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Comment on Nick Crossley/2

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Comment on Nick Crossley/2

by Deirdre M. Kirke

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In this paper Crossley is making a case for a much larger role for qualitative research methods in social network analysis than they have enjoyed to date. He believes that qualitative approaches to social network analysis have been pushed to the sidelines by the major advances in social network analysis achieved by quantitative researchers. He suggests that the exclusion of qualitative methods has been at a cost and that their inclusion will be to the benefit of social network research. Wisely, he does not suggest that qualitative methods should be an add-on to the already well established quantitative social network research. He suggests instead an integrated approach in which mixed methods are used to enhance our understanding of social networks.

He contends that social network analysis is needed in sociology if it is to be truly relational but suggests, nevertheless, that social network analysis to date has removed from its analyses much of what is needed to understand social life. He suggests that social networks are social worlds but that social network analysts' mapping of social networks has been too abstract, too formal and has given insufficient attention to inter-agency and process to get a thorough understanding of the "hurly burly of social life" in social networks. He claims that the very elements that quantitative social network analysis has filtered out can be replaced by a qualitative approach. Some examples are "concrete particulars" of interaction, such as shared meanings, norms and identities.

In the remainder of the paper Crossley outlines the advantages and disadvantages of using solely a quantitative or qualitative approach and gives a number of

examples from his own research in which he combined a qualitative and a quantitative approach to a social network question with obvious improvements achieved in the findings.

While I agree with the main thrust of Crossley's argument and see great value in his suggestion for using mixed methods, I have some reservations about his reasons for the lack of involvement of a qualitative approach in social network research, his suggestions of their value in the future, his interpretation of the quantitative approach to social network research, and have some suggestions about how a mixed methods approach can be achieved in large network studies.

The Value I See in Crossley's Proposal to the Social Network Community

Crossley's call to qualitative researchers to involve themselves in social network research, because they have an important contribution to make to sociological knowledge by doing so, is welcome. Evidence from the social network literature [Bidart and Lavenu 2005; Bellotti 2008] and from his own research, given in this paper, support his point. I would support Crossley strongly on this point. There seems little doubt that using a qualitative approach, rather than a quantitative approach, to data gathering can provide quite different data and, therefore, different insights into the social processes operating in a social network.

Aware that it is quantitative tools that enable social network researchers to provide data on the structure and composition of social networks, he calls for a mixed methods approach in which the qualitative tools, which provide information on such aspects as the meaning attached to relationships, are combined with the quantitative approach, which provides social structural knowledge on the social network itself. Such an integrated approach would enable researchers to get the best of both worlds, an accurate depiction of the social network and an accurate understanding of the social life of the members of the social network. Again there is evidence in the social network literature that social networks analysts have made some efforts to do precisely this.

In particular researchers have recognized the value of combining a qualitative with a quantitative approach to social network research. One of the earliest examples I have found has been the chapter by Wellman, Carrington and Hall [1988] in which they combine the quantitative results from a random sample of 845 respondents which comprised the sample in the first East York study in 1968, with results from qualitative interviews with a random sample of 33 of those respondents in 1978. It is notable that there was a 10 year gap between the collecting of the quantitative

and the qualitative data and another 10 year gap before the chapter was written for inclusion in Wellman and Berkowitz [1988] book. Nevertheless, Wellman, Carrington and Hall [1988, 136] demonstrate in this chapter their recognition of the value of combining quantitative and qualitative methods “to provide a broad overview of the composition, structure, and contents of our respondents’ social networks.” An excellent example of the concurrent use of both methods is given in Curtis *et al.* [1995, 230]. This paper presents findings from a combination of survey, ethnographic and qualitative interview data on drug users in Brooklyn, New York. A social network survey was conducted with 767 intravenous drug users, ethnographic fieldwork was conducted on hundreds (exact figure not given) of drug users (some intravenous, some not), and 210 qualitative interviews were conducted with 68 intravenous drug users located among the drug users. The mix of methods was used confirm relevant network connections between the intravenous drug users so that the association between their social network positions and their health risks could be examined. Quotations from the qualitative interviews were given throughout the paper to elucidate the social world of the street-level drug users. A second example from the drug field includes two papers by Michell and Amos [1997] in which they did qualitative interviews with 40 school pupils in a particular year in a school in Glasgow and Pearson and Michell [2000] in which they report on surveys done in a longitudinal study of all 150 school-pupils in that particular school year in the same school and incorporate the findings from the earlier qualitative interviews done by Michell and Amos [1997]. The qualitative and quantitative data were combined to confirm peer groups and the social position of the school-pupils within them.

All of these studies support the point made by Crossley that the combination of qualitative and quantitative data can have a beneficial effect on elucidating the social world being examined but they also confirm that efforts have already been made by social network analysts to combine qualitative and quantitative data and have demonstrated the beneficial effects of doing so.

Crossley’s paper also claims that, while social network analysis is needed in sociology if it is to be truly relational, social network analysts have removed much that is needed in order to understand what he calls “the hurly-burly of social life.” The underlying suggestion is that social network analysts focus on mapping social structures in an abstract and formal way and that they give insufficient attention to what is happening between the agents who form the structures and the processes involved in social life in those structures. Indeed, he suggests that there is a lack of recognition among social network analysts that social networks are social worlds. These suggestions depart significantly from what has been my experience of reading social network research, using a social network approach in research and participating

in social network conferences over the past twenty years or so. Indeed, it is precisely the possibility of examining those social worlds in a more precise way which attracted me to social network research in my own studies.

When I found social network analysis in the 1980s it was as a result of a search to understand the peer groups of adolescents and how peer influence operated in those social groups. In essence it was an effort to understand adolescents' behaviour in the context of the social world in which it was embedded. While the data collected were based on the quantitative methods of surveys, I would contend that they provided considerable insight into the social worlds in which the teenagers lives were embedded [Kirke 1990; Kirke 1995; Kirke 2004; Kirke 2006]. There is ample evidence in the social network literature that other researchers have also explored the social worlds operating in the social networks they researched.

The vast literature that has been amassed over the past thirty years or so by sociologists and other researchers within the international social network community provides ample evidence that they have also recognized that social networks are "social worlds" and that the social network perspective has given them an improved perspective on those social worlds. It has enabled them to establish how those social worlds develop [Robins, Elliott, and Pattison, 2001], how changes in behaviour happen in them [Pearson and Michell 2000; Kirke 2004; Kirke 2006], how patterns of influence permeate them and the detrimental effect those shared influences may have on their health [Curtis *et al.* 1995], how innovations diffuse through them [Burt 1987; Valente 1995; Valente 1996], how resources are stored in them [Lin 2001] and how those resources (social capital) are used to the benefit of individual members [Lin 2001; Wellman and Wortley 1990]. These researchers have not simply discussed structures and the patterns they form but have conducted serious investigations into the nature of the relationships within those structures and how those social relationships have been used by members to communicate with each other in a variety of ways. Social network analysts have mapped the relevant social structures as social networks and have combined those data with individual level and dyadic data on the social interactions of members to examine network members' behaviour and social interactions as they are embedded in the social networks. Recent work is focusing on how the widespread provision of the internet has impacted on people's lives [Wellman 2001; Wellman and Haythornthwaite 2002]. This research has, therefore, removed the abstract nature of the concept 'social structure' and replaced it with visualizations of social structures and with detailed accounts of the social worlds operating in those social structures.

Recent research has tackled sociological questions that have frustrated sociologists for a very long time. These questions include providing evidence for the social processes which result in the formation of social network structures and questions

relating to the dynamics of change in individual behaviour and in network change over time. Developments by a range of theorists and methodologists have resulted in real breakthroughs in this type of knowledge. Researchers, including Robins, Morris, Pattison and colleagues, have established ways of examining the social processes resulting in the formation of social networks [Robins, Elliott, and Pattison 2001; Robins and Morris 2007]. This approach has been applied by Kirke [2009] to understand the social processes involved in the development of gender clustering in friendship networks. Snijders and his team [Snijders *et. al.* 2005] have made the critical breakthrough of developing a network programme (SIENA) which facilitates the examination of the dynamics of individual behaviour and social network changes over time. Indeed, Bidart and Lavenu's [2005] paper used a qualitative approach to examining the evolution of personal networks over time.

To suggest that social network analysts have not recognized that social networks are social worlds, or that they have given insufficient attention to the social worlds existing in social networks, is, in my opinion, very wide of the mark. It is true to claim that qualitative researchers have done little to contribute to these developments but, it appears to me, that this is attributable much more to the lack of interest shown by qualitative researchers in such developments than that quantitative researchers have in some way "pushed" qualitative researchers to the sidelines. There are notable exceptions, of course, in the work of Bonnie Erickson, Claire Bidart, Luis Molina, Silvia Dominguez and many other researchers who have done quality qualitative work in social network research. I do agree with Crossley that qualitative researchers have a contribution to make to understanding the social worlds experienced by members of their social networks and, indeed, that the understanding they provide will be somewhat different, but if this contribution is to be valuable it should be made in the context of the developments to date in social network research generally, and with due regard to the excellence of the work of the qualitative and quantitative researchers involved.

Difficulties of Using the Qualitative Approach in Social Network Research

While I agree with Crossley that qualitative research can contribute to our understanding of the social world of the social network in much the same way as it provides a different understanding of the social world of individuals in sociology more generally, we should be aware of some difficulties of using the qualitative approach as a way of making a contribution to knowledge in this regard.

One of the major problems is the difficulty of collecting qualitative information from large numbers of people using conventional means. Crossley's own examples given in his paper [Crossley in this issue] did not cover large social networks. The three examples used covered networks ranging in size from 35 (Fig. 1) to 63 (Fig. 7). In the examples which combined qualitative and quantitative methods discussed above [Curtis *et al.* 1995; Wellman, Carrington, and Hall 1988; Pearson and Michell 2000], qualitative information was collected only on a fraction of the sample covered by the research. Another problem is in how those data are combined. Usually qualitative and quantitative data have not been combined on each individual in the study, rather the findings are combined in a more general way. If the qualitative and quantitative data are not collected on all of the same individuals an exact combination of the findings can not be made. In such circumstances the best that can be done is to combine the results in a more general way assuming that qualitative results from a smaller sample are generalizable to others. This is not an assumption we can make in social network research because those not included in the smaller sample may differ in network terms, such as centrality or prestige, from those observed or interviewed and we have no way of knowing just how much they differ.

Also sampling can be a particular problem in complete network research. This relates to the point discussed in the previous paragraph. We can not be sure that a sample, even a probability sample, will resemble, in network terms, the population from which it is selected. In particular, a sample will not enable the researcher to estimate the structure of the population accurately. This is because we simply will not know the number of relationships those not included in the sample have. They may be among those with the highest or lowest number of ties, or indeed a mix of both. Sampling is not such an issue in egocentric network research. Egos can be sampled from the population and the results generalized to the population (of egos). Questions of structure remain, however, at the level of the egocentric network with it remaining impossible to estimate the structure of the population.

Depending on the research question being examined, collecting qualitative data from a smaller sample of the larger sample chosen for a quantitative study, may yield some relevant data, such as insights into the nature of the relationships between injecting drug users and the lives they lived [Curtis *et al.* 1995] but it may not be very productive in social network terms (for example, in accurately mapping the structure of the whole sample). Having qualitative data on the structure of the ties of a small proportion of the individuals in a complete network will have some added value but it may be rather minimal as we can not assume that the structure of the complete network will resemble the sample accurately. Instead of sampling individuals from the complete network for a qualitative study, a more productive approach may be

to collect qualitative data from individuals in some of the partial networks within it, when they have been identified. Thus, for example, combinations of data can be drawn together for certain networks identified in a complete network as was done by Kirke [2004] using survey data.

Misconceptions with the Use of a Quantitative Approach to Data Gathering and Analysis in Social Network Research

I must question some of the points made by Crossley in this regard. Using a quantitative approach to data gathering to establish who is connected with whom in a network and, thereby, construct the structure of the network, is a very small part of what sociological social network analysts do. Indeed there is ample evidence in the social network literature that this is so. Sociologists over many years have used quantitative data gathering approaches to collect such data, and much more besides, in order to understand and explain the aspects of social life they were observing. Fischer [1982] for example, devised an excellent scheme for collecting personal network data but that was collected so that he could understand the impact of urbanism on people's personal networks and their social lives more generally. At around the same time Wellman [1979] collected personal network data in a different way and in a different place, Toronto, but with much the same purpose in mind. Neither was solely interested in the structure of the social networks they found but they were interested in the social lives of the members of those networks and how those social lives were being played out. The social network literature abounds with other examples. I would suggest that Crossley's paper must take such research into account if it is to be taken seriously by the international social network community. To suggest that social network analysts are only interested in the structure of the network and not the social world they are observing does social network researchers a great disservice. On the contrary, social network researchers use the social network approach (and not just its methodological tools) to access the social world of members of social networks, whether those networks be small groups of friends [Pearson and Michell 2000], urban communities [Fischer 1982; Wellman 1979] or internet networks [Wellman 2001]. Similarly I would suggest that these publications confirm that quantitative approaches to data gathering do, indeed, provide much valuable data on the social worlds of the members of such networks.

There are also suggestions in this paper that "it is not always sufficient to record a tie as existing or not" and that the neglect of the variation in content can lead to the neglect of agency [Crossley 2010]. Again a broader examination of much of the

social network literature would confirm that social network analysts do not simply record ties as being there or not nor do they neglect agency. Frequently ties of various strengths are recorded [Kirke 1995] and the dynamic arising between individuals and their networks are seen as central to the research process [Fischer 1982; Snijders *et al.* 2005].

Thus, there is much evidence given in these publications that the value of using a quantitative approach lies not only in producing reliable social network data on relationships and structures but also on the social lives being lived out in those networks. Indeed I would content that it is the social lives that are of primary importance to the researchers with the accurate depiction of the social networks providing a broader lens into the social environment in which those social lives are embedded.

The Future: Reconciling the Differences: Mixed Methods in Social Network Analysis

I agree wholeheartedly with Crossley that “the coherence of a project derives not from the tools that are used but rather from the questions addressed, the theoretical assumptions of the researcher and the way in which the tools are used and combined” and that “...there is no reason why a variety of methods, qualitative and quantitative, might not be combined and used in this way” [Crossley 2010]. When using a social network approach to address research questions, I would agree with Crossley that sometimes a combination of qualitative and quantitative methods is needed. My reasons would, however, differ from those given by Crossley. As I explained earlier in this paper a quantitative approach to data gathering can provide accurate data on relationships and the structure of the network but it may also provide accurate data on the social world of the members of the network, while Crossley contends that a qualitative approach is needed to provide accurate data on the social world of the social network.

Given that a combination of qualitative and quantitative data may sometimes be needed I think that there are real problems with combining qualitative and quantitative data on social networks if both types of data are not collected from all of the same individuals in the sample or population covered by the study. Yet there is a major problem with collecting high quality qualitative data on large numbers of respondents and this is so whether such data are collected by observational techniques or qualitative interviews. There are additional problems when using archival sources, including whether the archives in question are sufficiently complete and accurate on the relationships of interest.

As a way of resolving this methodological problem, my proposal relates to some points I made in the preceding section. Quantitative approaches to data collection in surveys are much more versatile than we are led to believe. The very use of the label 'quantitative' suggests that surveys are used to collect data which are quantifiable, and are, therefore, always numeric. Indeed, Crossley's description of quantitative tools of data gathering as "any means deployed to record observations about the social world in a numerical form" and quantitative tools of data analysis as "any means used to manipulate the numbers derived in this way so as to explore and /or answer questions about the social world" [Crossley 2010] confirm my view. I don't share this view. I suggest that we can be very innovative with our questionnaire design for use in surveys. In particular, we can include a broad range of open and closed questions. Open questions can be asked in much the same way as they are in "qualitative" research by allowing respondents to expand on their replies to questions until they have covered the topic adequately. Thus the researcher collects this information in "narrative," "conversational" form and in considerable detail. Such data come much closer to Crossley's own description of qualitative tools of data gathering as "those which generate and/or record non-numerical and most often discursive forms of data" [Crossley 2010]. I have consistently used such an approach when designing questionnaires and it has been used in anthropological network research by Schweizer, Schnegg and Berzborn [1998, 5] who collected "rich and systematic" data on 91 personal networks. When analyzing such data the narrative answers may be transformed into numerical codes so that they can be analysed by computer, following which those codes may be transformed back to their narrative context for reporting and interpretation of the results.

Another problem that arises when using qualitative approaches to social network research is the difficulty of covering large numbers. The approach which I described in the previous paragraph would overcome this problem too. It would allow social network researchers to collect qualitative and quantitative data from large samples of individuals and would enable them to combine those data using a mixed methods approach. The outcome would be contributions to sociological social research more generally as well as social network research specifically. More intensive qualitative approaches, such as described by Crossley in his paper, could be used when social networks are small.

Conclusion

I have agreed with the main thrust of Crossley's paper about the value of more researchers using a qualitative approach in social network research and with the value of combining qualitative and quantitative methods in social network research when that is appropriate. I think this should be done, however, with due regard for the publications already available in the social network literature which used either, or a combination, of those methods. I have differed with Crossley particularly on his interpretation of how quantitative researchers approach social network research in that I see them as having concentrated their interests on the social worlds of members of networks as well as on the structures they form. I have highlighted the difficulties I see in researchers using a qualitative approach to social network research. These include only being able to apply such methods to relatively small social networks and the difficulty of combining qualitative and quantitative data in social network studies if both types of data are not collected from all members of the network. I have proposed that qualitative and quantitative questions should be combined in surveys of large networks as a way out of these dilemmas. Whatever our differences of opinion I would encourage Crossley to proceed with his development of the interest in combining qualitative and quantitative research approaches in social network research. It is through such research projects, and sharing their results with the international social network community, that inadequacies or difficulties with using a mixed methods approach to social network research will be gradually resolved.

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Comment on Nick Crossley/2

Abstract: I agree with the main thrust of Crossley's paper. I provide evidence that his views are not entirely new. Qualitative, and a mix of qualitative and quantitative, approaches have been used in social network research. I differ with Crossley in his interpretation of quantitative researchers' approach to social networks, and provide evidence that they have examined the social worlds of networks as well as their structures. I highlight some difficulties with his proposal. These include the difficulties of applying qualitative methods to large social networks and of combining qualitative and quantitative data adequately when both types of data are not collected from all members of a network. I propose the combined use of qualitative and quantitative questions in surveys of large networks as a solution to these dilemmas.

Keywords: social networks, mixed methods, survey questions, social worlds, evidence.

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