

e-social capital: Building community through electronic networks

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Technology is often viewed as a source of separation between people, a barrier. No longer do we meet in person, but we talk on the phone. We watch performances on television, we fax each other, and we communicate using computer modems hooked up over telephone lines.

Argyle and Shields, 1996: 58

Introduction

Despite the extensive rhetoric of governments, business and the not for profit sector regarding “community”, “community development” and “community well being”, there is little consensus about what “community” really means, let alone how it might be examined and assessed. Talking about electronic communities or online communities merely adds another layer of complexity to the issue. This paper sets out to examine some of the elements which make up community and communities, and assess the potential for new electronic media to contribute to the health and well being of social groups. We draw on the concept of social capital as a way of thinking about the complex interaction of elements which contribute to the functioning of communities, and explore some implications for the communities which occupy cyberspace.

Social capital

In her 1995 Boyer lecture, Eva Cox stated that “social capital should be the pre-eminent and most valued form of capital as it provides the basis on which we build a truly civil society.” (Cox 1995: 17). Cox’s contention was that in an age of economic rationalism, the value of a civil society and of the social strengths which underlie such a society tend to take a back seat in political discourse. Nevertheless, researchers perceive an important relationship between stores of social capital and positive outcomes for health (House *et al* 1988; Baum, 1999) education (Coleman 1988; Teachman *et al* 1997), effective governance (Putnam *et al* 1993), sustainable development (World Bank 1999), economic growth (Knack and Keefer 1997) and human wellbeing (Bullen and Onyx 1999; World Bank 1998).

Social researchers have recently begun investigating holdings of social capital in diverse communities both in Australia and around the world. They have often used Robert Putnam's concept of social capital as a starting point, the notion of social capital as the "features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives." (Putnam 1995: 67). By this is meant the invisible bonds which connect people into smaller and larger social groups and allow people to work together cooperatively, for the good of the group rather than the benefit of the individual. An example of social capital in this instance may be the willingness of a parent to attend their child's school council meetings and contribute to decision making about the future running of the school. Such intangible features of social life are easy to describe, but harder to measure.

The measurement of social capital and its use as an analytical tool for assessing the effectiveness of development programs in education, health, civics and economics depends on many factors: the relationships we choose to consider (family, neighbourhood, region, nation); the heterogeneous or homogeneous nature of the subject group; the role of informal as well as formal networks; and the nature of horizontal and vertical divisions within society. It is a useful framework for understanding community health and well being and for assessing the effectiveness of community development or community building strategies. Such communities includes virtual or networked communities, as well as more traditional face to face communities.

We can make a useful distinction between two sorts of social capital: resources of 'bridging' capital (or weak ties between numerous people), and 'bonding' capital (or strong ties within small groups). Whereas small, tightly knit groups may function well and assist their own members with practical, emotional and financial aid, they may also be exclusive or even hostile towards perceived outsiders. On the other hand, where groups are more loosely connected and overlapping, bridging social capital may be of little value on a day to day level, but come into play when a member requires resources which are beyond his or her immediate social circle's ability to provide (Granovetter, 1973). The distinction between these two dimensions of social capital is an important one in the context of electronic communities. At first glance, online relationships would seem more likely to contribute to the relatively weak ties that constitute 'bridging' capital than to the strong, multifaceted, and highly personal relationships which underpin 'bonding' capital. But they may also contribute to

bonding capital, not only in situations where families and communities are divided by distance, but also when particular media, for instance instant messaging, make a useful and economical addition to people's existing repertoire of communications channels.

Recent analysis builds on this basic distinction and provides a broader typology of social capital (Woolcock (1998). Social capital can be located along the axes of embeddedness (bonding) and autonomy (bridging) at micro (informal) and macro (formal) levels. Figure 1 illustrates this matrix.

Figure 1. Social capital: Woolcock's typology

| | Micro | Macro |
|---------------------|--|---|
| Autonomy | Linkage (extra-community networks, or bridging capital) | Organisational Integrity (institutional coherence) |
| Embeddedness | Integration (intra-community ties, or bonding capital) | Synergy (State-society relations) |

Woolcock, 1998: 168

The assumption here is that social relationships need to balance each of these elements. For example, embeddedness is good, but not at the expense of autonomy (individuals should be supported in their local communities, but not restricted from venturing beyond the immediate group as and when required). The problem remains as to where such a balance can be found, but the value of this framework is that it enables us to see social capital as something to be optimised through a balance of relationships (Woolcock 1998: 158), rather than something to be maximised, as so many other writers have argued (for example, Putnam; Cox). More is not necessarily better. Indeed, some of the relationships captured by these categories can be destructive of other social resources. Using this model also avoids the problem of having to locate social capital in particular and exclusive levels, such as family or neighbourhood or society, but rather focuses on the relationships between the individual and the progressively wider social circles in which he or she is located.

Most research which is carried out in the Australian context tends to focus on the micro level, looking at informal, local levels of interaction, rather than the macro level, which examines social relationships in the formal, institutional realm.

The Reach for the Clouds Project: complex community building

The Institute for Social Research has recently commenced a study investigating the benefits of a computer network for a diverse community whose members have not previously had much access to ICTs. The Reach for the Clouds project is an initiative of the InfoXchange, a Melbourne based not-for-profit organisation. The project offers free personal computers to the residents of a high rise, inner urban public housing estate, as well as access to a local network and the Internet. The eventual aim is to build skills and capacities on the estate to the point where the local network is community-operated and managed.

The Atherton Gardens estate was constructed in the early 1970s as an exercise in slum clearance. More than half of the current tenants were born in Asia (64%), predominantly Vietnam. Other well established ethnic groups include Slavic, Turkish, and Chinese, while newer communities are arriving from the Middle East and East Africa. In contrast, only 14% of residents were born in Australia. Less than 40% of residents have nominated English as their preferred language of communication with the Office of Housing (McNelis and Reynolds 2001 p. 15). The cultural diversity of the residents reflects urban Australia's recent history of migration. The communities present on the estate can be seen as elements of other communities, now separated by time and space, but connected through culture, language and memory.

A pattern of disadvantage also characterises this community. The residents are generally on very low incomes, with 80% receiving some form of income support from the Government and only 20% having private or other income sources. Weekly incomes vary from \$150 to \$399 per week. Problems around the estate include a flourishing and visible drug trade, graffiti and vandalism of public areas and fear of personal violence.

In the light of all these factors, we think of Atherton Gardens as a 'complex community', connected by the architecture of the estate and the burden of shared

problems, divided by experience, language and ethnicity, and joined by history and communications to numerous other, otherwise remote communities.

The Reach for the Clouds project aims to deliver a range of benefits for the residents: enhanced communication between the diverse groups on the estate, increased opportunities for individuals to improve their IT skills, better access to information and communication channels, and greater civic, political and economic participation. As researchers, we are attempting to trace these uses of the network to evaluate its effects on the health of the community, using the concept of social capital. We can see that some sections of the estate population are closely knit within language and sometimes gender lines: they have high levels of bonding capital. It is also clear that bridging capital is low, with major fault lines along language divides, and limited communication between individuals belonging to different groups (Hopkins, forthcoming).

We are still in the process of gauging the resources of social capital existing on the estate, but we do have some idea of the diversity of the social resources there, good and bad, as well as the deficiencies. Mapping examples of these Atherton Gardens resources onto Woolcock's matrix looks something like this:

Figure 2. The matrix of social capital at Atherton Gardens: examples

| | Micro | Macro |
|---------------------|--|--|
| Autonomy | Community gardening. Sausage sizzles. JSS-organised excursions. Community art projects. | Residents' Association. |
| Embeddedness | Shared meals, shopping trips. | Language and ethnicity-based groups and associations |

From offline communities to online communities

Assessing the health of online communities is a very different proposition from assessing community health using traditional indicators. As a tool for expediting communication and information flows between individuals and groups, ICTs perform a similar function to other kinds of human interaction, but in very different ways. It is essential for our understanding of the impacts of new technologies that there are appropriate models in place to aid in the assessment of such fuzzy concepts as 'community', 'connectivity', and 'social networks'. Analysis of the existence and functioning of interpersonal relationships both in the real world and in cyberspace are crucial, and in particular the differences which might exist between such relationships as they are traditionally understood to function and as they have evolved and continue to evolve on the screen and over the airwaves. Using social capital to assess online community health is one way of addressing this complexity.

Why does it matter what the social effects of Internet connectivity are? In part it matters because the growth in network computing is occurring in a policy vacuum. And in part it matters because governments, companies and private consortia are putting large amounts of money into the provisions of computing hardware and software to increase public access to the Internet and World Wide Web, as well as to increase the level of computing skills in non-networked applications in the wider community.

The Reach for the Clouds project is an example of a public-private partnership working together to increase the access of a low-income, socially-disadvantaged community to ICTs. Whilst the provision of computers, software and appropriate training can be seen as beneficial for such a community in terms of increasing skills which might lead to greater opportunities for economic participation, there is also a strong sense that networking computers across the 800 dwellings which make up the estate will somehow contribute to the strengthening of real world community bonds and social networks. The task of plugging households in is only the first step in the creation of online communities, leading to the larger challenges of building literate, creative and civic skills, assisting marginalised communities to find the content that they need online, to generate content of their own, and to seek employment in the new economy (Digital Divide Network 2000).

Online communities

Discussions about online communities tend to relate to two distinct entities. One is the interactive community of interest, usually taking the form of a chat system, newsgroup or bulletin board. These communities generally take the form of a multi-stranded dialogue between participants around a particular theme or interest, be that music, health, politics, television programmes or personal relationships.

Cyberspace does allow users to overcome place based limitations to communication. Stamp collectors, organic gardeners and knitting enthusiasts in Australia can exchange news, gossip and items of interest with similar enthusiasts in Mexico and Mauritius. Internet dating services lead to relationships and marriages in the real world (Wellman, Salaff, et al. 1996: 7). "Some scholars argue that the Internet is causing people to become socially isolated and cut off from genuine social relationships, as they hunker alone over their terminals or communicate with anonymous strangers through a socially impoverished medium.... Others argue that the Internet leads to more and better social relationships by freeing people from the constraints of geography or isolation brought on by stigma, illness or schedule. According to them, the Internet allows people to join groups on the basis of common interests rather than convenience" (Kraut *et al*, 1998: 1017).

But is communication the same as community? And are shared online activities constitutive of community in the absence of a localised geographic dimension? Is a community of location the same as a community of interest, or as Galston says, are online communities just 'fan clubs' (Galston, 1999: 3) or social venues? The classic sociological definitions of community involve groups which have more than just a single strand of interest to bind members, but consist of a network of people linked by a shared set of interests and concerns (Bender, 1982, cited in Galston, 1999: 8). For anthropologists, the boundaries, both symbolic and real, which are constructed to define communities are highly significant.

In popular understanding, the notion of community usually translates to a geographically co-located group who utilise shared facilities (schools, hospitals, parks), participate in the same political process (local council area) and who share an interest in local issues and amenities. Thus the community of a single suburb may share concerns around local council decisions on planning, whereas the Australian community as a whole shares concern for issues of national importance.

Communities can exist at different scales and are not mutually exclusive (Bryson and Mowbray, 1981: 262). The idea of the online community network embedded in place is exemplified by America's Blacksburg Electronic Village. This type of community network is not confined to a single issue or limited range of interests, but instead replicates the on-the-ground make-up of local communities, conveying information about local facilities, local issues and local events.

The problem with applying this model directly to Atherton Gardens stems from the complexity of the Atherton Gardens community: its links with other places and other societies, the way it recombines in one place fragments of many places. But in our view this complexity points to some of the potential benefits of the computer network, which will combine the capacity for long distance communication with an emphasis on local information.

The impact of online communities on offline communities

Two arguments about the effects of online communities are familiar: one positing that computers lead to social isolation and reduced psychological well-being, the other suggesting that online interaction contributes to social connectedness in the real world. Yet comparatively little empirical evidence has been produced to support either argument, suggesting as much as anything that the situation is more complex than this simple dichotomy would allow.

Online connectivity is not the same as offline connectivity. Unless a computer user is communicating with someone that he or she already knows from face to face contact, the relationship does not function in the same way as a real world relationship does. Issues of identity, trust, honesty and responsibility can be subverted in an online environment where, as one cartoon puts it: "nobody knows you're a dog."

Anonymous or pseudonymous communication allows a sender to deny or evade responsibility for the outcomes of their actions, hence the proliferation of anti-social content in web pages, email messages, bulletin boards and the like.

Some research has demonstrated that access to computers and online communications don't lead to social connectedness and can in fact have negative consequences for social capital and community development. One study of social connectivity in internet users found that "greater use of the Internet was associated

with declines in participants' communication with family members in the household, declines in the size of their social circle, and increases in their depression and loneliness." (Kraut *et al*, 1998: 1017). Furthermore, "the most important finding is that greater use of the Internet was associated with subsequent declines in family communication" and "the evidence is strong that using the Internet caused declines in social participation and psychological well-being within this sample" (pp. 1025, 1029).

A different study was conducted in South Australia back in 1995-6, when the City of Salisbury in Adelaide received a grant to study the impact of access to ICTs by 20 residents with a range of disabilities. The study was evaluating impacts on " 'social participation', 'access to information', 'family relationships' and 'personal well being' ". The computers were "extensively and enthusiastically utilised", and participants reported improvements in the above fields, but an anticipated benefit of mutual support between participants failed to materialise.

In contrast, a similar project run in the same local government area at roughly the same time, providing computers and internet access to a group of home based carers found that "[t]he support group that developed was significant in enhancing social inclusion for participants. Group cohesion occurred quickly due to the common experience of caring shared by participants. This contrasted to.... [the project discussed above], a similar mini-net comprising of [sic] people with a range of disabilities in which the support group element did not fully develop."

One explanation for these different results is that the pre-existing role of being a carer enabled the carers to quickly form bonds which the group with diverse experiences of disability (physical, sensory, intellectual and psychiatric) did not. The communication technology facilitated online and offline formation of a supportive community of interest among people who already shared a strong interest. It was less successful for the group with little in common other than a general experience of living with a disability.

The lesson here for the Atherton Gardens project may be that we cannot expect the network to 'fill in the social capital gaps' in a simple way. Instead it is likely to be used most initially as an adaptation of existing channels of communication, in the areas of the social capital matrix which are already well developed. It is too early to know. Figure 3 sets out some potential uses, using our now-familiar matrix.

Figure 3. A matrix of networked social capital at Atherton Gardens: examples

| | Micro | Macro |
|---------------------|---|--|
| Autonomy | Atherton Gardens newsgroups, web pages, email lists. Online games. | The Atherton Gardens Network: Management, operation and organisation. Online employment and educational services. |
| Embeddedness | Instant messaging. Email. Family home pages. | Language and ethnicity-based newsgroups, web pages. Online community services, government information. |

Conclusion

'Community' and 'social capital' are now key terms in Australian social policy as elsewhere. Each of these terms is also slippery for service providers and for funding agencies, given that it can be difficult to specify observable outcomes from investment. But from a research perspective, one of the most interesting aspects of Reach for the Clouds is its potential to test the propositions that computer networks can promote participation in local communities; that participation will build community; and that these outcomes can be monitored and described as 'social capital'. In this respect, the project marks a point of departure from much of the social capital and community-building literature, which sees electronic communications as antipathetic to the resources generated by human contact and collective experience (cf. Nie and Erbring 2000, Doheny-Farina 1996, Stoll 1995, Rheingold 1994).

It is to be expected that complex and unanticipated uses of the hardware and the network will emerge amongst this diverse and fragmented group of residents. Tracking such uses and their flow on effects will form the basis for much of the ongoing research project and monitoring of effects both on individual users and on

the resident population as a whole will be a major challenge in completing an effective evaluation of this unique community network.

References

- Argyle, K. and Shields, R. 1996 'Is there a body in the Net?', in Shields, R. (ed.) *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, Sage, London. pp. 58-69
- Baum, F. Keynote presentation on social capital and health: Implications for health in rural Australia (<http://www.ruralhealth.org.au/fifthconf/baumpaper.htm>) (accessed Aug. 2001).
- Bender, T. 1982 *Community and Social Change in America*, Johns Hopkins University Press, Baltimore
- Bryson, L. and Mowbray, M. 1981 "'Community': The spray-on solution" *Australian Journal of Social Issues*, 16, 4: 255-267
- Bullen, P. and Onyx, J. 1999 Social capital: Family support services and neighbourhood and community centres in NSW (www.mapl.com.au/A12.htm) (accessed June 2001).
- Coleman, J. S. 1988 'Social capital in the creation of human capital', *American Journal of Sociology*, 94 (suppl.), S95-S120.
- Cox, E. 1995 *A Truly Civil Society*, ABC Books, Sydney.
- Digital Divide Network Content and the digital divide: What do people want? (<http://www.digitaldividenetwork.org/content/stories/index.cfm?key=14>) (accessed Aug. 2001).
- Doheny-Farina, S. 1996 *The Wired Neighborhood*, Yale University Press, New Haven, Connecticut.
- Galston, W. A. 1999 Does the Internet Strengthen Community? (http://www.puaf.umd.edu/IPPP/fall1999/internet_community.htm) (accessed Jan. 2002).
- Granovetter, M. 1973 'The strength of weak ties', *American Journal of Sociology*, 78, 6: 1360-1380.
- Hopkins, L. forthcoming 'Social capital in multiethnic communities: A case study from three inner urban high rise public housing estates'.
- House, J. S., Landis, K. R. and Umberson, D. 1988 'Social relationships and health', *Science*, 241, 4865: 540-545.
- Knack, S. and Keefer, P. 1997 'Does social capital have an economic payoff? A cross-country investigation.', *Quarterly Journal of Economics*, 112, 4: 1251-1288.

- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T. and Scherlis, W. September 1998 'Internet paradox: A social technology that reduces social involvement and psychological well-being?', *American Psychologist*, 53, 9: 1017-1031.
- McNelis, S. and Reynolds, A. 2001 *Creating Better Futures for Residents of High-Rise Public Housing in Melbourne*, Ecumenical Housing Inc., Melbourne.
- Nie, N. and Erbring, L. 2000 Internet and society: A preliminary report (http://www.stanford.edu/group/siqss/Press_Release/Preliminary_Report-4-21.pdf) (accessed Oct. 2001).
- Putnam, R. 1995b 'Tuning in, tuning out: The strange disappearance of social capital in America', *Political Science and Politics*, 28, 4: 664-683.
- Putnam, R., Leonardi, R. and Nanetti, R. 1993 *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, Princeton NJ.
- Rheingold, H. 1994 *The Virtual Community: Finding Connection in a Computerised World*, Secker & Walburg, London.
- Stoll, C. 1995 *Silicon Snake Oil: Second Thoughts on the Information Highway*, Macmillan, London.
- Teachman, J. D., Paasch, K. and Carver, K. 1997 'Social capital and the generation of human capital', *Social Forces*, 75, 4: 1343-1360.
- Wellman, B., Salaff, J., Dimitrova, D. and Garton, L. 1996 'Computer networks as social networks: Collaborative work, telework, and virtual community ', *Annual Review of Sociology*, 22, 213-238.
- Woolcock, M. 1998 'Social capital and economic development: Towards a theoretical synthesis and policy framework', *Theory and Society*, 27, 2: 151-208.
- The World Bank 1998 The initiative on defining, monitoring and measuring social capital. (<http://www.worldbank.org/poverty/scapital/wkrppr/sciwp1.pdf>) (accessed July 2001).
- The World Bank 1999 Social intermediation study field research guide: Exploring the relationship between social capital and microfinance (<http://www.worldbank.org/poverty/scapital/library/fieldguide.pdf>) (accessed July 2001).