Fi is playing the role described by Fischer (1992) in his social history of the early adoption of the telephone in the U.S., whereby the telephone connectivity provided by local co-ops compensated for the lack of provision by established telephone companies. In this case, an alternative infrastructure replaces a missing service - ISF continues to

provide the majority of free Wi-Fi hotspots in Montreal. However, the continuing role of “geeks” in creating this infrastructure, at least in Montreal, evokes a more complex relationship. The fact that ISF maintains hotspots where access to the Internet is free of charge introduces a tension between the development of Wi-Fi as a means for geeks to get together in person and develop their expertise, and its use as a communication tool for a larger community public who would prefer anonymity and ubiquity. Where ISF set out to establish Wi-Fi as a community media, its success has been, in the words of Michael Lenczner, “domesticating free Wi-Fi in Montreal” (ML, 2007).

In November 2007 I spoke with one of the members of the city of Montreal’s committee on economic development. He was trying to understand how the city could support an expansion of the ISF network. In our conversation, he referred to ISF as “a group of geeks” – and felt that the city’s partnership with ISF should support, not replace, what he saw as a fragile organizational form that contributed to Montreal’s culture. Negotiations have since continued, without any formal agreement between ISF and the city of Montreal. The funding programs that have supported other community networking organizations, discussed in Chapter 10, have not supported ISF. Instead, the group is continuing to cover its costs through the annual fees that it charges its hotspot partners. To keep geek volunteers motivated, the group has been focusing on mobile application development, particularly applications that help to find free or open Wi-Fi hotspots, and on replacing the WiFiDog authorization server software with new software that allows more precise network management. Considering the tension between the geek-public that evolved in Montreal and the idealized (or desired) community-public, these decisions are significant. Continuing opportunities for technical development provide more opportunities for the development of a geek-public concerned with building the technology that facilitates its own interactions, but do not necessarily restructure public provision of communications access.

Conclusion

The energy I felt in 2004 upon first meeting Montréal's Wi-Fi geeks convinced me that this group could potentially redefine local culture and communications. However, the tension that emerged at ISF between the geek public who built social capital and skills through their engagement with each other, and the community public solidified through access to robust communications infrastructure, suggested purposes at odds with each other. In the terms that Sandvig (this volume) presents, ISF is simultaneously defining "Wi-Fi geeks" as legitimate social and political actors (as per Marvin 1988), and filling an infrastructural gap (as per Fischer 1992). I would argue that these two purposes, and the two publics that they have evoked, create part of the dynamism of projects like ISF. Maintaining this dynamism is difficult and may be one of the reasons that projects based on innovation and experimentation, rather than service delivery, do not have very long lifespans.

Within the tensions between geek publics and community publics, and the expression of differing purposes for community Wi-Fi may lie a lesson for the future of social action embedded in technology. The difficulty in balancing the development of a geek public and a community public may result from the fact that contemporary politics no longer operates at a scale where mass publics have influence (Dean, 2002). While Dean advocates the creation of "issue networks" to connect people together to work on specific issues without the actors being reduced to groups of consumers, the community Wi-Fi phenomenon suggests that the local community may also act as a locus of resistance. Mobilizing such resistance means creating opportunities for members of geek publics to leverage their interest in technical development for greater engagement in their local community. In Warner's (2002) terms, none of the Wi-Fi communities discussed here are currently expanding their publics: in fact, all of them risk turning their discourse and practice inwards. Recent attempts to form a global community wireless "movement" testify to the difficulties of connecting together locally based community Wi-Fi projects: despite the fact that such local projects use similar technologies and are created by people with similar values, the particularity of each local project prevents a unified approach to

community Wi-Fi networking.

Wi-Fi communities may be part of a new generation of projects that politicize communication technology. Their challenges should encourage us to ask questions about culture, and about change. If geek publics can assist their communities in creating appropriate technical systems, we must develop ways to encourage them to make their hacking relevant and useful to their local communities. Yet we must also remain realistic about the limits of this hacking as a form of social justice.

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[i] This vision as stated on the group's webpage has recently changed to: "We believe that technology can be used to bring people together and foster a sense of community. In pursuit of that goal, Ile Sans Fil uses it's (sic) free public access points to promote interaction between users, show new media art, and provide geographically- and community-relevant information." (2007)

[ii] Hub des Artistes Locaux was a partnership project between a community radio station, Ile Sans Fil, and the campus television station of Concordia University. The project used ISF hotspots to host music and video servers that broadcast music and video content curated so as to relate to the specific culture of the hotspot. See http://www.ilesansfil.org/tiki-index.php?page=HAL

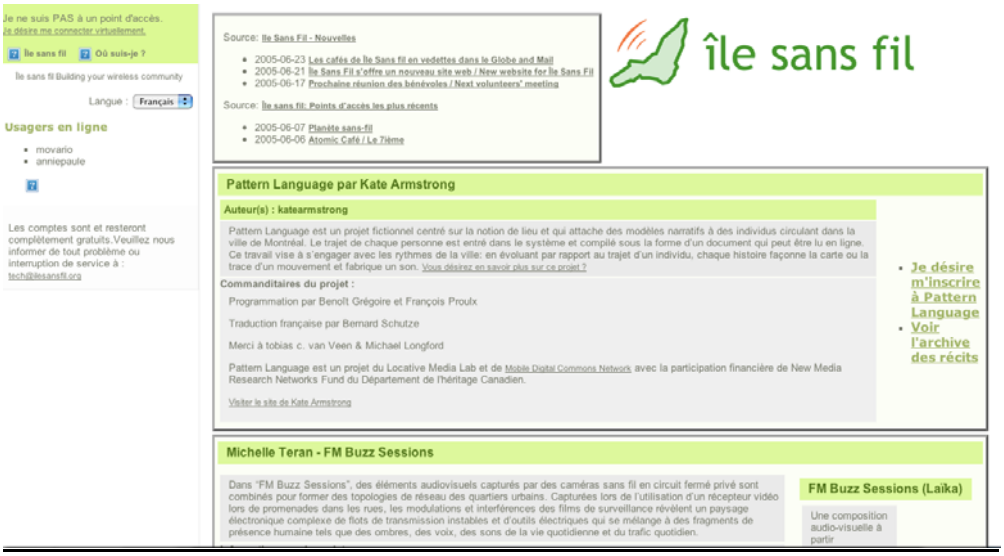
[iii] In this context, civic engagement is defined as an active contribution to the creation of a meaningful civic life; not limited to politics, and oriented towards improving the democratic or cultural lives of citizens in a local area.

[iv] A meshed network is a wireless network in which each node acts as both a sender and a receiver of data. This allows the network to automatically route around damage or interference. Meshed networks are meant to be non-hierarchical.

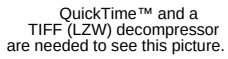
[v] As of July 2009. See: http://www.ilesansfil.org/message/110000-un-nouveau-record-pour-ile-sans-fil/

[vi] The survey was developed and deployed in partnership with Laura Forlano, PhD Candidate, Communications, Columbia University. The full results appeared in Forlano's dissertation in 2008

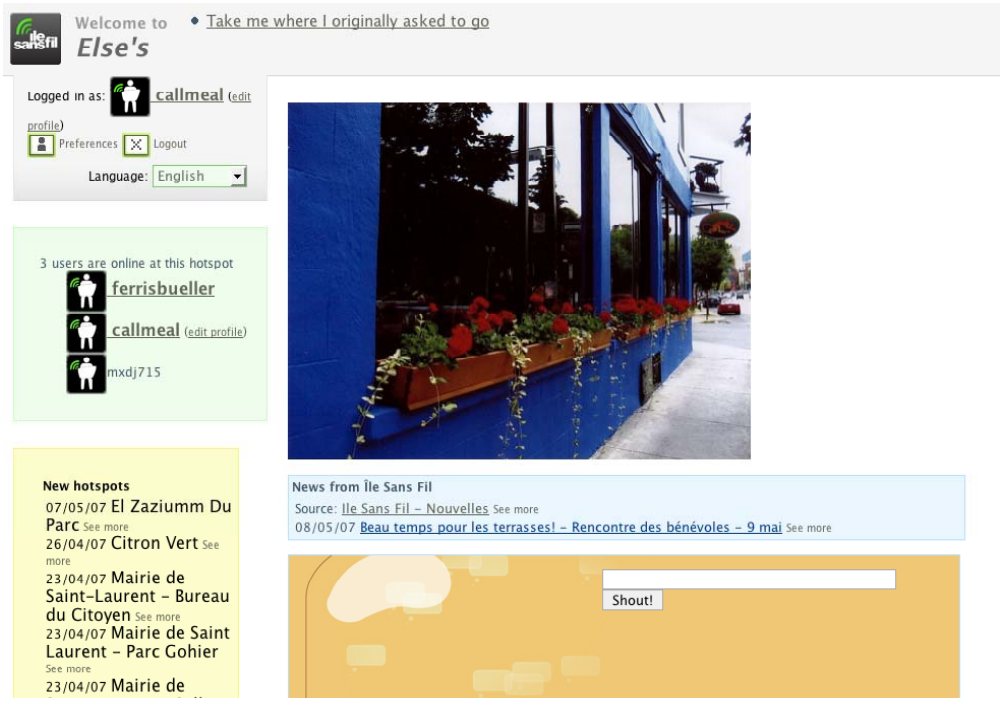
Appendix: Portal Page Screen Shots



Portal page for Laika café, June 2005



Portal Page for Laika café, October 2005 (This image, which my Mac tells me needs QuickTime and a Tiff decompressor, is not visible. Re-do in a more readily viewable format e.g. .jpg)



Portal page for Else's café, May 2007

References

All URLs accessed and confirmed as of June 15, 2010, except as otherwise indicated.

End Notes

Comment [Andrew Cl4]: Be more careful about using a global replace, as it can mess up others naming.