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ORIGINAL ARTICLE

Qualitative network analysis for migration studies: Beyond metaphors and epistemological pitfalls

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Abstract

In this introductory article, we as guest editors set out the key ambitions and arguments of the Special Issue and highlight our contribution to social network research within migration studies. We argue that social network analysis has the potential to address epistemological pitfalls in migration research especially in overcoming *the metaphoric use of networks* as well as *nation-state and ethnicity-centred epistemologies*. Moreover, we suggest that adopting a qualitative approach to social networks not only changes how we research networks but also what we understand them to be. While seeking to go beyond metaphors and delve into the tool box of SNA, in order to gain deeper understandings of social networks, we argue that this cannot mean purely quantitative research techniques. We draw upon the early roots of social network research, within anthropology, to find inspiration and consider the contribution of qualitative approaches to analysing dynamic social relationships and to including neglected aspects like meaning making and agency. Adopting a reflexive approach enables us to de-migranticise our research turning the role of migration and ethnicity for social networks into an empirical question rather than taking them as an essentialist starting point for investigation.

The Special Issue brings together an integrated set of articles drawn from a social networks and migration symposium. Using qualitative and mixed methods approaches, these articles focus on a diverse range of geographical and social contexts. In so

doing, the authors offer new methodological and epistemological insights into migrants' social networks.

KEYWORDS
ethic lens, metaphor, migration, qualitative methods, social networks

INTRODUCTION

Since the 1960s there is growing interest in the analysis of migration networks. We might say that there is a common understanding within migration studies that personal networks enhance and facilitate migration by decreasing costs and risks and that networks are conduits of information as well as social, emotional and financial assistance (Boyd, 1989; Massey et al., 1993). Scholars pointed, for instance, to the significance of social networks when it comes to migration decisions: social networks select who within a household will leave (e.g. Haug, 2008) and they canalise migrants to specific destinations (Fawcett, 1989). The relevance of social networks has also been shown for migration trajectories, for example, regarding the organisation or financing of the journey or access to documentation and smugglers (Wissink & Mazzucato, 2018). Networks have been said to be crucial for incorporation processes in post-migration situations (Nauck et al., 1997; Ryan, 2011) as much as for daily survival of undocumented migrants (Hagan, 1998). Moreover, since the 'transnational turn' in migration studies in the 1990s (Dahinden, 2017; Faist et al., 2013; Glick Schiller et al., 1995), the idea of networks gained increased popularity as the development of transnational spaces is simply not possible without social networks spanning over national borders.

In other words, networks are everywhere in transnational migration studies. There is, however, growing concern on two fronts: First, work in this field tends too often to rely on *metaphorical uses* of the term 'network'. However, when network metaphors start to become general 'descriptors', they have limited usefulness as 'heuristic devices' (Knox et al., 2006, p. 133). There are increasing calls for migration scholars to draw upon the wider canon of theories and methodologies of social network analysis (SNA) (Bilecen et al., 2018) that have developed since the 1960s (McCarty et al., 2019). Second, it has been shown that migration studies rely often on unquestioned nation-state and ethnicity-centred epistemologies running the risk to reproduce nation-state and post-colonial hegemonic power structures (Anderson, 2019; Dahinden, 2016; Nieswand & Drotbohm, 2014). This might even be the case when researchers apply a transnational perspective: Ethnic and national categories as units of research and analysis are in this case projected into transnational space with the results that transnational networks are of interest only regarding ethnic or national groups and hence reproducing ethnic- and national-centred epistemology (Wimmer, 2009).

In response to such concerns, this Special Issue presents novel approaches to the study of migrant social networks by showing the potential of qualitative and mixed (quantitative with qualitative) SNA to address these two critiques and to push further, theoretically and empirically, this field of study. Beyond the quantitative approach to SNA, which has become so dominant in recent decades (Crossley & Edwards, 2016), we look back to earlier roots of social network research within anthropology to find inspiration for qualitative and mixed methods approaches to studying relationality.

This Special Issue is the outcome of a workshop that Janine Dahinden and Louise Ryan organised in March 2019 at the University of Neuchâtel, Switzerland. The aim of the workshop was to bring together outstanding international scholars who had started to work with SNA in relation to transnational migration research, especially with a focus on qualitative methods. The work of this newer scholarship enables deeper understanding of how migration impacts on social ties both in the new destination country and transnationally, the resources that migrants can access and share through these ties, how such relationships may change over time and how ties are embedded in wider societal power structures (e.g., Altissimo, 2016; Bilecen, 2016; Dahinden, 2013; Herz, 2015; Lubbers et al., 2010; Ryan & D'Angelo, 2018; Schapendonk, 2015).

The contributions in this Special Issue all scrutinize assumptions based on metaphorical applications of networks and instead, by applying SNA, show in detail the compositions, meanings or changes in migrant networks. These articles bring in new theorizing going beyond simple binaries and static views of relationality in place. The authors in this Special Issue also show concrete ways in which SNA has the potential to rectify important epistemological pitfalls of migration research associated with its embeddedness in nation-state logic.

We will, in this introduction, briefly elaborate on these two potentials: first the gain for migration studies, and concomitant theorization, when going beyond a metaphorical use of networks and introducing qualitative network analysis instead. And second, we will illustrate the ways qualitative SNA can support reflexive and de-migranticised approaches within migration studies in order to give new insights beyond nation-state and ethnicity-centred epistemologies. In the final concluding section, we suggest avenues for new research on social networks and migration.

From metaphors to SNA

It has been argued that given the rise in Internet and digital technologies, networks have become one of the dominant metaphors in current social science (Shearmur & Doloreux 2015, p. 1523). Writing 20 years ago about the social sciences more broadly, Wigley referred to 'network fever': 'We are constantly surrounded by talk of networks. Every third message, article and advertisement seems to be about one network or another. We are surrounded, that is, by talk on networks about networks' (Wigley, 2001, p. 83). Of course, the word network is not new. It was popularised in the 19th century by biologists, to mean connections within the human body, as well as by technicians to describe transportation systems including rivers, canals, roads and railways. Similarly, within social sciences, the use of networks as a metaphor has a long history. It has been noted that, in the 1940s, British anthropologists such as Radcliffe-Brown 'used network metaphors as partial, allusive descriptions of social structure' (Wellman, 1997, p. 21, see also Mitchell, 1969; Rogers & Vertovec, 1995).

Metaphors may be a useful heuristic device and can be understood as 'a powerful mental tool that individuals use while trying to understand and explain a phenomenon which is highly abstract, complex and theoretical' (Gurol & Donmus, 2010, p. 1490). However, the usefulness of the network metaphor may be limited by its apparent ubiquity. According to Shearmur and Doloreux, researchers across the social sciences have adopted the network metaphor 'to understand and interpret a wide variety of phenomena' (2015, p. 1521). As Castells (1996) declared, we now live in a 'network society'. The early usefulness and transferability of this metaphor continue to be features of its application today as the word 'slides seamlessly from biology to technology to society' (Wigley, 2001, p. 94).

Given the proliferation of the network metaphor, across a range of disciplines, how can SNA distinguish its intellectual focus? According to Wellman, 'many analysts and practitioners' have misused network analysis as a 'mixed bag of terms and techniques'. While some have 'hardened it into a method', others have 'softened it into a metaphor' (1997, p. 20). The network metaphor may result in conceptual confusion because it is used to describe quite different things. For example, the term 'social networks' can be used to refer to websites and platforms, as well as interpersonal relationships. As Knox et al. have pointed out, the metaphor can refer to 'a web' with 'a hierarchical structure with a centre and concentric spheres of influence' but also may refer to 'a network' with 'a more horizontal and open-ended weave'. As a result, there is tension between the 'notion of networks that bind and immobilize, and those that invoke mobility and liberation' (Knox et al., 2006, p. 132).

Thus to paraphrase McLuhan (1964), social networks can be both the medium and the message. This begins to suggest some of the conceptual ambiguity of networks, as noted by Latour (1999), and why we need to be precise about how the metaphor is applied. Which raises the question, to borrow the words of poet, W.B. Yeats[1], '*how can we know the dancer from the dance*'? In other words, networks, like a dance, do not exist as objective entities outside of social actors. Instead, like dancers, social actors create networks through dynamic interactions and constructions of meaning. The challenge, therefore, is how networks, as dynamic and ephemeral social relationships, can be studied, analysed and theorised beyond mere metaphors.

Over the years, there have been repeated calls for social scientists to pay more attention not only to the toolbox of network analysis but also to the historical development of conceptualisations: 'most of the new network approaches have paid scant attention to the long history of reflections upon the potential of networks as an analytical device in the social sciences.' (Knox et al., 2006, p. 113). This is even more surprising as relational approaches within social sciences have been prominent since its foundation, the work of Simmel (1992) or Moreno being two pertinent examples (see also McCarty et al., 2019). There have also been calls for migration scholars to go beyond network metaphors in order to consider what can be gained by a more theoretically informed and methodologically cogent approach to network analysis (Ryan, 2007).

> Despite the acknowledgement of the network character of migration and mobility processes, social network methodology has rarely been at the forefront of such studies until relatively recently. Instead, social networks were often used either metaphorically or only describing dyadic relations… the absence of SNA in migration studies left relatively unexplored how these networks are composed and structured, how they evolve over time, which resources are exchanged through such networks, and how they are embedded in larger structures, so that links with migration processes and outcomes were often assumed rather than empirically investigated. (Bilecen et al., 2018, p. 2)

We are all familiar with assertions that migrants use their networks to find jobs, accommodation, advice, emotional support, information about their new environment, etc. But what does that actually mean? What/who is 'their network'? This term can be used to mean dyadic relationships with a relative or friend, or a wide range of diverse ties to neighbours, work colleagues, acquaintances as well as kin. In addition, to the place utility of networks within the destination society (Haug, 2008), much has been written about transnational networks carried on virtually (online), physically (offline) as well as a combination of both media (for an overview, see Lubbers et al., 2020).

By using the concept of networks in such a loose and generalised way, Wellman warns that researchers risk 'treating all units as if they had the same resources, all ties as if they were symmetrical, and the contents of all ties as if they were equivalent' (1997, p. 20). There is a need, therefore, for more precision. For instance, we need to distinguish between potential resources within networks and those that can be activated and willingly shared between actors (Bourdieu, 1986). Moreover, networks cannot be regarded as static objectified entities but instead we need to understand the meaning of particular relationships between specific alters and how these ebb and flow over time (Ryan & D'Angelo, 2018; Schapendonk, 2015).

There has been much discussion of the extent to which migrants rely on strong ties, which may involve high levels of trust and reciprocal support but low levels of economic resources, versus weak ties, that may be fleeting and unstable but could facilitate access to more advantageous job opportunities (Granovetter, 1983, 1985). However, there has also been criticism of the simplistic ways in which these ties often become ethnicised and essentialised within migration research (Dahinden, 2005b; Ryan, 2011).

For migration scholars, going beyond the metaphor to delve deeper into network analysis can offer more nuanced insights into how migrants forge new connections with particular people in specific places, sustain existing relationships and access different kinds of resources over time (Bilecen et al., 2018; Ryan, 2011). However, drawing upon the tools of network analysis is not without its risks.

Despite its early roots in qualitative traditions such as anthropological studies of family (Bott, 1955) and local neighbourhood ties (Young & Willmot, 1957), or as exemplified by the Manchester School and their work in Africa (Barnes, 1969; Mitchell, 1969), in recent decades SNA has become particularly associated with quantitative approaches (Wellman, 1997). As a result, research on networks often involves statistical computations and complex algorithms to measure structures (Crossley & Edwards, 2016). Hence, quantitative and highly mathematical approaches have been dominant. Indeed, SNA has been described as 'mathematical models based on graph theory' (Hersberger, 2003, p. 95). More recently, however, scholars rediscovered the older qualitative social network approaches, reconceptualised them and innovated them empirically and theoretically, so that this emerging field is currently gaining influence within social sciences (for a discussion, see Crossley & Edwards, 2016).

Quantitative techniques using large datasets derived from surveys or transactional 'big data' (Scott, 2011) to produce matrices and graphs give manifold insights into network structures and compositions. Qualitative SNA is complementary to this work: the strengths of qualitative network research is its ability to grasp the dynamic nature of interpersonal connections as well as the world of meanings, feelings, interpretations and perceptions of relationships (D'Angelo & Ryan, 2019; Ryan, 2020). By its ability to understand the content of relationships, qualitative SNA unpacks the importance of agency and meaning-making for human actors (Crossley & Edwards, 2016; Heath et al., 2009; Hollstein, 2011).

There is evidence of increasing interest in qualitative approaches to network analysis (e.g. Dahinden, 2005a; Heath et al., 2009; Herz et al., 2014; Ryan et al., 2014). Qualitative methods are well suited to research 'actors' assessment of the relationships and networks of which they are part (Hollstein, 2011, p. 7). As Hollstein notes, 'qualitative approaches not only give insight into how networks work' but also 'how networks matter' (2011, p. 8). The 'cultural turn' (Crossley & Edwards, 2016) in network research and the 'interpretative turn' in social science in general (Geertz, 1973) have also raised fundamental questions about how networks are conceptualised: focusing attention on qualitative insights into network meaning.

Therefore, in urging migration scholars to go beyond the metaphor and delve into the toolbox of SNA, we do not mean only quantitative SNA informed by graph theory, but also qualitative methods, informed by interpretive theories, in order to understand networks not as objectified, measureable entities, but as dynamic, fluid, interpretations and representations of social relationships. The papers in this Special Issue offer diverse examples of the innovative ways in which networks are now being researched, analysed and theorised by migration scholars.

Schaer et al. (2020), for instance, scrutinize through a careful analysis of the mobility networks of early career academics a particular metaphorical idea which is widespread in Academia: It is postulated, and often mirrored in funding schemes, that early career researcher will enhance their academic social capital due to multiple geographic mobility and stays abroad. However, as the authors show, the connections between transnational mobility and academic social capital are less straightforward than often assumed. While increased mobility results in more transnational networks, it does not lead to enhanced academic capital – hence, putting into question these assumptions based on the metaphor of social network. Ryan (2020) demonstrates the value of SNA to go beyond metaphors by bringing insights into how migrants make sense of dynamic relationships. By applying a narrative approach combined with SNA, she uses 'network stories' to analyse the meaning of local and transnational relationships, how they started and have been maintained or changed over time. Mazzucato (2020) elaborates in her methodological article the contribution of mixed-methods SNA to the study of transnational networks. It has been argued that transnationality remains often metaphorical and 'catch-all-and-say-nothing' (Pries, 2008). *In contrario*, Mazzucato gives insights into her work showing how SNA allowed her not only to create a viable transnational research design but also how transnational relations have been 'worked at' while capturing the dynamic and changing nature of transnational relationship. Using rich qualitative methods, from in-depth interviews, allows D'Angelo (2021) to explore the transnational connections utilized by sub-Saharan migrants in their hazardous journeys to Europe. In so doing, he goes beyond mere metaphors, and complicates our understanding of the intricate nature of these inter-personal relationships through time and space.

The study by Sommer and Gamper (2020) depicts another facet of how SNA brings to light particular dynamics that may be overlooked when using a metaphoric network term. In their study of the social capital of self-employed migrants from the former Soviet Union in Germany, SNA allowed the authors to point to the agency and strategies migrants displayed in order to overcome barriers they encountered. This analysis demonstrates temporal changes of social relation both in terms of network composition and network content as well as the meaning attached to these ties. The authors call for SNA to overcome 'structural determinism' (Emirbayer, 1997) an element, which was often said to be present in quantitative SNA.

In researching young people's decisions about geographical mobility, Herz and Altissimo (2021) demonstrate the potential of qualitative SNA to analyse supradyadic structures. It is not only the relationships between ego and alters that need to be understood but also the wider relations between alters – supradyads. Using interviews and network maps, the authors explore the relationships between different kinds of actors including organisations

and places as well as people. This approach offers insights into the relationships between supradyads who may indirectly influence why young people decide to move or, indeed, not to move.

Having discussed the proliferation of the network metaphor and reviewed the ways in which our contributing authors draw on qualitative and mixed methods SNA to go beyond such narrow and limiting understandings of social relationships, in the next section we move to our second overarching theme: how a reflexive approach to SNA can address the problem of nation-state and ethnicity-centred epistemologies within migration research.

The potential of SNA to advance reflexive migration studies

In recent years, a new theoretical strand gained momentum within migration studies: Scholars started to reflect upon questions of knowledge production and articulated fundamental concerns regarding particular ethical, epistemological and political problems in migration research (among many see Dahinden et al., 2020; Favell, 2014; Levitt, 2012; Malkki, 1992; Nieswand et al., 2014; van Houtum & Bueno Lacy, 2019). Many pointed to the problematic aspects of the entanglement of migration studies with the logic of nation-states and concomitant epistemological underpinnings (Anderson, 2019; Dahinden, 2016). One of the important criticisms still is the problem of 'methodological nationalism' and the 'ethnic lens' (Glick Schiller et al., 2006; Wimmer & Schiller, 2002) as well as an essentialist vision, which are often underpinning migration studies. By the latter we understand 'a system of belief grounded in a conception of human beings as "cultural" (and under certain conditions territorial and national) subjects, that is, bearers of a culture, located within a boundaried world, which defines them and differentiates them from others' (Grillo, 2003, p. 158). In the following, scholars discussed the political consequences of state- and ethnicity-centred categories (Scheel & Ustek-Spilda, 2019), and others highlighted the consequences of the label 'refugee' for the governance of forced migration (Crawley & Skleparis, 2017; Zetter, 2007), or scrutinized the category 'integration' arguing that it is a producer of gendered and racialised non-belonging (Korteweg, 2017) or consider it as an expression of neo-colonial governance (Schinkel, 2018). In a nutshell, a wide range of scholars started to address the risk that migration studies may reproduce particular hegemonic power relations and concomitant forms of social and political exclusion. In extreme cases, contributions to the field of migration studies build on and reproduce racist and neo-colonial reasoning. Scholars also came up with alternative ways to reorient migration studies by denaturalizing categories at a theoretical and conceptual level. There have been pleas to 'de-ethnicise' (Wimmer, 2009), 'de-naturalise' (Amelina & Faist, 2012), 'de-migranticise' (Dahinden, 2016) or 'de-nationalise' (Anderson, 2019) research designs in order to address the effects of hegemonic power relations in knowledge production.

As we argue here, SNA has the potential to contribute to tackling these problems because of its theoretical orientations as much as its specific methodological instruments.

Looking at studies interested in migration networks one can easily identify the problems indicated above, particularly, but not only, if studies use metaphorical network terms. First, some migration studies sometimes reduce the term network and grasp only *kin* and *same-ethnic ties* when it comes to migration issues (Nauck et al., 1997). Hence, migrants' networks become reduced to and framed by ethnicity and kinship (critically see Gurak & Caces, 1992; Rogers & Vertovec, 1995) which, from an epistemological point of view, is problematic and points to the criticisms we discussed earlier in this article. The categories of the nation-state logic are implicitly taken for granted and underlie the research design: Ethnicity and migration become the *explicans* for the composition of social networks. But why should migrant networks be reduced to kinship and ethnicity? We argue – in line with this critique – that, from a theoretical point of view, it makes more sense to critically interrogate the role ethnicity or migration play in overall networks.

The basic premise of network analysts is that the social embeddedness of actors in a web of specific relationships says something about their position in society, about their agency and their view on the world. In contrast to other approaches in social sciences that concentrate first and foremost on examining certain categorical variables – like age, ethnicity, gender or educational degree – network researchers do not regard social systems as a collection of isolated actors with certain characteristics. Rather, their attention is directed toward examining the relations of the actors

in a social network and the attempts to describe and understand this pattern. In this way, one hopes to gain information about the possibilities and constraints that affect the actors' scope of action and about the way they understand their relationships and how they make meaning out of them (Schweizer, 1996; Scott, 1991). Put differently, the 'world view' of network researcher implies a shift from categories to embeddedness (Degenne & Forsé, 2004; Granovetter, 1985) or dynamic processes of embedding (Ryan & Mulholland, 2015), or from 'groups to networks' (Marin & Wellman, 2011). As the focus of network researchers is placed on the structure, quality and meaning of social relations they do not start from primarily – and mostly ethnically – defined groups. Rather, this particular theoretical lens or world view encourages the exploration of multilevel and crosscutting ties, according to the research question that is at stake. This opens up the space and allows for analyzing the role of migration and ethnicity within these networks and how they interact with other structuring forces like migration regimes, social class, inequalities, discrimination, education or gender.

It is herein where the potential of SNA lies: Applying SNA means that in answering a particular research question all relevant ties will be investigated. The specific methodological instruments that are used in qualitative network analysis – name generators, network maps, visualizations of networks, often combined with other types of interviews, narratives or observations – support this investigation of relevant ties, first independently of their ethnic, migratory or racialised character. Only in a second step does the role of ethnicity, migration, religion, class or gender emerge out of the network structure and composition and can be investigated. This potential has meanwhile been identified by many scholars and they started to investigate these issues from such 'de-migranticised' and 'de-ethnicised' perspectives bringing in many nuances into migration debates (Dahinden, 2011; Ryan, 2015; Stienen, 2006; Wimmer, 2004). In particular, this body of work shows that SNA not only critically engages with the problem of categories in migration research, it also allows to define units of analysis that might not be a priori defined by migration and ethnicity. Moreover, this line of scholarship gives insights that network structures of migrants are often not so different from non-migrants, which reinforce our plea to turn ethnicity and migration into an empirical question rather than a starting point for investigation (Dahinden, 2009).

Many articles in this Special Issue bring this potential of SNA to light and give important nuances to the role of ethnicity within migrant networks. Lubbers et al. (2020), depict migrants' processes of social (dis-)embedding in local and transnational contexts, how those unfold over time and what their driving forces are. The main result is that a linear process from transnational towards local embedding is the exception and not the rule. The authors point also to the theoretical relevance of the idea of 'de-migranticisation': they argue that the network dynamics they observe for migrants are similar to those in the literature observed for non-migrants; basically, as they show, network dynamics seems to be caused by life events – rather than by ethnicity. This way they call into question assumptions of individual agency in integration debates given that opportunities to form new relationships with so-called 'natives' depended on their position within their places of residence, which were structured by gender, ethnicity and class. D'Angelo (2021) also focuses on agency and draws on a network lens to challenge the assumed passivity and helplessness of refugees. Moreover, in so doing, he adopts a reflexive approach to consider the ethical issues involved when researching network ties that may involve exploitation, abuse and illegal activities. Ryan (2020) adopts a critically reflexive approach to using network visualization techniques in order to consider the way local discourses regarding migration and ethnicity shape how migrants look at and give meanings to their relationship. In her example, the London discourses of diversity and multiculturalism frame the way ethnicity is perceived and presented by the interview partners when it comes to their social relations.

Kindler (2020) brings in yet another facet regarding the role of ethnicity in migrant networks. Network analysis allowed her to see with whom her Ukrainian migrants actually interact, form, sustain or break ties, and how they make sense of ethnic bonds. In this case, ethnicity was not the main bonding element: Rather, first wave migrants from the Ukraine closed their ranks against Ukrainian newcomers trying to save the place and position they had achieved in Poland. In a similar vein, Bilecen (2021) relativises the importance of ethnicity for migrant networks: She draws on personal networks of international students from China who were studying in the United States and shows that ethnicity, as a precursor to culture, along with gender and class, is important in friendship formations but not neces-

sarily for job-relevant issues. Moreover, through an intersectional personal network analysis, transnational family ties were problematised based not on their ethnicity but on gendered expectations and social norms.

Conclusion

In this introductory article, we have shown that SNA has the potential to address pitfalls in migration research especially in overcoming the metaphoric use of networks and nation-state and ethnicity-centred epistemological underpinnings. Furthermore, we have suggested that adopting a qualitative approach to social networks not only changes how we research networks but also what we understand them to be. While seeking to go beyond metaphors and draw upon the tools of SNA, in order to gain deeper understandings of social networks, this should not mean purely quantitative research techniques.

A truly qualitative approach also needs to address some epistemological pitfalls within SNA that has, in recent decades, been dominated by a quantitative paradigm. First, we cannot study networks as though they were fixed entities to be measured objectively. Networks do not exist outside of us. As we observed earlier, we cannot compartmentalise the dancer from the dance. Hence, drawing on interpretative social science traditions, we regard social networks as dynamic relationships through which actors weave around each other in varying degrees of harmony or disharmony. It is one of the strengths of qualitative social network analyse to give theoretical and empirical insights into issues of meaning making and agency of human beings. Second, social networks do not float in the air, so to speak: They are embedded, develop and evolve in particular geographical and historical contexts which in turn are shaped by specific power relations and systems of dominance. Qualitative network analysis has the potential to bring to light such structural issues, for instance, when they show the moments when 'networks fail' (Collyer, 2005; Dahinden, 2005a).

In this Special Issue, the authors illustrate the advantages of using mixed and qualitative approaches to network research. But adopting qualitative methods, informed by interpretative theories, challenges some of the often taken for granted tenets of SNA, as we have mentioned in this introductory piece. There is scope for more epistemological work and methodological innovation in how we develop qualitative approaches to migrant network research. As argued elsewhere (D'Angelo & Ryan, 2019), viewing networks as social constructions informed by perception and self-presentation, embedded in particular structures, requires a significant shift in our epistemological mind sets.

Taking that work forward, in our future collaboration we will be exploring the ontological, epistemological and methodological challenges of developing qualitative SNA.

ENDNOTE

[1] Yeats, William Butler. "Among the school children." (1928).

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REFERENCES

Altissimo, A. (2016). Combining egocentric network maps and narratives: An applied analysis of qualitative network map interviews. *Sociological Research Online*, *21*(2), 14.

Amelina, A., & Faist, T. (2012). De-naturalizing the national in research methodologies: Key concepts of transnational studies in migration. *Ethnic and Racial Studies*, *35*(10), 1707–1724. https://doi.org/10.1080/01419870.2012.659273

Anderson, B. (2019). New directions in migration studies: Towards methodological denationalism. *Comparative Migration Studies*, *7*(1), 7–66.

Barnes, J. A. (1969). Network and political process. In J. C. Mitchell (Ed.), *Social networks in urban situations. Analysis of personal relationships in Central African towns* (pp. 51–76). University of Manchester at the University Press.
Bilecen, B. (2016). A personal network approach in mixed-methods design to investigate transnational social protection. *International Review of Social Research*, *6*(4), 233–244.
Bilecen, B., Gamper, M., & Lubbers, M. J. (2018). The missing link: Social network analysis in migration and transnationalism. *Social Networks*, *53*, 1–3.
Bilecen, B. (2021). Personal network analysis from an intersectional perspective: How to overcome ethnicity bias in migration research. *Global Networks*. https://doi.org/10.1111/glob.12318
Bott, E. (1955). Urban families: Conjugal roles and social networks. *Human Relations*, *8*(4), 345–384.
Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
Boyd, M. (1989). Family and personal networks in international migration: Recent developments and new agendas. *International Migration Review*, *23*(3), 638–670.
Castells, M. (1996). *The information age*. Blackwell Publishers: Oxford.
Collyer, M. (2005). When do social networks fail to explain migration? Accounting for the movement of Algerian asylum-seekers to the UK. *Journal of Ethnic and Migration Studies*, *31*(4), 699–718.
Crawley, H., & Skleparis, D. (2017). Refugees, migrants, neither, both: Categorical fetishism and the politics of bounding in Europe's 'migration crisis'. *Journal of Ethnic and Migration Studies*, 1–17. https://doi.org/10.1080/1369183X.2017.1348224
Crossley, N., & Edwards, G. (2016). Cases, mechanisms and the real: The theory and methodology of mixed-method social network analysis. *Sociological Research Online*, *21*(2), 217–285.
D'Angelo, A., & Ryan, L. (2019). The presentation of the networked self: Ethics and epistemology in social network analysis. *Social Networks*. https://doi.org/10.1016/j.socnet.2019.06.002
D'Angelo, A. (2021). The networked refugee: The role of transnational networks in the journeys across the Mediterranean. *Global Networks*. https://doi.org/10.1111/glob.12312
Dahinden, J. (2005a). Contesting transnationalism? Lessons from the study of Albanian migration networks from former Yugoslavia. *Global Networks*, *5*(2), 191–208.
Dahinden, J. (2005b). *Prishtina – Schlieren. Albanische Migrationsnetzwerke im transnationalen Raum*. Seismo.
Dahinden, J. (2009). Are we all transnationals now? Network transnationalism and transnational subjectivity: The differing impacts of globalization on the inhabitants of a small Swiss city. *Ethnic and Racial Studies*, *32*(8), 1365–1386. https://doi.org/10.1080/01419870802506534
Dahinden, J. (2011). Cities, migrant incorporation, and ethnicity: A network perspective on boundary work. *Journal of International Migration and Integration*, *14*, 39–60.
Dahinden, J. (2013). Cities, migrant incorporation, and ethnicity: A network perspective on boundary work. *Journal of International Migration and Integration*, *14*(1), 39–60.
Dahinden, J. (2016). A plea for the 'de-migranticization' of research on migration and integration. *Ethnic and Racial Studies*, *39*(13), 2207–2225. https://doi.org/10.1080/01419870.2015.1124129
Dahinden, J. (2017). Transnationalism reloaded: The historical trajectory of a concept. *Ethnic and Racial Studies*, *40*(9), 1474–1485.
Dahinden, J., Fischer, C., & Menet, J. (2020). Knowledge production, reflexivity, and the use of categories in migration studies: Tackling challenges in the field. *Ethnic and Racial Studies*, 1–20. https://doi.org/10.1080/01419870.2020.1752926
Degenne, A., & Forsé, M. (2004). *Les réseaux sociaux* (2nd ed.). Armand Colin.
Emirbayer, M. (1997). Manifesto for a relational sociology. *American Journal of Sociology*, *103*(2), 281–317.
Faist, T., Fauser, M., & Reisenauer, E. (2013). *Transnational migration*. Polity Press.
Favell, A. (2014). *Immigration, integration and mobility: New agendas in migration studies*. Essays 1998–2014. ECPR Press.
Fawcett, J. T. (1989). Networks, linkages, and migration systems. *International migration review*, *13*(2), 671–680.
Geertz, C. (1973). *The interpretion of cultures*. Basic Books.
Glick Schiller, N., Basch, L., & Blanc, C. S. (1995). From immigrant to transmigrant: Theorizing transnational migration. *Anthropological Quarterly*, *68*(1), 48–63.
Glick Schiller, N., Çağlar, A., & Guldbrandsen, T. C. (2006). Beyond the ethnic lens: Locality, globality, and born-again incorporation. *American Ethnologist*, *33*(4), 612–633.
Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, *1*, 201–233.
Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *91*(3), 481–510.
Grillo, R. (2003). Cultural essentialism and cultural anxiety. *Anthropological Theory*, *3*(2), 157–173.
Gurak, D. T., & Caces, F. (1992). Migration networks and the shaping of migration systems. In M. M. Kritz, L. L. Lean, & H. Zlotnik (Eds.), *International Migration System: A Global Approach* (pp. 150–176). Clarendon Press.
Gurol, M., & Donmus, V. (2010). Metaphors created by prospective teachers related to the concept of "social network". *Procedia-Social and Behavioral Sciences*, *9*, 1489–1496.

Hagan, J. M. (1998). Social networks, gender, and immigrant incorporation: Resources and constraints. *American Sociological Review*, *63*(1), 55–67.
Haug, S. (2008). Migration networks and migration decision making. *Journal of Ethnic and Migration Studies*, *34*(4), 585–605.
Heath, S., Fuller, A., & Johnston, B. (2009). Chasing shadows: Defining network boundaries in qualitative social network analysis. *Qualitative Research*, *9*(5), 645–661.
Hersberger, J. (2003). A qualitative approach to examining information transfer via social networks among homeless populations. *The New Review of Information Behaviour Research*, *4*(1), 95–108.
Herz, A., Peters, L., & Truschkat, I. (2014). How to do qualitative structural analysis: The qualitative interpretation of network maps and narrative interviews. Forum Qualitative Sozialforschung/Forum: Qualitative Social Research (Vol. *16*, No. 1). https://doi.org/10.17169/fqs-16.1.2092
Herz, A. (2015). Relational constitution of social support in migrants' transnational personal communities. *Social Networks*, *40*, 64–74. https://doi.org/10.1016/j.socnet.2014.08.001
Herz, A., & Altissimo, A. (2021). Understanding the structures of transnational youth im/mobility: A qualitative network analysis. *Global Networks*. https://doi.org/10.1111/glob.12315
Hollstein, B. (2011). Qualitative approaches. *The Sage handbook of social network analysis* (pp. 404–416). Sage.
Kindler, M. (2020). Networking in contexts: Qualitative social network analysis' insights into migration processes. *Global Networks*. https://doi.org/10.1111/glob.12310
Knox, H., Savage, M., & Harvey, P. (2006). Social networks and the study of relations: Networks as method, metaphor and form. *Economy and Society*, *35*(1), 113–140
Korteweg, A. C. (2017). The failures of 'immigrant integration': The gendered racialized production of non-belonging. *Migration Studies*. https://doi.org/10.1093/migration/mnx025
Latour, B. (1999). On recalling ANT. *The Sociological Review*, *47*(1_suppl), 15–25.
Levitt, P. (2012). What's wrong with migration scholarship? A critique and a way forward. *Identities: Global Studies in Culture and Power*, *19*(4), 493–500.
Lubbers, M. J., Molina, J. L., Lerner, J., Brandes, U., Ávila, J., & McCarty, C. (2010). Longitudinal analysis of personal networks. The case of Argentinean migrants in Spain. *Social Networks*, *32*(1), 91–104. https://doi.org/10.1016/j.socnet.2009.05.001
Lubbers, M. J., Verdery, A. M., & Molina, J. L. (2020). Social networks and transnational social fields: A review of quantitative and mixed-methods approaches. *International Migration Review*, *54*(1), 177–204
Lubbers, M. J., Molina, J. L., & McCarty, C. (2020). How do migrants' processes of social embedding unfold over time? *Global Networks*. https://doi.org/10.1111/glob.12297
Malkki, L. (1992). National geographic: The rooting of peoples and the territorialization of national identity among scholars and refugees. *Cultural Anthropology*, *7*(1), 24–44.
Marin, A., & Wellman, B. (2011). Social network analysis: An introduction. In P. J. Carrington & J. Scott (Eds.), *Handbook of social network analysis* (pp. 11–25). Sage.
Massey, D. S., Arango, J., Graeme, H., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, *19*(3), 431–466.
Mazzucato, V. (2020). Mixed-method social network analysis for multi-sited transnational migration research. *Global Networks*. https://doi.org/10.1111/glob.12305
McCarty, C., Lubbers, M., Vacca, R., & Molina, J. (2019). *Conducting personal network research. A practical guide*. Guilford Press.
McLuhan, M. (1964). *Understanding media: The extensions of man*. Signet.
Mitchell, J. C. (1969). The concept and use of social networks. In J. C. Mitchell (Ed.), *Social networks in urban situations: Analysis of personal relationships in Central African Towns* (pp. 1–50). University of Manchester at the University Press.
Nauck, B., Kohlmann, A., & Diefenbach, H. (1997). Familäre Netzwerke, intergenerative Transmission und Assimiliationsprozesse bei türkischen Migrantenfamilien. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *49*(3), 477–499.
Nieswand, B., & Drotbohm, H. E. (2014). inleitung: Die reflexive Wende in der Migrationsforschung. *Kultur, Gesellschaft, Migration. Studien zur Migrations- und Integrationspolitik* (pp. 1–37). Springer.
Pries, L. (2008). *Rethinking transnationalism. The meso-link of organisations*. Routledge.
Rogers, A., & Vertovec, S. (1995). Introduction. In A. Rogers & S. Vertovec (Eds.), *The urban context. Ethnicity, social networks and situational analysis*. WBC Book Manufactures.
Ryan, L. (2007). Migrant women, social networks and motherhood: The experiences of Irish nurses in Britain. *Sociology*, *41*(2), 295–312. https://doi.org/10.1177/0038038507074975
Ryan, L. (2011). Migrants' social networks and weak ties: Accessing resources and constructing relationships post-migration. *The Sociological Review*, *59*(4), 707–724. https://doi.org/10.1111/j.1467-954X.2011.02030.x
Ryan, L. (2015). Friendship-making: Exploring network formations through the narratives of Irish highly qualified migrants in Britain. *Journal of Ethnic & Migration Studies*, *41*(10), 1664–1683. https://doi.org/10.1080/1369183X.2015.1015409
Ryan, L. (2020). Telling network stories: Researching migrants' changing social relations in places over time. *Global Networks*. https://doi.org/10.1111/glob.12295

Ryan, L., Mulholland, J., & Agoston, A. (2014). Talking ties: Reflecting on network visualisation and qualitative interviewing. *Sociological Research Online*, *19*(2), 1–12. https://doi.org/10.5153/sro.3404

Ryan, L., & Mulholland, J. (2015). Embedding in motion: Analysing relational, spatial and temporal dynamics among highly skilled migrants. In L., Ryan, U., Erel, & A., D'Angelo (Eds.), *Migrant capital* (pp. 135–153). Palgrave Macmillan.

Ryan, L., & D'Angelo, A. (2018). Changing times: Migrants' social network analysis and the challenges of longitudinal research. *Social Networks*, *53*, 148–158. https://doi.org/10.1016/j.socnet.2017.03.003

Schaer, M., Jacot, C., & Dahinden, J. (2020). Transnational mobility networks and academic social capital among early-career academics: Beyond common-sense assumptions. *Global Networks*. https://doi.org/10.1111/glob.12304

Schapendonk, J. (2015). What if networks move? Dynamic social networking in the context of African migration to Europe. *Population, Space and Place*, *21*(8), 809–819. https://doi.org/10.1002/psp.1860

Scheel, S., & Ustek-Spilda, F. (2019). The politics of expertise and ignorance in the field of migration management. *Environment and Planning D: Society and Space*, *37*(4), 663–681. https://doi.org/10.1177/0263775819843677

Schinkel, W. (2018). Against 'immigrant integration': For an end to neocolonial knowledge production. *Comparative Migration Studies*, *6*(31). https://doi.org/10.1186/s40878-018-0095-1

Schweizer, T. (1996). *Muster sozialer Ordnung. Netzwerkanalyse als Fundament der Sozialethnologie*. Dietrich Reimer Verlag.

Scott, J. (1991). *Social network analysis. A handbook*. Sage.

Scott, J. (2011). Social physics and social networks. *The SAGE handbook of social network analysis* (pp. 55–66). Sage.

Shearmur, R., & Doloreux, D. (2015). Central places or networks? Paradigms, metaphors, and spatial configurations of innovation-related service use. *Environment and Planning A: Economy and Space*, *47*(7), 1521–1539.

Simmel, G. (1992). Soziologie. *Untersuchungen über die Formen der Vergesellschaftung*. Suhrkamp.

Sommer, E., & Gamper, M. (2020). Beyond structural determinism: Advantages and challenges of qualitative social network analysis for studying social capital of migrants. *Global Networks*. https://doi.org/10.1111/glob.12302

Stienen, A. (2006). EdVerborgene Einschluss- und Ausgrenzungsdynamik im Stadtteil. In A. Stienen (Ed.), *Integrationsmaschine Stadt? Interkulturelle Beziehungsdynamiken am Beispiel von Bern* (pp. 213–360). Haupt.

van Houtum, H., & Bueno Lacy, R. (2019). The migration map trap. On the invasion arrows in the cartography of migration. *Mobilities*, 1–24. https://doi.org/10.1080/17450101.2019.1676031

Wellman, B. (1997). Structural analysis: From method and metaphor to theory and substance. *Contemporary Studies in Sociology*, *15*, 19–61.

Wigley, M. (2001). Network fever. *Grey Room*, 82–122.

Wimmer, A. (2004). Does ethnicity matter? Everyday group formation in three Swiss immigrant neighbourhoods. *Ethnic and Racial Studies*, *27*(1), 1–36.

Wimmer, A. (2009). Herder's heritage and the boundary-making approach: Studying ethnicity in immigrant societies. *Sociological Theory*, *27*, 244–270.

Wimmer, A., & Schiller, N. G. (2002). Methodological nationalism and beyond: Nation-state building, migration and the social sciences. *Global Networks*. *2*(4), 301–334.

Wissink, M., & Mazzucato, V. (2018). In transit: Changing social networks of sub-Saharan African migrants in Turkey and Greece. *Social Networks*, *53*, 30–41. https://doi.org/10.1016/j.socnet.2017.03.005

Young, M., & Willmott, P. (1957). *Family and kinship in East London*. London.

Zetter, R. (2007). More labels, fewer refugees: Remaking the refugee label in an era of globalization. *Journal of Refugee Studies*, *20*(2), 172–192.

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