

## FROM FACE-BLOCK TO FACEBOOK OR THE OTHER WAY AROUND?

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### **Abstract**

Can network technology stimulate communities of propinquity and sustainability? We explore in this study the relation between communication technology, the production of space for public life, and community building in the contemporary city. For that we propose the collaboration of urban planning and computer science, for the design of virtual communities that are deferent to physical space (hybrid). We aim to stimulate creativity, generate common interest and promote physical interactions in the neighborhood with the existing tools used to design web-based online communities. The critical piece that should be in place for the success of such an effort is the participation of community members. In this paper we focus on one of the possible ways to address this challenging problem: creativity within collective action. We explore a new type of collective action enabled through the steadily advancing wireless technology. That is the ability of a community to create a cost-effective user-owned wireless network to support their internal communication needs and offer free access to the Internet. We propose a new type of hybrid community -- wireless neighborhood community (WNC) -- that exploits this technological potential and provides an institutional framework for the community at the neighborhood level. For this we analyze examples of neighborhood collective action that are successful in the physical space, which could guide the design of wireless neighborhood communities.

**Key words:** neighborhood, participation, conviviality, creativity, place, networks, wireless neighborhood communities

## 1. Introduction

We are interested in ways of building and sustaining communities by means of place-based collective action. So we consider creativity from the perspective of social organization at the neighborhood level, and learn from public life practices that manifest in convivial communities. Our understanding of convivial communities draws on Lisa Peattie's definition of "democratic conviviality that bonds people in communal public actions" from "small-group rituals and social bonding" to "serious collective action, from barn raisings and neighborhood cleanups to civil disobedience that blocks the streets or invades the missile site" (1998). The condition of creativity requires room for chance, serendipity and imagination, but also (city) sponsorship of public life (e.g. Banerjee, 2001).

Until recently public life occurred in physical space. Nowadays online social networks or communities have created a multitude of virtual spaces on which people can socialize (*Facebook*), share content (*Flickr*, *YouTube*) and expertise (*Wikipedia*). Virtual space is constructed by 1) the communication network, which allows the exchange of digital information (currently, the Internet), and 2) the software that defines the user interface, the types of enabled interactions, the rules for access and filtering of information, and more. We often call such software "social", since it facilitates social exchanges between users and the organization of different types of groups (Shirky, 2008).

Actually one may see social software also as a tool for shaping virtual space, which we could say that it is not only a *space of flows* (Castells, 2005), but also a space of virtual *places*. To draw analogies between the design of physical and virtual space, the user homepage is the equivalent of one's home, which has a private and a public part and whose limits can differ from society to society, as they differ in different on-line communities. There are also public spaces of interest or activity groups, which current users regulate and operate mostly by replicating physical space. A user is also "moving around" in an online community by taking specific actions (e.g., commenting, creating relationships, making gestures, to name just a few) on different community spaces, like other users' homepages and/or public spaces. The way a user is represented in the context of these actions (e.g., the photo displayed or the part of her homepage hyperlinked on her name) is the analog of her outfit or her car. There are also means of communication like networks that facilitate exchanges among users, yet with the particularity of asynchronous communication and activity records that could build up a collective history/memory. The community identity is expressed through the collective outcome, the overall interface, by means of text, colors, images, and formal and informal rules, similarly how built up and public spaces materialize the social and cultural character of

a place. Without physical delimitations though, the virtual space offers new possibilities and challenges for spatial designers, as they could take a “clean-slate” approach to create everything from scratch.

Due to some clever details in social software design, recently many internet-based online communities have been very successful in bringing together people with common interests for socializing and sharing content and expertise (Shirky, 2008). However, these activities happen only virtually and rarely materialize in physical space. This is one of the bases in criticizing the Internet for the current agoraphobic tendency, similarly to claims on the effects of telephony and television on the local social ties (e.g. Putnam, 2000), or even for the decline of our sense of place and community.

A hybrid community refers to an on-line community spanning the neighborhood, one that bridges the physical with the virtual space. Note that unlike current Internet-based communities that bring together people with common interest, hybrid communities need to create a common interest among a group of people living in the same neighborhood with relatively limited choices for interaction. In addition to limited opportunities for shared interests and taste, one has to address cultural differences, educational or even language barriers, digital divide issues, busy schedules, timidity, lack of trust, and so forth.

Sociologists have experimented with different notions of hybrid communities in projects like Netville (Hampton and Wellman 2003), the Blacksburg Electronic Village, and more recently e-Neighborhood (Hampton, 2007). Although such studies have documented a positive impact of the Internet technology on social capital, yet they have not proven the sustainability and effectiveness of the employed tools and software in different contexts. Current operational hybrid on-line communities like *i-neighbors*, *Meetup*, and *Facebook neighborhood* generate a tangible value for community members as a way to stimulate their initial participation. For example, recommendations, chances for socialization, exchange of services and organization of daily community activities such as car-sharing, baby-sitting and driving/walking-kids-to-school cooperatives, food cooperatives, elderly-care, and even block-parties.

These practical efforts and sociological studies are the starting point for our research. We believe that one of their weaknesses is their generic design. None of them addresses explicitly their members’ system of values or lifestyle types, and thus they are not successful in creating community identity (see also Foth, 2006). How can we design virtual space in order to provide the appropriate platform (social environment) for conviviality? In Apostol et al. (2008) we discussed the role of *flânerie* as a means to discover the soul of a community. But this approach requires a first level of participation. As we are interested to find out what could

bring people together in a random neighborhood, in this paper we investigate the role of wireless technology and collective action in creating truly convivial communities.

So we are interested to exploit an additional tangible value generated by the participation in a neighborhood community that could lead to community building. That is, the vision of a community-owned communication network that supports the communication needs of the neighborhood online community and that offers cheap access to the Internet for all the participants. The WiFi (Wireless Fidelity) technology allows users to contribute towards this vision with their own infrastructure (wireless access points), that are either already available in households or can be purchased at very low prices. Negroponte pictured that as a “Wi-Fi ‘lily pads and frogs’ broadband system built by people for the people” (2002). Today numerous grassroots user initiatives in big cities like *NYWireless* or projects initiated by municipalities under various business models (Philadelphia, San Francisco) aim to bring this vision to reality. We believe that the participation of a wider range of people in these initiatives would increase the network efficiency and the corresponding users’ benefits.

For that we define a novel type of hybrid online community, a wireless neighborhood community (WNC), whose members will be responsible for the creation and management of the required communication network (Antoniadis et al., 2008). Besides providing inexpensive Internet access, users’ participation in a WNC can increase the value of the neighborhood online community built on top of the network. We envision the creation of this community as an outcome of collective action, and not a pre-designed space inviting citizens to join, as the Internet versions of on-line communities. We don’t believe that it is desirable to go away from face-block to *Facebook* communities as it seems to be the current trend. We wish to employ the technology developed for such online communities to bring communities back to the “barn-raising”-type of collective action that could encourage participation, increase the feelings of solidarity and social capital, and lead to building community identity.

In the next section we explore specific examples of community organizations that stimulate collective action at the neighborhood level. The characteristics of these communities can guide the WNC design, and support our argument that people’s engagement in the creation of a wireless network is beneficial. In Section 3 we focus on the networking aspects and discuss how this activity could be exploited to increase civic engagement and form the basis for building community identity.

## **2. Illustration of some of the current forms of neighborhood collective action**

To learn from successful convivial neighborhoods, we present in this section four examples of collective action in different urban environments. First, the neighborhood ecovillages in North American cities like Seattle and Vancouver are community organizations based on shared values and lifestyle. Second, Isola in Milan is a neighborhood with a strongly manifested identity due to its physical and social environment. Third, the *Socially Integrative City* in Berlin is a State-led program through which we exemplify creative processes of balancing physical and social disparities in our market-based urban development. Fourth, we look at a grassroots model of city governance at the neighborhood level in the Neighborhood Councils in Los Angeles, California.

The main interest of neighborhood ecovillages is to strengthen the community's vitality around healthier lifestyles and ecological aspirations. They are different than intentional communities where people choose to live together based on ecology principles, and aim to comprise the entire neighborhood or community. *Ecovillage Vancouver* in British Columbia, which models the *Phinney Ecovillage Project* in Seattle, Washington, defines the neighborhood ecovillages as "places where people come together for any number of reasons - or sometimes for no reason at all other than to enjoy each others company. They make it easy for neighbors to get to know one another, and to do things together." As incentives for collective action, these organizations encourage meetings for all sorts of activities from everyday life exchanges around food and resource sharing to more long-term oriented political and educational actions that could enhance the livability of the neighborhood and build a sustainable community.

Another example of grassroots collective action is *Cantieri Isola*, a neighborhood with strong identity and a small village atmosphere in Milan, Italy. Its clearly defined physical boundaries and traditional houses with loggia assemble an identifiable neighborhood, and preserve the city's industrial character within its shops, studios, and art galleries. In the 1980s a group of artists reclaimed one of the historical factory buildings; throughout the decade they have transformed the brownfields into community gardens and a small football field. In the 1990s the *Stecca degli Artigiani* included various craftsmen and artists studios and neighborhood associations, some of them concerned with creative urban renewal.

The Isola community expresses the need for neighborhood networking in order to compensate the absence of an institutional organization at the neighborhood level. Initially the associations organized public events to make their interests and efforts known to the public. Later came *Isola Tv*, a street television station interested to document neighborhood's change,

and the neighborhood's web portal as "a laboratory of ideas and proposals (individual and collective) for a distribution of knowledge and creativity, also a catalyst of voices and a promoter of aggregation and continuity ... a source of inspiration for the city as a whole." To explain their interest in networking they claim, networking is important to get to understand and exchange diverse types of knowledge, to make visible what is unique, to corroborate the services and the resources and to attract a diversity of people and services in the neighborhood, and also to know, anticipate and manage change in the neighborhood.

As a reaction to increasing social and spatial disparities in the cities, in 1999 the German federal and Länder governments adopted a program to support urban development, the *Socially Integrative City*, which concerns districts with special development needs. Moreover, the online project *Gewerberaumboerse* is an initiative of the home- and landowners of targeted buildings in certain Berlin neighborhoods to offer their spaces for tenancy and maintenance to interested parties. In cooperation with the buildings owners, the program offers on a yearly basis low or free rents for housing, firms and cultural venues. The purpose of this program is to revitalize districts that cannot compete on the marketplace because of the state of many of their buildings and infrastructure (i.e. Friedrichshain-Kreuzberg, Lichtenberg and Weißensee). At the same time, due to high market prices, there is a large (young) creative group of Berliners who need support to have access to housing, services and commercial space. By prioritizing these special groups, the *Socially Integrative City* program balances both social and spatial problems. The State has a strong role in this program in providing an umbrella structure, sponsorship, financing mechanisms etc. These districts provide affordable space, specialized services, and like-minded communities of users. So this project's outcomes boost the neighborhood spirit, and the urban areas become more vibrant, and also strengthen Berlin's character of a cluster of village-type neighborhoods.

Possibilities of hybrid communities that planners will be apt to support may involve local neighborhoods as presented above, but also larger entities of local governance such as the neighborhood councils created under the 1999 Charter Reform of the City of Los Angeles that we present next. The neighborhood councils are place-based associations with the central goal to promote citizen participation in government, and help forge more collaborative and productive relationships between community stakeholders and city officials. In addition, the neighborhood councils organize regional and citywide alliances. The average size of a neighborhood council board is twenty-one board members, and the boards are not descriptively representative of the social and economic diversity of Los Angeles residents. The fact that the internal organization meetings of the neighborhood councils add up to two

thirds of their activity shows how challenging it is to organize in the midst of diversity.

Out of these examples we draw lessons related to the sets of factors necessary or sufficient for different urban environments to configure best practices towards conviviality. For instance, the communities in North America address the institutional environment and act based on values and lifestyle principles like the ecovillages, and also on political interests like in the case of the neighborhood councils. The two communities in Europe have as a starting point the physical environment. Besides strong physical identity, the social organizations of these places and the roles that the community members assume have led their collective action to significant results in terms of neighborhood livability and vitality.

### **3. WNCs as a new type of neighborhood collective action**

Current information and communication technology provides the means to build a wireless place-based hybrid community (a WNC) capable to play the role of a neighborhood institutional framework. The purpose of this framework is to initiate, stimulate and maintain collective actions in the neighborhood. If the WNC would be a generator, catalyst and supporter of neighborhood collective action, it could sustain convivial, and creative communities.

In this section we discuss some basic principles to follow in designing and configuring a WNC in a way to benefit from the fact that its members will collaborate in building their own independent communication network. We distribute these principles in three categories namely 1) vision and identity, 2) engagement and social ties and 3) the role of the city. We comment on each category in light of the practices learned from the four examples of neighborhood collective action, but focus on the qualities that bridge the physical with the virtual space, with an emphasis on the role of the wireless network. We make suggestions regarding city's participation in exploiting this important dimension of the wireless technology.

#### **3.1. Vision and identity**

The neighborhood examples presented in Section 2 refer to communities with strong identity that are led by clearly defined visions. These visions vary from the environmentally friendly ideals of the neighborhood ecovillages organizations to the culture-prevalent “do it yourself” ideology of the creative neighborhoods in Milan and Berlin or to the sense of responsibility to calling government responsiveness to local needs in Los Angeles. In all of these cases there are organizational structures in place that are capable to bring their vision to life. The

initiation of collective action in these neighborhoods comes either from the State (federal and Länder in Germany) and from the City government (i.e. the Los Angeles voters enacted charter provisions) or from grassroots initiatives of the neighborhood North American ecovillages and of the inhabitants of the Isola neighborhood in Milan. The vision and the agency that prepares the ground for acting according to this vision are mutually connected.

For cases when such an agency is not present, we could consider WNC as the agency initiating collective action in the long run. How should we communicate the vision and identity of a community-owned communication network? As the institutional framework of the neighborhood, the WNC expresses the vision through various means of representation, which range from visual means like text and images to the implicit messages given by the enabled members' roles as well as their participation and civic engagement both online and offline. In this case the virtual representation of a community's identity is intrinsic with the identity formation, and not only an external image on the web like it is the case of current community websites.

The inherent advantage of a WNC compared to the wired Internet is the independence that it offers to its members to design their virtual space according to the public good and become cohesive; that could lead to good solutions for privacy, censorship and collective order. Providing independence through the participation and contribution of the community members, and communicating it appropriately could shape their vision and a fruitful environment for building community identity. That could happen both through social software design and through interventions in physical space (refer to Apostol et al., 2008).

### **3.2. Engagement and social ties**

Although we consider the WNC as the agency initiating and stimulating collective action in the neighborhood in the long run, there is a starting point that requires strong leadership, enthusiasm and investments on infrastructure from highly motivated members. The four neighborhood examples show an array of ways to provide institutional and financial sponsorship, including different types of governments and community members. Additionally, we propose flexible WNC organizational structures like "action committees" that could be reconfigured according to needs, issues or performed activities.

To stimulate engagement in the WNC creation, community leaders should formulate appropriate participatory mechanisms and measures that would build social ties and increase civic engagement. Simple measures like face-to-face invitations could be effective, as well as meeting arrangements that encourage informal exchanges (i.e. ecovillages, Isola).



Socialization and resource sharing activities could alternate with specific projects (i.e. SozialeStadt, Isola). Increased civic participation could be measured as the “number of times that individuals undertake a participatory act such as volunteering, voting or attending a meeting” (Musso et al. 2007). But higher-quality forms of participation depend upon the sense of empowerment and the acquired civic skills that community members exercise either in collective activities involvement or in building networks of relationships among neighborhood activists. Recognition of efforts and rewards are methods to stimulate civic engagement. In particular for WNCs, the “community layer” offers possibilities for members’ acknowledgment like including their contributions to their virtual social image, and also granting special privileges to the most motivated people.

As part of the social software design of a hybrid community, the wireless technology can play also an important role in the formation of social ties. First, the network creation process could become an excuse for socialization itself. Additionally, the *de facto* physical proximity of the participants in a WNC (since the wireless access requires physical presence) could strengthen the sense of neighborhood between community members, while providing a level of spontaneity due to flexible physical borders, and blurred boundaries between public and private space. Finally, the wireless “sensing” among neighbors through the wireless access points introduces a new type of technology-enabled human contact, i.e. besides their next-door neighbors users have also their network neighbors.

### **3.3 The role of the city**

The City could contribute in many ways like provision of sponsorship, core infrastructure, legitimacy, security, trust or bootstrapping. For instance, the City could address the digital divide by investing in the provision of free access terminals. Another aspect is educational with respect to technology as well as social skills from simple problem solving, to recruiting capable community leaders, training activists, supporting group activities, and identifying and sharing “best practices” of neighborhood initiatives. The City could take a leading role in establishing what it means to represent and reflect “diverse interests”, and in promoting innovations that engage and empower community members, and support ideas for bridging virtual and physical space. Instead of investing in ambitious WiFi projects that aim to cover the entire city, which seem difficult to maintain due to high costs and conflicting interests, municipalities would be better off investing in users’ involvement and supporting citywide grassroots initiatives. In addition to reducing the overall cost for covering the city with a WiFi

network, we advocate in this paper the consideration of users' participation to play a central role in building community identity.

#### **4. Concluding note**

Can network technology stimulate communities of propinquity and sustainability? We hope that WNCs, the hybrid communities that we propose, challenge the inevitability of Mel Webber's notion of "non-place urban realm", as well as Bill Mitchell's celebration of the cyborgs and cyber-communities where place and face-to-face contact become irrelevant or unnecessary. Due to their inclusiveness and capability to increase social capital, urban planning should encourage the creation of WNCs, and help maintain their active operation through policy implementation and city sponsorship.

We make here only a first step in this direction. We identify the potential benefits of including the wireless network dimension in the design of a hybrid community with the goal to increase civic engagement. However, the details of a WNC design and the links between the physical and virtual space are critical, and they highly depend on the specific environment. A possible methodology to address this need for "specialization" is to create specific pilot projects out of which we expect to identify some basic parameters of the software design, which would allow the creation of configurable social software to help communities to adapting to their own visions and needs. The collaboration between the fields of planning and computer science is essential to achieve this ambitious objective.

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