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**Playing on the Edge:
Facilitating the Emergence of a Local Digital Grassroots**

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This paper describes the first phase of the Emergent Digital Grassroots eXpo (edgeX) project – a research and application project centred on mapping grassroots and amateur content creation, community engagement with new media, and strengthening local identity. Developed in conjunction with the City Council of Ipswich, a city of some 150,000 residents in regional Queensland, the edgeX project provides a site for local residents to upload creative content, to participate in competitions, to comment on each other's work, and to develop new skills. Research goals associated with edgeX arise from a broader project of mapping the creative industries and their role in the knowledge economy, and a growing understanding of the significant part user-led content creation plays in these processes, especially including the role of amateur creatives.

There has been little research to date into the potential of emerging amateur content creation to generate local content. Growth of information technology far outstrips our understanding of its role in social, behavioural, and organizational dimensions of knowledge creation and use. To develop effective information policy in conjunction with cultural and community planning, we need to understand the relationships among the social and material bases of knowledge work and communities, and information practices, artefacts, systems, and institutions (Peterson Bishop, et. al., 2003). The research project directly addresses these relationships, providing quantitative and qualitative data on grassroots content (co)creation and consumption, through competition events (modelled on 'Expos'), through

mapping and recording user activities, and through ethnographic research into participants and their practices.

The project addresses Ipswich City Council objectives relating to cultural development and community building through its examination of new forms of community engagement around grassroots content development and broadband participation. Widespread concerns about declining forms of community and participation (Putnam, 1996, 2000) have been debated by researchers who argue that such assessments are misguided, 'measuring old forms of community and participation, while new forms of communication and organization underneath ... [the] radar are connecting people' (Wellman et al., 2002), particularly online forms such as email, chat, blogs, wikis, online games, and other participatory environments (Kraut et al., 1998; Bruns, 2005, 2008; Nguyen, 2003; Humphreys, 2005; Jenkins, 2006). Results from studies of Internet consumption indicate that 'the observed decline (in traditional forms of community participation) has not led to social isolation, but to community becoming embedded in social networks rather than groups, and a movement of community relationships from easily observed public spaces to less accessible private homes' (Wellman et al., 2002; Wellman, 1999, 2001; Wuthnow, 1991, 1998; Guest & Wierzbicki, 1999; Lin, 2001). It has been argued that "as the Internet is incorporated into the routine practices of everyday life, social capital is becoming augmented and more geographically dispersed" (Wellman et al., 2002). Community engagement can be enhanced as the Internet provides "opportunities for people to bond, create joint accomplishments, and collectively articulate their demands" (Curtis, Baer & Grabb, 2001; Eckstein, 2001; Schofer & Fourcade-Gourinchas, 2001).

One of the key areas the edgeX project is exploring is whether people's sense of local, *geographic* community can be strengthened and enhanced through the use of Internet technologies focussed on local issues. Thus while the Internet has proved beyond doubt its capacity to connect and grow communities of interest, we are interested to see whether the creation and

sharing of local content in a broadband environment by local amateur practitioners can enhance a location-based sense of identity and community.

Recent years have seen a rapid rise in the use of inherently collaborative spaces; a Pew Internet & American Life Project report found that blog readership has shot up by almost 60% during 2004 alone (Rainie, 2005), and similarly speedy uptake of new forms of content co-creation can also be observed in the emergence of the *Wikipedia* as a multi-lingual repository of knowledge and information, in the growth of *Flickr*, *YouTube*, and other spaces for the sharing of creative works, and in the development of *Second Life* as a popular and widely shared virtual environment. Such collaborative content creation points to wider trends towards a fundamental shift in the patterns of production and consumption – rather than constituting merely passive content audiences online, Internet users are now actively involved in the collaborative production of content and are becoming ‘producers’ (Bruns, 2005, 2007a/b, 2008; and *International Journal of Cultural Studies* 7.1, 2004).

The Missing Grassroots

Such spaces are also of increasing economic importance, as the US\$1.65 billion purchase of *YouTube* by Google, as well as a number of studies examining the in-space economies of *Second Life*, *EverQuest* (Castronova, 2001), and other multi-user worlds, clearly indicate. This, then, points to a question of whether and how the development of such environments for the collaborative creation and sharing of media content may need to be supported by government policy – that is, what, if any, contribution such spaces may be able to make to the overall creative industries sector that has recently been identified as an important driver of the economic development of post-industrial societies (Hartley, 2005, Cunningham, 2006). The generation of content by users acting as producers is an act of value creation in its own right, even if few avenues for the direct commercial exploitation of such value exist at present (as content is often shared freely under creative commons and similar licences); additionally, such produsage also contributes to

developing participants' skills and capacities as they may be utilised in paid employment in media and related creative industries fields.

While Leadbeater and Oakley (1999) identify the 'missing middle' in content creation policy, (pointing to the significance of the independent *commercial* production sector in the creative industries), then the edgeX project extends their premise to highlight the 'missing grassroots', an even less visible layer within the under-researched independent creative industries sector. There is an increasingly vibrant community of DIY or 'grassroots' practitioners in the creative industries that are making important and innovative contributions in online environments (Benkler, 2006). Many of the most creative spaces on the Internet generate innovative content and enterprises that relate to 'grassroots' production, evaluation and exchange of content (Meikle, 2002). *Wikipedia*, *YouTube* and *Flickr*, open source software development, blogs and citizen journalism, manga and fan fiction, music subcultures, and games development are all examples of user-led content creation sites (Postigo, 2003; Herz, 2002; Humphreys, 2005, Banks and Humphreys, forthcoming; Bruns, 2005, 2008; Jenkins, 2006).

Indeed, partly due to these efforts, grassroots practitioners constitute the fastest growing, yet highly informal, sector of the creative industries. While they typically operate as non-commercial content producers, they are embedded in highly evolved local, social, and informational networks. With appropriate support through training institutions, government policy, and other mechanisms, there is great potential to help such non-commercial practitioners move into more commercial industry environments if appropriate pathways can be identified. Leadbeater and Miller (2004) have introduced the term 'Pro-Am' to describe this point of crossover.

The edgeX project seeks both to map some of the grassroots networks generated in online creative spaces, and to foster pathways into industry environments for users with such ambitions, by providing a central space for the development, exhibition, sharing and exchange of content created by

grassroots creative practitioners in the Ipswich area, and through the use of a competition structure to focus their efforts. Competitions held on the site will be judged by professionals recruited from relevant industries, and it is hoped that the exposure given to artists' work through this process will act as a promotional tool launching them into professional careers.

Policy Context

While access to local information and content is important and attractive to Internet users and potential users, the online media content delivered to audiences in Australia does not reflect the cultural diversity and local concerns of its people, particularly in regional areas. Further, there is widespread concern about the lack of local media content in Australia, particularly in regional areas. It is feared by many Australian producers that The Free Trade Agreement with the USA will further erode local content regulations. Traditional media models of content production (high cost, 'one-off' productions) are unsustainable, and in many cases unsuitable, for online distribution and participatory environments. 'In-house' production costs are unviable, as media audiences become more fragmented, calling for new modes of generating highly targeted content (reality television, talent competition formats, and cross platform content) (Ferrier, 2000, 2002). Cutler points out that 'the scale of investment in innovation in and through digital content appears significantly underweight relative to the funding of other industries. Given the growing economic importance of the creative industries, increased investment in innovation through digital content initiatives is key to capturing future national benefits' (Cutler, 2003: 59). He also notes that "the leading edge activities within digital content industries function as the research and development for the content industries at large. The interface of creative industries with the cultural and not-for-profit sectors appears to be an important factor in creating economic multipliers" and that "digital content production appears to thrive where there are strong informal people networks and where not-for-profit organisations provide inclusive and stimulating meeting places" (Cutler, 2002:69). The edgeX site and competitions provide

that meeting place which offers a space for grassroots content research and development and an entry point for innovative content producers into the for-profit sector of the creative industries.

The edgeX Project

The project is jointly funded through the Australian Research Council (ARC), Queensland University of Technology (QUT), the University of Queensland UQ), and the Ipswich City Council (ICC). For the ICC the interest is in both community engagement and in developing further potential for e-government and service delivery to operate through broadband environments. The uptake of broadband is an important part of being able to shift some of its services online. ICC has a history of innovative development strategies with new media; it backed an ISP (Global Info Links) to provide services to Ipswich in the very early days of the internet in Australia, and Global Arts Link, which sought to develop and display creative work online. ICC also supported the development of SeniorNet, a group of older residents who train each other in using new media technologies. These are ongoing infrastructure and community support programs that have sought to foster new media literacies and widespread community engagement with the internet.

Ipswich is a small city 45 minutes' drive west of Brisbane, the capital and largest city in Queensland. Ipswich has a population of about 150,000, comprised of a diverse range of ethnic communities, and of working class and working poor or welfare-dependent people as well as some newer and more affluent developments. From a long history as a mining town, Ipswich has slid into a less viable economic position, and has had its fair share of social problems as a result.


The initial stage of the edgeX project has involved the development of the Website which allows for the uploading of content in many formats – it combines the functionality of a *YouTube*-style video site, a *Flickr*-style photo site, and of blogs and podcasting, in one environment. The site provides commenting, rating, and tagging functionality, allows the development of

specific user groups with their own self-moderation structures, and contains a competition space as a central feature. An important feature of this multi-media content sharing system is that it is designed to enable its users to communicate not only through text-based interaction, but directly through the content uploaded to the site; by employing a range of creative commons licences alongside standard copyright and public domain licences, it also encourages users to modify and ‘mash up’ one another’s contributions, thereby ideally creating a continuous stream of content evolving over time in the hands of a varied community of participants.

Ipswich Photography Group [Join | Apply to join | Cancel membership]


This group collects images of Ipswich. [Information on moderation process, and other background information.]

Content posted to the group: sort by [title](#) | [date](#) ^ | [author](#) | [rating](#) | [age classification](#) | ...
 Show [threaded](#) / [plain list](#) active filters: rating ●○○○○ or better; posted after 20 Feb. 2006 [[change](#)]
 Show [thumbnails](#) / [full content](#)




Ipswich by Night, by [Sal Humphreys](#) (posted 3 Mar. 2006) ●●●○○ (14 votes)
[still photo](#), [G \(all ages\)](#), [Creative Commons BY-NC-SA](#) beautiful (4 votes), nice (3 votes)
 tagged [Ipswich](#), [night](#), [cars](#)

Main St by night: the lure of neon, the revving of engines, the colourful nightlife...



Ipswich by Day, by [Jo Tacchi](#) (posted 1 Mar. 2006) ●●○○○ (19 votes)
[still photo](#), [G \(all ages\)](#), [Creative Commons BY-NC-SA](#) nice (3 votes), so-so (5 votes)
 tagged [Ipswich](#), [day](#), [cars](#)

This is a photoshopped version of [Liz Ferrier's Cars on Main St](#) – I increased... [[read more](#)]



Cars on Main St, by [Liz Ferrier](#) (posted 27 Feb. 2006) ●●●●○ (23 votes)
[still photo](#), [G \(all ages\)](#), [Creative Commons BY-NC-SA](#) nice (5 votes), good (8 votes)
 tagged [cars](#)

Just a quick snapshot of the main street at the height of rush hour... [[read more](#)]

Ipswich Trains, by [Axel Bruns](#) (posted 23 Feb. 2006) ●○○○○ (23 votes) | nice (2 votes), boring (7 votes)
[still photo](#), [MA \(15+\)](#), [Copyright](#) tagged [Ipswich](#), [trains](#), [tracks](#)
 Impressions from my visit to the Train Museum. I just love trains. When I was a kid I wanted... [[read more](#)]

Buses, by [Dave Rooney](#) (posted 21 Feb. 2006) ●●●○○ (30 votes) | excellent (5 votes), nice (10 votes)
[still photo](#), [PG \(10+\)](#), [public domain](#) tagged [Ipswich](#), [buses](#), [transport](#)
 Ipswich buses have operated for over 70 years now – and some of them feel like they're still the... [[read more](#)]

1 | [2](#) | [3](#) | [4](#) >> [next page](#) >> [last page](#)

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Fig. 1: Excerpt from edgeX Website specifications, showing threaded multimedia discussions on the site

Locally-based aspects of the edgeX project are also reflected in a strong focus of the site on browsing and accessing content through geographic or quasi-geographic features of the site. So, for example, through integration

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with Google Maps, edgeX provides users with the opportunity to geo-tag their contributions on a map of Ipswich, allowing others to browse all site content (or subsets of all content as filtered by tags, topics, media forms, and other factors) through a map interface. Further functionality to be developed will also allow access through a quasi-geographic representation of the tag clouds describing content uploaded to the site; similarly, access to the various user groups existing on the site will also be possible through a quasi-geographic interface which places each group's space as a pavilion on the fictional expo grounds of Ipswich edgeX.

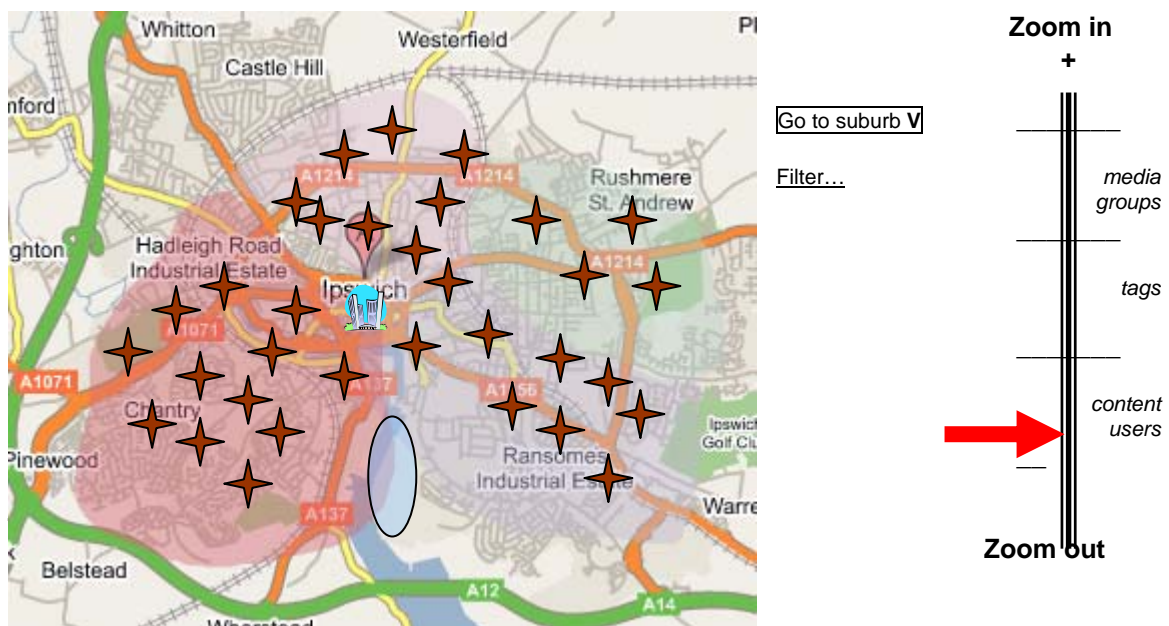


Fig. 2: Excerpt from edgeX Website specifications, showing the geographical interface for accessing content (here using a map of Ipswich, UK, for demonstration purposes)

The content management system supporting the site is designed to track such user interaction with the site and its contents, and these data can be analysed using a variety of tools, supporting the diverse research interests of the seven researchers involved.

In addition to such online engagement, the project considers face-to-face contact with community groups on an ongoing basis to be an essential part of generating the critical mass needed for the site to become self-sustaining. Knowing that a “build it and they will come” attitude will fail, contact with a

wide variety of community groups has been made, and they will be offered training workshops and help to familiarise them with the site, as well as ongoing support. Using an ethnographic action research model (Tacchi, 2003) the ongoing needs of the groups will be assessed through consultation throughout the life of the project, and the site adapted wherever possible to meet those needs. A questionnaire assessing participants' current media use habits is filled out on initial contact with groups. Field workers carry out ethnographic observation and keep field notes. The project will evolve using both the observations and consultations with groups and individuals offline, and interactions online through the site. Targeted interviews and focus groups will be conducted during the life of the project, both to gather data and to shape the ongoing development of the site.

The enthusiasm for the project evinced from local people has been very encouraging in the initial stages. The SeniorNet group have been focused mostly on computer skills, less on Internet-based skills. The enthusiasm for gaining skills in this area is high. SeniorNet is a group with whom project members can work to train trainers: they have a training room that is accessible, in the centre of town, and equipped with ten computers and a data projector for the specific purpose of training. Once we have trained the initial group, they will train their members. This viral structure for getting the site known and used is ideal for the purposes of edgeX. Other groups, with a less established focus on training and computing, require more support. We have established links with the youth network group LeadOn, which runs projects with Ipswich youth in various capacities. They currently lack a good Website, and although one is in development, they are keen to establish a presence on the edgeX site as their own will not allow content uploading. Additionally, in the second phase of development, the edgeX team hopes to implement a facility for individual groups to 'skin' their own group areas, allowing them to establish a unique look and feel (similar to the way this is possible in social networking sites such as *MySpace*).

Further contact has been made with individual craftspeople, arts practitioners, and suppliers or shops that run workshops within their business (for instance, a sewing supply shop which runs quilting groups, an art supply shop which runs painting groups). In one of our first encounters, we approached a woman who operates a small craft business from home. She was very unenthusiastic initially, stating very clearly that she wasn't interested. Within five minutes of having the project explained, and also understanding it was free, she had become extremely enthusiastic and wanted to sign up for training immediately. With this woman, the barriers of cost and skill were key in creating a resistance. It is hoped that edgeX, with its resources for helping to overcome such barriers, can create an environment that generates such enthusiasm on a widespread scale within the Ipswich area.

On-site competitions are seen as a further key mechanism for generating interest and content. It is hoped that competitions will produce both high quality work (for example, focussed around specific themes or forms of content) and an increase in awareness of the site and its usefulness as a community tool. Prizes for the competitions may include electronic equipment or other donations from competition sponsors, as well as the chance to show a short film in the national TropFest short film competition, and other arts- or creative industries-based prizes such as internships with commercial ventures which would offer winners a chance to begin a professional career in their field.

The project will work with schools and has been liaising with teachers in the local area to work the site into their curriculum. Early in 2008, we will run a schools-based competition in collaboration with the "Creative Commons Clinic", an outreach project of the Australian creative commons organisation. edgeX actively encourages people to adopt creative commons licences, and is interested to track the extent to which this is taken up. It will include creative commons information and training within broader training sessions for participants. QUT is the lead organisation in Australia for the development of the Australian based licences and is planning to run a national 'remix'

competition in schools. The creative commons group at QUT are keen to use the Ipswich edgeX site as a pilot project for their broader agenda. Many other such synergies are emerging as the project becomes better known.

The research team hopes by the end of the project life to have developed a business model for sustaining the site over a much longer period of time. The City Council will, at least initially, host the site beyond the project life, but it is thought that the team can develop a revenue model based on advertising from local businesses, and that a proven success of edgeX in Ipswich will lead to the deployment of the site in other Australian locales. Future publications by the project team will report on creative and research outcomes of the edgeX project – in particular, they will examine the extent to which the project has supported and fostered a community of digital content creators at the grassroots level of the creative industries in Ipswich; track the emerging career paths of practitioners contributing to the site; and analyse the forms, formats, genres, and content of material uploaded to edgeX. The research will examine the potential for creative industries policy at a local, state, and national level to facilitate greater uptake of and participation in edgeX-style environments as a means of skills training, support for cultural diversity, and factor in economic development.

References

- Banks, J. and Humphreys, S. (forthcoming) 'The Labour of User Co-Creation: Emerging Social Network Markets?' *Convergence*.
- Benkler, Y. (2006) *Wealth of Networks: how social production transforms markets and freedom*, Yale University Press, New Haven, Connecticut.
- Bruns, A. (2005) *Gatewatching: Collaborative Online News Production*. Peter Lang, New York.
- Bruns, A. (2007a) Producers: Towards a Broader Framework for User-Led Content Creation. Paper presented at *Creativity & Cognition 6*, Washington, DC, 13-15 June 2007.
- Bruns, A. (2007b) The Future Is User-Led: The Path towards Widespread Producers. Paper presented at *PerthDAC*, Perth, 15-18 Sep. 2007.
- Bruns, A. (2008, forthcoming) *Blogs, Wikipedia, Second Life and Beyond: From Production to Producers*. Peter Lang, New York.
- Castronova, E. (2001) 'Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier' California State University; CESifo (Center for Economic Studies and Ifo Institute for Economic Research, Fullerton.
- Cunningham, S. (2006) *What price a creative economy?*, Currency Press, Strawberry Hills, NSW.
- Curtis, J., Baer, D., & Grabb, E. (2001). 'Nations of joiners: Explaining voluntary association membership in democratic societies'. *American Sociological Review*, 66 (6): 783-805.
- Cutler, T. (2002) *Producing Digital Content: A Consultancy to Examine and Advance the Understanding of the Production of Digital Content*, stage two edited report for the Department of Communications, Information Technology and the Arts, Sept., retrieved 2 May 2004 from http://www2.dcita.gov.au/__data/assets/file/12345/Cluster_Study_Stage_2_Report.pdf.
- Cutler, T. (2003) *Research and Innovation Systems in the Production of Digital Content and Applications*, report for the National Office for the Information Economy, Sept., retrieved 2 May 2004 from http://www.cultureandrecreation.gov.au/cics/Research_and_innovation_systems_in_production_of_digital_content.pdf.
- Eckstein, S. (2001). 'Community as gift-giving: Collectivistic roots of volunteering'. *American Sociological Review* 66, 6, 829-51.
- Ferrier, E. (2000). 'SBS Independent as a model content manager: commissioning for difference'. Paper presented at CSAA *Television Studies* conference, University of Queensland, December 2000.
- Ferrier, E. (2002). 'Bring out the Backroom Boys: the role of the media planners and buyers in the new knowledge economy', *Media International Australia*, no. 105. pp. 66-76.
- Guest, A., & Wierzbicki, S. (1999). Social ties at the neighborhood level: Two decades of GSS evidence. *Urban Affairs Review*, 35, 92-111
- Hartley, J. (Ed.) (2005) *Creative Industries*, Blackwell Publishing, Oxford.

- Herz, J. C. (2002) 'Harnessing the Hive: How online games drive networked innovation' *Release 1.0*, 20,9, 1-22.
- Humphreys, S. (2005) 'Productive Players: online computer games' challenge to conventional media forms' *Journal of Communication and Critical/Cultural Studies*, 2,1, 36-50.
International Journal of Cultural Studies, 7,1
- Jenkins, H. (2006) *Convergence Culture: where old and new media collide*, New York University Press, New York.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.
- Leadbeater, C. and Miller, P. (2004) *The Pro-Am Revolution. How enthusiasts are changing our economy and society*, Demos, London.
- Leadbeater, C. and Oakley, K. (1999). *The Independents: Britain's new cultural entrepreneurs*. Demos, London.
- Lin, N. (2001). *Social capital*. Cambridge: Cambridge University Press.
- Nguyen, A. (2003) 'The current status and potential of online news consumption: a structural approach', *First Monday* 8 (9), retrieved 3 May 2004 from http://firstmonday.org/issues/issue8_9/nguyen/index.html.
- Meikle, G. (2002) *Future Active. Media Activism and the Internet*, Routledge and Pluto Press, Sydney, New York, London.
- Peterson Bishop, A., Van House, N., Buttenfield, B. (2003) eds. *Digital Library Use: Social practice in design and evaluation*, Cambridge: MIT Press
- Postigo, H. (forthcoming) 'Of Mods and Modders: Chasing Down the Value of Fan Based Digital Game Modifications' In *Digital Games Industries: Work, Knowledge and Consumption* (Ed, Rutter, J.) Ashgate Publishing, UK.
- Putnam, R. (1996). 'The strange disappearance of civic America'. *The American Prospect*, 24, 34-48.
- Putnam, R. (2000). *Bowling alone*. New York: Simon & Schuster.
- Rainie, L. (2005, 2 Jan.) "The State of Blogging," Pew Internet & American Life Project, http://www.pewinternet.org/pdfs/PIP_bloggin_data.pdf (accessed 5 Jan. 2005).
- Schofer, E. & Fourcade-Gourinchas, M. (2001). 'The structural contexts of civic engagement:: voluntary association membership in comparative perspective'. *American Sociological Review*, 66, (6), 806-28.
- Tacchi, J.A., Slater, D. and Hearn, G.N. (2003) *Ethnographic Action Research: A User's Handbook*. UNESCO.
- Wellman, B., Quan y Haase, A., Witte, J., and Hampton, K. (2002). 'Capitalising on the Internet: Social Contact, Civic Engagement, and Sense of Community', in B. Wellman & C. Haythornthwaite (eds.), *The Internet in Everyday Life*. Oxford: Blackwell, 2002.

- Wellman, B., Quan y Haase, A., Witte, J., & Hampton, K. (2001). 'Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment'. *American Behavioral Scientist*, 45 (3), 437-456.
- Wellman, B. (1999). 'The network community'. In B. Wellman (Ed.), *Networks in the global village* (pp. 1-48). Boulder, CO: Westview.
- Wuthnow, R. (1991). *Acts of compassion: Caring for others and helping ourselves*. Princeton, NJ: Princeton University Press.
- Wuthnow, R. (1998). *Loose connections: Joining together in America's fragmented communities*. Cambridge, MA: Harvard University Press