

Enabling local interaction and personalised networking in residential communities through action research and participatory design

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Abstract

This paper explores how to support the building of networks and network social capital in place-based communities through the use of internet and personal communications technologies. The trends away from conventional neighbourhood interactions to interactions centred around the workplace, personal interests and personalised networking are examined. Through a case study, new forms of interactions in neighbourhoods are identified. Preliminary implications for the support of neighbourhood interactions as well as a framework for understanding community interactions are presented.

Keywords

Community Networks, Residential Communities, Participatory Design, Interaction Design, Community Informatics, Neighbourhoods, Urbanism

INTRODUCTION

The Communities and Place project within the Australasian CRC for Interaction Design (ACID) explores the relationship between *geographic location* and *community* in the era of the internet and mobile communications. The project uses participant observation, community inquiry and participatory design methods in order to study mobile communities (e.g. backpackers), youth communities and residential communities, recognising that the membership of these communities is overlapping. This paper focuses on residential communities.

There is a recognised trend towards people identifying more with their workmates and their personal networks of friends, who may reside across town or in other countries, than towards people in the local neighbourhood. Wellman (2002) argues that much social organisation no longer fits the “little boxes” model where work, community and domesticity exist as hierarchically arranged, densely knit bounded groups. In the traditional “little boxes” model a person belonged to a discrete work group within a single organisation and participated in structured voluntary organisations such as a church and a bowling league. The boundaries for inclusion within a group were often determined by geographic location. The structured hierarchical organisation of the group – supervisors and employees, pastors and churchgoers, etc. – meant that organisations were less permeable, such that people were more likely to rest on their local community ties. As Wellman (2001, 2002) argues, a shift has occurred “from hierarchically arranged densely knit bounded groups to social networks” where “boundaries are more permeable, interactions are with diverse others, linkages switch between multiple networks and organisational hierarchies are both flatter and more complexly structured.” (Wellman, 2002: 10).

In spite of the shifts documented by Wellman, which have led to such phenomena as “dormitory suburbs”, aspects of physicality and geographic location are remarkably enduring – people still desire to know their neighbours and they prefer to eat dinner with friends who are physically present. They form neighbourhood watches, their children play together, they shop at the same local stores, they seek local entertainment (dining, clubs, etc.), they seek local friends and they face the same local issues as their neighbours (traffic, development, pollution, etc.) Nonetheless, neighbourhood life has been transformed, because peoples lives no longer fit the “little boxes” model. And yet the role played by the internet and mobile communications in supporting residential communities is not well understood.

This residential component of the project seeks to explore how to support the development of neighbourhoods where residents feel a sense of connection to their local community and an ability to participate fully in that community. Fostering the rise of residential networks will foster the rise of network capital, social capital and cultural capital, which gives residents and their cities, both a sense of wellbeing and a competitive edge in doing business. In addition local governments can use the mix of residential collectives and residential networks for purposes of community engagement and political participation.

In the next sections we contrast the view of residential communities as collectives with the emerging view of communities as networked individuals. Through a small participant observer study in a residential community, the validity of the collective and networked individual models are examined. We then present a framework for thinking about interactions in residential communities and identify preliminary issues in the design of community communications.

COMMUNITIES AS COLLECTIVES

Most online community networks that are investigated by researchers such as the Blacksburg Electronic Village (Cohill & Kavanaugh, 2000), Netville (Hampton & Wellman, 2003) and Williamstown (Arnold, Gibbs, & Wright, 2003) are designed under the premise that residential communities exhibit characteristics of a collective. The information systems available to those residents include discussion boards, mailing lists and newsletters which afford community broadcasts and public communication. The term online community 'network' is misleading, since most applications implemented in these systems are designed for collective activity (one-to-many and many-to-many) instead of network activity (peer-to-peer).

These information systems display significant similarities with the features and functions available in virtual (dispersed) online communities. They accumulate users who share a common interest, profession or support need into a whole which acts as a group or collective. Projects which design and implement online community networks for residential communities look at the functions of dispersed online communities as role models and at their numbers of users and level of activity as benchmarks. Such projects that regard residential communities as collectives are in most cases doomed to failure, because proximity per se does not ensure community or neighbourliness. However, there are two exceptions:

First, if the online community network is introduced to a well-established residential community in the traditional sense of *Gemeinschaft* or 'village', the information system might be successful. Residents already know each other, they already use phone, email and face-to-face chats to 'have a yarn'. If such a tightly-knit and well-connected residential community is given access to an information system which provides them with superior facilities to communicate with their peers and neighbours, then the project may be successful, subject to the provision of appropriate access and training. Jankowski and his colleagues rightly point out that "those geographic communities already rich in social capital may become richer thanks to community networks, and those communities poor in social capital may remain poor" (Jankowski, Van Selm, & Hollander, 2001: 113). In this sense, a residential community 'rich in social capital' shares similarities with the concept of 'community as collective'.

Second, the unique selling proposition that could give place-based information systems a competitive advantage over conventional, that is, dispersed online communities is proximity. As such, they can be an effective tool for local community engagement and community activism. Hampton (2003) describes his experience with residents in Netville who faced the prospect of losing free broadband internet access which had been provided to them free of charge. The issue and the 'common enemy', that is, the Internet Service Provider, unified residents in their quest to advocate for a continuation of the service, and the traffic in the online community network (in the form of an electronic mailing list) increased significantly. The unifying vigour of a common problem or issue can (temporarily) transform residents into a collective.

If a residential community is poor in social capital and does not face a common problem or issue, an online community network per se will not establish neighbourhood identity, because connectivity does not ensure community (Foth, 2003). The online community network might still be successful if the project plan contains preceding phases to initiate and sustain engagement and involvement of community members. Methodologies such as PAD (Foth, 2004) integrate residents in the development process of the online community network as active participants and stimulate neighbourhood identity through social and cultural events organised for residents by residents. This approach does not regard the residential community as one collective, rather, it seeks to nurture a number of small groups,

clusters and collective-like communities of interest which – combined and interconnected – support the emergence of a neighbourhood identity and a sense of belonging.

COMMUNITIES AS NETWORKS

Residents are also citizens, employees, family members, and friends who like to choose and be the operator of their own social network. A conventional online community network (read ‘collective’) cannot easily compete with the other communication assets residents have access to and use to maintain both strong and weak ties with potentially more interesting people than their neighbours.

Castells (2001) suggests that members of the network society do not just act and converse locally anymore but access and effectively use electronic devices and online applications to form new social ties beyond their traditional physical boundaries. The global dispersion and universal pervasiveness of the Internet allows them to pursue “personalised networking” (Wellman, 2001) which leads to what Castells calls a private and egocentric “portfolio of sociability” (Castells, 2001: 132).

Face-to-face interaction and electronic services such as email, mobile phones, instant messaging and SMS comprise a toolbox of peer-to-peer communication media which enable users to operate their own personal networks of kin, friends, colleagues and peers. Depending on the context and the communication partner, people select whichever tool is most appropriate. “The stronger the tie, the more media are used.” (Wellman, 2002: 18).

Conventional online community networks are usually designed to provide a main public place online such as a discussion board which implies a similar significance as the traditional market place or town square in the built environment. This is inconsistent with contemporary social behaviour of members of society. Swarms of teenagers for example use their mobile phones to arrange meeting places on the spot – this could be the local café, the shopping mall or someone’s home (Satchell, 2003). An online community network which regards residential communities as networks needs to afford personalised networking, that is, be designed to cater for and serve the needs of individual residents and their personal social ties. This would allow the online community ‘network’ to become a true network.

A new design methodology is required that allows for the diversity and individualism of residents. Such a strategy needs to be designed to (a) work towards providing easy and convenient ways for residents to identify birds of a feather, that is, to find like-minded people of their choice with common interests or support needs, and to (b) conduct personalised networking, that is, to voluntarily initiate contact and build social ties with those people. What may emerge from this process is a complex web of social networks that span the anonymous void of the building complex or suburb, a web of what Watters calls “urban tribes” (Watters, 2003). In this sense, the online community network becomes an ‘urban tribe incubator’.

A PARTICIPANT OBSERVER CASE STUDY

A short case study is presented in order to provide one rich example from which to compare the collective and networked individual view. One of the researchers participates in a local community association in a city suburb. The association has not been the subject of a formal study. The suburb is growing and is experiencing both the opportunities and the challenges of growth. Opportunities for business are expanding, roads are becoming more crowded, new housing estates are springing up and large residential blocks are being subdivided into smaller ones. There is a desire to raise money for a community hall, to welcome new residents, to introduce new residents to local businesses and to provide opportunities for social engagement.

While the community association recently formed with a general mandate to improve the well-being of residents in the area and in a bid to build social capital, participation has undoubtedly been strong because of issues that threaten the way of life in the suburb i.e. the common enemy model. While the association does have a president, it has several “subcommittees” that each address particular issues. The subcommittees are in many respects the most active part of the organisation, because they are project based in response to the criticality and timeliness of particular issues. The organisation of subcommittees is rather flexible, leadership and participation shifting according to who happens to be available, who is most impacted by the relevant issues and the particular skills that people can bring to bear. One successful subcommittee has held several community meetings with attendance of several hundred people at each one, gaining the attention and ear of relevant political leaders and the media. This subcommittee has used as its primary means of communication face-to-face meetings and a private email list of people who have attended the meetings and added their name to the list. At this

point the Community Association does not have a website, nor any kind of discussion forum or bulletin board, although some members have proposed that this would be useful. In reflecting on this group, it seems that the beauty of the private email list is that all members are committed to a cause and thus can speak and strategise freely among friends. By contrast it is doubtful that a publicly accessible discussion board would engender the same level of trust and exchange. Thus this seemingly traditional local community association has a relatively low level of hierarchical structure, a fluid leadership at the subcommittee level where most of the action takes place, allows people to participate on the basis of what they can offer and when they can offer it. While addressing issues that affect the community as a collective, it is organised as a series of personal individualised networks where people go to face-to-face meetings and get to know each other and then get joined into private email lists. The interactions have not been overtly planned in this way and they may shift in the future. This current model has emerged as a consequence of the time and skills that people have to offer, the widespread access to a particular technology (email) among members and the desire to accomplish shared objectives. Thus the community organisation does not fit the “little boxes” model but has naturally adapted to reflect the lifestyles of its members.

CONCLUSION AND OUTLOOK

The research design has been informed by the recent literature on networked individualism and by active participation in a local community. Preliminary investigations suggest that in order to begin to design to support communities one must come to:

- Understand motivations for participation;
- Understand barriers and disincentives to participation;
- Utilise technologies that allow broad access;
- Allow individuals to choose who they will address (make list memberships and other communication media transparent and tailored for the particular communication, i.e. personalised) in order to honour issues of trust, transparency and privacy;
- Understand the relationship between public and private communications.

Our research will proceed through a process of action research and participatory design as we strive to address the above issues. Participatory design takes the perspective that those who will use systems should be full participants in their design, from the perspectives of ethics, participatory democracy and pragmatics (Greenbaum and Kyng, 1991). Recognising that even collective approaches to common issues now often operate through mechanisms of networked individualism, as evidenced in the case study, we have found it helpful to think about community interaction in terms of the framework presented in Table 1.

LEVEL OF INDIVIDUALISM:	SIZE:	macroperspective (a suburb, an area, a town, a city)	← multiple ‘tribes’/ networks make up a residential community	microperspective (an apartment or townhouse complex, a street or block)
Community issues (e.g. community functions, traffic, environment, character crime, etc.)		CORE RESEARCH private networks supplemented by public displays		minor research
↑ increased network capital benefits community and civic engagement and activism				
Individual issues (e.g. personalised networking enabling sociability with neighbours of choice)		minor research		CORE RESEARCH ‘urban tribe incubator’

Table 1: Research framework to characterise community interactions

Our research into residential communities will address two areas within this framework as illustrated:

1. Supporting the activities of a suburban community that uses personal networking supplemented by public displays of some community information;
2. Supporting the activities of an urban apartment complex with new forms of personal networking – an urban tribe incubator.

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