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# **The Presentation of the Networked Self: Ethics and Epistemology in Social Network Analysis**

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## **Abstract**

Drawing on the seminal work of Goffman, Krackhardt and others, this paper argues that there is a crucial step in between participants' perceptions and the collection and visualisation of data – i.e. what we call the presentation of the networked self. We employ examples from our own empirical work in the UK to argue that presentation of the networked self requires researchers to adopt a highly reflexive approach. Framing our analysis within the context of contemporary society – including the impact of social media on a 'networking mindset' – we explore the range of ethical dilemmas which can emerge during a research encounter.

## **Introduction**

For decades, social network analysis (SNA) has experienced a growth in volume and subject areas, accompanied by the development of technological tools, increasing availability of data (Borgatti et al., 2014) and the prominence of visualisation techniques (D'Angelo et al., 2016). Whilst opening new pathways for sociological investigation, this also raises specific ethical challenges, an aspect which often has been overlooked in academic discussions. As argued by Borgatti and Molina over a decade ago: 'the newness and surprising power of network analyses cause both researchers and research subjects to seriously under-estimate the risks of participation' (2005: 108). Thanks to the rise of the internet and social media, recent years have seen increased attention towards the ethics of researching online networks (see e.g. Hoser and Nitschke, 2010). If anything, however, this seems to have pushed the broader discussion of the inherent challenges of SNA, especially when focusing on 'off-line' networks, further into the background.

Collecting network data directly from individuals can challenge some central, taken-for-granted assumptions about research ethics, such as informed consent and anonymity (Kadushin, 2005), even when institutional ethical procedures have been followed and approval granted. Participants may not realise that data will be used in particular ways and, as we argue, may be unprepared for the practical and psychological impact this may have on themselves; or even on the researchers. The researcher's responsibility in making assertions about connections, centrality and power of individual participants raises further ethical issues, particularly when the reliability and objectivity of data are questionable (Kadushin, 2005). To

an extent, this relates to long-standing debates in the literature about the relationship between so-called ‘real’ and perceived network data (Krackhardt, 1987).

In this paper, however, we go further by examining the step in between participants’ perceptions and the collection and visualisation of data – i.e. the presentation of the self. In other words, we are interested in the ethical and epistemological challenges of how people present themselves when disclosing information about their own personal or professional social networks as part of a research encounter. We argue that this is a crucial aspect, requiring researchers to adopt a highly reflexive approach, no matter what specific SNA technique is employed.

To this effect, we draw upon the body of literature stemming from Goffman - and more recently the work of Papacharissi (2010), Hogan (2010) and Mehra et al. (2014) - as well as examples from our own research in the UK. The studies used to inform this paper cover a range of settings (including research with EU migrants, secondary school students, and Black and Minority Ethnic (BME) organisations) and methods (qualitative, visual and mixed-methods SNA). We claim neither representativeness nor exceptionalism for these examples; rather, we use them to ensure our theoretical contributions are well grounded in empirical data. We contend, however, that our arguments have a much wider relevance and applicability for researchers working on social networks.

Before presenting our own research data, we begin with a discussion of the epistemological challenges underpinning social network research, in particular drawing on the work of Krackhardt and considering presentations of the networked self in both on-line and off-line encounters, building on the work of Goffman and others. Furthermore, we examine the ethical implications of these complex and dynamic processes, which extend well beyond what can be captured by mere tick-box ethical approval procedures. We argue that adopting a reflexive approach to our own research experiences helps to make good ethical practice. We then conclude by considering the need for more research ethics training that will enable researchers to be sensitised to potential ethical dilemmas in the field beyond those covered by a simple, a priori ethics protocol.

## **Researching social networks: perceptions and visualisations**

Mehra et al. (2014:2) argue that ‘social networks lead a famously dual-existence. On the one hand, recurring and relatively stable patterns of interaction and sentiment connecting individuals to each other; on the other hand, social networks are also mental (re)constructions of social relations, some real, some imagined’. In other words, social networks can be understood as ‘imaginary worlds that people create and then endeavour to live in’ (2014: 3). Yet, they also contend that the vast majority of social network research has ‘focused on networks in their realist guise’, whilst far less attention has been paid to networks in their ‘cognitive guise’ (2014:13). That is to say, researchers have largely tended to measure and study networks as accurate reflections of concrete connections.

In this respect, it is important to go back to the work of Krackhardt (1987), who explained the gap between behavioural measures of interaction and self-reports of participants in terms of ‘cognitive social structures’. For Krackhardt, such perceptions should not be assessed in terms of their accuracy against objective data, but rather as ‘data in their own right, apart from their ability to mimic specific behaviours’ (1987:128). These are not just worth studying, but are

also ‘real in their consequences, even if they do not map one-to-one onto observed behaviours’ (1987:128). For example, building on Burt’s (1982) argument, Krackhardt contends that actors’ perceptions of their position in a network affect their interests and motivations, their assessment of the role of others and their overall perception of the network. Going further, we argue that cognitive social structures not only affect behaviours, but also how participants present their social networks as part of a research encounter. In particular, we suggest, this becomes crucially important when network data are visualised.

As discussed elsewhere (D’Angelo et al., 2016; Hogan et al, 2007; Hollstein & Dominguez, 2014; Molina, 2014; Freeman, 1992; Schiffer & Hauck, 2010), visualisation has long been an important aspect of research on social networks. Since the original hand-drawn ‘sociograms’ of pioneers such as Moreno (1934) the role of sociograms is not simply to collect and analyse data, but indeed to channel and ‘materialise people’s perceptions of their relational lives. By asking participants to freely draw a map of their networks, or to discuss a sociogram produced by the researcher, ‘network analysis makes visible that which cannot be seen by the naked eye’ (Kadushin, 2005: 142). In fact, visualisation gives participants a unique, and perhaps unexpected, view of their inter-personal relationships and the social contexts in which they are embedded (Ryan et al, 2014). Such a tangible representation of social ties would not emerge spontaneously from just verbally describing relationships in interviews, or adding names of contacts to a list in a questionnaire. As suggested by Emmel and Clark (2009:6), through sociograms participants move ‘from description of social practices, to their elaboration and theorisation’. This may be seen in a positive light as a way of empowering participants (Manovich 2002) and stimulating interesting reflections (McCarty et al. 2007). However, as we argued elsewhere (Ryan et al, 2014) and elaborate further below, visualisation can also produce unexpected results and, as such, it should not be seen as risk-free.

This requires us to go one step further and argue that between perceptions and visualisation there is a further layer of complexity, what we call the ‘presentation of the networked self’. In other words, the data that we collect as researchers are not only based on how participants perceive their networks, but also on how they choose to present them in a particular (research) encounter.

In this respect, it is important for SNA researchers to engage with ideas around ‘the socially embedded nature of identity’. This has long been recognised by social scientists, ‘from Cooley’s looking glass self and Mead’s ‘generalised other’ to Goffman’s presentation of self’ (Davis, 2011). The work of Goffman, in particular, continues to influence our understanding of self-presentation, moral careers, and the management of stigma and stereotypes in everyday interactions (Ryan, 2011; Scott, 2010; May, 2008; Yang et al, 2007). Of special significance is Goffman’s dramaturgic analysis of social life (1959). Goffman uses the metaphor of the stage to consider the ‘performance’ of an individual in relation to an audience of observers, and whereby the backstage represents a more ‘authentic self’ (Goffman, 1959). Actors seek to make sense of social encounters so that the social world appears knowable, predictable, trustworthy and reliable, in other words, it appears as ‘normality’ (Goffman, 1971). Furthermore, Goffman draws attention to how actors seek to ‘reject an image of the self as abnormal’ (Goffman, 1961:50), distancing themselves from particular roles and images.

Drawing on this framework, we argue that participants are not simply ‘giving’ information about their inter-personal relationships to the researcher. Rather, they seek to present a particular image of themselves. However, because network visualisation may be unfamiliar to

participants, they are not able to anticipate how their relationships will be depicted and analysed in visual images. Hence, the final output may be surprising and indeed challenging to their efforts of self-presentation. These are processes that must be taken into account and which raise specific ethical and epistemological challenges.

## **The presentation of the self in the Digital Age**

In recent years, much research on social media and social networking sites also has drawn upon Giddens to understand the self as increasingly fluid and multifaceted, especially as people assume a variety of roles across diverse social contexts (see e.g. Hogan, 2010). Indeed, 'scholars were quick to recognise the potential for self-multiplicity afforded by the internet' (Davis, 2011). Drawing on the body of work of Goffman - and more recent developments by Bauman, Giddens and Jessop - Papacharissi argues that, in late modern societies, the self 'is expressed as fluid abstraction, reified through the individual's association with a reality that may be equally flexible' (2010: 304). Within this context, Papacharissi suggests: 'The process of self-presentation becomes an ever-evolving cycle through which individual identity is presented, compared, adjusted, or defended against a constellation of social, cultural, economic or political realities' (2010: 304).

Networking sites facilitate self-presentation through text, photos and other media, but the performance is 'centred around public displays of social connections or friends which are used to authenticate identity and introduce the self through the reflexive process of fluid association with social circles' (Hogan, 2010: 305). Hence, technology both enables but also shapes online presentation of self. However, while there are manifold opportunities to present versions of the self to different audiences, that is not to say that individuals simply proliferate a multiplicity of selves. As Hogan (2010) notes, people may sustain different online profiles where they upload different kinds of images and express different views; but it is quite hard to sustain such varied representations of the self without experiencing 'a sense of self-presentation paralysis' (Hogan, 2010: 383). In fact, there is growing research to suggest that 'self-coherence' is essential for one's psychological well-being and one's sense of moral integrity (see Davis, 2011). Hence, while 'self-multiplicity is a core feature of our networked era, it appears to have its limits' (Davis, 2011: 638). Research conducted by Davis on young people's networked selves in the USA suggested that expressing very different personalities in different contexts was viewed by participants as 'inauthentic' (2011: 643). Her research findings tally with a wider body of work which shows that people seek an 'overarching sense of identity that is experienced as coherent and stable' (2011: 645). In fact, Bullingham and Vasconcelos (2013), on the basis of an analysis of identity and presentation of the self in blogging and other online contexts (including Second Life) argue that, contrary to engaging with the process of whole persona adoption, people interacting online are 'keen to re-created their offline self online, but engaged in editing facets of self' (2013:101). This seems to tally with Goffman's idea that 'when in the 'front stage', people deliberately chose to project a given identity' (ibid.) Thus, most scholars now recognise that 'online and offline identities are more aligned than early internet research suggested' (Davis, 2011: 648; Dunbar et al. 2015); practices of presentation of the self, it could be argued, may also be more aligned than usually assumed.

Notwithstanding, it is clear that, with the rise and omnipresence of social media, most people have developed very strong ideas about what social networks are and how to talk about their own to give a 'good impression'. In other words, the Internet revolution has brought

consciousness about presentation of the ‘networked self’ to the fore, and led to the wider adoption of what may be called ‘a networking mindset’ and lexicon within society. This contrasts markedly with less than two decades ago, when ‘social network’ was a concept that had to be explained carefully to most research participants. For example, in Ryan’s research with newly arrived migrants in the early 2000s, the actual word ‘networks’ was rarely used in the interviews (Ryan et al 2008). Although understanding patterns of sociality and sources of social support were central to the research, Ryan and colleagues felt the need to explain in detail what was meant by the term ‘social networks’. They used explanation such as ‘contacts’, ‘people who could help you’, ‘circles of friends’ or ‘acquaintances’, ‘groups’, ‘relatives’, etc. The term ‘social network’ was not in every day popular parlance and even those participants who spoke English fluently rarely referred to their social circles as ‘networks’. Nowadays, instead, ideas about social networks – of any kind – are often conflated with or informed by specific behaviours and habitus typical of online network. This social media effect can spill over into other aspects of our lives as specific social (and professional) contexts are characterised by particular understandings of networks and networking behaviours. D’Angelo’s work on migrant organisations (D’Angelo, 2015), as discussed later in this paper, shows how within all sorts of professional communities – including those which rely very little on digital technology – the jargon and way of thinking typical of the internet is now informing language, mindsets and behaviours.

While there is growing research on presentation of the self on-line, there has been very little research on how the presentation of the self may impact research which seeks to map social networks in the off-line world. As Hogan (2010) notes, although the concept of presentation of self is increasingly popular among scholars researching activity on social networking sites, Goffman was mainly referring to interpersonal encounters bounded in place and time – a specific performance before a specific audience in a particular moment and location. This is very different from much online activity where the audience may be largely unknown. In our research studies, as discussed below, we consider interactions which are more similar to Goffman’s original examples. Social Network Analysis, however, does bring some very new and distinctive elements to the research encounter, something that disrupts both the familiar rules of engagement of a traditional interview as well as challenging contemporary ‘network mindsets’ simply based on numbers (rather than patterns) and self-reinforcing narratives.

Particularly, SNA studies which involve participants in the production of sociograms, may have the effect of placing people in front of what appears to be a mirror reflection of one’s social life. Depending on the methods used, these visual snapshots of the networked self can be drawn by the researcher during or after data collection (D’Angelo et al, 2016) or can be produced by the participants using instructions and tools provided by the researcher (Tubaro et al, 2014). In any case, these processes involve a presentation – indeed a visualisation – of the networked-self using means and a ‘language’ that – even in the age of online networks - may be unfamiliar for the participants. Thus, their ability to produce an outcome (performance) which is desirable and coherent with their sense of identity may be challenging. The resulting sociogram may question or shatter the participants’ carefully constructed and socially mediated performance, suggesting social or personality ‘flaws’ or lack of authenticity. Even worse, a sociogram drawn by the participants, may generate unease about the effectiveness of their presentation of the self when the narrative is crystallised in one (apparently) all-encompassing picture. This mismatch, we argue, becomes amplified in an age in which most people have begun to adopt a ‘networking mindset’ and may have developed a certain sense of confidence on how these networks appear to others. The impact can be psychological, relational and, as we will exemplify later in this paper, even professional. The inability of participants to fully

understand the possible outcomes of a SNA exercise – as well as how a sociogram may be used or presented by an academic as a research output – also puts a new light on formal ethical procedures such as ‘informed consent’.

## **Encounters in the field: ethics and reflexivity of the networked self**

As well as the usual, standard ethical issues associated with all research involving human participants, social network research raises some specific ethical challenges. As Kadushin has noted, social networks have a troublesome and distinctive attribute: ‘the collection of names of either individuals or social units is not incidental to the research but its very point’ (2005:141). Participants are usually asked to list and describe, in some detail, the names, professions, social standing of ‘second parties’ without their knowledge. The actual names are needed at the point of data collection, though they can be anonymised later on. Thus, anonymity and data protection can be especially onerous in social network research because of the large numbers of alters involved. As discussed elsewhere (see other paper in this special issue) the new General Data Protection Regulations, 2018, have very specific implications for how we conduct social network research. Detailed research protocols on secure data storage and anonymization are now mandatory.

Anonymity and confidentiality, however, are only the most obvious of the ethical issues to take into consideration. In the work of Goffman, ideas around ethics and morality are above all connected to social encounters and performance. As Goffman (1959:251) explained, social actors are not so much concerned with realising universal moral standards but with ‘engineering a convincing impression that these standards are being realised’. Thus, as explained by Bovone (1993), the key issue becomes not so much ‘ethics’ in an abstract sense, but ‘etiquette’. As the formal code that govern encounters, allowing these ‘to take place without any problem arising, irrespective of their aim and situation’ (Bovone, 1993:26). Communication norms and, more broadly, the practice of encounter, become the key ethical issue. Thus, breaking these norms or disrupting someone’s presentation of the self may risk having a negative impact on those affected. This risk is ever present in the research encounter and, for the reasons presented below, even more so for network research.

This of course also has implications for informed consent. Obviously, it behoves all researchers to provide sufficient information and reassurances to participants before they agree to take part in our studies and this is usually a requirement of all ethics governance procedures. However, as mentioned at the start of this paper, the complex and highly sophisticated techniques associated with social network analysis mean that visualisation may reveal hidden patterns in network data, thus presenting participants with mediated self-representations they did not anticipate at the outset (Borgatti and Molina, 2005; Kadushin, 2005). While some of these ethical issues have been discussed at length in the literature (Hoser and Nitschke, 2010), in this paper we seek to go further and adopt a reflexive approach to examine other ethical challenges which we encountered, especially when using network visualisations techniques.

Reflexivity in the research process has been discussed by social scientists for over three decades. As well as the important contributions made by feminist theorists, social researchers from hermeneutics and critical theory have also considered the importance of being reflexive

(Mauthner and Doucet, 2003). Reflexivity involves honesty and openness about how, where and by whom the data were collected and locates the researcher as a participant in the dynamic interrelationship of the research process. This matters because, as De Souza has noted, reflexivity can enhance ‘the credibility and rigour of the research process as well as make transparent the positionality of the researcher’ (2004: 474).

Furthermore, reflexivity has been linked to good research ethics (Sultana, 2008). Beyond the formal procedures which need to be ratified by most universities before a researcher can enter the field, there are ongoing ethical dilemmas encountered in the field (Guillemin and Gillam, 2004), which can only be appreciated by adopting a reflective approach. As Kleinsasser has observed, ‘reflexivity enables the researcher to explore ethical entanglements before, during, and after the research’ (2000: 157). However, being reflexive about our research encounters may not necessarily be a comfortable experience. It forces us to confront challenges and difficulties in the research process. Rather than simply presenting our findings, we need to show the complex and sometimes messy process behind the scenes; revealing ethical dilemmas and our attempts to overcome them. As Pillow reminds us, reflexivity demands an ‘ongoing critique of all of our research attempts, recognising that none of our attempts can claim the innocence of success’ (2003: 188).

In this paper we adopt a reflexive approach not only as a way of revealing the processes behind our network data, but also to expose and explore the ethical dilemmas encountered in the field. In so doing, we seek to reveal how the ‘presentation of self’ is a crucial aspect of social network research and needs to be given more attention by scholars, especially those who are interested in off line networks.

## **Our studies: data and methods in conversations**

The two authors have been working together on a range of research projects for over a decade. As colleagues in a busy research centre, even when working separately on different projects, we have often met to discuss our experiences of data collection and to share our observations and reflections on the dynamic process of research encounters and the ethical dilemmas we experienced in the field. In our previous writings together Ryan and D’Angelo, 2018; D’Angelo et al 2016; D’Angelo and Ryan, 2016), we have drawn upon our experiences of conducting social network research, especially with migrants, to explore methodological opportunities and challenges of using mixed methods including network visualisation. This current paper draws upon research we conducted separately over recent years.

In exploring social relationships, Louise Ryan has developed the technique of using paper sociograms embedded in in-depth qualitative interviews (Ryan et al, 2014). These sociograms are based upon the original target sociograms of pioneering researchers such as Moreno and Northway and use concentric circles, drawn around an ego focal point, to collect data on degrees of closeness across different domains of relationality - including family, friends, neighbours, hobbies, work or school (see Ryan et al, 2014 and Ryan, 2016 for a detailed discussion of this method).

The work of Alessio D’Angelo has instead tended to focus on the exploration of whole-networks, and particularly on organisational networks, where each organisation is a node and the ties are the connections between these. Particularly, he looked at the networking practices



of migrant and Minority Ethnic organisations, including community centres, advice centres and other voluntary and non-for-profit organisations working for and on behalf of minority groups in the UK. Methodologically, D'Angelo started approaching SNA from a quantitative perspective, with the aid of specialised software, though he gradually moved towards a mixed-methods approach, whereby the mapping of networks was the product of an iterative process involving the triangulation of formal, 'quantifiable' data (e.g. official documents, shared funding, interlocking directorates, questionnaire) and informal, qualitative data (e.g. stemming from interviews, observations and ethnography).

Despite working separately on these projects, the analysis below has benefitted from our shared discussions and reflections. In fact, our use of different methodologies and focus on different case studies has enhanced our ability to use empirical evidence to generate broader reflections and contributions to social network theory. The next sections will present three significant case studies emerging from our work and conversations, with common points and overall reflections being drawn in the Discussion section of this article. As mentioned above, these examples are not meant to be representative of our work – and certainly not of the wide range of challenges which SNA researchers may encounter in the field. However, they have been selected to substantiate some of the specific issues underpinning our overarching argument about the ethical implications of network (re)presentation which, we believe, has a much wider relevance for social network scholars and, so far, has not received much attention.

## **The embarrassment of visualising networks (case study 1)**

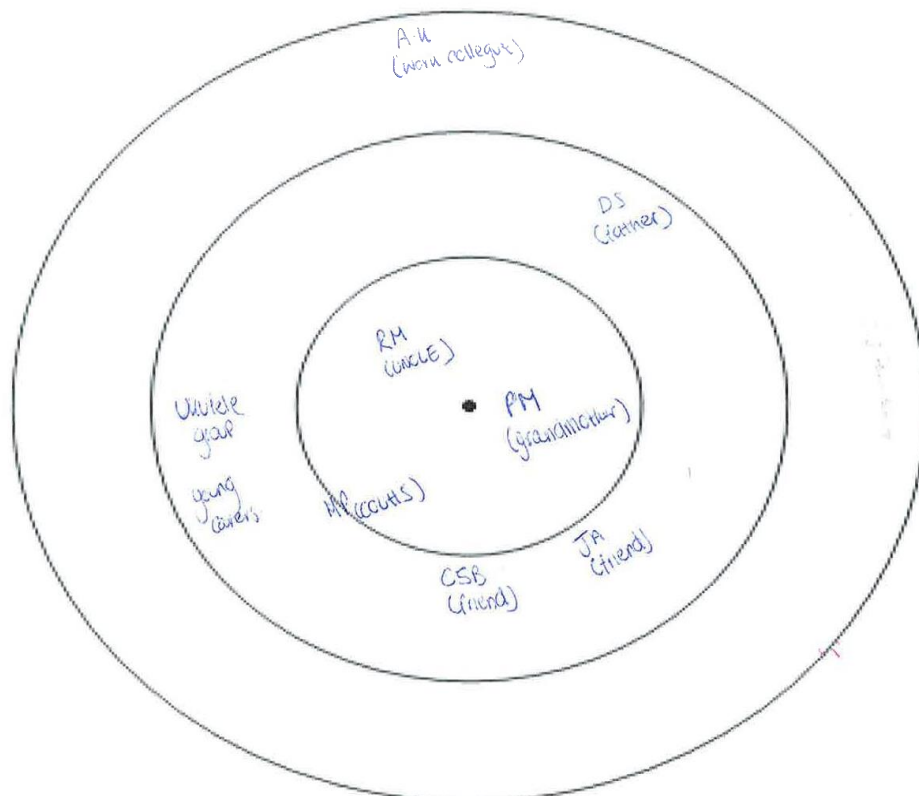
The first example is drawn from a study of young people undertaking apprenticeship training programmes in London, interviewed in 2016-17; this was part of a larger project on school engagement and transitions to work (Ryan et al, 2019). For the qualitative element of the project, a sample of young people were interviewed several times to discuss their experiences of education and their professional plans and aspirations. For example, Cynthia was met on 4 separate occasions and participated in two in-depth interviews, the second of which also involved completing a paper sociogram as part of the interview process. Cynthia was aged 16 and 17 at the time of the two interviews, which occurred almost one year apart. Her mother died when Cynthia was a child and she was estranged from her father. Cynthia was reared by her grandmother and they still lived together. While the grandmother was initially the carer, later the roles reversed as she developed dementia and Cynthia became the main carer. While Cynthia made the decision to pursue an apprenticeship programme - which is still a minority route for young people in the UK (Ryan and Lorinc, 2018) - most of her closest friends had gone to university in other cities outside London. Cynthia remarked in the interview that she missed her friends and felt 'very lonely' without them. As an apprentice, she combined work and study. In addition, she also looked after her grandmother. While the other apprentices on her programme had time to socialise at the weekends, she felt that she was 'stuck at home with gran'. However, she did not say this with any sense of self-pity or resentment, but merely as a fact of life. Throughout the interviews, Cynthia sought to present herself as a capable, responsible and mature young woman. In fact, as noted elsewhere (Fuller and Unwin 2009) claims to maturity and responsibility often mark out apprentices from their apparently fun-seeking university-going peers.

Nonetheless, Cynthia's sociogram revealed and made plainly visible the extent of her isolation. After adding her few close contacts, she said: 'that's all I think of'. As with all participants, Ryan prompted her to see if there were other relatives or friends to add. Cynthia replied: 'I

have cousins, but we are not close, I probably see them at Christmas’. Ryan then asked who was her main source of support and Cynthia replied: ‘my grandmother definitely, all the way’. On hearing this Ryan felt quite concerned for Cynthia. Her main source of support was an elderly woman with dementia. This seemed to underline her isolation and lack of support. Nonetheless, Cynthia appeared determined to make a positive presentation of self. While acknowledging relational problems, she still asserted: ‘I feel like this is quite a good network, except my dad doesn’t really give me a lot of encouragement’. As Borgatti and Molina (2005) note, the researcher may feel it necessary to advise participants on network support. Ryan felt worried for Cynthia, she seemed isolated and over-burdened for a teenage girl. Moreover, this raised ethical concerns about exposing and visualising her very limited and sparse network. Ryan continually urged her to seek more professional help for her grandmother.

The case of Cynthia exemplifies the potential embarrassment that can be caused when we ask a participant not just to talk about their support networks, but to put them on paper, creating a tangible diagram which conveys a sense of exhaustiveness. The efforts to present one’s network – as visualised in a sociogram – as ‘normal’ and unproblematic, can hide a deep sense of unease about having fully revealed one’s personal sphere. As noted earlier, the visualisation of a network may come as a surprise to participants (Kadushin, 2005). The sparse network, visualised on paper in the interview context, challenged Cynthia’s presentation of herself as someone who was mature, responsible and coping well with ‘quite a good network’ of support. This raises ethical challenges for network research, especially involving visualisation, as it risks having a psychological impact on participants.

**Figure 1 - Cynthia’s sociogram**



## When actors know each other (case study 2)

The second example comes from a different study undertaken with Polish migrants in London (Ryan, 2016; Ryan 2018). Although the participants were recruited using a range of diverse methods, some snow-balling was used towards the end of the recruitment process. Hence, as a result, Ryan interviewed two women who knew each other. The first, Sylwia was interviewed in the summer of 2014 and spoke very movingly about her sense of social isolation following the recent break up of her marriage. Although she had a well-paid, permanent job in her chosen profession, after years of study and hard work, her divorce had left Sylwia in a state of uncertainty about the future. As a single, working mother, with two children, she felt bereft of wider family support networks in London: 'I miss my family, I feel quite lonely here'. She elaborated on this sense of loneliness: 'I just feel very kind of very disconnected, you know I don't have any connection with neighbours, no connections with schools and communities. So in that way I just feel very disconnected'. Her sociogram (Figure 2 below) reflected this sense of disconnection and was very sparse. Apart from her children in London and parents in Poland, she appeared to have very few strong social ties. Her best friend ('SU') was in Poland and she had only a few friends in London but they did not appear to be particularly close and only one ('G') was given an identifier.

A few months later Ryan interviewed another Polish woman, Karina, who had been recommended by Sylwia. Being aware of how lonely and isolated Sylwia was feeling, Ryan was curious to see if Karina would mention her at all in the interview, especially when discussing friendship ties in London. Interestingly, as Karina completed her sociogram she remarked spontaneously:

*Actually someone who was very helpful who didn't make it here (i.e. on to the sociogram), Sylwia, who put me in touch with you, because we lost contact when I was writing my PhD. I really like her and we've met recently and we both thought 'how is it exactly that I haven't seen you for 4 years, what's happened'? Like, she's busy in her life, having children and things. She was very helpful. She has gone through the same of finding out how it all works, knew where I was coming from so that was very useful.*

Ryan asked Karina how she and Sylwia had met, and was interested to know if they had known each other in Poland or had met in London. It turns out they had briefly worked together in London when Karina was just beginning her career. Karina noted that Sylwia had been very 'helpful' and indeed 'useful' to her. Upon seeing her network visualised on paper, Karina became very reflexive about how her sociogram and interview story made her seem. It is apparent that the emerging picture made her feel uncomfortable: 'It's very Machiavellian', she suddenly proclaimed. She reflected on how people had come into her life at key moments, such as work colleagues like Sylwia, and for a time they had been 'useful' and 'helpful'. But over time she had not maintained the links.

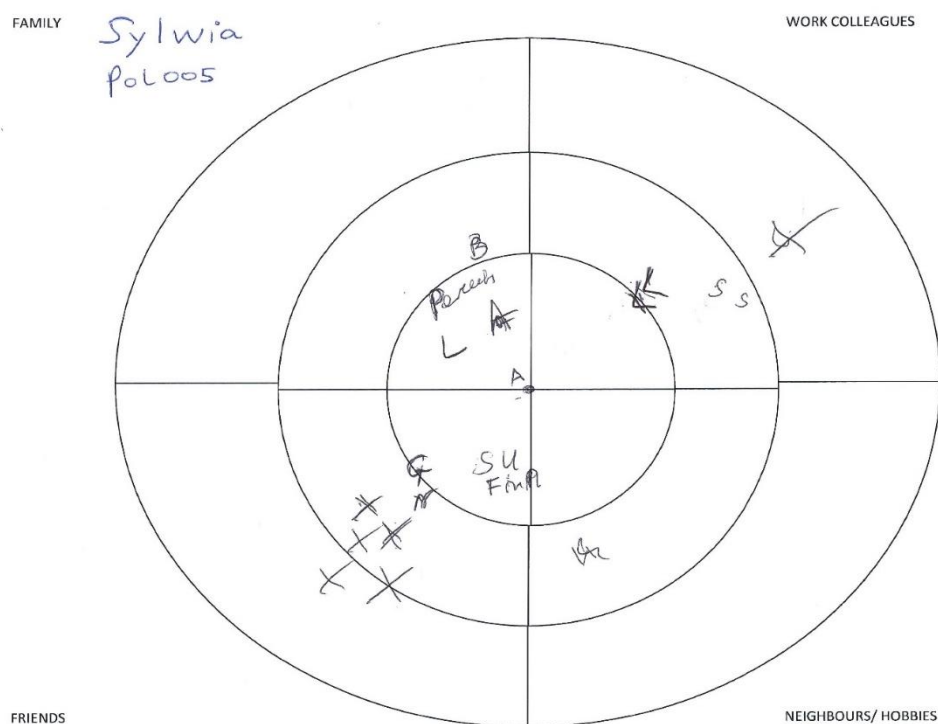
As noted earlier, participants seek to maintain a coherent sense of themselves and to manage any negative impressions (Goffman, 1959; Hogan, 2010). Karina then began to offer a justification for her approach to relationships and in so doing sought to re-establish a more comfortable presentation of her networked self that was more in line with her 'cognitive guise' (Mehra, et al, 2014).

*My theory is maybe I have capacity for close friends, a certain capacity for non-workplace friendships and I do feel very linked with people who are back in Poland, they are the closest, emotionally. Certainly if it was just talking about how I feel then that would be the first choice I would be making. The people in Poland. But, yeah, I don't know. I'm not, just one thing about me, I never keep in touch with anyone and I'm always getting told off by my family that I ring them once or two years time. It's just the way it is.*

As a researcher interested in social network formations and maintenance over time, Ryan was fascinated by how Karina presented and justified her networked self. Her interview and sociogram provided rich and valuable data. However, as a human being, Ryan was struck by Karina's somewhat casual attitude to friendships especially remembering how isolated and lonely Sylwia was feeling. On a personal level, Ryan wanted to encourage Karina to phone Sylwia and take her for a coffee. But ethically Ryan knew this would breach the confidentiality owed to both women and was completely inappropriate.

The example of Sylwia and Karina illustrate two noteworthy points. Firstly, they show quite clearly the ways in which collecting such rich data about people's intimate lives and interpersonal relationships raises very specific ethical challenges for both the participant and the researcher, as well as issues of anonymity and confidentiality when participants know each other and when the researcher ends up becoming an additional 'tie' between them. Secondly, as shown by Karina in particular, the visualised network may challenge a participant's desired presentation of self; disrupting their cognitive guise. In such cases, participants may seek to justify, or even amend, the visual image so that it sits more comfortably with their sense of self.

**Figure 2 – Sylwia's sociogram**



## **The presentation of the networked self as a personal asset (case study 3)**

The third and last example presented in this paper is drawn from a series of research projects undertaken by D'Angelo looking at Kurdish community organisations in London. These interconnected studies (D'Angelo, 2008; D'Angelo 2015) aimed to explore networking practices at the organisational level and raised a number of methodological issues, in particular on the limitations of traditional approaches to whole-network SNA (D'Angelo, 2015). One of the key findings that emerged was how the changing and shifting nature of this organisational network was affected not just by the formalisation of community links, but also by a range of contextual factors and, most notably, was the product of economic and policy changes concerning the UK voluntary sector as a whole.

However, the fieldwork conducted with Kurdish 'community leaders' clearly showed how establishing the presence or absence of ties in a clear-cut and 'objective' way was extremely challenging. In an initial pilot study (D'Angelo, 2008) organisational ties were measured through established SNA techniques, in particular with a matrix-based questionnaire. Community officers tended to report ties with as many other organisations as possible and were often keen to declare to work with 'most' if not 'all' other Kurdish groups. In several cases, though, they were unable to give any details about such links if probed. Eventually, for this reason, D'Angelo decided to explore the nature of organisational links resorting to increasingly less formal methods, accompanying unstructured interviews with non-participatory observations and data triangulation. In this sense, sociograms like the one presented in figure 3, below, are not the result of a formal quantitative mapping. Rather, they represent a descriptive tool, informed by the researcher's understanding and interpretation of networking processes and structures, they are, in effect, a representation of the researcher's cognition of a given social network.

What D'Angelo learned through this process was that participants made very conscious effort to present themselves as highly connected; this was deeply engrained in their professional practice. In an increasingly marketized and professionalised voluntary sector (Craig, 2011), individual organisations are constantly expected to provide evidence of their ability to pull together and lead on a network of organisations; for example, when applying for funding, by providing a long list of potential partners. Such ability to demonstrate membership - or ownership - of a network becomes a sort of symbolic capital (Bourdieu, 1986) which is extremely important to exercise influence and receive financial or political support. Whilst most participants seemed to make very little use of online networking sites to maintain (or express) their professional networks, their jargon and networking mindset appeared highly influenced by them. Terms such as 'networks', 'links', 'connections' – and a very quantitative approach to assessing these – emerged from the conversations in spontaneous, unsolicited ways. Moreover, the image of Kurdish organisations operating as a whole network - and as such being stronger and more representative than the sum of its parts - was a powerful one to evoke when trying to influence the public sector and other major mainstream stakeholders (D'Angelo, 2015). As Oh et al. (2006:578) argued, 'groups create boundaries that are both

cognitive and real, that are meaningful to the members, and that affect subsequent identification and behaviours’.

The production of D’Angelo’s sociograms included an iterative process - with structural patterns informing questions about ‘meaning’ and with the results of qualitative research being used to interpret, but also to enhance and amend visualisations. At various points, selected participants were shown draft sociograms and encouraged to comment on them. This often led participants not so much to criticise or ‘correct’ D’Angelo’s interpretation of the overall Kurdish network, but above all to ‘justify’ their individual position and role within it.

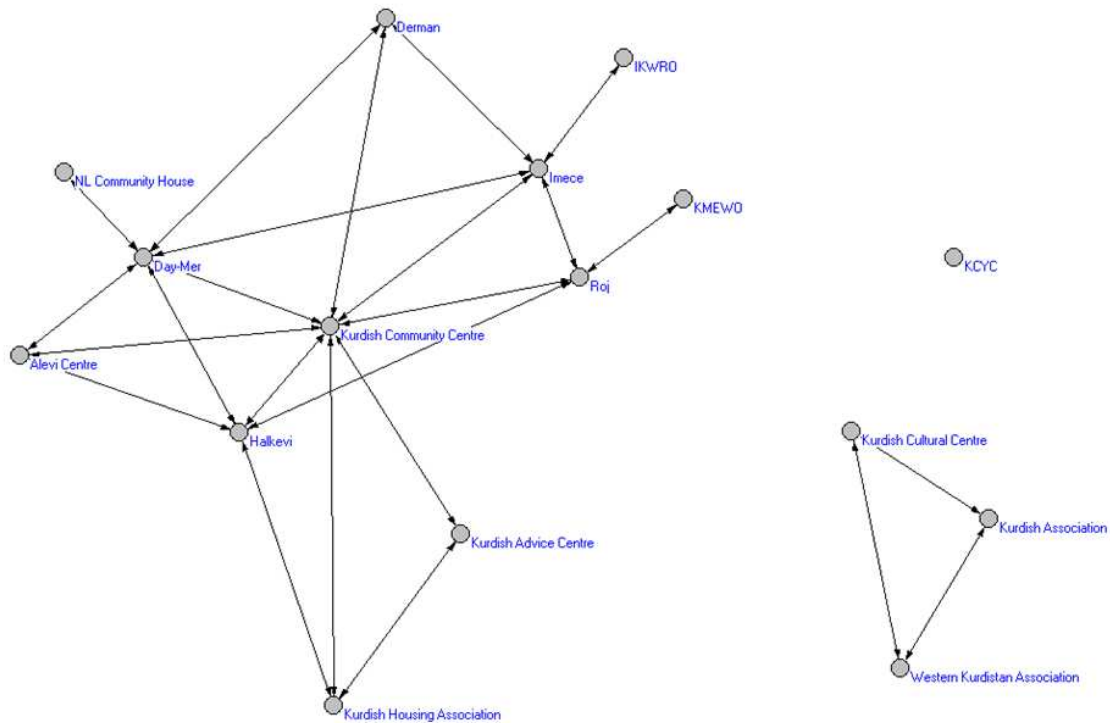
Many, whilst respecting D’Angelo’s independent role as a researcher, asked questions about how he was going to use the sociograms and whether they would have been identifiable or not. Clearly, this was not just a matter of self-esteem and pride, rather, it was a realisation that a representation challenging the official narrative of an organisation could – for the reasons discussed above – have a major impact on their ability to operate successfully.

Some referred to the transient nature of their professional links (Gilchrist 2004), highlighting, in a very reflexive way, how the set of connections which were active at the very specific time of research, were very different from what they used to be just a few months before – this draws attention to the role of time, something we have discussed elsewhere (Ryan and D’Angelo, 2018). Others noticed that an apparently peripheral position was due to the centrality of their organisation within a completely different group. So, for example, some Kurdish Women organisations (such as ‘IKWRO’ in figure 3) claimed to have very few links with other Kurdish groups because they were in fact keener to collaborate with migrant women organisations from different ethnic backgrounds.

This raises the issue of how different perspectives, and particularly different perceptions of network boundaries, impact on perceptions (Krackhardt, 1987), presentation and assessment of a given network. With regard to this challenge, Knoke and Yang (2008) refer to two different approaches to determining network boundaries: realist strategies, based on boundaries imposed by the individuals (and whereby actors are included or excluded depending on whether other actors judge them to be relevant) and ‘nominalist’ strategists, based on boundaries imposed by the researcher on the basis of a conceptual framework. The latter approach, as made clear by this example, can force the researcher’s framework and views onto the participants, producing results that they cannot relate to. The former, as discussed for example by Heath et al. (2009) requires a complex process of boundary mapping which is driven, at every step, by decisions made by participants about the representation of the network within the research context. On this basis, they explore the question of whether the partiality of data thus collected ‘actually matters’ and conclude that ‘it reflects the permeable, partial and dynamic nature of social networks, characteristics which are central to a more qualitatively informed understanding of SNA’ (Heath et al. 2009: 646). In discussing their own data, Heath et al. also suggest that ‘in some cases certain potential network members were excluded from nomination in order to avoid the possibility of unflattering or conflicting accounts, and that those who were included were often nominated because they were unlikely to present a contrary position’ (2009:655). Thus, firstly, researchers need to be reflective about how their chosen framework of analysis – and particularly the boundaries imposed on the network – impact on the participants’ presentation of the networked self, and thus the research data. Secondly, they need to be aware

of how the process of network mapping can be affected by conscious decisions made by participants when identifying alters.

**Figure 3 - Kurdish community organisation in London (circa 2013)**



## **Discussion: rethinking data reliability and ethics**

The examples presented here are not meant to be exhaustive of the range of issues concerning the representation of the networked self and its impact on the research process. With this article, however, we aim to raise the attention of SNA researchers to a number of important aspects which, we argue, are relevant to most network research, whether online, ‘off-line’, qualitative or quantitative. First of all, it is important to recognise that network mapping is often about collecting information on network perceptions and, even more so, on the representations provided by participants at a given time. The role of the researcher then becomes one of summarising and, often, ‘visualising’ these representations (e.g. through sociograms). Thus, echoing the observations of Krackhardt (1989) over three decades ago, SNA data can be quite remote from any ‘objective’ information about social networks as concrete social facts. But while Krackhardt pointed to the key role of perception in network research, we have gone further by highlighting that between perception and visualisation there is the additional step of self-presentation. In other words, drawing on Goffman, we have argued that the network data

elicited in an interview encounter, is shaped by what we call ‘the presentation of the networked self’.

However, that is not to suggest that research participants simply present us with ready-made images of themselves and their social relationships. As researchers, we impose a structure (sociogram) and network boundaries (Heath et al, 2009) on the data we collect. In addition, as noted previously (Borgatti and Molina, 2005), the complexity and unfamiliarity of network visualisation may disrupt efforts of self-presentation and confront participants with surprising and uncomfortable images. Thus, from an epistemological perspective, we need to be mindful of the dramaturgical context of the research interview as a stage on which performer and audience interact in ways that shape and co-produce the resultant data.

Hence, we argue that the need not to take network data ‘at face value’ is connected to at least two, opposing types of risk. On the one hand, as exemplified by the first two case studies presented here, asking participants to visualise their personal social network in the context of an interview encounter with the researcher can lead to the disclosure of an overall picture that can reveal itself as disappointing or embarrassing, and emerging as such only when it is too late, i.e. once the network has been visualised as an image on paper (or a computer screen). Of course, participants can always exercise the right to withdraw from a study, but once this powerful reflection of the networked self has revealed itself, it cannot be unseen, and any possible impact of it, psychological or otherwise, cannot be undone very easily.

On the other hand, when conducting SNA research with participants who ‘perform networks’, using a ‘networking mindset’, as part and parcel of their personal or professional toolkit, researchers may be at the receiving end of a highly rehearsed narrative. This may be of sociological interest in its own right, but it is important to recognise it as such. Moreover, the disclosure of network visualisations, and more generally of any analysis of the network data, has the potential to challenge particular narratives which, as discussed with regard to the case of Kurdish community organisations, can represent an important asset for participants. Ethical considerations thus emerge not only in relation to the psychological sphere, but also with regard to the professional, economic and ‘political’ ones. In the case of whole networks (particularly small to medium), the right to withdraw can seriously compromise the reliability of the data, so the relationship between the interest of the participants and that of the researcher can be particularly hard to balance. In any case, even when the research outputs are fully anonymised, for anyone who is embedded in that social or professional structure it can still be easy to work out who is who and, hence, the role they have been revealed to play within a network.

Although, as always, social researchers are bound by ethical governance to explain to participants how their data may be used in research reports, academic articles and so on, it is unlikely that participants will fully appreciate how personal network data may be analysed and interpreted, unless they are also academics. It is possible they are primarily concerned with how they present themselves to the researcher in that particular encounter, rather than how their data may be perceived by a wider academic audience in later curated presentations. As Hogan argues: ‘Once a performance has been recorded, the nature of the performance has altered. It may still be a presentation of self, and undoubtedly it continues to signify an individual. However, it no longer necessarily bounds the specific audience who were present when the performance took place. Instead it can be taken out of a situation and replayed in a completely different context’ (2010: 380).



One needs to reflect on whether consent, however given voluntarily, can be actually considered 'informed' if participants do not have a full understanding of the type of outputs and outcomes which may result from the research process. An inability to interpret the very data disclosed and generated through interviews or other network mapping exercises makes the right to withdraw (or, more specifically, the capacity to assess the consequences of not withdrawing) much less meaningful. Again, balancing interests and power relations becomes difficult, since for a researcher revealing too much about the rationale and potential impact of the methodology used may be highly impractical and produce a further, major effect on the 'collaborative manufacture' (Goffman, 1959) that is a sociogram.

At the same time, it is important also to recognise that – in today's digital age – anything to do with 'networks', whether offline or online, comes with a particularly heavy baggage and many participants – whilst they may be oblivious to the specificities of SNA and network visualisation - tend to have strong ideas about their own networks, how to communicate them and how to assess their value for themselves and for others (Davis, 2011). As we have shown through our case studies, some participants may feel bad about a social network that could come across as 'poor', whilst others may be worried about appearing overly instrumental in their approach to personal relations. Of course, such value judgments may differ significantly from the particular perspective of individual researchers. Thus, it is to be hoped that future scholarly debates will further explore issues concerning the researchers' reflexivity with specific regard to network research, as well as investigating the ways in which the digital world impacts on mindsets, behaviours and presentations of the networked self also 'off-line'.

Finally, using a reflexive approach, our case studies clearly exemplify the ethical challenges of conducting research with participants who know each other and who are aware that other members of the network will also take part in the research process. To an extent, through the 'research encounter', researchers become embedded in the social network. Hence, we are made part of the perspectives and relative positions of its members and may be tempted to make moral judgements on the conditions or behaviour of individuals. In sociological research, the moral dilemma of whether and how to give advice or otherwise influence social relations is always present, but in Social Network research this is amplified by the very nature of the method.

## **Conclusion**

To conclude, our paper demonstrates that an a priori tick box institutional procedure of ethical approval does not necessarily anticipate all the ethical dilemmas that can emerge in the field (Guillemin and Gillam, 2004). In a bid to conduct research ethically, it is necessary to be mindful about the potential impact of network visualisation on participants, the extent to which this affects properly informed consent, the limits of 'anonymity' after (and indeed even during) the research process, and the particular ethical responsibilities all this creates for us as researchers. Sharing and being honest about the challenges involved in research encounters can help all researchers to reflect on what works and what does not work and encourage us all to become better and more ethical researchers. Being aware of the potential risks arising from research encounters does not mean claiming that most SNA research is or is likely to be 'dangerous'. In fact, those working in the field are well aware of the fact that a conversation around social networks often can be quite engaging, interesting and sometimes even uplifting for those involved. Being reflexive of potential ethical issues, however, helps preventing negative outcomes (however unlikely) but also, and in any case, leads to a more nuanced and

aware approach to data collection, analysis and presentation. Adopting a reflexive approach not only makes for good research ethics (Kleinsasser, 2000), it makes for good research.

The objective of this paper is not to suggest that new, additional or more detailed 'research ethics protocols' are passively added to the briefcase of professional researcher. Rather, we argue for a high level of reflexivity and for the development of ethical sensitivities and sensibilities which can better equip researchers for the messy reality of collecting network data from human participants. This can and should be supported by targeted training opportunities, exchanges of research practices and, most importantly, ongoing conversation between scholars, both through academic publications and 'off line', in the real world of everyday scholarship.

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