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The Neighbourhood and Social Networks

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Introduction

The purpose of this paper is to review the literature, some of it research-based, much of it from other countries, to identify trends and issues that could be examined in the UK context. It focuses on networks and neighbouring, the degree to which significant social networks are neighbourhood based, and on the relationship between ideas of social capital, social networks and the neighbourhood. The relationship between social networks and residential neighbourhood has long been debated in academic and policy research. In current UK neighbourhood regeneration policies the importance of neighbourhood-based social networks in turning around "failing" or deprived neighbourhoods around seems to be a taken-for-granted assumption. Yet with processes of globalisation and electronic communication potentially stretching our social ties in time and space, just what kind of social network ties can we expect in the contemporary local neighbourhood? Our answer to this question is of vital importance in understanding the degree of social cohesion/exclusion that can be expected in different urban neighbourhoods and the potential of area based initiatives to influence relations in a positive way.

Social networks have been seen as a vital component in defining the nature of a neighbourhood. For example neighbourhoods are seen as possessing "common named boundaries, more than one institution identified with the area, and more than one tie of shared public space or social network" (Schoenberg 1979: 69). Or elsewhere, "a limited territory within a larger urban area, where people inhabit dwellings and interact socially" (Warran 1981: 62) or "geographic units within which certain social relationships exist" (Downs 1981: 15). These definitions reveal the range of common assumptions about the relationship between neighbourhoods and networks. The first is that the neighbourhood fosters the development of social networks through interaction in local public space. There are the possibilities of repeated interaction in the streets, parks or, if they exist, shops and pubs, helping to build local social networks. The idea of people interacting

socially reinforces this assumption but also relates to the exclusively residential complexion of many urban and suburban neighbourhoods. These are places of residence and not work and so the prevailing forms of interaction in neighbourhoods happens out of work time and so the types of relationships that develop reflect this fact. This is captured in the third definition that suggests that neighbourhood is defined by the types of interaction in social networks. The assumptions are that in the modern western city these relations are predominantly "neighbourly" consisting of non-intimate, convivial relations between people who know each other to nod and wave to, or engage in limited conversation with and who are available to call on in emergency situations. All these assumptions will be examined in this paper.

The Classic Ideas of Neighbourhood and Networks

Social networks break down in the city

Much of the classic literature on neighbourhoods and networks is part of what is called the urbanisation literature that discusses the consequences of the growth of the industrial city in western nations. This literature established a number of implicit assumptions about the nature of social ties in the newly established urban neighbourhoods. They relate to assumptions about what was happening to community as rural dwellers moved to the industrialising urban areas for work. Most of it is concerned with ideas of the decline of community. Urban neighbourhoods were compared with the rural settlements, from which the new city dwellers were drawn, and were found wanting. Ferdinand Tonnies (1957, [1887]) argued that in rural *gemeinschaft* (or community) social order was based on multi-stranded social ties. People knew each other in a range of roles - as parents, neighbours, co-workers, friends or kin. In contrast, residents of urban neighbourhoods lived in a *gesellschaft* (or association) with single-stranded ties (only knowing each other in single, specialised roles as neighbours or co-workers, for example). *Gesellschaft* relations were more calculating and contractual. In the same way

the classic work of Georg Simmel (1995: 1903) reflects the contractual, rational nature of social relations in the city. Simmel observed that the inhabitants of turn of the century Berlin showed an indifference to each other in the streets that, he argued, arose from the psychic over-stimulation of the city. Because people could not cope emotionally with the range of possible social interactions and stimulations of the city, they withdrew into themselves, to protect themselves. New norms of interaction were developed in the city that involved an avoidance of staring, closed-down body language and minimal verbal interaction between passers-by. Urban social relations came to reflect the capitalist economy: they were impersonal and neutral.

The sorts of social relations that Tonnies and Simmel argued prevailed in the modern metropolis were much more individualised and specific. Their work prompted a vast literature which argued for the decline-of-community in the city. In terms of networks and neighbourhoods this literature assumed that multiple social ties in networks confined to a limited geographical area such as existed in rural villages, was the ideal type of network to ensure social support. In urban areas, translated in terms of Simmel and Tonnies work, social networks were seen to operate on single-stranded ties, or to be disappearing altogether, resulting in the mass society of the city in which individuals were tiny atoms, living an alienated existence. Urban neighbourhoods contained very fragmented social networks.

Social networks survive in certain types of neighbourhood

Assumptions that social ties in urban neighbourhoods were disappearing into mass society or becoming more specialised and less rich were questioned subsequently by several classic sociological studies. Many of these studies focused on the significance of working-class or minority ethnic communities in sustaining rich ties in an urban context. For Herbert Gans the communities ties of Italian Americans in the neighbourhoods of Chicago and Boston constituted "urban villages" (Gans 1962). Similarly, in their famous study of Bethnal Green, East London, Young and Wilmott (1957) documented what they saw as the vibrant community life of the East End, based on kinship and family ties.

Young and Wilmott argues that the close ties that had been fostered in inner urban neighbourhoods of the East End were rent apart when families were moved out of their slum housing and moved to new town settlements on the edge of London. Here moving out of the urban neighbourhood meant the fragmentation of social networks and a loss of community. These studies imply a sub-cultural idea of urbanism. Urban populations are large enough to provide a sufficient critical mass for the formation of distinct subcultures and networks, rather than being an undifferentiated and alienated urban mass of population. The idea of the neighbourhood is crucial for this sub-cultural theory of the city. Neighbourhoods provide the distinct milieus in which these differentiated groups can develop. For example historians of 19th century urbanism and class (such as Crossick 1976) point to the importance of neighbourhood segregation in enhancing the status of certain fractions of the working class such as the labour aristocracy or artisan elite who lived in separate districts of artisans cottages. Here neighbourhood based social networks were critical to a distinctive sense of social position.

Neighbourhoods have qualified influence on social networks

Between the decline-of-community and discovery-of-community literatures a number of researchers argued for a form of contingent community in the city. Melvin Webber (1964) for example made a distinction between middle-class professionals (cosmopolites), highly mobile members of far-flung but interactionally intimate 'nonplace' communities, and working-class residents (localites) who were less mobile and had more neighbourhood-related ties. Janowitz (1967) qualified this by arguing that middle class cosmopolites did have place-related roles (as parents, members of resident's associations, and so forth) but their wider networks meant that the neighbourhood of residence was a "community of limited liability".

For some, communities of limited liability were argued to characterise working-class as well as middle-class neighbourhoods. The increasing separation of work and home in the modern city was argued to have the effect of splicing-apart working-class networks. The absence of the mutual reinforcement of work ties and neighbourhood ties resulted in what

David Lockwood (1966) called the increasing privatism of the working class, a turn from communalism to the pursuit of private goals within the home. The neighbourhood became emptied-out as networks fragmented behind closed doors. For others, such as Sennett and Cobb the separation of home and work resulted in ties relapsing into primary contacts within the residential neighbourhood (Sennett and Cobb 1972).

Survey Evidence on Neighbourhoods and Networks

Some of the assumptions behind the literature on decline, discovery and limited-liability neighbourhood ties can be investigated using questions that directly or indirectly tackle these issues on general surveys of the population. In the American context where most of this type of neighbourhood research takes place, Guest and Avery (1999) review the evidence on social ties at the neighbourhood level from the General Social Survey between 1974 and 1996. The questions they focused on asked how frequently respondents spent a social evening with someone from their neighbourhood. Guest and Avery compared this with responses to the question about how often they spent a social evening with friends outside the neighbourhood. The GSS is the same survey that Putnam used to make his arguments about the loss of local civic engagement (see the discussion of social capital, networks and neighbourhoods, below). Guest and Avery note a steady decline in the importance of social ties in the neighbourhood and a slower increase in the importance of non-neighbourhood ties. This suggests community liberated from neighbourhood (see discussion of Wellman, below). Yet community is not necessarily lost from neighbourhood. The types of relationships found in the neighbourhood is of a greater range than socialising with outside friends and so neighbourhood ties continue to be important for a sizeable proportion of the population. The present situation seems to be captured by the idea of community mediate (Guest 2000) where the individual maintains ties at the neighbourhood and extra neighbourhood levels. He further distinguishes between expressive ties (friendship, sociability and recreation) which he argues are still significant in the local neighbourhood and instrumental ties (over property prices and good schooling) which are growing in

significance at a neighbourhood and extra-neighbourhood scale. Guest and Avery argue further that there is an increasing dissociation between neighbourhood and extra-neighbourhood ties with certain individuals becoming specialised in localised versus non-localised social interaction. However, they could find no strong evidence for neighbourhood being more significant for certain socio-demographic sub-groups of the population.

Part of the analysis for this paper included a review of recent large-scale UK surveys that included questions of relevance to an understanding of social networks and neighbourhood. Questions rarely deal with social networks directly. Certain evidence suggests that people still know many of their neighbours personally. In response to this question on the National Survey of Voluntary Activity 1997 82 percent of respondents said they knew 4 or more neighbours personally, 23.7 percent knew 31 or more neighbours in this way. The 2000 survey of poverty and exclusion found that 48 percent of respondents had no friends as neighbours whilst 32 percent had 1 or 2 friends who were also neighbours, with a further 17 percent having 3 or more neighbours who were also friends. The vaguer question on the 1994 Housing Attitudes survey found that 54 percent of the 3285 respondents knew "a lot" of people in the area (apart from relatives), with 36 percent knowing a few and only 10 percent knowing hardly any or none. The significance of the local area seems to be reinforced by the responses to the statement "The friendships and associations I have with other people in my neighbourhood mean a lot to me" on the 1998 British Household Panel Survey, with which 49.6 percent of the 10,493 respondents agreed and 15.1 percent strongly agreed. 21.3 percent of respondents neither agreed nor disagreed but only 13.9 percent either disagreed or disagreed strongly. Kin ties in the local area were still significant for 57.1 percent of the 20,327 respondents on the Survey of English Housing 1997/98 with 42.9 percent saying that there were no other relatives living in the local area. 64.6 percent of the 11,586 who responded on the same survey said they had relatives in the area with whom it was important to stay living close, with 35.4 percent disagreeing. Taken in aggregate these surveys do suggest a continued role for the local area in the fostering of close friendship or kinship ties. Nevertheless the questions are worded very broadly and do not focus on the types of ties

that people have and what is transacted within them. It is to the social network literature that we must turn in order to consider these issues directly.

Testing the Relationship Between Neighbourhoods and Networks: Evidence from Social Network Analysis on Neighbourhoods

Measuring social networks

What is interesting about the discussions of the decline, discovery and limited community literature is that the nature of social ties were assumed rather than investigated systematically. The growth of social network analysis from the 1950s onwards provided researchers with the analytical tools to explore the types of actual social ties that existed in neighbourhoods and elsewhere, rather than asserting such links from traditional notions of social and spatial solidary groups. A social network is defined as "a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behaviour of the persons involved" (Mitchell 1969: 2). Social network analysis looks at the overall structure of ties and the content of transactions regardless of spatial scale. Networks can be analysed from 'the outside in', often using large-scale surveys to get an understanding of the overall structure of a network, in which individuals appears as nodes. This "sociocentric" approach infers the behaviour of individuals from their position in the overall network. Similar behaviour is predicted for instance for individuals who are in the same position within the overall network, regardless of the behaviour of their close associates, what Burt has called "structural equivalence" (Burt 1987). Networks can also be studied from the 'inside-out', usually involving quantitative surveys or in-depth qualitative analysis of the life history and experiential qualities of network types. This "egocentric" approach to network analysis follows networks ties from individual respondents to their social contacts. It is the egocentric approach that characterises most of the implicit or explicit use of network analysis in neighbourhood research.

Dense local ties and strong neighbourhoods

Some classic network studies support the assertion of the importance of location and neighbourhood (Bott 1957, Fischer 1982). They point to the close association between dense network forms and local neighbourhood. The density of a network is one of the formal measures in network analysis. In the egocentric approach, it is measured by taking all the direct ties to others that an individual might have and counting all the ties between the individual's contacts (or alters as they are called) as a percentage of the total number of contacts possible between them. A network in which all of an individual's (ego's) contacts (alters) know each other will have a network density of 1: very close knit. A network in which none of ego's alters know each other will have a network density of 0 i.e. very loose knit. There are several qualifications that come with measures of network density. The first might be called "verification of reciprocation". Interviews and social surveys on which network analyses are based often do not check whether the relationship with another person, claimed by the respondent, is in fact reciprocated by that contact. This qualification applies to all the UK social surveys in which network-type questions appear and which are reviewed later in this paper. Another weakness of the density measure is that it can be a numerical artifact. The number of potential links in a network grows at a much faster rate than the number of network members. Thus, the larger the network the lower the measure of density is likely to be. This simple measure of density also takes no account of the number of different types of links between ego and alters, that is, the degree to which these ties are multi-stranded or single-stranded.

Despite these qualifications density measures do reveal a good deal about the structure of social networks. In her classic in-depth study of 20 urban working-class families Elizabeth Bott noted the close association between dense networks, confined to neighbourhood. As Bott (1957: 112) argues

It is only in the working class that one is likely to find a combination of factors all operating together to produce a high degree of connectedness [density]: concentration of people of the same or similar occupations in the local area; jobs and homes in the same local area; low population turnover and continuity of relationships; at least occasional opportunities for relatives and friends to help one another to get jobs; little demand for physical mobility; little opportunity for social mobility.

Here we seem to have the classic definition of traditional working-class community. Dense ties of friends and kin are found in workplace-based residential neighbourhoods. In network terms this picture is supported by Laumann's (1973) work showing that increasing length of residence in a neighbourhood and working class status were associated with denser, more spatially constrained social networks. In some studies the problem of the degree to which ties are single or multi-stranded is taken into account and density is conceptualised as the number of partial networks (single stranded ties of co-workers, kin, friends, neighbours) that intersect in the same networks and the same neighbourhoods. Thus Klein noted a high degree of neighbourliness in Bethnal Green, London but only because neighbours were also kin. Although not strictly a network study, in their classic work on the same area Young and Wilmott (1957) observed that kin, neighbours and work associates were all the same people, i.e. that the sectors of partial networks were overlapping to give a high-density network. Logan and Spitzer's (1994) research suggests the continued significance of "family neighbours" in a range of different neighbourhoods in the Albany/New York area. This research supports earlier claims by Kasarda and Janowitz that "the local community is viewed as a complex system of friendship and kinship networks" and "formal and informal associational ties rooted in family life and ongoing socialisation processes" (Kasarda and Janowitz 1974, 329).

The significance of kin versus nonkin relations has been debated in terms of what makes for socially healthy neighbourhoods. Wellman *et al* (1988), for example, argue that networks containing a large proportion of nonkin are symptomatic of a well functioning neighbourhood. Healthier and more successful neighbourhood are ones where a range of

different social relationships are available, rather than similar types of relations making up the local social network, usually based on family and wider kin. Diversity of types of relationships seems to make for more successful neighbourhoods.

It is clear from these early studies that we need to be cautious about interpreting the type of social interaction in the network and its relation to neighbourhood. Even the most classic statements of the predictability of relationships in working-class neighbourhoods, involving close-knit networks of overlapping relations, do indicate some variation from this norm. As far back as the late 1950s Bott (1957) noted some working class families had looser knit, geographically dispersed networks that resembled middle class social networks. In another study Cubitt (1973) remarks:

As these [working-class] families become more mobile and as they move into new working environments, their networks take on the characteristics of the middle class network, the sectors become separate and the density of the network decreases. (Cubitt 1973: 70)

Weak social ties and strong neighbourhoods

Up to this point (1973), the background assumption in much of the research on urban neighbourhoods was that dense social networks were a "good thing" in that they provided the classic elements of a good community. This meant multi-stranded ties in a close knit network over an identifiable geographical area providing social support and a sense of identity and place. Other network researchers have questioned the relationship between neighbourhood base, network density and social support. For instance, the usefulness of density as a source of social support depends on the quality of the ties. Neighbourhood ties need not be superior ties. In a major survey of urban and rural locations in northern California Claude Fischer (1982) argued that distant friends were no less intimate than local ones and in fact might be more intimate, which is why they are maintained, despite being distant. Fischer does concede however that the 'freight of distance', the cost of maintaining distant relationships, affects different socio-economic groups to different

extents. Thus "proximity is important to the extent that distance is an unupportable cost, which it tends to be for the poor, the elderly, burdened mothers, and the like." This suggests that neighbourhood relations might be relatively more significant for those with limited economic resources and mobility. This is represented in the idea of the "residual neighbourhood" reflecting "the assumed decline in the neighbourhood's importance over time and the hypothesis that neighbouring is an alternative form of socialising for people who do not have access to broader networks (Logan and Spitze 1994, 457). The latter group includes those on low incomes, minority ethnic residents and a larger proportion of women and the unemployed (Campbell and Lee 1990, 1992). As Fischer argues it "nearby associates are preferred when nearness is critical. When proximity is less critical - and these are often situations involving most intimacy, sacrifice and faith - there is little or no preference for those nearby" (Fischer 1982, 175). For certain groups, such as the elderly, or parents without cars, nearness and neighbourhood might be critical for all generalised social relationships. Fischer noted a rural/urban distinction in these attributes. Urban dwellers had more dispersed networks containing a higher proportion of nonkin relations than did rural dwellers. This concurs with Barry Wellman's research in a number of Toronto neighbourhoods demonstrating that personal networks are geographically dispersed with large variations in the number of contacts living in the neighbourhood.

Networks liberated from neighbourhood: the work of Barry Wellman

This conundrum of the relationship between networks and neighbourhood was Wellman's explicit research question in his in depth and large scale survey of 845 adult residents of the neighbourhood of East York, Toronto. At the time of this classic study (late 1970s) East York was a British/Canadian upper working-class/lower middle district with a reputation for solidarity. Eliciting information for up to 6 intimates for each respondent, Wellman found that primary ties tend to form sparsely knit, spatially dispersed, ramifying structures, instead of a single, densely-knit solidarity" (Wellman 1979: 1211). Few East Yorkers depended on the neighbourhood for their key ties. Indeed few respondents had more than one intimate residing in the neighbourhood. Wellman argued that "the

metropolitan area bounds the field of interaction more than does the neighbourhood (1979: 1211). East York was neither a Gansian urban village nor a Webberian "community without propinquity". Instead the findings gave broad support to the Community Liberated argument, where the spatial constraints on social networks are loosened. Furthermore, Wellman observes that "proximity tends to be more important on the job than in the neighbourhood for the availability of help from intimates. The spatial range of assistance relationships has expanded to encompass the entire metropolitan area" (1222). However neighbourhood ties have not lost all their importance:

While local ties are real, their importance comes from their being only a component of a diverse array of relationships. Intimate ties are into local solidarities even less often than they are into local solidary kinship systems. Indeed the car, the telephone and the airplane help maintain many kinship ties. Yet space is still a constraint: there are distances for each tie at which the cost of keeping in contact becomes too great for it to remain viable." (1222)

Overall though, Wellman's research supports the "community liberated" arguments in which community networks are liberated from neighbourhood. Since local ties make up only a small minority of people's active social networks the neighbourhood is not very important in terms of social networks. "Personal community networks are rarely neighbourhood solidarities" (Wellman 1996: 348; 1988; 1990). This finding is related to the size and density of cities. High densities in the neighbourhood can lead to avoidance of geographically close strangers. Alternatively the sub-cultural theory of urbanism suggests that the specialisation of population and activities that are possible in the city might encourage individuals to seek out like-minded others in different parts of the city. As Fischer (1982) argues rural dwellers are more dependent on local ties and this is reflected in the prominence of the neighbourhood-based network in their overall social network. Specialised neighbourhoods in terms of social composition may be seen positively in terms of lifestyle choice and negatively if it is the result of structural economic or discriminatory forces that lead to social/spatial segregation.

Social segregation in network terms can apply within an individual neighbourhood. Whilst agreeing with Wellman that metropolitan-wide sparse density characterises the networks of both working class and middle class residents of a gentrifying west London neighbourhood, my own research also indicates the divisions in the networks between classes in this situation (Bridge 1994; 1995ab).

The degree to which neighbourhood ties are significant in an individual's total social network might also be an outcome of the way that social network elements are measured. In a re-evaluation of his earlier study Wellman (1996) demonstrated how a change in definition of what constituted significant network contacts changed markedly the role of neighbourhood in social networks. In his original study (Wellman 1979) had defined significant ties as those relationships (in this case up to six) deemed 'close' and significant by the respondent her/himself. Thus the focus is on particularly strong ties out of up to 1000 or more informal relationships. If however significance in the social network is measured by the frequency of contact between ego and alters, rather than the self-defined relationships the importance of neighbourhood based ties is emphasised. In the original study, of the 29 Toronto residents who were interviewed in depth after the larger survey, 23 percent of the 344 active community ties were to contacts (alters) who lived within 1 mile of the respondent. The status of most of these local ties is that of neighbour. Given the exponential rise in the number of potential contacts with increasing distance it is a theoretical and definitional question to ask whether 23 percent is a lot or a little. However that proportion doubles (to 42 percent) for face-to-face meeting with active network members who live within 1 mile of the respondent. Telephone contact peaks at a radius of 1 to 5 miles from the respondent and local calls happen twice as frequently as those at a distance of 5 miles or more. Wellman's reappraisal also emphasises the workplace as a locality of interaction that is equivalent to neighbourhood. As he argues "If we think of the workplace as a person's second home, then workmates are like neighbours because they are locally available for interaction" (1996: 351). Although workmates make up only 7 percent of active community ties their significance rises when frequency of contact is considered, making up 26 percent of those active network members who are in contact three times a week or more.

Wellman concludes his re-analysis by arguing that: -

...we cannot base an analysis of community solely on the neighbourhood because so many intimate and active ties are not local. Yet the predominance of frequent contact with neighbours and workmates should lead network analysts to bring proximity back into the investigations of community, along with the existing criteria of intimacy and supportiveness" (Wellman 1996: 353).

Workmates and neighbours still account for a small minority of active ties and they are not usually social intimates but the contacts are frequent. Whilst workmates do not routinely offer any social support, neighbours often provide small services such as lending household goods or short-term childcare. Different services are provided by different members of the personal networks that tend to combine dense supportive ties with looser linking ties: people get different strokes from different folks (Wellman and Wortley 1990). What we can reasonably expect from neighbours is neighbourliness - meaning the exchange of small services or support in an emergency against a background of routine convivial exchanges (greetings, brief chats over the garden fence or in the street).

(Net) working the neighbourhood

Wellman's most recent work (Wellman 2001; 1999) attempts to assess the impact of those recent and most celebrated network structures - the internet and the mobile phone network - on social networks. In relation to neighbourhood he argues that computer and electronic support to social interaction merely extends the relations beyond the neighbourhood to a greater extent. In the late 19th/early 20th century faster transport and telephone technology had moved communities from door-to-door interaction within the neighbourhood to social interaction between neighbourhoods. Now the emphasis is increasingly on individualised interaction across a range of networks and spaces. In

answer to the question 'how much do neighbourhoods matter in a networked globalised world' Wellman would say 'not much'. For Wellman neighbourhoods do retain a function as a provider of local personal services (babysitters and barbers), schools, and as physical and human environments (especially in relation to safety and crime). However, in terms of active community ties "most North Americans have little interpersonal connection with their neighbourhood" (Wellman 2001: 233). There is a move into the home where most entertaining, emailing and phone calling takes place and a move away from the use of neighbourhood public space - chatting in bars, street corners and coffee shops. Wellman's quotes Lofland's (1998) research that suggests that even when people do go out with others - to restaurants and movie theaters, they usually leave their neighbourhoods. Wellman also cites Smith's research showing the overall decline in socialising with neighbours over the last 25 years. 30 percent spent a social evening with neighbours several times a week in 1974 and this had fallen to 20 percent in 1999. Socialising in bars had fallen from 11 to 8 percent (Smith 1999).

According to Wellman's analysis over a period of 25 years key social interactions are now organised within the home or beyond the neighbourhood altogether. Wellman's analysis does refer to Canada and the US where mobility and internet penetration are highest and so there are obvious variations to be found, even among western nations. As well as cross-national variations there are also differences between sub-groups of national populations. Groups for whom neighbourhood contacts are deemed more significant are the elderly, and parents (usually mothers) with small children.

The Significance of Neighbourhood Networks for Specific Groups: The Case of Older Residents

The significance of neighbourhood networks for the elderly is brought out by recent research by Thomese and van Tilburg (2000). Rather than look at individual neighbouring relationships within personal networks, as Wellman et al (1988) and Fischer (1982) had done Thomese and van Tilburg measure the relative proportion of

neighbouring relationships in the personal network. This avoids the problem that large absolute numbers of neighbourhood contacts might be a function of the size of the respondent's network as much as a neighbourhood bias in the social network. The research was based on a sample of 3,504 older adults born between 1908 and 1937 and living in three different regions of the Netherlands. Respondents were asked the question 'Name the people (e.g. in your neighbourhood) you have frequent contact with and who are also important to you.' Aside from the bias of the question in including a reference to neighbourhood, the measure of frequency was 'monthly contact' either face-to-face or by phone. This measure combines the self-defined 'closeness' or 'significance' element, as well as a frequency measure, combining elements of previous studies (analogous to Wellman's ties and contacts measures). The top 12 contacts were used (excluding household members). Using various correlation and regression analyses variations in core network characteristics were compared with variations of neighbourhood characteristics (level of urbanisation, share of age peers, share of lower income households, residential turnover).

For the Thomese and van Tilburg's survey as a whole neighbouring networks constituted on average 60 percent of the core network which amounted to a mean of 3.2 neighbouring relationships. In terms of neighbourhood characteristics the more 'urban' the neighbourhood (measured by population densities) the less older residents were oriented to their direct neighbourhood and the greater the propensity for larger core networks outside the neighbourhood, but within an hour's travel. Neighbourhoods with high turnover had the same effect on networks. Neighbourhood stability seems to be important for older residents to commit to the investment of making new friends. However the share of age peers and share of lower-income households had no appreciable effect on the relative size of the neighbouring network. There was no evidence for an increased dependence on neighbouring relationship with age or that older people have smaller neighbouring networks. Residents on lower incomes are most susceptible to the influence of variations in the neighbouring environment. Thomese and van Tilburg argue that there is no general mechanism of environmental dependency that makes older people more vulnerable to the overall characteristics of their neighbourhood.

They suggest their results are typical of other western countries. Much of the evidence from the US and other western nations suggests that it is difficult to establish, in network terms at least, any strong relationship between neighbourhood dependency and any distinctive socio-demographic sub-group of the population.

Social Capital and Social Networks: The Reassertion of Neighbourhood?

In contrast to the evidence of the social network literature, which suggests a declining role for neighbourhood in significant social ties, the development of the idea of social capital (Bourdieu 1986; Putnam 1993, 2000; Coleman 1988) has had the effect of putting a strong emphasis on the importance of locally-based social networks. Indeed Putnam's most recent work (Putnam 2000) stresses the significance of regular co-presence as a basis for significant social interaction. It was the fact that the relationship between the bowling partners was based on regular physical meeting at the bowling club that explained the development of a depth of commitment that lead one partner to donate a kidney to the other. Putnam laments the decline of neighbourhood based relationships such as these. American society is, he argues, increasingly characterised by people bowling alone rather than together. Social capital refers to the resources that can be mobilised as a result of the structure of relationships between actors and in which actors are embedded.

"By analogy with notions of physical capital and human capital ... social capital refers to features of social organisation such as networks, norms and trust that facilitate co-ordination and co-operation for mutual benefit. Social capital enhances the benefits of investment in physical and human capital." (Putnam 1993: 95)

These structures contain ties that have high degrees of reciprocal obligations and are characterised by trustworthiness. Coleman (1988) explicitly links social capital and social networks suggesting the type of network structure that facilitates social capital.

The first element is network closure. Norms of reciprocation and sanctions against defection are most easily enforced where the social network is closed. This means it is more effective in terms of imposition of sanctions against behaviour that impose negative externalities if the actors in the network negatively affected know each other and are able mutually to recognise the errant behaviour and consort over punishment. In more open network arrangements actors affected by negative externalities are less likely to know one another and therefore the behaviour is unlikely to be checked and norms of reciprocity upheld. Closure of network structure relates to network density discussed earlier. Norms can be most easily enforced where all ego's alters know each other (i.e. in a dense network). Similar coordinated sanctions can be effected intergenerationally given a closed community network structure. It has been noted earlier that the development of dense, closed network structures is fostered by the sort of geographical proximity and recognisability of a residential neighbourhood.

The second element of the social structure that is amenable to the formation of social capital is what Coleman calls 'appropriable social organisation'. This is where an informal social organisation formed for one purpose endures and can be used as a resource for different purposes in the future. That the combination of closure and appropriable social organisation are instrumental in the provision of social capital can be explained by another network attribute: the degree to which the ties in the network are simplex (uniplex) or multiplex. Coleman cites Gluckman's (1967) distinction here to argue that multiplex ties (persons linked in more than one context) allow the resources of one relationship to be appropriated for use in others. Multiplex ties involve people knowing each other in a range of overlapping networks (as co-workers, parents, neighbours, for example). Coleman uses the case of the acquisition of education both within and without the family to make his point about the social structure of social capital formation. Human capital (for example, the educatedness of the parents) is passed on to the child only if there are strong reinforcing ties that pass that knowledge on. If the family is fragmented then the intergenerational translation of human capital might be inhibited. The family ties are a form of social capital. Social ties may be significant outside the family "in the community consisting of the social relationships that exist

among parents, in the closure exhibited by this structure of relations, and in the parents' relations with the institutions of the community" (Coleman 1988: S113).

Coleman's proposition on the significance of social co-ordination and trust among parents who also know each other in a range of networks seems to require geographical proximity to be met. There is a strong but implicit assumption about the importance of dense neighbourhood-bounded networks in his conception of the conditions propitious for strong social capital.

If social capital is in some senses about social networks that operate to enhance the resources available in the network, then some social network research presents a difficulty for Coleman's idea. Dense, neighbourhood-based networks might actually limit resource mobilisation. In his now classic paper Granovetter (1973) criticised the assumption that strong ties in dense networks were strong in resource terms. Using the example of searching for a job Granovetter found that neighbourhood based dense multiplex networks were limited in getting information about possible jobs (see also Lin and Dumin 1986). In a dense multiplex networks everyone knows each other, information is shared and so potential sources of information are quickly shaken down, the networks quickly becomes redundant in terms of access to new information. In contrast Granovetter stresses the strength of weak ties involving a secondary ring of acquaintances who have contacts with networks outside ego's network and therefore offer new sources of information on job opportunities. The network arrangements in play here involve only partially overlapping networks composed mainly of single-stranded ties. The network structures that correspond to different types of ties and different uses of social capital is identified, albeit implicitly, by Putnam (2000) in his distinction between bridging (or inclusive) and bonding (or exclusive) forms of social capital. Bridging social capital includes associations like civil rights or youth service groups and it is better for fostering linkages to external assets and information diffusion. Bonding social capital emerges from inward looking groups, such as ethnic fraternal organisations and fashionable country clubs, which tend to be socially homogeneous and are better for mobilising solidarity and specific solidarities. The latter group has the potential to create strong out-group antagonism. In the first neighbourhood networks form a platform to

extra local ties and in the other the neighbourhood delimits the scope and effectiveness of the network.

The effects of strong and weak ties on social capital and neighbourhood effects

Strong and weak ties can have different effects and different benefits (Hirsh, Engel-Levy, Du Bois and Hardesty 1990; Cattell 1995, 2001). "Strong ties between similar persons foster understandings and support whereas dissimilar persons in loose networks of weak ties provide access to diverse resources" (Cattell 2001: 1502; Wellman and Wortley 1990). In a study of the relation of health to social networks and neighbourhoods in several east London neighbourhoods, Cattell concludes that the most robust networks in terms of health outcomes are those Solidarity Networks that combine positive aspects of dense and loose networks. They consist of a wide range of membership groups, made up of similar and dissimilar people involving strong local contacts of family and or local friends and neighbours on the one hand, plus participation in formal and informal organisations on the other. As Cattell concludes "the more varied the network, the greater the range of resources accessible, and the greater the potential benefits to health." (Cattell 2001: 1513). There are however, she cautions, the direct effects of poverty which cannot be compensated for by good social networks fostering social capital. Indeed adapting Townsend's (1979: 32) definition of relative poverty as "exclus[ion] from everyday living patterns, customs and activities" means that extreme poverty can delimit the ability to participate in the social networks from which additional social capital might be garnered. Loose networks might be helpful in finding a job but job skills and job opportunities must be there to get one. Furthermore the concentration on the inherent capacities within a neighbourhood can mean that wider power relations are ignored and the analysis has the danger of lapsing into the kind of "culture of poverty" arguments that have characterised certain understandings of excluded neighbourhoods and communities (Murray 1984; cf Wilson 1987).

The separation of networks of strong and weak ties is endorsed by the research of Henning and Lieberg (1996). This study of selected neighbourhoods in Linköping,

Sweden, included an investigation into both the structure of networks and the content of ties. Strong ties were those of importance to the respondent and which were characterised by regular contact. Weak ties consisted of nodding acquaintances, conversational contacts and contacts that could be relied upon to be sources of practical help. Henning and Lieberg found that neighbourhood was relatively unimportant for both white collar and blue-collar residents - three quarters of contacts were outside the local area. Strong-tie networks (averaging 12 persons) are made up primarily of kin (40 percent of relations). Neighbours only comprised about 20 percent of the strong tie networks. When weak ties are considered there are three times as many contacts in the neighbourhood compared with strong ties. These contacts provided a feeling of home, security, practical and social support. The researchers still found a class difference with blue-collar workers being more dependent on neighbourhood for contacts.

Henning and Lieberg suggest that weak ties are important for the things they deliver and for the fact that they provide a type of relationship that can be most easily sustained in the neighbourhood. Close ties are often difficult to sustain at close distance (over-familiarity can breed contempt) whereas the more superficial relations of weak ties need to be refreshed with regular contact. Strong and weak ties are doing different things and both are necessary for a healthy social network. This research suggests that neighbourhood is still a significant site of social networks for weak ties. It suggests further that policy interventions based on assumptions about neighbourhood-based social capital would be better aimed at working with weak ties that stretch out from the neighbourhood and bridge to other social contexts, rather than focusing resources on the support of strong ties within the neighbourhood.

The typical assumptions about the relationship between neighbourhood, social networks and social capital are thrown into doubt by other streams of social network analysis. As we have seen Coleman looked to network closure and multiplexity as key ingredients in social capital rich social networks. Members of such networks might have the resources of relationships at their disposal but they are also likely to be subject to strong social norms and sanctions as well as embedded in clearly circumscribed social realms (see

Granovetter 1985 for the genesis of the idea of "embeddedness"). So closed networks can provide security but they might also limit one's horizons, including valuable contacts into other social realms. In contrast, Burt (1992) points to the significance of "structural holes" in the network. Burt argues that the resources available to any one actor are contingent on the resources available to the actors socially proximate to that person. Social capital is determined by the structure of contacts in the network (who you reach and how you reach them). Structural holes are the spaces between non-redundant contacts in a network, which gives actors a competitive advantage. These are the number of gaps between distinct portions of network contacts which provide benefits that are additive rather than overlapping. This is a development of Granovetter's idea of the strength of weak ties, but one that does not rely on the strength or weakness of the tie but on the number of holes between network sections. Burt argues that actors with relationships free of structural holes at their end and rich in structural holes at the other end of the network are 'structurally autonomous'. What he means by this is that persons with high connectivity with those socially close are able to gain support from these contacts. If these same networks have lots of gaps between the contacts further away in the network (the structural holes) the 'far' contacts are not able to collude with one another against the core network member. This gives her network autonomy in which she is able to perform brokerage roles between the distinct parts of her network that is further away and separated by the structural holes.

Burt's idea of structural holes compared with Coleman's conception of network closure confirms the idea that different benefits in terms of social capital can be conferred by different network arrangements. Burt's loose-knit, disaggregated network provides competitive advantage in gaining new information and 'brokering' resources between different networks and has proved useful in the analysis of entrepreneurial activity. Coleman's emphasis on network closure and appropriable organisation is most useful when social support and mutual reinforcement are required (see Sandefur and Laumann 1998). It is also possible that network structures can have positive and negative effects. The sorts of network closure useful for mutual support of children in a neighbourhood

might also act as a form of social control that stifles individual mobility and extra-neighbourhood contact (Portes and Sensenbrenner 1993).

Neighbourhood Infrastructure and Operating Capacities

It is possible to develop the ideas of the linkage between neighbourhoods, social networks and social capital by looking at the operating capacity of networks. To do this I think two elements of a new approach to network analysis are worth considering. Actor Network Theory (ANT) takes seriously the constellation of power that exists within, between and behind networks (Latour 1987, Callon 1991). Networks are not simply composed of individuals who have mutual influences on each other given the structure of the network and the content of transactions (as conceived in social exchange theory - Cook 1987, Emerson 1962). Social networks are considered to be part of wider networks of power that help form subjectivities in the first place: power is a network effect. One way that power is exercised is through the powers of translation forming a network of discourse that enrolls others. The point to be made here is that it is not just the structure of the network - loose or dense, heterogeneous or homogeneous that counts but the capacities for translation of nodes at the point of contact to other networks. Powers of translation stabilise the behaviour of others and are most possible in networks with strong association between others "which in turn depends on the ability to use the network to enrol the force of others and speak for them" (Amin and Thrift 1995). The stronger the associations between network members, the more irreversible the translation. The links and relationships are more predictable and stable when the network is "heavy with norms" (1991: 151). Clearly in the past, neighbourhood and locale were important factors in helping to foster norms based on everyday reciprocity. The emergence of norms in network space is now potentially more complex geographically (in the way that networks can act at a distance) but also in the elements that might settle norms. It is here that we should consider another element of actor network theory.

Actor Network Theory also exhorts us to treat networks not just as social phenomena but as assemblages of human and non-human actors, texts and machines. This allies with the idea that power is an emergent network effect that involves a range of "actants". Actions

that have effects can be a result of human volition, or a computer programme or an internet connection. Texts and machines can be just as influential in the operation of powers of translation and the formation of norms. To judge the relationship of this radically symmetrical view of networks to neighbourhood networks is surely one of the tasks for network and neighbourhood research. Internet connections can accelerate the move out of the neighbourhood (as Wellman argues) but overlapping networks of internet connection might consolidate the power of certain neighbourhoods. It is therefore worth looking at the hardware and software, the accumulated texts and the way that diverse informational links might overlap in different locations to get a sense of the effect of neighbourhood, locally, globally.

This latter point reinforces the earlier critique of the idea of social capital from a network perspective. Social relations are insufficient in understanding the potential powers of translation of a network. Given technological advances, the physical infrastructure of communication in a neighbourhood must also be considered to get an idea of the technical/social relations that in turn might enhance or exhaust human capital.

Conclusions

At present, in network terms, the neighbourhood provides the realm of practical relations involving the exchange of small services as well as convivial relations that might contribute to a diffuse feeling of security and well-being. These relations continue to be significant parts of people's overall social network, in which most significant ties exist outside the neighbourhood. Given these realities policy interventions based on assumptions about social capital in neighbourhood should focus on weak instrumental ties within and extending without the neighbourhood, rather than any strong affective bonds within the neighbourhood. Seeking to enhance the 'porosity' rather than 'solidarity' of neighbourhoods is especially important given contemporary technical developments in communication and knowledge acquisition. Neighbourhood networks should be considered at the city-wide scale when analysing neighbourhoods that are seen as socially

excluded. Neighbourhoods are socially networked to the city in the first instance and it is the segregation of the types of resources that flow into and out of these networks that should focus social policy intervention. In this approach social exclusion becomes a comparative understanding of the types and quality of network connection throughout the city, rather than any privileging of dense ties in the neighbourhood itself. Furthermore social networks are now socio-technical networks and so neighbourhood characteristics of relevance are more likely to be the in situ physical/technical infrastructure that helps support this connectivity.

References

- Bott E 1957: *Family and Social Network* London: Tavistock
- Bourdieu P 1986: The forms of capital in J Richardson (ed) *Handbook of Theory and Research for the Sociology of Education* New York: Greenwood Press
- Bridge G 1994: Gentrification, class and residence: a *reappraisal Environment and Planning D: Society and Space* 12: 31-51
- Bridge G 1995a: The space for class: on class analysis in the study of gentrification *Transactions of the Institute of British Geographers* 20: 236-247
- Bridge G 1995b: Gentrification, class and community: A social network approach In A Rogers and S Vertovec *The Urban Context* Oxford: Berg, 259-286
- Burt R S 1987 Social contagion and innovation: Cohesion versus structural equivalence *American Journal of Sociology* 92: 1287-1335
- Burt R S 1992: *Structural Holes: The social structure of competition* Cambridge, MA: Harvard University Press
- Burt R S 1997: A note on social capital and network content *Social Networks* 19: 355-373
- Callon M 1991: Techno-economic networks and irreversibility in J Law (ed) *A Sociology of Monsters* London: Routledge, 196-261
- Campbell K and Lee B 1990: Gender differences in urban *neighboring Sociological Quarterly* 31: 495-512

Campbell K and Lee B 1992: Sources of personal neighbor networks: social integration, need, or time? *Social Forces* 70: 1077-1100

Cattell V 2001: Poor people, poor places, and poor health: the mediating role of social networks and social capital *Social Science and Medicine* 52: 1501-1516

Coleman J S 1988: Social capital in the creation of human capital *American Journal of Sociology* 94. Issue supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, S95-S120

Cook S 1987: *Social Exchange Theory* London: Sage

Crossick G 1976: The labour aristocracy and its values: a study of mid-Victorian Kentish London *Victorian Studies* 19: 301-328

Cubitt T 1973: Network density among urban families in J Boiesevain and J C Mitchell (eds) *Network Analysis: Studies in human interaction* The Hague: Mouton

Downs A 1981: *Neighborhoods and Urban Development* Washington, DC: Brookings Institution

Emerson R M 1962 Power-dependence relations *American Sociological Review* 27: 31-40

Fischer C 1982 *To Dwell Among Friends: Personal networks in town and city* Chicago: University

Gans H 1962: *The Urban Villagers* New York: Free Press

Gluckman M 1967 *The Judicial Process among the Barotse of Northern Rhodesia* 2nd edn. Manchester: Manchester University Press.

Granovetter M 1973 The strength of weak ties *American Journal of Sociology* 78: 136-1380

Granovetter M 1985: Economic action and social structure: The problem of embeddedness *American Journal of Sociology* 91: 481-510

Guest A 2000: The mediate community: the nature of local and extralocal ties within the metropolis *Urban Affairs Review* 35: 603-627

Guest A and Wierzbicki S 1999: Social ties at the neighborhood level: Two decades of GSS evidence *Urban Affairs Review* 35: 92-111

Henning C and Lieberg M 1996: Strong ties or weak ties? Neighbourhood networks I a new perspective *Scandinavian Housing and Planning Research* 13: 3-26

Hirsh B J, Engel-Levy A, Du Bois D, Hardesty P H 1990: The role of social environments in social support. In B R Sarason, I G Sarason and G Pierce (eds) *Social Support: An interactional view* New York: Wiley, 367-393

Janowitz M 1967: *The Community Press in an Urban Setting* Chicago: University of Chicago Press

Kasarda J and Janowitz M 1974 Community attachment in Mass *Society American Journal of Sociology* 39: 328-39

Latour B 1987: *Science in Action* Milton Keynes: Open University Press

Laumann E O 1973: *Bonds of Pluralism* New York: Wiley

Lin N and Dumin M 1986: Access to occupations through social ties *Social Networks* 8: 365-86

Lockwood D 1966: Sources of variation in working class images of society *Sociological Review* 14: 249-267

Lofland L H 1998: *The public realm: exploring the city's quintessential social territory* New York: Aldene de Gruyter

Logan J R and Spitze G D 1994: Family neighbors *American Journal of Sociology* 100: 453-476

Mitchell J C 1969: The concept and use of social networks in J C Mitchell (ed) *Social Networks in Urban Situations* Manchester: Manchester University Press, 1-50

Murray C 1984: *Losing Ground* New York: Basic Books

Portes A and Sensenbrenner J 1993: Embeddedness and immigration: Notes on the social determinants of economic action *American Journal of Sociology* 98: 1320-1350

Putnam R D 1993: *Making Democracy Work: Civic Traditions in Modern Italy* Princeton: Princeton University Press

Putman R D 2001: *Bowling Alone* New York: Simon and Schuster

Sandefur R and Laumann E O 1998: A paradigm for social capital *Rationality and Society* 10: 481-501

Schoenberg S 1979: Criteria for the evaluation of neighborhood viability in working class and low income areas in core cities *Social Problems* 27: 69-85

Sennett R and Cobb R 1972 *The Hidden Injuries of Class* New York: Vintage

Simmel G 1995 [1903] The metropolis and mental life In P Kasnitz (ed) *Metropolis: Center and Symbol of our times* Basingstoke: Macmillan, 30-45

Smith T 1999: *The emerging 21st century American family*. Report to National Opinion Research Centre, Chicago.

Thomese F and van Tilburg T 2000: Neighbouring networks and environmental dependency. Differential effects of neighbourhood characteristics on the relative size and composition of neighbouring networks of older adults in the Netherlands *Ageing and Society* 20: 55-78

Tonnies F 1957 [1887] *Community and Society* East Lansing, MI: Michigan State University Press

Warren D 1981: *Helping Networks* South Bend, IN: Notre Dame University Press

Webber M M 1964: Urban place and the nonplace urban realm in M M Webber, J W Dyckman, D L Foley, A Z Guttenberg, W L Wheaton, C B Wurster (eds) *Explorations into Urban Structure* Philadelphia PA: University of Pennsylvania Press, 79-153

Wellman B 1979 The Community Question: The intimate networks of East Yorkers *American Journal of Sociology* 84: 1201-1231

Wellman B 1996: Are personal communities local? A Dumptarian reconsideration *Social Networks* 18: 347-354

Wellman B ed. 1999: *Networks in the Global Village* Boulder, CO: Westview

Wellman B 2001 Physical place and cyberplace: the rise of personalised networking *International Journal of Urban and Regional Research* 25: 227-252

Wellman B, Carrington P and Hall A 1988: Networks as personal communities. In Wellman B and Berkowitz S (eds) *Social Structures: A network approach* Cambridge: Cambridge University Press, 130-84.

Wellman B and Wortley S 1990: Different strokes for different folks: Community ties and social support *American Journal of Sociology* 96: 558-588

Wilson W J 1987: *The Truly Disadvantaged: The inner city, the underclass and public policy* Chicago: University of Chicago Press

Young M and Willmott P 1957 *Family and Kinship in East London* Harmondsworth: Penguin