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Are personal communities local? A Dumptarian reconsideration ¹

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Are personal communities local? A Dumptarian reconsideration¹

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Abstract

Are local ties important in personal community networks? Since local ties only make up a minority of people's active ties, network analysts have argued for decades that the neighborhood is not very important. Re-analysis of the Toronto data shows that when contacts become the unit of analysis instead of ties, the percentage of local relationships in active networks nearly doubles. Moreover, when we also take into account active contacts with coworkers, who like neighbors are physically proximate, we find that two-thirds of all contacts are 'local'. As Humpty-Dumpty has cogently reminded us, a network can be anything we want it to be. It depends on how we define it. When we change the definition, the conclusions change too.

1. How liberated are 'liberated communities'?

"When I use a word, it means just what I choose it to mean – neither more nor less," the noted postmodernist, Humpty-Dumpty, asserted a century ago (Carroll, 1872, Chapter 6). The same is true for social networks. There is not any such thing as 'the network', although many of us persist in writing as if this were so. How we define the members and ties of a network strongly affects what we will find out about it.

Roberto Fernandez (1993) stimulated my meditations on this when he wrote in his review of Douglas Massey and Nancy Denton's *American Apartheid* (1993):

... Barry Wellman, Barrett Lee, and others have shown [that] with improvements in communication and transportation, social relations may have been 'liberated' from geography. (1993, pp. 365–366).

¹ My thanks to Milena Gulia who prepared the tables for this note, to Nancy Nazer, Thy Phu and Bev Wellman for their editorial comments, to Charles Wetherell who in the course of our collaboration started me rethinking the local nature of personal community networks (see Wetherell et al., 1994), to Barry Leighton who collaborated in developing the original 'community liberated' argument (Wellman and Leighton, 1979), and to Lewis Carroll, the nineteenth century's preeminent postmodernist. Research for this paper has been supported by the Social Science and Humanities Research Council of Canada and by Health and Welfare Canada's Welfare Grants program.

When I took another look at the personal communities of Torontonians, I found that from one perspective it is wrong to say that active community ties are "'liberated' from geography". It depends on what one means by 'social relations'.

For two decades, our research group has argued that planes, phones and cars have enabled communities to transcend the confines of neighborhood and kinship solidarities (Craven and Wellman, 1973; Wellman, 1979; Wellman and Leighton, 1979). This 'community liberated' argument contends that non-local, personal network communities flourish. It is an alternative to the 'community lost' argument that community has largely disappeared (a key feature of the current American crime scare) and the 'community saved' argument that local communities continue to thrive (a key feature of the 1960s).

Since my formulation of the community question, many studies have shown that the typical personal community network is both 'saved' and 'liberated'. It has a densely knit core of confidants, many of whom are immediate kin. This core is surrounded by more sparsely knit ties with other kin, friends, neighbors and coworkers.

Fernandez is right in implying that personal community networks rarely are neighborhood solidarities (Fischer, 1982; Wellman, 1988, Wellman, 1990, Wellman, 1993) – as long as the unit of analysis is the tie itself. Such ties are defined in personal community studies as relations between Egos and a half-dozen or so socially close network members (called 'intimates' in my own research) or 'active' ties. The latter is a broader definition that may include ten to 20 network members whom Egos deem to be important. Thus personal community studies focus on a small subset of strong ties (Granovetter, 1973) among a person's total set of 1000 or more informal relationships (see the review in Wellman, 1992b).

Most intimate and other active ties are not with neighbors. People get out of their neighborhoods quite easily. For example, our interviews with 29 Torontonians reveal that 23% of their 344 active community ties live within 1 mile of the Egos at the centers of their networks. (Wellman, 1982 and Wellman and Wortley, 1990 provide details of this sample). The Torontonians' regard most of the active ties who live within a mile as 'neighbors' (79%). The other active network members living within 1 mile of their Egos are a few 'friends' (8%), immediate kin (9% – parents, siblings, adult children), fellow members of organizations (4%), and one workmate (1%). (No extended kin live nearby.) Active ties with neighbors, coworkers and organizational members are usually weaker and less durable than ties with friends and immediate kin (Wellman et al., 1988, Wellman et al., 1996)².

² The minor statistical discrepancies between the data reported here and Wellman et al. (1988) are for two reasons:

(a) We cleaned our data after publishing that paper to eliminate ties which are not really 'active'. In such cases, a few respondents padded their lists of active ties with relationships that were clearly not important to them. As the eliminated ties are disproportionately with extended kin who do not live locally, the cleaned data slightly increase the percentage of local ties.

(b) In this paper, a 'local tie' is defined as an active network member who lives within 1 mile of Ego while Wellman et al. (1988) described only those in the 'neighbor' role. In the currently cleaned data, those in the 'neighbor' role comprise 20% of all active ties, while 'non-neighbors' comprise 21% of those living within 1 mile.

2. Finding local community in networks

It is not that local ties are negligible in personal community networks. It is surely a Zen question whether the percentage of local ties is only 23% or as much as 23% of all active ties, given the potential of the metropolitan area (and the world beyond) to supply relationships. After all, nearly one-quarter of all active ties come from the neighborhood's small population pool; three-quarters come from the rest of the world.

To say that 23% of active ties are local is to assume that all active ties are equivalent. Yet, there are many ways to look at ties. In this paper, I focus on their frequency of contact. In our Toronto studies (and I suspect in others), people have different frequencies of contact with different active members of their networks. Suppose we want to know what the percentage of local ties is among only those active ties that are in frequent contact. When we operationally define 'frequent contact' as face-to-face or telephone contact at least three times per week, we find that 42% of such active ties live within 1 mile (Wellman et al., 1988, p. 149). Thus the percentage of ties that are local almost doubles when the criterion of 'frequent contact' is introduced into the definition of these relationships.

3. Counting contacts

The importance of local ties becomes apparent when we redefine the composition of personal community networks in terms of the number of contacts (interactions) that Egos have with the active members of the networks instead of the traditional procedure of counting the number of ties (relationships). I weighted each tie by the number of days per year in which there had been contact between the network member and Ego. For example, a network member in daily face-to-face contact would receive a score of '365'. Separate transformations were done for face-to-face and for telephone contact.³

Changing the definition of network composition from the number of ties to the number of contacts reveals the importance of neighborhoods for contact. Fully 42% of all face-to-face meetings with active network members are with those who live within 1 mile (Table 1). Active network members living within 1 mile meet an average of 143 days year⁻¹; those living 1.1–5.0 miles meet an average of 123 days year⁻¹; while those living farther away meet an average of 41 days year⁻¹.

³ These findings are based on respondent-reported data in the second Toronto (East York) study about the number of days in the past year they had face-to-face and telephone contact with each network member (Wellman, 1982; Wellman and Wortley, 1990). Unfortunately, we did not collect data about the length of each interaction or the number of contacts made in a day. Other examples of weighting ties in studying social networks include Doreian (1969), Peay (1980) and Freeman (1992). See also Wasserman and Faust's (1993) general discussion.

The proliferation of desktop videoconferencing may make the term 'face-to-face' contact inadequate to describe situations where two (or more) persons are both present physically. One Canadian organization calls their physical meetings 'belly-to-belly' contact, while Brenda Danet has suggested 'flesh meetings'.

Table 1
Frequency of contact per year with all active network members

Residential distance # and % of sample		Face-to-face contact	Telephone contact	Total contact
≤ 1.0 mile N = 80 23%	Total # of contacts ^a	11419	5242	16661
	% of contacts in all networks ^a	42	31	38
	Mean # of contacts per relationship	143	66	208
	% Media split ^b	69	31	100
1.1-5.0 miles N = 56 16%	Total # of contacts ^a	6880	4525	11405
	% of contacts in all networks ^a	26	27	26
	Mean # of contacts per relationship	123	81	204
	% Media split ^b	60	40	100
> 5.0 miles N = 208 61%	Total # of contacts ^a	8597	7061	15658
	% of contacts in all networks ^a	32	42	36
	Mean # of contacts per relationship	41	34	75
	% Media split ^b	55	45	100
Total N = 344 100%	Total # of contacts ^a	26896	16828	43724
	% of contacts in all networks ^a	100	100	100
	Mean # of contacts per relationship	78	49	127
	% Media split ^b	62	38	100

^a Total # of contacts and % of contacts in all networks refer to the distributions by residential distance. Number and percentage sum vertically within columns.

^b % Media split refers to the use that network members who live at different distances make of face-to-face or telephone communication. The percentage sums horizontally within rows.

What about contact by telephone? Do those living in the same neighborhood avoid telephoning in order to have the greater social presence of face-to-face contact? Do people use telephones to keep in touch with distant relations? In Toronto, it only takes dialing four extra digits and a bit more money to call long-distance.

Distance does make a difference. Local network members call each other an average of 66 times year⁻¹, those living 1 to 5 miles away call 81 times year⁻¹, while those living further away call the least, 34 times year⁻¹ (Table 1). Moreover, the closer network members live, the more apt they are to see each other rather than to telephone each other. The telephone is used for 31% of contacts with network members living within 1 mile of each other, 40% of contacts with those living 1 to 5 miles away, and 45% of contacts with those living further away.⁴

Even though network members living within 1 mile have a lower percentage of their interactions by telephone than those living more than 5 miles apart, these local networks members telephone each other nearly twice as often (66 times year⁻¹) as those living more than 5 miles apart (34 times year⁻¹). This is because local ties have more contact

⁴ For more on how telephone networks sustain social networks, see Wellman and Tindall (1993). When these data were collected in 1978, face-to-face and telephone contact were just about the only means by which network members communicated. People rarely sent letters by post; faxes and electronic mail were extremely rare.

(by telephone and face-to-face) than those who live further away. Consequently, the 23% of the active network members living within 1 mile make 31% of the telephone contacts in all of these networks (Table 1).

Combining face-to-face and telephone contact shows that the 23% of active members living within 1 mile are responsible for nearly two-fifths (38%) of all contacts in these networks. Clearly, local ties have a disproportionately large number of contacts with active network members. Although most contacts are outside the neighborhood, local ties are important sources of people's routine interactions.

4. The workplace as locality

When people are not meeting with their neighbors, they are often with their workmates: coworkers with whom they also have active social relationships. If we think of the workplace as a person's second home, then workmates are like 'neighbors' because they are locally available for interaction. Although workmates make up only 7% of all active community ties, they make up 26% of those active network members who are in contact three times week⁻¹ or more.⁵

Indeed, workmates who are active network members see each other an average of 213 days year⁻¹ and telephone each other only 28 days year⁻¹ (Table 2). It is almost always the workplace where contact between active workmates takes place, and not the home or other milieus. This workplace focus is reflected in the predominance of face-to-face over telephone contact. Unlike British workers, Toronto workmates rarely gather after work in pubs, and they do not live near enough to each other to meet casually in public spaces or local shops (Wellman, 1992a).

We can obtain a broader estimate of the effects of proximity on relationships by combining the data for those active ties who live within 1 mile of each other and those who work together. Thirty-one percent of active network members live nearby or work together, and these ties make up fully 68% of active network members who are in frequent contact (i.e. at least three times per week or more by telephone or face-to-face). A similar thing happens when we look at contacts instead of ties. Although workmates are only 15% of active network ties, they account for 20% of all active face-to-face contacts. Combining the two 'local' ties (workmates and those living within 1 mile) reveals that while workmates and neighboring network members make up 39% of all active ties, they account for fully 63% of all face-to-face contacts with active network members.

To be sure, workmates (unlike neighbors) rarely phone each other. Fully 89% of all workmate contact is face-to-face. Yet because workmates see each other so much, overall contact between them (phone + face-to-face) is still a disproportionately high 14% of all contacts with active network members. When we consider both workmates

⁵ Only one workmate lives within a mile of her Ego so double-counting is not an appreciable problem.

Table 2
Frequency of contact per year with active workmates

Residential distance # and % of sample		Face-to-face contact	Telephone contact	Total contact
≤ 1.0 mile <i>N</i> = 1 4%	Total # of contacts ^a	260	0	260
	% of contacts in all networks ^a	5	0	4
	Mean # of contacts per relationship	260	0	260
	% Media split ^b	100	0	100
1.1-5.0 miles <i>N</i> = 9 33%	Total # of contacts ^a	1978	383	2361
	% of contacts in all networks ^a	34	51	36
	Mean # of contacts per relationship	220	43	263
	% Media split ^b	84	16	100
> 5.0 miles <i>N</i> = 17 63%	Total # of contacts ^a	3520	362	3882
	% of contacts in all networks ^a	61	49	60
	Mean # of contacts per relationship	207	21	228
	% Media split ^b	55	45	100
Total <i>N</i> = 27 100%	Total # of contacts ^a	5758	745	6503
	% of contacts in all networks ^a	100	100	100
	Mean # of contacts per relationship	213	28	241
	% Media split ^b	89	11	100

^a Total # of contacts and % of contacts in all networks refer to the distributions by residential distance. Number and percentage sum vertically within columns.

^b % Media split refers to the use that network members who live at different distances make of face-to-face or telephone communication. The percentage sums horizontally within rows.

and those living within 1 mile, then the 31% of the active network members who live or work nearby account for more than half (52%) of all face-to-face and phone contacts.

5. The persistence of proximity

This re-analysis of the Toronto data shows that social relations have not been liberated entirely from 'geography' (to use Fernandez's term). Proximity's influence is not dead, although it has been stretched by the telephone, the automobile, the airplane, and now the Internet. The preponderance of local interaction revealed by these data suggests that the neighborhood and workplace continue to have strong effects on contact in personal community networks. As neighborhoods and workplaces are usually more socially homogeneous than the world around them (Feld, 1982), Massey and Denton (1993) are right to worry that the high level of American segregation at home and work fosters serious social isolation.

Do these data mean that I, Fernandez and others have been mistaken in thinking that much of community is non-local? No, no, and yes. No, because neighbors and workmates are still only a minority of active ties. Moreover, these relationships are usually weaker than other active ties. Neighbors and workmates rarely are socially close intimates. The only social support that neighbors give tends to be small services such as

lending household goods or short-term childcare, while workmates rarely provide any social support (Wellman and Wortley, 1990).

No, because local ties are almost always a small component of people's overall networks of 1000 to 2000 interpersonal ties (Kochen, 1989). Even if we relax the criterion of active ties to include weaker ties, I estimate that most urban North Americans tend to have 10 to 20 local ties, principally relationships with those who live on the same face-block or apartment building, or whose children attend the same schools (Wellman, 1990, Wellman, 1992b). Even if we consider ties with spatially proximate workmates to be 'local', most people only have between 5 and 50 workmate ties. For every assembly-line or office-worker surrounded by coworkers, there are artisans, truck drivers and shopkeepers who essentially work alone. Therefore, even with generous estimates, local ties (neighbors + proximate workmates) are only 2% to 5% of a mobile North American's overall network. Such local ties are usually fragments of overall networks rather than self-contained urban villages or coworker solidarities.

Yes, because local ties are a sizeable percentage of the people with whom most North Americans are in frequent contact. These data make it clear that the network with whom the Torontonians have frequent contact is quite different from the network with whom they are intimate or the networks that provide them with either emotional aid, large services or financial aid. All can validly and reliably be called 'social networks', and all are important elements of the Torontonians' personal communities.

In short, we cannot base an analysis of community solely on the neighborhood because so many intimate and active ties are not local. Yet the predominance of frequent contact with neighbors and workmates should lead network analysts to bring proximity back into their investigations of community, along with the existing criteria of intimacy and supportiveness.

My hope is that this note will stimulate others to think about new ways of defining networks. Merely shifting the focus from the number of ties to the number of contacts has changed the apparent importance of neighboring in personal community networks. Other definitions may yield other revelations.

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