

IDIA International Development Informatics Association

Proceedings of the 3rd International IDIA Development Informatics Conference
28-30 October 2009
Berg-en-Dal
Kruger National Park
South Africa
ISBN 978-0-620-45037-9

A critical account of ‘Community’ in Community Informatics

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Abstract

Information and Communication Technologies (ICT) used by community development programmes are distinguished by their advocacy of local interests. With the emerging discipline of Community Informatics (CI), we believe a need exists to critically examine one of its terms of reference - the ‘Community’. We contend that the term ‘Community’ has become used in an unspecific and general manner and that this may dilute and subvert the attention of practitioners in the field. In making this argument, we offer a critical account of the term ‘Community’. It is argued that the term is almost always used in a positive fashion and moreover has been deployed in differing discursive frameworks and political projects.

We examine the historical origin of the term and some examples of the manner in which the term has been used in political and sociological projects. We conclude that (1) the term ‘Community’ remains unproblematised and unmindful of its history; (2) the term needs to be recognised as a politically emotive one; (3) as a term of reference its use should be carefully considered within specific contexts; (4) a fuller discourse and exploration of the term in the CI discipline is needed; and (5) ICT deployment in communities should factor in local requirements.

Keywords: Community, Community Informatics (CI), *Gemeinschaft*, Political frameworks, Social appropriation

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Introduction

In the shifting sands of time, conceptions of communities are varied. Communities are diverse social constructs, in which it is possible to observe the complete spectrum of the human condition (Day, 2005:6). No researcher has yet been able to present a formal methodology for the scientific study of the community. The term ‘Community’, like other concepts taken from common-sense usage, has been used with an abandon reminiscent of poetic license (Wirth, 1964).

Lie (2005:120) notes that as “a result of new potentials that [information and communication technologies] ICT are said to offer ... the concept of community has been pushed to the fore once again”. What distinguishes (contemporary) ICT from other development programmes that use ICT is the advocacy of local interests (Leaning, 2009: 92-93).

With the emerging discipline of Community Informatics (CI), we believe a need exists to critically examine one of its terms of reference - the ‘Community’ since it remains an evasive concept (Leaning and Averweg, 2009). We contend that the CI field needs to move towards a social examination of its activities. The very nature of this CI discipline, the intention to see “the application of information and communications technologies to enable community processes and the achievement of community objectives” (Gurstein, 2003:77), is argued to be a social endeavour. The Internet facilitates and accelerates social behaviour (Leaning, 2009: 70). Heeks (2008: 26) notes that “[e]conomic, social, and political life in the 21st century will be increasingly digital, and those without ICTs will be increasingly excluded”. This paper is organised as follows: The concept of CI is introduced. We then give a critical account of the term ‘community’. Some concluding remarks are then presented.

Concept of Community Informatics

The use of ICT for and by local communities is not a new social phenomenon (Day, 2005: 4). ICT have been widely understood to bring about social change (Averweg and Leaning, 2006: 3). This is particularly so when CI is compared to its parallel discipline and ancestor, management informatics, whose prime goal is the furtherance of profit and economic success of the organisation. However, there does seem a particular emphasis within the discipline of CI, and rightly so, to focus upon the technology and its application. Technology is viewed as a tool to be designed, used and shaped by humans for human purposes (Cooley, 1996).

The focus of CI is the study and practice of “the duality of redefining application design and of embedding the technology in social processes in civil society” (Erwin and Taylor, 2004: 23). CI prioritises the social requirements of ICT use in communities and acknowledges a bias reflected in valuing ‘public goods’ and the potential for human growth and development (Bieber, Civile, Gurstein and White, 2002:3). de Moor (2006) contends that CI “concerns (amongst many other things) the

building of the socio-technical infrastructure (in terms of enabling technologies as well as organizations) which is a necessary condition for communities to thrive”. However, the social appropriation of ICT recognises that appropriation in a social or community sense is different to that which occurs in an organisational setting (Erwin and Taylor, 2006: 46). Whilst focussing the field of study upon the ‘social appropriation of ICT’ it does not specifically address the somewhat tricky question of what is meant by community in the term Community Informatics. We contend that such question is of vital importance. We concur with a number of authors who assert that attention should be focussed upon issues of examining and challenging the underlying premises of ICT usage (Leaning, 2005) and investigating “the ‘soft’ as well as the ‘hard’ concerns” (Selwyn and Gorrard, 2002: 6). We intend to show that with our treatment against these backdrops, it reduces the subject synoptically but still permits us to appreciate its complexities on the larger landscape. We feel therefore that there are a number of ways in which CI could adopt a specifically social agenda and it is towards this end that we make the following points in this article: that CI tends to use the term community in an uncritical way.

The study of community has been a major topic for a number of years and indeed there is a veritable cottage industry in producing books, articles and conference papers on the topic – it is a field that has considerable body of publications. The subject has been studied from a variety of disciplines and perspectives: from Ferdinand Tönnies’ classical conception of *Gemeinschaft* (Community) as a set of intimate and closely interwoven skills to Melvin Webber’s conception of ‘interest community’ in which spatial proximity is not a *necessary* condition. Whilst we could not possibly give justice to the wide variety of perspectives that have been used to study community (or those which have made use of the concept in the study of other areas) we intend to critically examine the term community and to indicate that community has been used within differing discursive political frameworks. In doing so we make reference to the study of community from within a sociological tradition, both in terms of how it has historically been understood by sociologists and political theorists and how a sociologically critical approach can be deployed in the study of the idea of community. We concur with Day (2005: 7) that it “is community that should form the base element of the CI approach ... [and] provide overall meaning and essential departure point for any discussions about CI”. CI and ICT are interwoven.

ICT “development and change should be ideally accompanied and integrated into locally initiated programs of social, educational and economic development” in communities (Leaning, 2009: 93). It is contended that factoring in local cultural interests of a community in a CI approach, ICTs may ‘regularise’ the technology to intended users in the community. Another reason is that at “an integrated approach may facilitate development better than a solely technological approach” (Leaning, 2009: 93). We now present a critical account of the term ‘Community’.

Critical account of the term ‘Community’

Historically, community has been an expression that emphasised the unity of the common life of a people or of mankind (Wirth, 1964). Even a superficial retrospect reveals that this common life itself has undergone radical changes which have been reflected in changing scientific interests in the community. Modern community boundaries remain unclear. Some forty years ago, Wirth (1964) noted that

“One aspect of every community is its territorial base ... In the past, before the interests of the sociologists were as clearly defined as they are now, the area of a community was either staked out arbitrarily or was defined by political or administrative boundaries”.

We contend that, contrary to what seems popular practice, the term ‘Community’ should be used carefully and specifically. We make this point as it has been noted that community is a term that has a “high level of use but a low level of meaning” (Miller, Coleman, Connolly and Ryan, 1991: 8). Our concern lies with the manner whereby in the literature on CI, the concept of ‘Community’ remains unproblematised and unmindful of the history of the term. We believe that without a critical engagement and analysis of the term and its implications we encounter the risk of diluting the field of CI to the point at which it is no more than simply the study of the use of informatics for reasons other than profit generation (and even then, profit generation may be fairly ‘close to the surface’).

Three distinct points need to be made with regard to the general use of the term ‘Community’. Firstly, the term is currently ‘in’ political fashion and as will be noted below, is and has been widely appropriated by political parties of all persuasions. The term ‘Community’ has decided political overtones in contemporary Western discourse and the ascendancy of the term, like any term, in the discourse of social policy and political science is tied to, and implicit in, the emergence and dominance of a particular political ideology (Fairclough, 2000). Eskow (2006) suggests that the term community “has achieved cult status, like ‘democracy,’ (*sic*) and it is clear that no logic or demonstration can shake the hold it has on its admirers”. The current use of the term community is tied to specific political projects that emerged in particular political environments. For example, much of the current use of the term can be argued to be strongly linked to the rise of ‘third way’ social democratic politics following the collapse of communism in Europe (Outhwaite and Ray, 2005) and the seeming rejection of the New Right’s social policy agenda (Giddens, 1998). Indeed it could be argued that the use of the term in the field of CI is indicative of the pre-eminence of the term.

Secondly, the term indicates particular forms of social interaction; however, exactly what forms of association can be regarded as a community is a contentious issue. The use of the term shifts between the descriptive and the prescriptive, between the empirical analytic and the idealist use of the term. A number of authors have argued that several different forms of association can be inferred by

community (Crow and Allen 1995; Willmott 1986; 1989). Tanner (2005: 121) suggests the association is “where people are linked by a common purpose, interest or commitment to a cause”. Furthermore attention should also focus upon notions of ICT “and its relation to society within the social and cultural forms of modernity” (Leaning, 2009: 16).

Thirdly, it is a value-laden concept applied to these forms of interaction (Miller, Coleman, Connolly and Ryan, 1991: 88) or even a value itself (Frazer, 1999: 77). Community is often used to indicate closeness, a benefit or a ‘good’ side of social interaction. MacIver and Page (1961: 8) suggest that the “basic criterion of community ... is that all of one’s social relationships may be found within it”. It has a wealth of positive connotations; these are most evident when community is contrasted with more instrumental and bureaucratic forms of association such as ‘state’ or emotive forms of social organisation such as ‘nation’. A community is “an area of social living marked by some degree of *social coherence*” MacIver and Page (1961: 9). Community implies familiarity and closeness, and nearly always in a positive sense. As Williams (1976: 66) notes

“Community can be the warmly persuasive word to describe an existing set of relationships, or the warmly persuasive word to describe an alternative set of relationships. What is most important, perhaps, is that unlike all other terms of social organization ... it never seems to be used unfavourably, and never to be given any positive opposing or distinguishing term”.

Whilst political opinion has been divided upon what community actually is, it has served as a rallying point for both the political right and left. For the conservative right, community has been deployed in support of tradition and the status quo. Its use harks back to romantic imaginings of pre-modern, small, socially bounded conglomerations of people. Wirth (1964) notes that the “folk community was apparently more of a primary group ... than the prevailing form of group life is today in Western civilization”. Community is perceived as the social form of the ‘Golden Age’ of pre-industrial Britain and other late modern capitalist societies, of agrarian societies, of a place or age when distinctly ‘modern’ problems simply did not occur. Elias (1974, quoted by Hoggett, 1997: 5) notes that community has served as an ideological tool to evoke “once more the closer, warmer, more harmonious type of bonds between people vaguely attributed to past ages”. Interestingly enough it is usually moral panics around perceived social problems that evoke strong calls for community values and action from the conservative right. More liberal minded rightists have had problems with community as any form of collective endeavour poses a challenge to individual freedom.

The ‘New Right’ that emerged in the 1980s in various Western democracies successfully integrated market freedoms with a strong conservative discourse emphasising responsibility to community and family. On the ‘harder’ left, the term has been deployed within historical materialist and socialist

frameworks to highlight the commonality of experience within social classes and the rationality of class solidarity. Within more centre-left and social democratic circles the concept has been integrated into a variety of progressive social movements, again indicating the commonality of experience of particular minorities and the benefits of recognising community and solidarity of action. As folk life gave way to technological civilization, new bases for social integration must appear if men are to retain the capacity to act collectively in the face of divergent interests and increasing interdependence (Wirth, 1964).

These different positions, with more below, indicate a radical divergence in both ideological and empirical terms of what is meant by community. The ideological interpretation is idealistic rather than analytic, it points towards an imagined future (or past) and sets an appropriate course of action. Indeed we find ourselves in agreement with many of the assertions proposed by social democratic exponents. Schulte-Tenckhoff (2001: 17) contends

“Expressions like ‘community action’, ‘community development’ and ‘community participation’ are meant to convey principles such as participation from below, decentralisation and devolution. Used in this manner the concept community fills an ideological function that is linked to modern political thought”.

In the second section of this paper we will argue for a decidedly ‘modern’ political interpretation of community.

With this in mind it may prove useful to chart, historically, some of the interpretations of the term. The term community arrived in its current use, via Old French and Middle English, from the Latin words *Communitas*, meaning fellowship and *Communis*, meaning common, public or shared (Harper, 2001). It is no linguistic accident that ‘community’ and ‘communication’ share the Latin root *Communis* (Webber, 1964). Communities comprise people with common interests who communicate with each other. Webber (1964) advocates the ‘interest community’ concept that the “place-community represents only a limited and special case of the larger genus of communities, deriving its basis from the common interest that attach to propinquity alone”. However, community’s refinement as a term with political importance arises not simply because of its meaning but its use in opposition to other forms of association. As noted by Williams (1976), community is always a positive form of association and is categorically different from other forms of collectivity.

The distinction of community from other terms may be argued to be an inheritance from the emergent philosophic and social scientific discourse of the (especially German) Enlightenment and ‘Modern’ *weltanschauung* (worldview). Hegel’s differentiation of *Staat* (State) and *Gesellschaft* (Society) fundamentally influences much European, and particularly embryonic social scientific, thought of the

nineteenth and early twentieth centuries (Freund, 1978: 150). Moreover it draws upon a Romantic strand of Enlightenment thought in which the “primordial nature of the communal bond was the widely held premise” (Schulte-Tenckhoff, 2001: 17). As will be indicated below, this was quite distinct from the British Utilitarian models of political economy popularised by Mill and Bentham and the Rousseauian and French Revolutionary inspired idea of ‘contract’ political models. Perhaps the most influential early thinker on the topic was Ferdinand Tönnies. Tönnies’ most significant work on this area, *Gemeinschaft und Gesellschaft* (Community and Society) continues Hegel’s concept of distinguishing between different forms of association. Tönnies works from the first premise that there are two ‘types’ of ‘will’: the *Wesenwille* - the natural or essential will - that which is an instinctive, organic or underlying energy; and the *Kürwille* - the reasoned or arbitrary will - that which is instrumental, deliberative, purposive and goal oriented. Tönnies implicitly values the associations formed around essential ‘will’, *Gemeinschaft* (or Community) above those formed around arbitrary will society seeking some instrumental goal *Gesellschaft* (or Society), asserting community meets the requirements of “real and organic life” while society serves “artificial and mechanical representation” (Tönnies, 1955: 48-54). *Gemeinschaft* (Community) should be understood as a living organism, *Gesellschaft* (Society) as a mechanical aggregate and artefact.

This is an influential idea and is central in the work of many social thinkers of the nineteenth and early twentieth centuries (Giddens, 1971) and is still present to a degree today. It revolves upon the conflict between concerns of immediate shared interests and forms of structured, regulated sociability. Two very disparate examples may serve to illustrate how this tension has been interpreted. Emile Durkheim, one of the founders of sociological theory, distinguishes two forms of social solidarity or *solidarité*: mechanical and organic. Mechanical solidarity is that which binds individuals together in pre-modern or agrarian societies. Such societies are understood as composed of various ‘clan’ groups that share a “cultural unity... (and a) set of sentiments and beliefs” (Giddens, 1971: 76). As a society develops and industrialises, it moves towards an organic form of solidarity where labour becomes increasingly specialised. Organic societies depend upon specialised units functioning as organs do in the body. Organic relationships may be found in human relations as well as between organisms of the same or of different species living together or a symbiotic basis (Wirth, 1964). The romantic potential of more ‘genuine’ or ‘real’ communities, (typically those of mechanical solidarity), are often based upon notions of ethnicity, and appeal in many ways to notions of nationalism and the articulation of ethnic nations. More recently and from the field of educational studies, Sergiovanni (1994: xvi) describing an approach to developing community in schools, contends

“communities are collections of individuals who are bonded together by natural will and who are together binded (*sic*) to a shared set of ideas and ideals. This binding and bonding is tight enough to transform them from a collection of ‘I’s into a collective ‘we’. As a ‘we’ members are part of a tightly knit web of meaningful relationships. This ‘we’

usually shares a common place and over time comes to share common sentiments and traditions that are sustaining”.

Both of these accounts incorporate ideas drawn from the Tönniesian contention that society and community are different as they encompass different forms of ‘will’. Those associations that emerge from rational, purposive or instrumental ‘will’ - the *Kürwille*, are intrinsically less valuable than those that emerge from the emotive ‘will’ - the *Wesenwille*. In the model of community derived from this approach, membership of the community is not an actively sought pursuit; membership is derived from being born into, raised as a member of, or achieving a particular status in a community. Members of a community in this interpretation are not members because they have a particular set of interests rather, their interests are determined by their membership of a community. The community determines their interests but membership of the community is determined by something far more essential, it might be location, family or status. A number of authors have argued that this model of community leads eventually to a fascistic, racist worldview and perhaps legitimated or contributed to the rise of nationalism and Nazism in Germany (Rocher, 1968: 58).

A second strand of thought on the idea of community can also be detected. Here the emphasis, whilst still very idealistic, contends that community should be/is based around the interests of members. This tradition stems from Rousseau’s question of how best to achieve and safeguard personal interests, our ‘particular will’, the *volonté particulière*. Our best strategy lies in aligning ourselves with common interests or sublimating our *volonté particulière* to the ‘general will’ - the *volonté générale*. Only in society can we be free, to enter society then is to enter a social contract. Perhaps the best-known exponent of this idea is Robert MacIver and is contained in his 1917 text *Community: A Sociological Study Being an Attempt to Set Out the Fundamental Laws of Social Life*. MacIver (1970) argues that community should stem from the ‘communality of interests’ that community offers - our interests are best served by being in a group, an extension of the Rousseauian idea. MacIver (1970) challenges the Tönniesian contention that communities cannot be created by ‘will’ or common interest. Communities can come into being though the recognition of shared interests and ‘common will’. However, this will must be of a certain type – it must be a will to bind people together, a will must be for the ‘common good’ (though how this is determined is a more tricky question). MacIver and Page (1961: 8) note that we “may live in a metropolis and yet be members of a very small community because our interests are circumscribed within a narrow area”.

Moreover, it is important to distinguish this from the simple idea that community is simply a collection of people with like interests. In MacIver’s model, community is more than aggregated interests; drawing heavily from the Functionalist ethos that predominated in American sociology of the period, community becomes a social entity in its own right. Community becomes the vehicle

through which interests are not only expressed but made possible. MacIver and Page (1961) contend that economic and “*increasingly ... political interdependence* is a major characteristic of our great modern communities” (italics added by authors). While MacIver’s (1970) conception of community predates more recent political ideas of community found in much centre left discourse, it certainly contributes to the current model in which community and the attendant model of citizenship is understood to be something that both confers rights and responsibilities upon its members (see, for example, Etzioni, 1995).

Some concluding remarks

What exactly constitutes a community has engendered considerable debate in the social sciences literature. The complexities embodied in the term ‘Community’ reaches many disciplines and theoretical variations. Likewise ICTs interlink and crosscut many disciplines. The study of community has become far more popular in recent years though here we could not possibly cover the range of debates now taking place. This popularity has been augmented by ICTs and these need to be understood as being interlinked with social life in communities. For example, Heeks (2008: 33) suggests that there is now a need to explore how “communities ... use ... technologies if left to their own devices”. Furthermore there may also be a need to explore review interpretations of ‘Community’ in developing countries.

While references to the term ‘Community’ are common in modern social policy, an exact definition still remains elusive. Despite this apparent shortcoming, we nevertheless have sought to summarise and contextualise some of the initial arguments that occurred. In conclusion we contend that (1) the term ‘Community’ remains unproblematised and unmindful of its history; (2) the term needs to be recognised as a politically emotive one; (3) as a term of reference its use should be carefully considered within specific contexts; (4) a fuller discourse and exploration of the term in the CI discipline is needed; and (5) ICT deployment in communities should factor in local requirements. In arguing for this we hope to engender a critical engagement and reflexive approach to the practice and multidisciplinary field of academic study, Community Informatics. This may serve to fuel the presentation of a formal methodology for a scientific study of the ‘Community’.

References

Averweg, U. and Leaning, M. 2006. Information and Communication Technologies in a knowledge society: some modal and ethical Challenges. In: *Abstracts and Program of Global Trends in Management Conference (MANCOSA)*, 4-5 May, Mont Choisy, Mauritius, 3-4.

Bieber, M., Civile, R., Gurstein, M. and White, N. 2002. A White Paper Exploring Research Trends and Issues in the Emerging Field of Community Informatics. [Online] Available WWW: <http://www.is.njit.edu/vci/vci-white-paper.doc> [Accessed 1 August 2006]

- Cooley, M. 1996. In: K. S. Gill (ed) *Human Machine Symbiosis: The Foundations of Human-Centred Systems Design*. London: Springer-Verlag: 69-100.
- Crow, G. and Allan, G. 1994. *Community Life. An introduction to local social relations*, Hemel Hempstead: Harvester Wheatsheaf.
- Day, P. 2005. Sustainable Community Technology: The symbiosis between community technology and community research. *Journal of Community Informatics* 1(2): 4-13.
- de Moor, A. 2006. *e-Mail* (CI Researchers listserv). STARLab, Vrije Universiteit Brussel, Belgium, 6 June.
- Elias, N. 1974. Foreword: towards a theory of communities. In: C. Bell and H. Newby (eds) *The Sociology of Community*. London: Frank Cass & Co. Ltd.
- Erwin G. J. and Taylor, W. 2004. Social Appropriation of Internet Technology: a South African platform. *The Journal of Community Informatics* 1(1): 21-29.
- Erwin, G. and Taylor, W. 2006. Assimilation by Communities of Internet Technologies. In: S. Marshall, W. Taylor, X. Yu (eds) *Encyclopedia of Developing Regional Communities with Information and Communication Technology*. Hershey: Idea Group Publishing: 40-46.
- Eskow, S. (2006). *e-Mail* (CI Researchers listserv). Rockland Community College, State University of New York, 6 June.
- Etzioni, A. 1995. *The Spirit of Community: Rights, Responsibilities and the Communitarian Agenda*. London: Fontana.
- Fairclough, N. 2000. *New Labour, New Language?* London: Routledge.
- Frazer, E. 1999. *The Problem of Communitarian Politics. Unity and conflict*. Oxford: Oxford University Press.
- Freund, J. 1979. German Sociology in the Time of Max Weber. In: T. Bottomore and R. Nisbet (eds) *A History of Sociological Analysis*. London: Heinemann: 149-186.
- Giddens, A. 1971. *Capitalism and Modern Social Theory*. Cambridge: Cambridge University Press.
- Giddens, A. 1998. *The Third Way: The Renewal of Social Democracy*. London: Polity Press.
- Gurstein, M. 2003. Community Informatics: What is Community Informatics? In: M. Gurstein, M. Menou and S. Stafeev (eds) *Community Networking and Community Informatics: Prospect, Approaches, Instruments*. St Petersburg: Centre of Community Networking and Information Policy Studies (CCNS): 77-84.
- Harper, D. 2001. *Online Etymological Dictionary*. [Online] Available: <http://www.etymonline.com/index.php?term=community> [Accessed 1 August 2006]
- Heeks, R. 2008. ICT4D 2.0: The Next Phase of Applying ICT for International Development, *Computer*, 41(6): 26-33. [Online] Available: <http://csdl2.computer.org/comp/mags/co/2008/06/mco2008060026.pdf> [Accessed 19 September 2008]
- Hoggett, P. 1997. Contested Communities. In: P. Hoggett (ed) *Contested Communities. Experiences, struggles, policies*. Bristol: Policy Press.

- Lie, R. 2005. Community development and Internet. In: N. C. Lesame (ed) *New Media. Technology and policy in developing countries*. Pretoria: Van Schaik Publishers.
- Leaning, M. 2005. The modal nature of ICT: challenging the historical interpretation of the social understanding and appropriation of ICT. *Journal of Community Informatics* 2(1):35-42.
- Leaning, M. 2009. *The Internet, Power and Society: Rethinking the power of the Internet to change lives*. United Kingdom: Chandos Publishing.
- Leaning, M. and Averweg, U., 2009. Community in Community Informatics: An Evasive Concept. Forthcoming *Proceedings of The 11th International Conference General Online Research (GOR 2009)*, Vienna, Austria, 6-8 April [Triple blind peer-reviewed. Accepted]
- MacIver, R. M. and Page, C. H. 1961 [1937]. *Society: An Introductory Analysis*. MacMillan Co: 8-10.
- MacIver, R. M. 1970 [1917]. *Community: A Sociological Study Being an Attempt to Set Out the Fundamental Laws of Social Life*. London: Frank Cass & Co.
- Miller, D., Coleman, J., Connolly, W. and Ryan, A. 1991. *The Blackwell Encyclopaedia of Political Thought*. Cambridge: Blackwell.
- Outhwaite, W. and Ray, R. 2005. *Social Theory and Postcommunism*. Oxford: Blackwell Publishing.
- Rocher, G. 1968. *Introduction à la sociologie*, vol 2. Paris: HMH.
- Schulte-Tenckhoff, I. 2001. *The Concept of Community in the Social Sciences and its Juridical Relevance*. Law Commission of Canada. [Online]. Available WWW: http://www.lcc.gc.ca/research_project/01_social_1-en.asp [Accessed 1 August 2006]
- Selwyn, N. and Gorrard, S. 2002. *The Information Age: Technology, Learning and Exclusion in Wales*. Cardiff: University of Wales Press.
- Sergiovanni, T. J. 1994. *Building Community in Schools*. San Francisco: Jossey Bass.
- Tanner, K. J. 2005. Emotion, Gender and the Sustainability of Communities. *Journal of Community Informatics* 1(2): 121-139.
- Tönnies, F. (trans Charles P Loomis) 1955. *Community and Association*. London: Routledge and Kegan Paul.
- Webber, M. M. 1964. The urban place and the nonplace urban realm. In: M. M. Webber, J. W. Dyckman, D. L. Foley, A. Z. Guttenberg, W. L. C. Wheaton and C. B. Wurster (eds) *Explorations into Urban Structure*. University of Pennsylvania Press: 108-11.
- Wirth, L. 1964 [1933]. The scope and problems of the community. In: A. J. Reiss, Jr (ed) *Louis Wirth on Cities and Social Life*. Chicago: University of Chicago Press: 165-75.
- Williams, R. 1976. *Keywords. A Vocabulary of Culture and Society*. London: Fontana.
- Willmott, P. 1986. *Social Networks, Informal Care and Public Policy*. London: Policy Studies Institute.
- Willmott, P. 1989. *Community Initiatives. Patterns and prospects*. London: Policy Studies Institute.