

## Research Article

## Open Access

Başak Bilecen\*

# A Personal Network Approach in Mixed-Methods Design to Investigate Transnational Social Protection

DOI 10.1515/irsr-2016-0025

Received: April 1, 2016; Accepted: July 22, 2016

**Abstract:** Research on the cross-border practices that underpin the spatial dimension of personal relationships involves also the study of protective resources (e.g. care, information exchange and financial assistance). However, studies that examine such transnational practices within migrants' personal networks face methodological challenges at both the data collection level and the data analysis level. For a comprehensive analysis of migrants' life worlds, new methodological approaches to transnational practices and resource flows within personal networks are essential. Thus, this article aims to illustrate ways to study social protection by empirically capturing such practices. In addition to demonstrating that the combined use of personal network analysis and qualitative interviews is a fruitful approach, this study used a mixed-methods design contributing to capture the interrelationship between transnational social protection patterns and migrants' strategies, as well as their meanings.

**Keywords:** personal network analysis, mixed-methods research, qualitative interview, hermeneutics, migration, transnational social protection

## Introduction

As any other individual, migrants also have personal contacts surrounding them with certain protective functions. Usually, these personal networks include individuals who are scattered across various different regions, mainly in the migrants' countries of both emigration and immigration, and thus exhibit different

dynamics when it comes to social protection. Persons with a local social network might simply call upon a friend or family member when they need a babysitter, a ride to a dental appointment or help in finding an apartment. In contrast, for migrants it might be quite different as their personal contacts might be thousands of miles away in another country. Finding themselves in situations in which they need care, information or financial assistance – conceptualised broadly as 'social protection' – migrants are in a position to (re)negotiate their personal relationships.

Personal relationships cannot be neatly separated from the opportunity structures within which migrants and their significant others reside as they are in constant dialogue with formal protective welfare schemes. For example, a country's healthcare regime or pension systems usually closely linked to the labour force participation of its population. Migrants face different situations particularly when access to healthcare services in the country of residence is linked to individuals' insurance according to their employment status. Regulations regarding childcare are also closely linked to employment status and migrants and their families are in negotiation depending on whether the country of residence permits parental leave for six weeks, six months or not at all, and whether or not such leave can be shared between fathers and mothers. Because in each case of parental leave, parents' participation in the labour force might change, the constellation of care may extend beyond spouses to other family ties, depending on the culture and the availability of resources, such as grandparents, as well as access to mobility.

These situations also influence the content and meaning of personal ties. Particularly in the case of migrants, legal status, citizenship, the number of years spent in the country of immigration and the availability of social networks are important indicators in our efforts to understand who has access to what types of formal welfare. As argued elsewhere, formal and informal aspects

\*Corresponding author: Başak Bilecen, University of Bielefeld, Faculty of Sociology, Germany, Email: basak.bilecen@uni-bielefeld.de

of social protection are assembled in various ways; thus, in order to capture the dynamics of social relationships, the use of a mixed-methods research design that involves personal network analysis is inevitable (Bargłowski et al. 2015; Bilecen and Bargłowski 2015). The main aim of this article, therefore, is to show how personal network analysis, as part of a mixed-methods design, contributes to our understanding of a transnational phenomenon through empirical examples of (transnational) social protection. This enables researchers to combine the strengths of quantitative and qualitative methods and to compensate for the weaknesses inherent in these approaches when they are applied independently (Hollstein 2014). Employing such a research design makes it possible not only to analyze the patterns of personal ties but also to understand the content and meanings of these ties and dispositions. After all, a relation is not only embedded in a context and (re)constructed in its environment by different agents (Emirbayer and Goodwin 1994; Tilly 2004), but it is also narrated through stories (White 1992).

The article begins with an overview of migrant networks and certain aspects of transnational social protection. This is followed by a description of the mixed-methods research design and a discussion of empirical examples of such protection, as drawn from fieldwork carried out for a large-scale international project.<sup>1</sup> The article concludes by explaining how personal network analysis within a mixed-methods research design uniquely benefits migration studies.

## Migration, Transnational Networks and Social Protection

Cross-border relations and the practices of migrants have been key subjects of recent migration studies. Viewing these topics through a transnational lens has allowed researchers to capture the simultaneous engagement of individuals across several state borders. In other words, the main issues for those who investigate transnational phenomena are ‘the social organization and consequences of the complex interconnectivity of cross-border networks in multiple fields of social

practice’ (Smith 2005:235). Moreover, networks that span different nation-states create transnational social spaces (Pries 1996; Faist 2000) or transnational social fields (Glick Schiller et al. 1992; Basch et al. 1994; Levitt and Glick Schiller 2004), which highlights the importance of social and institutional ties. The transnational lens also reveals the social embeddedness of migrants within different sociocultural, political and economic realms, which is congruent with the idea that ties precede actors in the understanding of network processes (Burt 1978; Granovetter 1985).

Rather than thinking of the nation-state as a ‘container’ of society – a concept known as methodological nationalism (Wimmer and Glick Schiller 2002) – transnational studies focus on the networks, social practices, life worlds, resource flows, knowledge and ideas usually found between at least two nation-states: those of immigration and those of emigration (Waldinger and Fitzgerald 2004; Levitt and Jaworsky 2007; Dahinden 2010; Faist et al. 2013), and these relations represent ‘the complex interconnectedness of contemporary reality’ (Levitt and Glick Schiller 2004:1006). In addition to their criticism of methodological nationalism, more recent studies have revealed scepticism about the tendency of previous researchers to ‘essentialise’, that is, to focus primarily on ethnic or national categories in preference to other factors (Brubaker 2004; Amelina and Faist 2002), indicating the need to have meticulous design, careful implementation, and perpetual reflection on methodological challenges in transnational migration research. To this end, the main methods used to investigate transnational phenomena have consisted of qualitative interviews, participant observations, quantitative surveys, and multi-sited ethnography with migrants and, to some extent, with their significant others (see e.g. Mazzucato 2009; Faist et al. 2015a).

The earlier migration studies that involved social network analysis focused on several different aspects: the practices of transnational families and the well-being of children (Bernardi 2011), the use of financial remittances in the home countries of migrants (Mazzucato 2006, 2009), friendship networks among transnational professionals (Kennedy 2004), supportive transnational relations among international doctoral students (Bilecen 2012, 2014), transnational social support for intra-EU mobiles (Herz 2015) and the connection between migrants’ identities and personal networks (Lubbers et al. 2007). Although the crucial role of social networks has long been recognised in migration research (Boyd 1989; Massey et al. 1993; Krissman 2006; Vertovec 2009), studies that use social network analysis

<sup>1</sup> The project, entitled ‘Transnationality, the Distribution of Informal Social Security and Inequalities’, is funded by the German Research Foundation within the framework of the Collaborative Research Centre 882 at Bielefeld University (2011–2015). For more information about the project, see <http://www.sfb882.uni-bielefeld.de/en/projects/c3>; for additional findings, see Faist et al. (2015a).

within a mixed-method design have remained marginal but are nevertheless on the agenda of researchers whose interest in this topic has recently increased (see also Barglowski et al. 2015; Molina et al. 2015; Bilecen et al. 2017). Thus, this article contributes to the literature on both migration and personal networks by putting these two domains on an axis around which rich data can be accrued to help reveal the dynamic nature of personal cross-border relationships. A combination of transnational and network lenses indicates the relationality of the phenomenon now under study – that is, social protection.

Social protection refers to the strategies, as well as the tangible and intangible resources, required to overcome social risks that might constrain one's life chances (Faist et al. 2015b). Closely linked to such protection is the study of social support through network analysis, and earlier studies made extensive use of the network approach in their examination of social support (see e.g. Hall and Wellman 1985; Wellman and Wortley 1990; Schweizer et al. 1998; Wellman and Gulia 1999; de Miguel Luken and Tranmer 2010; Song et al. 2011; Herz and Olivier 2012; Gamper and Fenicia 2013). However, social protection is more widely understood to include assistive relationships that constitute an assemblage of both formal and informal elements, where 'formal social protection' is understood to be protection provided by the nation-state through welfare policies, social assistance and relevant institutions, and 'informal social protection' consists in the personal networks outside the realm of the state, including ties with kin and non-kin. Thus, not only has the personal side of assistive relationships been taken into account (as has been the case in the literature on social support), but, as argued elsewhere, the nation-state frameworks and the national and cultural discourses in which migrants are embedded have also been closely scrutinised (Bilecen and Barglowski 2015).

In the case of migrants, legal status and citizenship are important aspects in research aimed at understanding who has access to social protection in the formal realm, as well as the nature of such protection. Such studies also investigate how formal and informal types of assistance are intertwined. Because of its relationship-based nature, social network analysis supplies the necessary tools for investigating the informal aspect of social protection, in which tangible and intangible resources are transferred through a variety of transactions to reduce social risks, such as unemployment, malnutrition and lack of care. Informal social protection is usually manifest in the

form of family support or community-based systems, the purpose of which is to prevent or minimise risk, deprivation and poverty (Drèze and Sen 1991). Most of the literature on migration focuses on family and ethnicity-based community networks or religious communities (see e.g. Boyd 1989; Ryan 2004; Glick Schiller 2005, 2009; Reynolds 2006; Levitt 2007). For example, based on qualitative interviews with Guatemalan immigrants in Los Angeles, California, Menjivar (2002) found that migrant women obtain medical treatment at different venues thanks to their personal ties. These informal, network-based protective resources play a particularly crucial role in the lives of migrants who are ineligible for or excluded from access to formal welfare schemes (Sabates-Wheeler and Feldman 2011).

Although migrants may have multiple connections to at least two welfare regimes regulated through social policies and regulations or bilateral agreements, some may be excluded from one or even both, as in the case of irregular migrants. Social protection provided by informal networks is dynamic in nature. Previous studies have found extensive evidence that transnational families (situated in different countries) continue to exchange care relations despite the geographical distance that separates them, although this arrangement might be constrained by time, resources or health and family conditions (Bryceson and Vuorela 2002; Baldassar et al. 2007; Baldassar and Merla 2014). Not only is social protection influenced by geographical distance between actors, but such protection also depends on relationships that are subject to constant transformation as a result of migration and the experiences it yields. For example, the migration of women who leave their children in their home countries and become the main breadwinner for their families has implications for various aspects of their family relations, such as child care, gender dynamics and current and future intergenerational (protective) relations (see e.g. Parreñas 2005). Therefore, a research design that seeks to capture these dynamics should take into account not only the geographical location and ethnicity/nationality of the significant others but also the positions of migrants within their networks. To achieve this goal, a structural analysis, together with an in-depth understanding of relations and intersubjective positionings are necessary to examine transnational phenomena such as social protection. Because personal network analysis can capture the agency of the individual along with the institutional frameworks (Molina et al. 2014), it is crucial to utilize this method for investigating social protection across borders.

## Towards a Mixed-Methods Research Design

Interest in conducting mixed-methods research has grown (for an extensive review, see Creswell 2003; Tashakkori and Teddlie 2010), as has the use of social network data in more recent years (Edwards 2010; Bernardi 2011; Domínguez and Hollstein 2014). The primary focus of social networks is not on individuals or their personal characteristics but rather on the relationships between individuals and their structure, with relational information being the defining aspect. The ties that exist among actors' relationships and their embeddedness are keys to understanding the behaviour of individuals; their personal characteristics are of secondary importance. In other words, social network analysis is the appropriate method for investigating the patterns of relations between nodes (Wasserman and Faust 1994).

'Accurate network analyses cannot be derived from metaphors' (Krissman 2006:7). In other words, the structures and the nature of resource exchanges among network members are not self-explanatory but are worth exploring. To this end, personal network analysis offers a variety of techniques to collect and analyse relational data systematically. Personal or egocentric networks are 'networks consisting of a single actor (ego) together with the actors they are connected to (alters) and all the links among those alters' (Everett and Borgatti 2005:31). Network compositions may differ depending on the actors involved and the types of interactions between them. In order to understand network composition, researchers ask respondents further details on people in their networks such as gender, age, and education level. Relations can be defined according to the type of interaction (e.g. formal or informal, or, more specifically, among family members), the intensity of the interaction (usually determined by the frequency of contact or duration of the relationship) and its content (the form that the flow of resources takes) (Borgatti and Halgin 2011). By asking egos detailed questions about the relations their alters have with one another, researchers can obtain information about both the composition and the structure of such networks. After collecting data on alter-alter relationships, the structural properties of personal networks can be investigated, including such factors as their density and the ways in which actors are connected with one another, through computing a variety of centrality measures (McCarty 2002; Scott 2013).

Drawing on previous research concerning the mixed-methods design, Hollstein (2014:12–18) depicts five research approaches that include quantitative and

qualitative data collection and analysis, with specific reference to network analysis: (1) *sequential design* indicates the successive use of both methods, in which the second strand of data collection is based on the pre-study analysis; (2) *parallel design* suggests simultaneity of both strands, in which neither the data collection nor the analysis relies on the other strand; (3) *fully integrated design* means that both approaches are implemented interactively and dynamically at all research phases; (4) *embedded design* denotes that one of the research strands plays only a narrow role in the study; and (5) *conversion design* requires the transformation of two types of data into another type, and this is re-analysed according to that kind of logic.

The next section introduces a study in which the fully integrated design was adopted. Research questions were operationalised, drawing on a mix of methods that included personal network analysis and qualitative semi-structured interviews. By describing the actual implementation of such a research design, this article is meant to illustrate a roadmap for future research.

## Research Design

In order to investigate social protection patterns and strategies of migrants, as well as related inequalities, the author was involved in an international research project<sup>2</sup> in which data were collected by a team of researchers. The project relied on data coming from qualitative semi-structured interviews with labour migrants and asylum seekers from Turkey who were living in Germany and their significant others who were living in Turkey, as well as from various other sources, such as personal network analysis, document analysis, expert interviews and participant observations collected between 2011 and 2012 (for an extensive analysis, see Faist 2015a). All data collection guidelines were devised simultaneously by an international team.

For the purpose of this project, the data on personal networks were collected in four steps (McCarty et al. 2007), all of which were recorded and later transcribed verbatim to produce text data that could be analysed through social scientific hermeneutics (Reichert 2004; Schröer 2009).

<sup>2</sup> In the larger collaborative research project, three different transnational social spaces were chosen as a way to examine different legal categories of migration: Kazakhstan–Germany (resettlers), Poland–Germany (EU migrants) and Turkey–Germany (labour migrants and asylum seekers). Because the data for the Turkey–Germany study were collected by the author, this article describes the analysis of this specific case.

Based on intersubjective knowledge, the main goal of this method of analysis was to reconstruct patterns of meanings as attributed by the persons involved.

In the first step, one name-generator question was asked to generate the network of the interviewee (ego). Name-generator questions are usually asked to identify the important alters in an ego's social world, or an 'ego's contacts in certain role relationships (e.g. neighbourhood, work), content areas (e.g. work matters, household chores) or intimacy (e.g. confiding, most intimate, etc.)' (Lin 1999:476). The present study used the following name-generator question: *'From time to time, most people need assistance, be it in the form of smaller or bigger tasks or favours. Within the past one year who are the people with whom you usually exchange such assistance?'.* The interviewees were asked to name as many contacts as they wished. These contacts were designated as alters, which enabled the researchers to determine the size of the networks.

A network map was used to identify significant others—that is, individuals who provide social protection for the egos—and to collect comparable, quantifiable data (Kahn and Antonucci 1980). The interviewees were asked to place these individuals within one of four concentric circles on the network map according to their degree of importance (from 'very important' to 'unimportant') (Fig. 1). The concept of 'importance' was not pre-defined; instead, the interviewees were asked to reflect on the meaning of this term (see Bernardi 2011).

In the second step, additional questions were asked to obtain information about the characteristics of the alters, including age, gender, nationality, geographical location, income and education level. The interviewees were also asked about a number of aspects regarding their connection to their alters, such as the duration and type of the relationships and the frequency of contact.

In the third step, a matrix of alter–alter relations was used in which the ego described the alter–alter relations in order to analyse the structure of the personal networks. Alter–alter relations were measured as either present or absent (Scott 2013; Wasserman and Faust 1994).

In the fourth and final step, interviewees were asked to respond to a 17-item questionnaire designed to collect in-depth information concerning social protection (Table 1). Informal social protection was operationalised along three dimensions: (a) information exchange (5 items), (b) financial resources (4 items) and (c) care relations (8 items). Each of these questions was asked twice to determine to whom the egos provided protective resources and from whom they received protection, based on the names given in response to the initial name-generator

question (see Step 1 above). The final sample size consisted of 100 interviewees, yielding 964 alters.

Next, the network maps were visualised with VennMaker software, through which the location, gender and type of each alter could be shown as different-coloured nodes and the protective relationships as different-coloured arrows. The aim of the program is to provide a simpler and faster way to code, visualise and analyse social networks (Gamper et al. 2012). Thus, researchers can investigate the egos' positions not only in the social

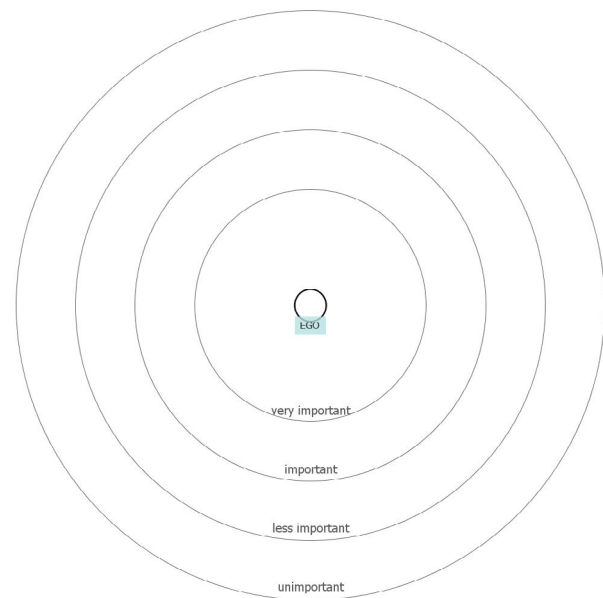


Figure 1. The network map

Table 1. Operationalisation of informal social protection

Dimension	Items
Information exchange (Index: min = 0, max = 5)	Job Health Legal status Legal matters Education
Financial resources (Index: min = 0, max = 4)	Regular ( $\geq$ €500) Regular ( $<$ €500) Irregular ( $\geq$ €500) Irregular ( $<$ €500)
Care relations (Index: min = 0, max = 8)	Healthcare in unserious cases Healthcare in serious cases Eldercare Regular childcare Irregular childcare Emergency Help in household Help in moving

context but also in the geographical one, which is crucial in transnational studies.

Right after determining the personal networks, I conducted *qualitative interviews* with 20 of respondents. Because of the order of methods, I had become familiar with the persons with whom the respondents exchanged protective resources and could ask in-depth questions during the interview to understand their strategies. The two research methods used were complementary, not only during the data collection phase but also when the data were later analysed. During the data collection phase, respondents were able to visualise their social networks and commented on them extensively. For example, they questioned the inclusion of the category ‘unimportant’ in assigning their contacts, sometimes even deliberately rejecting the existence of such persons, and they recognised their own life worlds, as evidenced by their astonishment. For instance, some of them realised that all their contacts were co-ethnics/co-nationals, and they reflected further on that discovery. In this way, network maps shifted the respondents’ position ‘from being observed to becoming observers’ (Molina et al. 2015:310). In the analysis phase, the network data, which included the maps used to determine the composition and structure of the interviewees’ protection networks as well as to construct typologies of protection, were complemented by the interviews, which exposed the connections in a more reflexive and interpretative way. Therefore, it was possible to explore the meaning patterns of protective relationships and the idea of protection from the perspective of the persons under study.

## Personal Networks of Migrants from Turkey

Based on 100 personal networks (51 female and 49 male egos), a total of 964 alters were named as protective ties. The median age of the egos varied from 30 to 41 years. Networks of migrants from Turkey comprised between 4 and 27 alters, with an average network size of 9.7 (standard deviation [SD] = 4.25). The average density score of the networks in the sample was 0.73, indicating that these networks were rather dense. Turkish migrants’ personal networks were composed of family (48%) and friendship ties (52%). As described by the respondents, 68% of the alters were very important, 26% were important, 4% were less important and almost 1% were considered unimportant. Of those who were deemed very important, 57% were family members and 43% were friends. Approximately 60% of all the alters lived

in Germany, 37% lived in Turkey, and the remaining 3% were scattered across the globe, with the greatest concentration in Europe. The respondents’ duration of relationships with their significant others were to a great extent defined as ‘long’—that is, longer than 10 years for 84% of their relationships and less than 3 years for only about 8%. The frequency of the respondents’ contacts with their significant others was as follows: 28% daily, 42% weekly, 23% monthly and almost 7% yearly. Of the alters, 52% were female and 48% were male. The age composition of the alters ranged from 10 to 70 with an average age of 50.

The protective relationships seemed to be fairly balanced between egos and alters. Information and care relations were exchanged much more than financial resources were. Based on the descriptive analysis, 30% of the respondents received information from their alters and 31% also gave information to their alters. Moreover, 42% of the respondents received care and 41% gave care, indicating that care relations were the most commonly exchanged type of social protection. In terms of financial protection, a slight imbalance was found; 14% of the respondents gave money to their alters but only 11% received financial protection (Bilecen and Sienkiewicz 2015:234). Based on further analysis, it became clear that when the networks were segregated by geographical location, respondents tended to give more information and financial resources and to receive less care (Bilecen and Cardona 2017).

Moreover, during our quantitative analysis we found that the migrants from Turkey in our sample had a large number of significant others who were living outside Germany (385 alters out of 964) (Bilecen and Sienkiewicz 2015:233). This finding parallels our previous observation based on the network visualisations. Thus, the reliability of the data was improved by not only observing the network maps but also running a quantitative analysis. Because these analyses took place simultaneously (the qualitative ones being based on 20 semi-structured interviews with migrants in Germany and 10 with their significant others located in Turkey), the meanings attached to personal ties as well as social protection were unearthed, as will be described in the next section.

## Meaning of Protective Ties

The respondents consistently emphasised their strong relationships with family members. In order to secure their livelihood and reduce risks, they prioritised the family. In some cases they would migrate, return home,

or not migrate at all for the sake of their parents and children. Even though migrants have access to the formal benefits regulated by Germany and Turkey (for an extensive review, see Bilecen et al. 2015), their responses on the network maps and later during the interviews showed that they always considered their families to be of primary concern. When asked about social protection, the respondents listed family members first in the ‘very important’ circle on their network maps. The concentric circles in these maps stimulated the respondents to interpret their relationships and compare their alters with one another when designating them according to their importance (see also Ryan et al. 2014). The respondents perceived the term ‘importance’ to mean ‘emotionally closer’, referring to those whom they could ‘talk to’, ‘confide in’ and ‘rely on for anything in life’.

Thus, their main social protection strategy was to put the emphasis on family, particularly on extended family and sometimes even friends who were seen as part of the family, meaning that they were trustworthy and reliable in terms of protection, which indicates the multiplexity of roles. But going beyond that, a mix of factors were considered when they decided whom to ask for daily help. The respondents took into account not only the alters’ availability in terms of time and location but also their effort, capability and willingness, as well as the respondents’ trust in their reciprocity and ability to accomplish the task at hand. In the earlier part of the study, the network maps called upon the respondents to think about their significant others and made them realise what kind of protection they had exchanged, whereas later in the interview process, they reflected more on the quality of both the relationships and the protective resources while indicating the reasoning behind what happened and the way in which it happened. Let us take the subject of healthcare as an example.

## Who Is Caring for Whom?

With respect to health insurance, 97% of the sample was covered by insurance from Germany. Based on the Social Security Agreement between Turkey and Germany ratified in 1965 and updated in 1987, such coverage affords migrants the right to equal healthcare, as in the case of maternity care and the treatment of accidental injuries and diseases in Turkey. Despite the fact that participants

have this type of formal protection<sup>3</sup>, they also rely on their personal ties in matters related to healthcare, not only because they perceive shortcomings in the welfare provisions (particularly in the formal healthcare system in Turkey), but also because they prefer this approach.

Whereas female participants and alters provide daily care for the children, the elderly and the sick, men are more likely to be engaged in activities such as driving others to the doctor or picking up prescriptions. For example, in completing the network section of the survey, Ömer<sup>4</sup>, a 1.5-generation migrant living in Germany with his wife and three children, highlighted the importance of his 65-year-old mother when he needs someone to take care of him in the event of illness, even though she lives half the year in Turkey. In his words, ‘Who would take care of me if not my mother?’, indicating that she would automatically assume this responsibility; if he became seriously ill, she would stay in Germany and take care of him. In return, he pointed out that it was his duty to take care of her. In practice, Ömer takes care of his mother by supporting her financially. He interprets his decision to hire a cleaning lady to help out as being ‘important for [his mother’s] general well-being’.

Whereas male respondents’ involvement in healthcare-related matters usually means that they provide material support, female respondents as well as the female alters of all the respondents were involved in daily care tasks, such as attending to household chores. This situation seemed to be taken for granted; as Senem stated, ‘It is the natural way’. This attitude points to the ‘habitual’ or ‘normalised’ filial daily care within migrant families from Turkey from the perspective of both genders. Apparently, in this study’s sample, this is what constitutes appropriate care.

When it comes to caring for elderly family members who are still living in their country of origin, respondents also count on family-like female friends. For example, when Berna needs to check on her elderly parents who are living in Turkey, the people whom she thinks of first are her two closest female friends in Turkey, Hale and

<sup>3</sup> The social welfare system in Turkey is usually characterized as the ‘Southern European model’ where the state mainly protects the employed citizens and has a marginal role in social assistance programs, at the same time family has been attributed as the fundamental provider of welfare (Grütjen, 2006). Because some of the welfare provisions in Turkey have recently been privatised, the Turkish welfare system can also be classified as liberalising. On the other hand, Germany has a conservative welfare system with social democratic elements based on the role of unions as well as of the state (Offe 1996).

<sup>4</sup> All the names of interviewees used in this article are pseudonyms.

Nazlı. Certainly not all friends are accepted as part of the extended family; however, in Berna's case, she considers her friends part of her family because, as she explained, she was born in Turkey and spent many formative years with them. In contrast, Sema, another respondent, put all 11 of her contacts in the 'important' circle on the network map, differentiating family members from friends according to the kind of protection she actually exchanged (and would theoretically exchange) with them rather than according to how important they were in her life. In terms of care relations and financial protection, Sema feels closer to and more reliant on her family members and would be reluctant to exchange such resources with friends. To her, friends are there to socialise and share useful information with.

## Healthcare Across Borders

At the beginning of the study, respondents were not asked about the geographical location of their alters, yet they discussed the role of geographical proximity in decisions about daily care tasks at length during all the stages of data collection. In other words, the name-interpret questions were asked after we had captured all their ties, regardless of their locations; when they were asked more specifically about informal social protection, location turned out to be an important factor in some of those exchanges, particularly in the realm of care. In previous studies on transnational families, the starting point was to understand how such geographically dispersed family members would care for each other (see e.g. Baldassar et al. 2007; Boccagni 2015). Therefore, these studies tended to focus extensively on transnational ties and endorsed the idea that advances in telecommunication technologies and the availability of frequent flights to connect family members across the globe greatly facilitated care relations at a distance. However, our study began with no assumptions about location, concentrating instead on how social protection was arranged and negotiated among personal ties, and the respondents problematize being at a distance particularly when they reflected on actual situations they had experienced. In fact, at some point in their narratives, all the respondents compared theory and practice when it came to their informal social protection. As it turned out, family ties were, in theory, considered 'very important' and 'helpful' in care relations, regardless of where those ties lived, whereas in practice, there was always an explanation as to why the grandparents or siblings could not be there when the respondents needed daily practical care. One common reason cited was the presence of formal rules and regulations governing travel between the two nation-states; because Turkey is not a

member of the European Union, family members living in Turkey need a visa to enter and stay in Germany. Other explanations included the lack of means, ability and willingness of the left-behind family members.

Although most of the participants were willing to name their contacts in Turkey, a few of them did not include their contacts in Turkey on their network maps, believing that the exchange of assistance was impossible owing to the geographical distance. The location of the alters mattered most in the area of care relations, as compared with the areas of information and financial exchanges. All the respondents mentioned that they would theoretically exchange care with their contacts in Turkey, but in reality the exchanges that took place during the previous year had been fewer than expected. If such an exchange happened, it usually involved the care of elderly parents who had been left behind in Turkey, as in Berna's case. Mainly, this responsibility took the form of financial protection, in that money was sent to other family members, rather than to the parents directly, to hire a caregiver or housecleaner. For the elderly family members who remain in Turkey, care is eventually provided by other family members, usually women, who reside in both Germany and Turkey. For example, Süheyla and her brother from Turkey took care of their mother in Turkey on a daily basis, while their sister Münevver in Germany claimed that she supported them financially. In another case, Necati together with his other siblings took care of their mother in Turkey and received financial support from his brother in Germany to meet the mother's needs. These arrangements also indicate the transferability of different types of social protection.

In instances of both serious and unserious illness, the respondents described what actually happened in addition to reflecting on hypothetical situations. For example, Murat, a 40-year-old, second-generation migrant with three children, cited in the network section only those alters who lived in Germany. He described how his wife, sister, and mother looked after him and his children when they were sick, providing medicine and tracking its use, as well as preparing and monitoring their diets. Although he had not had any serious illnesses during the past year, he pointed out that if he had, these relatives would be the ones who would care for him. Later in the interview, Murat mentioned that his mother frequently visited Turkey and lived there for longer periods; he rationalised his failure to care for her when she was sick in Turkey, yet he felt that he should have, because of his obligation as her son and as a way to reciprocate for her care of him.

Another respondent, Melek, mentioned that her family members would come and visit, thus restoring

‘the feeling of [having] a family again’. However, not all respondents were able to invite their family members to visit, not only because they did not have the means to do so, but also because of legal restrictions. For example, the aforementioned visa regulations make it difficult for relatives who live in Turkey to provide care for their family members in Germany. Also, the legal status of migrants poses problems, as was the case for Mustafa and Aylin, two siblings who came to Germany as asylum seekers and therefore could not exchange any daily practical care relations with their left-behind family members in Turkey. As can be seen, the meanings of personal relationships and the dynamics of social protection exchange are much more complex than the tasks, resources and responsibilities involved in such exchanges. Formal rules and regulations, together with gender, location, expectations and experiences, underpin the interpersonal dynamics of protection.

## Conclusion

In addition to understanding resource flows, researchers interested in transnational phenomena are now beginning to focus on the dynamics of personal networks and the qualities of personal relationships (see also Scheibelhofer 2011). With this in mind, the author participated in an international project from which this article has drawn empirical examples. This study shows how the application of personal network analysis within a mixed-methods design can enhance the study of transnational practices by examining informal social protection patterns within and across borders. Such a research design enabled the author not only to carry out a quantitative analysis of social protection but also to analyse the meanings attributed to personal relationships and the various types of resources from the respondents’ perspective. Using this methodological lens, the article placed the focus on the importance of gender and geographical location as well as the multiplexity of relations and resources. This investigation thus contributes to migration and network analysis scholarship by exploring the meaning of migrants’ embeddedness in their personal networks and its implications for a variety of protective resource flows.

By presenting empirical examples of (transnational) social protection of Turkish migrants living in Germany, this study shows the value of personal network analysis in a mixed-methods research design. Its systematic research orientation and analysis techniques make personal network analysis a useful tool for examining the practice of social protection among migrants and

their significant others. When this approach is combined with qualitative interviews, researchers are better able to understand the life worlds of the participants and have ‘thick descriptions’ of their social protection strategies. As was shown here, one can observe respondents not only in their immediate social context but also in a geographical one. In terms of information exchange and financial protection, the location of significant others was not particularly important to the respondents, although proximity and opportunity structures did matter when it came to daily care (see Kilkey and Merla 2014). In fact, there is ample evidence of care being provided at a distance. Nevertheless, when social protection is investigated from the network perspective, which makes it possible to look at all alters rather than focusing only on transnational ones; researchers should refrain from emphasising certain ties over others.

Social relationships change over time. In the case of migrants who have lived in different countries, certain ties that were perceived as meaningful in terms of protection might fade away while new ones are being continually formed. This could be considered a limitation of the research design used in this study—that is, the personal networks discussed in this article are only snapshots of a specific point in time and may not necessarily provide an accurate picture of the networks at other times (Feld et al. 2007). Nevertheless, the same could be said for any other method of data collection (Scott 2013), because all methods depend on a variety of factors, including the positions of the researcher and the researched (which are constantly being negotiated), the willingness of the interviewees to disclose personal information and the changing nature of personal relations and thus of the embedded resources. A network map consisting of concentric circles was used in this study to indicate how important alters were to the respondents, and this exercise yielded information about the meaning of ties and protection. Also, qualitative interviews allowed the respondents to reflect on their life course and showed them how social protection practices might change over time.

In summary, mixing different research methods can be beneficial for researchers who are after ‘thick descriptions’ of their subjects. Nevertheless, future studies should take into account longitudinal approaches. One such strategy might involve collecting data every year, based on the logic presented in this article, and then conducting a longitudinal analysis (see Lubbers et al. 2010 on longitudinal analysis of personal networks). Longitudinal data on social protection could also be collected retrospectively by creating concentric circles on a network map that includes time periods representing

the respondents' practices before and after migration.

Use of the mixed-methods approach, although time- and resource-consuming, greatly benefitted the study described here. Given the potential strengths and advantages of this approach, as discussed in this article, it is only a matter of time before researchers who study mobility and transnational phenomena begin to use and expand on personal network analysis and combine it with other methods.

**Acknowledgements:** This research was funded by a grant from the German Research Foundation (DFG) within the framework of Collaborative Research Centre 882 'From Heterogeneities to Inequalities' at Bielefeld University. I am grateful to Thomas Faist, Karolina Bargłowski, Andrés Cardona and the editors and anonymous reviewers for their useful comments. I would also like to thank my interviewees, who opened up to me their social relationships and lives.

## References

- Amelina, Anna and Thomas Faist. 2012. "De-Naturalizing the National in Research Methodologies: Key Concepts of Transnational Studies in Migration." *Ethnic and Racial Studies* 35 (10): 1–18.
- Baldassar, Loretta and Laura Merla, eds. 2014. *Transnational Families, Migration and the Circulation of Care: Understanding Mobility and Absence in Family Life*. London: Routledge.
- Baldassar, Loretta, Cora V. Baldock, and Raelene Wilding. 2007. *Families Caring Across Borders: Migration, Ageing and Transnational Caregiving*. Houndmills: Palgrave Macmillan.
- Bargłowski, Karolina, Başak Bilecen, and Anna Amelina. 2015. Approaching Transnational Social Protection: Methodological Challenges and Empirical Applications. *Population, Space and Place* 21 (3): 215–226.
- Basch, Linda, Nina Glick Schiller, and Cristina Szanton Blanc. 1994. *Nations Unbound: Transnational Projects, Postcolonial Predicaments and Deterritorialized Nation-States*. Amsterdam: Gordon and Breach.
- Bernardi, Laura. 2011. "A Mixed-Methods Social Networks Study Design for Research on Transnational Families." *Journal of Marriage and Family* 73 (4): 788–803.
- Bilecen, Başak. 2012. "How Social Support Works Among the Best and the Brightest: Evidence from International PhD Students in Germany." *Transnational Social Review* 2 (2): 139–155.
- Bilecen, Başak. 2014. *International Student Mobility and Transnational Friendships*. Basingstoke: Palgrave Macmillan.
- Bilecen, Başak and Joanna J. Sienkiewicz. 2015. "Informal Social Protection Networks of Migrants: Typical Patterns in Different Transnational Social Spaces." *Population, Space and Place* 21 (3): 227–243.
- Bilecen, Başak, Gül Çatır, and Aslı Orhon. 2015. "Turkish–German Transnational Social Space: Stitching Across Borders." *Population, Space and Place* 21 (3): 244–256.
- Bilecen, Başak and Andrés Cardona. 2017. "Do Transnational Brokers Always Win? A Multilevel Analysis of Social Support." *Social Networks* (forthcoming).
- Bilecen, Başak, Markus Gamper, and Miranda Lubbers. 2017. "Migration, Social Networks, Transnational Phenomena: Mapping the Issue(s)." *Social Networks* (forthcoming).
- Boccagni, Paolo. 2015. "Burden, Blessing or Both? On the Mixed Role of Transnational Ties in Migrant Informal Social Support." *International Sociology* 30 (3): 250–268.
- Borgatti, Steve and Dan Halgin. 2011. "On Network Theory." *Organization Science* 22 (5): 1168–1181.
- Boyd, Monica. 1989. "Family and Personal Networks in International Migration: Recent Developments and New Agendas." *International Migration Review* 23 (3): 638–670.
- Brubaker, Rogers. 2004. "Ethnicity Without Groups." Pp. 7–27 in *Ethnicity Without Groups*, edited by R. Brubaker. Cambridge, MA: Harvard University Press.
- Bryceson, Deborah F. and Ulla Vuorela, eds. 2002. *The Transnational Family: New European Frontiers and Global Networks*. Oxford: Berg.
- Burt, Ronald. 1978. "Applied Network Analysis: An Overview." *Sociological Methods & Research* 7 (2): 123–130.
- Creswell, John W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Dahinden, Janine. 2010. "'Wenn soziale Netzwerke transnational werden': Migration, Transnationalität, Lokalität und soziale Ungleichheitsverhältnisse." Pp. 393–420 in *Knoten und Kanten: Soziale Netzwerkanalyse in Wirtschafts- und Migrationsforschung*, edited by M. Gamper and L. Reschke. Bielefeld: Transcript.
- Domínguez, Silvia and Betina Hollstein, eds. 2014. *Mixed Methods Social Network Research: Design and Applications*. Cambridge: Cambridge University Press.
- Drèze, Jean and Amartya Sen. 1991. "Public Action for Social Security: Foundations and Strategy." Pp. 1–40 in *Social Security in Developing Countries*, edited by E. Ahmad, J. Drèze, J. Hills, and A. Sen. Oxford: Clarendon Press.
- Edwards, Gemma. 2010. "Mixed-Method Approaches to Social Network Analysis." Review Paper NCRM/015. National Centre for Research Methods, Manchester.
- Emirbayer, Mustafa and Jeff Goodwin. 1994. "Network Analysis, Culture, and the Problem of Agency." *The American Journal of Sociology* 99 (6): 1411–1454.
- Everett, Martin and Stephen P. Borgatti. 2005. "Ego Network Betweenness." *Social Networks* 27 (1): 31–38.
- Faist, Thomas. 2000. *The Volume and Dynamics of International Migration and Transnational Social Spaces*. Oxford: Oxford University Press.
- Faist, Thomas, Başak Bilecen, Karolina Bargłowski, and Joanna J. Sienkiewicz. 2015a. "Safety Nets of Migrants Across Borders: An Inquiry into Social Mechanisms of Inequality." *Population, Space and Place* 21 (3): 193–293.
- Faist Thomas, Başak Bilecen, Karolina Bargłowski and Joanna J. Sienkiewicz. 2015b. "Transnational Social Protection: Migrants' Strategies and Patterns of Inequalities." *Population, Space and Place* 21 (3): 193–202.
- Faist, Thomas, Margit Fauser, and Eveline Reisenauer. 2013. *Transnational Migration*. Cambridge: Polity.

- Feld, Scott L., J. Jill Suitor, and Jordana G. Hoegh. 2007. "Describing Changes in Personal Networks over Time." *Field Methods* 19 (2): 218–236.
- Gamper, Markus and Tatjana Fenicia. 2013. "Transnationale Unterstützungsnetzwerke von Migranten – Eine qualitative Studie zu Spätaussiedlern aus der ehemaligen UdSSR." Pp. 249–276 in *Visuelle Netzwerkforschung: Qualitative, quantitative und partizipative Zugänge*, edited by M. Schönhuth, M. Gamper, M. Kronenwett, and M. Stark. Bielefeld: Transcript.
- Gamper, Markus, Michael Schönhuth, and Michael Kronenwett. 2012. "Bringing Qualitative and Quantitative Data Together: Collecting and Analyzing Network Data with the Help of the Software Tool VennMaker." Pp. 193–213 in *Social Networking and Community Behavior Modeling: Qualitative and Quantitative Measures*, edited by M. Safar and K. A. Mahdi. Hershey, PA: Information Science Reference.
- Glick Schiller, Nina. 2005. "Transnational Social Fields and Imperialism: Bringing a Theory of Power to Transnational Studies." *Anthropological Theory* 5 (4): 439–461.
- Glick Schiller, Nina. 2009. "'There Is No Power Except for God': Locality, Global Christianity and Immigrant Transnational Incorporation." Pp. 125–147 in *Permutations of Order*, edited by T. G. Kirsch and B. Turner. Aldershot: Ashgate.
- Glick Schiller, Nina, Linda Basch, and Cristina Szanton Blanc. 1992. *Towards a Transnational Perspective on Migration: Race, Class, Ethnicity and Nationalism Reconsidered*. New York: The New York Academy of Sciences.
- Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91 (3): 481–510.
- Grütjen, Daniel. 2006. "The Turkish Welfare Regime: An Example of the Southern European Model? The Role of the State, Market and Family in Welfare Provision." *Turkish Policy Quarterly* 7 (1): 111–129.
- Hall, Alan and Barry Wellman. 1985. "Social Networks and Social Support." Pp. 23–41. In *Social Support and Health*, edited by S. Cohen and S. L. Syme. New York: Academic Press.
- Herz, Andreas. 2015. "Relational Constitution of Social Support in Migrants' Transnational Personal Communities." *Social Networks* 40: 64–74.
- Herz, Andreas and Claudia Olivier. 2012. "Transnational Social Network Analysis." *Transnational Social Review* 2 (1): 11–29.
- Hollstein, Betina. 2014. "Mixed Methods Social Networks Research: An Introduction." Pp. 3–34 in *Mixed Methods Social Networks Research: Design and Applications*, edited by S. Domínguez and B. Hollstein. Cambridge: Cambridge University Press.
- Kahn, Robert L. and Toni C. Antonucci. 1980. "Convoys over the Life Course: Attachment Roles, and Social Support." Pp. 253–286 in *Life-Span Development and Behavior*, Vol. 3, edited by P. B. Baltes and O. G. Brim. New York: Academic Press.
- Kennedy, Paul. 2004. "Making Global Society: Friendship Networks Among Transnational Professionals in the Building Design Industry." *Global Networks* 4 (2): 157–179.
- Kilkey, Majella and Laura Merla. 2014. "Situating Transnational Families' Care-Giving Arrangements: The Role of Institutional Contexts." *Global Networks* 14 (2): 210–229.
- Krissman, Fred. 2006. "Sin Coyote Ni Patrón: Why the 'Migrant Network' Fails to Explain International Migration." *The International Migration Review* 39 (1): 4–44.
- Levitt, Peggy. 2007. *God Needs No Passport: Immigrants and the Changing American Religious Landscape*. New York: New Press.
- Levitt, Peggy and Nina Glick Schiller. 2004. "Conceptualizing Simultaneity: A Transnational Social Field Perspective on Society." *International Migration Review* 38 (3): 1002–1039.
- Levitt, Peggy and B. Nadya Jaworsky. 2007. "Transnational Migration Studies: Past Developments and Future Trends." *Annual Review of Sociology* 33: 129–156.
- Lin, Nan. 1999. "Social Networks and Status Attainment." *Annual Review of Sociology* 25: 467–487.
- Lubbers, Miranda J., José L. Molina, and Christopher McCarty. 2007. "Personal Networks and Ethnic Identifications: The Case of Migrants in Spain." *International Sociology* 22 (6): 721–741.
- Lubbers, Miranda J., José L. Molina, Jürgen Lerner, Ulrik Brandes, Javier Ávila, and Christopher McCarty. 2010. "Longitudinal Analysis of Personal Networks: The Case of Argentinean Migrants in Spain." *Social Networks* 32 (1): 91–104.
- Massey, Douglas S., Joaquín Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino, and J. Edward Taylor. 1993. "Theories of International Migration: A Review and Appraisal." *Population and Development Review* 19 (3): 431–466.
- Mazzucato, Valentina. 2006. "Migrant Transnationalism: Two-Way Flows, Changing Institutions and Community Development Between Ghana and the Netherlands." *Economic Sociology: The European Electronic Newsletter* 7 (3): 8–16.
- Mazzucato, Valentina. 2009. "Bridging Boundaries with a Transnational Research Approach: A Simultaneous Matched Sample Methodology." Pp. 215–232 in *Multi-Sited Ethnography: Theory, Praxis and Locality in Contemporary Research*, edited by M.-A. Falzon. Burlington, VT: Ashgate.
- McCarty, Christopher. 2002. "Structure in Personal Networks." *Journal of Social Structure* 3 (1).
- McCarty, Christopher, José L. Molina, Claudia Aguilar, and Laura Rota. 2007. "A Comparison of Social Network Mapping and Personal Network Visualization." *Field Methods* 19 (2): 145–162.
- Menjívar, Cecilia. 2002. "The Ties That Heal: Guatemalan Immigrant Women's Networks and Medical Treatment." *International Migration Review* 36 (2): 437–466.
- Miguel Luken, Verónica de and Mark Tranmer. 2010. "Personal Support Networks of Immigrants to Spain: A Multilevel Analysis." *Social Networks* 32 (4): 253–262.
- Molina, José L., Isidro Maya-Jariego, and Christopher McCarty. 2014. "Giving Meaning to Social Networks: Methodology for Conducting and Analyzing Interviews Based on Personal Network Visualizations." Pp. 305–335 in *Mixed Methods Social Networks Research: Design and Applications*, edited by S. Domínguez and B. Hollstein. Cambridge: Cambridge University Press.
- Molina, José L., Sören Peterman, and Andreas Herz. 2015. "Defining and Measuring Transnational Social Structures." *Field Methods* 27 (3): 223–243.
- Offe, Claus. 1996. *Varieties of Transition: The East European and East German Experience*. Cambridge: Polity.
- Parreñas, Rhacel S. 2005. "Long Distance Intimacy: Class, Gender and Intergenerational Relations Between Mothers and Children in Filipino Transnational Families." *Global Networks* 5 (4): 317–336.

- Pries, Ludger. 1996. "Transnationale Soziale Räume: Theoretisch-empirische Skizze am Beispiel der Arbeitswanderungen Mexico–USA." *Zeitschrift für Soziologie* 25 (6): 456–472.
- Reichert, Jo. 2004. "Objective Hermeneutics and Hermeneutic Sociology of Knowledge." Pp. 290–295 in *A Companion to Qualitative Research*, edited by U. Flick, E. v. Kardorff, and I. Steinke. Thousand Oaks, CA: Sage.
- Reynolds, Tracey. 2006. "Family and Community Networks in the (Re)Making of Ethnic Identity of Caribbean Young People in Britain." *Community, Work & Family* 9 (3): 273–290.
- Ryan, Louise. 2004. "Family Matters: (E)migration, Familial Networks and Irish Women in Britain." *The Sociological Review* 52 (3): 351–370.
- Ryan, Louise. 2011. "Migrants' Social Networks and Weak Ties: Accessing Resources and Constructing Relationships Post-Migration". *The Sociological Review* 59 (4): 707–724.
- Ryan, Louise, Jon Mulholland, and Agnes Agoston. 2014. "Talking Ties: Reflecting on Network Visualisation and Qualitative Interviewing." *Sociological Research Online* 19 (2): 16.
- Sabates-Wheeler, Rachel and Rayah Feldman. 2011. "Introduction: Mapping Migrant Welfare onto Social Provisioning." Pp 3–35 in *Migration and Social Protection: Claiming Social Rights Beyond Borders*, edited by R. Sabates-Wheeler and R. Feldman. New York: Palgrave Macmillan.
- Scheibelhofer, Elisabeth. 2011. "Potential of Qualitative Network Analysis in Migration Studies: Reflections Based on an Empirical Analysis of Young Researchers' Mobility Aspirations." *Migration Letters* 8 (2): 111–120.
- Schröder, Norbert. 2009. Hermeneutic Sociology of Knowledge for Intercultural Understanding. *Forum: Qualitative Social Research/Qualitative Sozialforschung* 10 (1): Art. 40.
- Schweizer, Thomas, Michael Schnegg, and Suzanne Berzborn. 1998. "Personal Networks and Social Support in a Multiethnic Community of Southern California." *Social Networks* 20 (1): 1–21.
- Scott, John. 2013. *Social Network Analysis* (3rd ed.). London: Sage.
- Smith, Michael P. 2005. "Transnational Urbanism Revisited." *Journal of Ethnic and Migration Studies* 31 (2): 235–244.
- Song, Lijun, Joonmo Son, and Nan Lin. 2011. "Social Support." Pp. 116–128 in *The SAGE Handbook of Social Network Analysis*, edited by J. Scott and P. J. Carrington. Thousand Oaks, CA: Sage.
- Tashakkori, Abbas and Charles Teddlie, eds. 2010. *Handbook of Mixed Methods in Social & Behavioural Research*. (2nd ed.) Thousand Oaks, CA: Sage.
- Tilly, Charles. 2004. *Stories, Identities, and Political Change*. Lanham, MD: Rowman & Littlefield.
- Vertovec, Steven. 2009. *Transnationalism*. London: Routledge.
- Waldinger, Roger and David Fitzgerald. 2004. "Transnationalism in Question." *American Journal of Sociology* 109 (5): 1177–1195.
- Wasserman, Stanley and Katherine Faust. 1994. *Social Network Analysis: Methods and Applications*. Cambridge University Press: Cambridge.
- Wellman, Barry and Milena Gulia. 1999. "A Network Is More Than the Sum of Its Ties: The Network Basis of Social Support." Pp 83–118 in *Networks in the Global Village: Life in Contemporary Communities*, edited by B. Wellman. Boulder, CO: Westview Press.
- Wellman, Barry and Scot Wortley. 1989. "Brothers' Keepers: Situating Kinship Relations in Broader Networks of Social Support." *Sociological Perspectives* 32 (3): 273–306.
- White, Harrison C. 1992. *Identity and Control: A Structural Theory of Social Action*. Princeton, NJ: Princeton University Press.
- Wimmer, Andreas and Nina Glick Schiller. 2002. "Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences." *Global Networks* 2 (4): 301–334.