CONNECTIVITY DOES NOT ENSURE COMMUNITY: ON SOCIAL CAPITAL, NETWORKS AND COMMUNITIES OF PLACE

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Abstract

Putnam reports a decline of social capital in society, Castells speaks of a privatisation of sociability. In this paper, I argue that, in local contexts, the internet holds the potential to grow strong communities of place which are rich in social capital. However, this potential can only be realised by online communication networks which are designed to create a sense of social ownership within the community. This paper provides the rationale for a research project currently undertaken by the author which seeks to inform the design and development of online communication networks to grow sustainable communities of place.

ONLINE COMMUNITY RESEARCH

The plethora of meanings of the concept of 'community' are hard to grasp, but the essential denominator is people who establish relations between each other out of various motivations and for various purposes. Communities open up opportunities for individuals to specialise, to contribute their specialised skills, goods, or knowledge to the community, and to access various types of specialisation that others provide. Community can also take the form of a conglomeration of members with very similar attributes for the purpose of increased security or strength. Community could be defined as a collective problem-solving, resource-sharing, interactive and distinct segment of a communicative ecology or society.

The advent of the internet and the fact that people now communicate more and more online has sparked an increased interest amongst researchers from multiple disciplines to investigate online communication networks and online communities. Yet, most of the work undertaken in this research field focuses on globally dispersed online communities and not on the use of online communication networks in communities of place, known as 'community networks'.

A community of place comprises of people who live or stay in a geographically demarcated area. Such communities are sometimes also referred to as local communities, residential communities, or physically or geographically based communities. Apart from the fact that members of a community of place share the same location or address, they are not necessarily bound by any other common characteristic, such as interest, age group, or occupation. As such, communities of place are not 'communities' a priori, in the sense of neighbourhood or *Gemeinschaft* (Tönnies, 1959). An apartment complex might comprise of tenants who do not even know each other.

In 1999, academics of various disciplines from Europe and the US came together for the first joint European Commission/ National Science Foundation Advanced Research Workshop to develop a set of cross-disciplinary recommendations for research priority areas (Brown et al., 1999) which are not only applicable in the US or European context. The report reinforces the need for research 'that will inform the design of all kinds of online communities' (Recommendation 26) as well as research 'to develop participatory, community-centered design and evaluation techniques' (Recommendation 30). It also advocates 'research funding for supporting case study and ethnographic research that will enable us to better understand the needs of […] networked communities in which online resources are integrated with physical resources to support community life' (Recommendation 33).

These recommendations are supported by the findings of Harrison & Stephen who 'urge serious and systematic involvement by academic researchers in the creation of community networks' (Harrison & Stephen, 1999, p. 235). New online community research has to step away from segregation and towards a theoretically-grounded model (Jankowski, 2003) that links the findings of *understanding* community networks back into the process of *creating* them.

Most social research into the internet in general, and online communities in particular, has not been conducted and published before the internet had been readily available in many parts of the industrialised world in the mid Nineties of the last century. It evolved from previous research and benefited from previous findings of what Jankowski (2002) calls the first (print) and second (electronic media such as radio and television) wave of community and media studies. The third wave of research focuses on the internet, its associated networks and applications, and the emerging social issues and characteristics of community media online.

One of the first prominent accounts of online communities, published by Howard Rheingold (1994), describes his experience in the WELL – 'Whole Earth 'Lectronic Link' (www.well.com) which sparked widespread commercial and academic interest in online communities. However, Rheingold's book is descriptive and speculative and lacks evaluative research. Steve Jones, founder and current president of the Association of Internet Researchers (www.aoir.org), set out to change this and put online communities onto the research agenda of many academics between 1995 and 1999 by mobilising other sociologists interested in online communities (Jones, 1999). Since then, the key prevailing research themes have been somewhat overlapping and are thus difficult to separate, but for the purpose of this paper I distinguish between

1.   research that tries to *understand* online communities, i.e. sociological and evaluative studies which are concerned with analysing the factors that shape online communication patterns and its consequences on members of the community, the community itself and society in general; and

2.   research that tries to *create* online communities, i.e. studies into the conceptualisation and design of online community networks which are concerned with issues of usability, visualisation and engagement.

Understanding online communities

We are amidst a new era which is characterised by automation, digitisation, and miniaturisation. Castells (2001a) calls it the 'Internet Galaxy' in contrast to McLuhan's (1962) 'Gutenberg Galaxy', Rifkin (2000) coins it the 'Age of Access', whereas Leadbeater (2000) christens it the 'Weightless Society'. There is no need to fall prey to the hype surrounding these developments to realise that they have the potential to spark profound change in most aspects of everyday life as outlined by Wellman & Haythornthwaite (2002).

One of the key social aspects of everyday life has traditionally been community and civic engagement, such as political participation, social activism, volunteerism, and altruism. Putnam (2000) argues with empirical research and anecdotal evidence that the spirit of community and civic engagement is declining and on the brink of collapse and that members of society have increasingly become disconnected from one another which leads to a loss of social capital. This account of society's condition is somewhat ironic in that society has never been so well connected through means of electronic links and networks. Empirical evidence to support this has been provided by various quantitative studies such as the 'Survey 2000: Charting Communities and Change' (National Geographic Society, 1999) and the Pew Internet Report (Horrigan, Rainie, & Fox, 2001). Based on this evidence, Arnold points out, 'it is clear that for the ordinary citizen, social interaction is the 'killer application' of the Internet, not retail commerce, not game playing per se, not news and information exchange per se, not pornography' (Arnold, 2003, p. 83).

It could be argued that community and social relationships are loosing importance or are

even vanishing, but only in their local appearances. In fact, Putnam acknowledges a shift in community and social relationships away from local anchors and towards the internet which has the potential to revive social capital. He rightly concludes, 'that the Internet will not *automatically* offset the decline in more conventional forms of social capital, but that it has that potential. In fact, it is hard to imagine solving our contemporary civic dilemmas without computer-mediated communication' (Putnam, 2000, p. 180).

People make use of the opportunities that the internet (Wellman & Haythornthwaite, 2002), mobile phones (Rheingold, 2002) and other electronic tools offer them which allow for a global and location-independent dispersion of everything that had traditionally substantiated what we call community. Hence, it is understandable why empirical data collected locally suggests a disappearance of community. One must look elsewhere, and that is more and more online, and one must adopt a holistic perspective taking new forms and occurrences of community and social relationships into consideration.

Yet, the question remains if today's society – even online – can still live up to the high ethical standards and values that are attributed to 'the third place' (Oldenburg, 2001). Harrison & Stephen indicate that new technology, which enables cheap and easy global communication, causes a distraction 'from the social interaction we encounter in our geographical place or community' (Harrison & Stephen, 1999, p. 221). Ongoing individualisation and the process of privatisation of leisure time – fostered by forms of electronic entertainment such as television and now the internet – have been alleged to speed up the decline of social capital in our society (Blanchard & Horan, 1998, Putnam, 2000). As well, there is the credible proposition that the declining of social capital is also triggered by a lack of media and information competence within the wider society. People cannot keep up with the rapid technological advancement of communication tools and are left behind and offline in a vacated local place. They are disconnected from the technological savvy who instead cavort in the virtual space – a development

which leads to a gaping 'digital divide' (Servon, 2002).

Optimistic and pessimistic positions have been postulated to explain the new manifestations of community and society in a networked world. Putnam's dramatic picture of a collapse of community (Putnam, 2000) can be rectified with historic reports from the past that contain similar protests and objections all the way back to ancient times (Wellman, 1979). This supports the notion that the philanthropic and altruistic view of community has always been maintained by a minority of society – it has never been a mainstream idea, and levels of civic engagement and participation remain low (National Geographic Society, 1999). Thus, Arnold rightly points out that, '[c]ommunity is dynamic, and much angst is no doubt driven by nostalgia that fails to recognize the strengths of contemporary communities and the changing forms of contemporary communities' (Arnold, 2003, p. 78).

Castells provides an excellent overview of the current status quo in this field of research (Castells, 2001b). He rejects earlier studies which claim that the widespread use of the internet led to social isolation and local disconnectedness, and he offers evidence to the contrary from various more recent studies and reports. Castells suggests that members of society do not just look locally anymore but make use of electronic tools they now have access to, in order to form new social ties beyond their traditional physical boundaries. The global dispersion and universal pervasiveness of online communication networks allow users to pursue 'personalised networking' (Wellman, 2001) which leads to what Castells calls a private and egocentric 'portfolio of sociability' (Castells, 2001b, p. 132).

Castells' account also opens up the question whether the appreciation and functioning of traditional communities of place and neighbourhoods are in fact declining because of a mere lack of appropriate information

systems and networks that support their existence and operation locally in this new era of online communication, or whether the other assets in one's portfolio of sociability are just more attractive and defeat the purpose of maintaining local ties and ultimately of finding out who is living next door.

Other research studies suggest that communities of place are still feasible and conceptually attractive if they can equitably compete with the dispersed version of online communities. Furthermore, if that is the case, communities of place online can even prevail against their virtual-only counterparts, because proximity still counts (Walmsley, 2000). The ability to combine face-to-face interaction and local activism with the individuality and flexibility of the online environment is a key advantage of community networks. In fact, a yet small but growing body of research presenting empirical evidence backs up assumptions that there is a positive symbiotic effect within the interrelationship of communities, the internet and sociability. Some of those studies include

- the Pew Internet & American Life Project (Horrigan, 2001, Horrigan et al., 2001);
- Blacksburg Electronic Village Community Surveys and Reports (Cohill & Kavanaugh, 2000, Kavanaugh, 1999, Kavanaugh & Patterson, 2002);
- Canada's wired suburb 'Netville' (Hampton & Wellman, 2000, 2002);
- the National Geographic Society's 'Survey 2000: Charting Communities and Change' (National Geographic Society, 1999);
- reports on the impact of communication technology in rural Queensland (Lennie & Hearn, 2003, Simpson, Wood, Daws, & Seinen, 2001);
- Williams Town (www.williamstownonline.net), Melbourne (Arnold, 2003).

Furthermore, both the National Office for the Information Economy (Geiselhart, 2003) and the Australian Bureau of Statistics (Australian Bureau of Statistics, 2002) recently started to take a more structured approach towards issues involving communities, civic engagement and their effect on society which is likely to result in the availability of Australia-wide empirical data in the near future. The Australian Bureau of Statistics has also launched a theme page dedicated to the discussion around social capital on their website (www.abs.gov.au). This initiative by an agency of the public sector is interesting, for it reinforces the theory of social capital mainly developed by Putnam (2000) as the dominant concept for understanding the effect of online communities on offline communities and society.

Creating online communities

Creating and designing community networks cannot be done successfully without considering the community members right from the start (Andrews, Preece, & Turoff, 2001). An increasing body of knowledge generated by practitioners and academics working in the nexus of design and systems development, deals with human-computer interface design and interaction design. Interaction design is an ambiguous term, for it is used to describe the act of designing interactive features mostly in digital media applications (Preece, Rogers, & Sharp, 2002, Shedroff, 1999) such as personalised dynamic websites which offer high levels of customisation, individualised systems feedback as well as interaction among other users of the system in order to create an experience for the user. However, the term interaction design has also been defined – particularly by Alan Cooper and his colleagues (Cooper, 1999, Cooper & Reimann, 2003) – to describe an interactive design process itself that incorporates notions of participative development, personas, scenarios and use cases, and adaptive and agile methods (Udell, 2002). These techniques seek to allow the future users of the to be developed product to participate in and influence and shape the design process. Other strategies called Design Studio Methodology (Wells & Horan, 2001) and ETHICS – Effective Technical and Human Implementation of Computer-based Systems – (Mumford, 2003) advocate similar approaches in related areas of systems design.

The idea to give end users a substantial level of power and creative responsibility is not a widely accepted procedure and has earned

criticism by some (e.g., Wagner, 2002) who argue that the lack of technical expertise and skills results in an inferior and limited product. The discussion about advantages and disadvantages is still ongoing and an agreement has yet to be reached in which areas and to what extent participative design is indeed feasible and beneficial to the end result. Yet, it is also important to keep the bigger picture in mind. A house which has been designed by the inhabitants themselves holds the potential to offer a superior level of satisfaction than its ready-made counterpart. Hence, principles of interaction design and participative development are suitable, but they have to be used with caution. The objective is to generate a sense of social ownership of the community network amongst the community and to foster acceptance and engagement.

Adaptive methods such as interaction design will also prove helpful in two other aspects which have been recognised by academics in the software requirements engineering discipline (e.g., Alexander & Stevens, 2002). It supports a holistic perspective for both communities as well as individuals. For communities, it does not just take selected community members such as the opinion leaders and their individual requirements into account, but the community as a whole. For individuals, it goes beyond conventional needs assessments (e.g., Impart Corporation, 1998) which are standard in a rushed commercial environment and which merely take explicit knowledge into account. Rather it seeks to elicit different types of tacit knowledge (Polanyi, 1966), from simple facts that were too obvious to be worth mentioning, to deeply ingrained skills that might be impossible to articulate, yet become visible through interaction.

Research into community design is necessary to explore ways of initiating and stimulating community development and community capacity building through online communication networks. An existing community of place does not necessarily possess the same characteristics as a community of interest which could be exploited to engage community members to make use of the endless possibilities the new technology offers them and to vitalise and

populate the network. Furthermore, the mere combination of a community of place that is given access to online communication networks still lacks an indispensable phase of sociocultural animation (Doneman, 2003, Flynn Thapalia, 1996, Grosjean & Ingberg, 1975) and engagement (combined with training efforts and awareness raising strategies) if it is supposed to result in a successful and sustainable community network. However, it is still common to see projects and public funding programs without any financial or conceptual investment to link the technology with the community, and to engage the community members to take up and use the network. The developer's attention has to shift from mere access to information to use of information (Menou, 2001). Otherwise these projects regularly result in sophisticated technical products, yet without a social concept it is unlikely that the community will accept them: 'If you build it, they will not necessarily come' (Maloney-Krichmar, Abras, & Preece, 2002).

There are few cross-disciplinary works that have been reported that situate themselves in-between community development theory and design for online communication networks and that take advantage of the knowledge and experience of both fields. Preece (2000) provides a thorough and theoretically-grounded overview of online community design between sociability and usability. It induces strong interest for the interrelationship between these two facets of online communication research amongst sociologists, community researchers and designers. Preece and her colleagues have also presented a preliminary framework that supports the transition from plain online connectivity to online community for 'demographic groups resistant to online community interaction' (Andrews et al., 2001). Another study reports on a master planned community that nevertheless initially failed to attract a critical mass of users (Maloney-Krichmar et al., 2002). The findings of Preece and her colleagues are of particular value to avoid conceptual mistakes and to inform the community design process.

There are a few studies available that look at communities of place under the aspect of community design (e.g., Arnold, 2003, Cohill

Systems Design	Community Design
participative design	sociocultural animation
creating the network	populating the network
access to information	use of information
usability	sociability
human-computer interface	human-human/ social ties

Table 1. Systems Design vs Community Design

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& Kavanaugh, 2000, Jankowski, Van Selm, & Hollander, 2001). However, none of these studies really focus on community design during the development and rollout stages of the online communication network which would include aspects of systems design, sociocultural animation, and engagement. Rather, they investigate and evaluate the characteristics of the community before and after the community is given access to online communication networks with the rationale of

informing community media theory and social policy making.

This gap in the field of online community research establishes the need to combine systems design theory with community design and development theory into one holistic design methodology. Such a methodology holds the potential for synergy effects between these two disciplines and is able to inform the development of community networks. Utilising and acting upon the main concepts of each theory as in Table 1, helps ensure that community projects applying the proposed design methodology will not only create an online communication network, but also work to increase social capital and grow social networks in the offline community.The underpinning framework revolves around the concept of social capital (Putnam, 2000) in that it argues that approaching the design process of community networks from both an online and offline perspective will result in an increase of social capital in the community (Blanchard & Horan, 1998, Simpson et al., 2001). More specifically, I propose that it is the introduction of the currently missing participative element into the design process which can activate and increase social capital by

- building trust amongst community members,
- introducing, strengthening and confirming (mostly unwritten) social policies and norms, and sharing personal acts of reciprocity,
- creating social networks (online and offline).

A community of place is limited in its primary definition and identity to a location, address or physical place which is not sufficient to hold residents together in order to form an actual 'Gemeinschaft' (Tönnies, 1959). This is why the key goal of the participative design process is to facilitate the creation of social capital and especially the formation of smaller clusters based on interest or support which are embedded within the larger community of place in order to stabilise and hold it together. Jankowski and his colleagues observe 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 et al., 2001, p. 113). Thus, the combination and interrelation of building an online communication network while undertaking efforts to increase social capital is a way to take advantage of the synergy effects that emerge from working on both the online and offline fronts.

CONCLUSION

Communication research is more and more shifting towards the online sphere. This development has been widely recognised and led to a tension in the field between those who mourn the disappearance of traditional forms of community and those who acknowledge the potential that online communication offers. Yet, if the potential of the internet cannot be realised automatically, then how can it be realised?

The findings of this paper establish the framework and rationale for a study currently undertaken by the author which seeks to answer this question. Using ethnographic action research (Hearn & Foth, forthcoming, Tacchi, Slater, & Hearn, 2003), the study will investigate and apply principles of participative design and sociocultural animation in order to formulate a design methodology which will guide the development of online communication networks to grow sustainable communities of place.

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