A Network Approach to Migrants' Transnational Biographies

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Bio Note

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Abstract

This paper reviews social network analysis (SNA) as a method to be utilized in biographical research which is a novel contribution. We argue that applying SNA in the context of biography research through standardized data collection as well as visualization of networks can open up participants' interpretations of relations throughout their lives, and allow a creative and innovative way of data collection that is responsive to participants' own meanings and associations while allowing the researchers to conduct systematical data analysis. The paper discusses the analytical potential of SNA in biographical research, where the efficacy of this method is critically discussed, together with its limitations, and its potential within the context of biographical research.

Keywords: social network analysis, biographical research, migration, transnational social protection

Introduction

Biographical research is often understood as a methodological decision necessitating the inquiry of the whole life story of individuals regardless of the specific research question (Kohli, 1986; Rosenthal, 2006). It is a way of research that starts from and focuses on the personal and subjective perceptions and experiences of individuals. Biography is attributed as social constructions, which 'constitutes both social reality and the subjects' worlds of knowledge and experience, and which is constantly affirmed and transformed within the dialectical relationship between life history knowledge and experiences and patterns presented by society' (Fischer-Rosenthal and Rosenthal, 1997: 138). Biographical research makes possible to understand cognitive, affective and active dimensions of meaning-making processes of researched persons. Recently manifold methods have been used to conduct this type of research. According to this perspective, the principal object of biographical research is the hidden side of life, personal experiences, evaluations and knowledge. However, without connecting the personal experience to the underlying social, cultural and political strata runs the risk of studying individuals as free-floating agents. After all, human action is bounded and constrained by structural restraints of interpersonal relations, networks and membership in various communities. In order to understand biographies' relational aspects, configuration of relationships over time should be considered in detail. Biographical research focuses usually on the subjective positions and evaluations of life stories contextualizing them usually within

the interviews and it is where social network analysis (SNA) exactly can contribute to a relational contextualization of a biographic project through its focus on the interpersonal relationships that could be analyzed in their interplay with narrated life stories. Therefore, we argue that SNA has an analytical potential for biographical research and our aim in this paper is to illustrate its contribution through empirical examples of migrants' personal networks.

Network analysis is the study of social relations among a set of actors where the relations are important rather than the individual attributes (Scott, 2013). The ties among actors' relationships are fundamental to penetrate the behavior of the person, whereas their characteristics are secondary. The analysis done through a social network perspective empowers the analysis of social processes as a product of the relations and embeddedness of actors among social entities which is the main advantage of such a portrayal (Granovetter, 1973; Borgatti et al., 2013). We argue that the main contribution of SNA to biographical research is its emphasis on relationality and devised its own methods to capture them which is not visible through 'classical methods'. The concern of the present paper is that the focus on the ego-centric networks as a way of conducting biographical research, and the focus on relationships are both valuable additions to biography research but so far have not been done. They can be added to by being brought together and developed into a wider focus of persons' relationships in researching biographies. After all, every individual is connected to some others who influence the ways in which life stories and life histories are constructed. Previous research demonstrates that personal networks are particularly important in the lives of migrants with transnational linkages (Dahinden, 2005; Mazzucato, 2009). Therefore, we will illustrate migrants' personal networks relevant for transnational biographies below.

The first section explores SNA and discusses the role of meaning-making and the 'cultural turn' on a theoretical and methodological level. In the next section, we present the ways in which SNA can be used for investigating biographies. The subsequent section depicts a large-scale international research project in which ego-centric network analysis has been applied together with semi-structured interviews analyzed through social scientific hermeneutics. The conclusion offers a list of main benefits of applying SNA to biography research while critically assessing the limitations of such an inquiry.

What is social network analysis?

A social network is an array of social relations among social actors (such as a person, a group, an association, an institution, a nation, a blog, etc.), or a set of nodes linked by a social relationship or tie (Scott, 2013). A relation is symbolized as a link, an arrow, or a flow between these nodes. Any type of relation can be symbolized ranging from acquaintance, kinship, family, friendship, trade relations, co-authorships, and so on. SNA can be explained as a structural investigation of the sum of all patterned relations among all actors with different levels of analysis. Multi-level perspective of conceptualization, and thus research of social structures (Blau, 1993) 'enables researchers to not only see the relative contribution of each network level to the processes or phenomena under investigation, but also to study how these levels interact with each other' (Prell, 2012: 3).

Different from a whole social network approach, personal network analysis or ego-centric network analysis focuses on only one node and their relationships with other nodes. In personal network analysis, scholars are standing in the center of a person's world and analyzing who he or she is connected to and with what consequences (Wellman, 2007). The ego is usually a person and the sum of all ties surrounding that ego together with the relationships among his/her ties constitutes the network of an ego. To put it differently, a whole social network can also be defined as sum of many ego networks, or equally one ego network can be only one unit of a whole social network. Thus, its analysis differs from a whole social network approach as one personal network can be considered one unit of analysis.

One of the basic premises of the social network analysis is the assumption that embeddedness of actors within their social circles is much more important than their personal attributes (Granovetter, 1973; Borgatti et al., 2013). In order to investigate actors' embeddedness and connections in statistical analyses of personal networks, it is argued that qualitative methods are indispensable (Fuhse and Mützel, 2011; Hollstein and Straus, 2006). Blending the traditional quantitative structural analysis with a strong emphasis on culture and meaning in networks through qualitative methods is known as 'the cultural turn' in SNA research (Breiger, 2004; Emirbayer and Goodwin, 1994; White, 2008). The main premise of this turn is the idea that, '[s]ocial relations are culturally constituted, and shared cultural meanings also shape social structure' (Pachucki and Breiger, 2010: 219) where culture refers to 'meanings,

local practices, discourse, repertoires, and norms [...] a dynamic process of meaning-making' (Ibid: 206). Therefore, we argue that SNA (as a combination of both quantitative and qualitative ways) offers an innovative and special set of toolkit for contemplating challenges faced in biography research. Through a network lens and analytic toolkit we advocate that it is possible to elucidate the issues of social structure where persons are subjected to, linkages between individuals and their immediate social environments. Furthermore, through utilizing SNA challenges in understanding both the constitution and dynamics of personal biographies could be addressed.

How to conduct network analysis to investigate biographies?

According to Rosenthal (1993), the 'goal of a hermeneutical case reconstruction is on one hand the reconstruction of the life history, i.e. the experienced, lived through life history, and on the other hand the reconstruction of the life story, i.e. the narrated life story. Life story and life history always come together; they are continuously dialectically linked and produce each other' (pg. 60). In other words, the term life story is commonly applied to the narrated story by the researched (the biographer). Life history, then, infers the researcher's interpretive, presentational work of past events which are constituted by the biographers' narration. Thus, it is important and necessary to investigate the two levels of narrated and experienced biography in separate analytical steps. In doing so, the reconstruction of both the biographical meaning of past experiences and the meaning of self-presentation in the present can be achieved (Rosenthal, 1995).

SNA has three main contributions to biography research: (1) the emphasis of relationality, (2) systematic analysis techniques, and (3) visualization strategies. First, SNA enables biographies (both life story and life history) to be analyzed as embedded in personal networks. Biography research using primarily narrative interviews is an interpretative approach, which advocates that biographies are told from a certain perspective with meanings constructing social reality. This perspective is compatible with qualitative approaches in SNA research. If a phenomenon has a 'meaning', it is understood that such meaning does not exist apart from a social context or frame of reference. In other words, the meaning of an action can only be understood with reference to a wider context of this action or expression. For example, in a biographical-narrative interview the context would be the entire life history which includes dynamic social relationships. It is where SNA can and should be used to

depict individuals' personal networks over time. As in narrative methods, the topics to be investigated through SNA can center on important life events such as geographical mobility. Moreover, researchers can also conduct research on resource exchanges between the respondents and their significant others such as, among many others, social support. By putting forward such topics, the researcher provides the researched with a framework for selecting the relationships to be included in their lives and interpreted in their biographies.

Second, SNA allows for a systematic collection of data and its analysis based on the composition, structure, and content of interpersonal relationships (Hall and Wellmann, 1985). Therefore, SNA can guide the researchers in understanding not only different forms of relations but also their structure and dynamics; for example, the circulation of protective resources within the networks can be achieved through systematic analysis of what is being exchanged between the biographer and his/her significant others. There are several ways of gathering network data: surveys, questionnaires, interviews, observations, diaries, archival records, experiments and electronic sources. Depending on the research question, researchers might choose one or several techniques of the data collection. For instance, ethnographic approaches can be used in investigating the cultural practices of fringe groups and subcultures as in Whyte's (1955) classic study of the Street Corner Society in an Italian neighborhood. Other empirical sources include documents and archives. For example, McLean (1998) analyzed several hundreds of private letters through which Florentines sought favors from one another. By paying special attention to what was reflected in these writings, he investigated the strategies members of this society employed in constructing network ties with patrons and in building their own careers.

Third, SNA aids respondents in reconstructing their social relationships and life stories with the help of visual techniques. This also assists researchers in investigating life histories. Imagery is a hallmark of mental time travel. Visual perspective has an influence on the level of meaning people perceive in actions — both when people recall the past and imagine the future (e.g. Libby and Eibach, 2009). Through visual techniques, SNA assists the respondents to recall their personal relationships and reflect on them at the same time. While the respondents can freely draw their networks and interpret them (e.g. McCarty, 2002; Scheibelhofer, 2009), they can also be presented with preassigned pictures such as concentric circles (Antonucci, 1986) or interact with researcher assisted computer programs such as EgoNet (http://sourceforge.net/projects/egonet/) and VennMaker (Gamper et al., 2012). Respondents are aided through visualization of networks during their narrations on their life

stories, whereas researchers are aided through visualization during their analysis of life histories.

Transnational biographies: migrants' personal networks

In order to give some insight into the method we will connect our considerations with empirical cases which were part of an international research project¹ on informal social protection strategies of migrants and related inequalities (Faist et al., 2015). Here we will focus on two personal networks, one from a migrant from Turkey and the other from a migrant from Kazakhstan (both living in Germany), in order to illustrate the ways in which SNA can be used to study transnational biographies.

In order to investigate social protection, standard methods of ego-centric network analysis were modified in accordance with one of the main research questions. Name-generator questions are usually asked to elicit alters (i.e. the significant others) in an ego's (i.e. biographers) social world, or an 'ego's contacts in certain role relationships (e.g., neighborhood, work), content areas (e.g., work matters, household chores), or intimacy (e.g., confiding, most intimate, etc.)' (Lin, 1999: 476). In the current project we refer here, the participants were asked one name-generator question: 'From time to time, most people need assistance, be it in the form of smaller or bigger tasks or favors. Who are the people with whom you usually exchange such assistance?' The interviewees were asked to name as many contacts as they wished. This was intended to determine the network size, but depending on the research question network size could be restricted by the researchers.

In this study, a hierarchical mapping technique (Antonucci, 1986) was used with concentric circles to represent the personal network of the respondent. In the middle of the circle was the word 'Ego'. Respondents were asked to write the first name of people they exchange protective resources with and then interpret the meaning of the circles for them was emotional

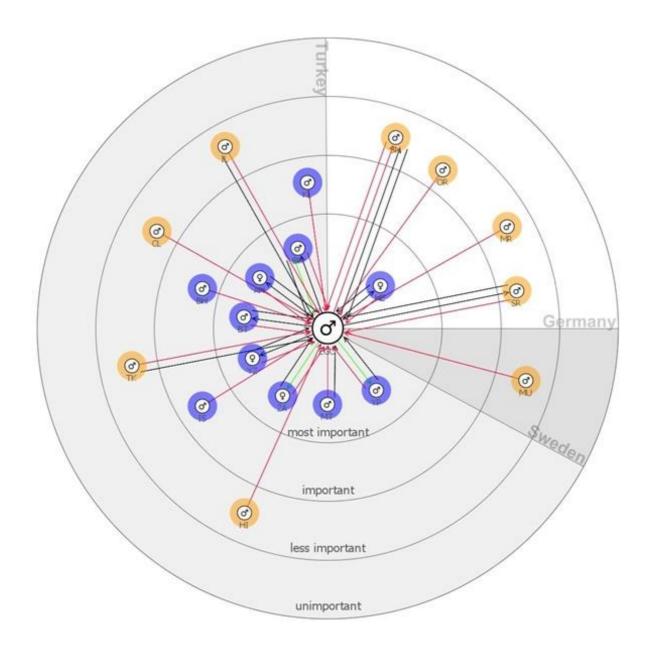
¹ The project is called "Transnationality, the Distribution of Informal Social and Inequalities" and is funded by the German Research Foundation, under the framework of Collaborative Research Center 882 at Bielefeld University (2011–2015). The data for this project was collected through interviews with migrants from Turkey, Poland and Kazakhstan who live in Germany, as well as from various other sources such as document analysis, expert interviews, participant observation, and matched interviews with interviewees' significant others in the respective countries. For more information about the project, see http://www.sfb882.uni-bielefeld.de/en/projects/c3.

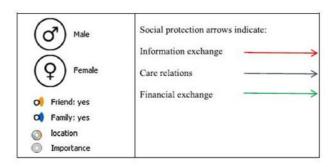
closeness. The interviewees were asked to place these individuals in four concentric circles in the network chart according to their degree of importance, ranging from 'very important' to 'unimportant'. The concept of 'importance' was not pre-defined; instead, the interviewees were asked to reflect about the meaning of the term and interpret it (Bernardi, 2010). The resulting map gave us some sense of the size of the network and the distribution of their personal ties based on closeness. Another technique which can be also used by biography research for acquiring an image of a personal network is to ask respondents to draw them with minimal instruction as to how they are represented.

In the second step, further questions were asked to obtain information about the characteristics of the alters. A questionnaire was designed to ask the egos about personal attributes of their alters, including age, gender, nationality, geographic location, income, and educational level. The interviewees were also asked about a number of aspects of the relations with their alters such as duration and type of the relationship and frequency of contact (ranging from every day to once a year). In the third step, a matrix of alter–alter relations was used where the ego described the alter-alter relations. This was carried out in order to analyze the structure of the personal networks and to represent compound relations (Breiger, 2004; McCarty, 2002). This technique is also called personal network visualization (McCarty et al., 2007). This method differs from the others because the respondent is being asked to evaluate a set of binary alter-alter relationships that are then built into a representation of personal network structure, as opposed to the respondent being asked to try to summarize all relationships into a structure from memory.

After the SNA, we also conducted semi-structured interviews and it gave the respondents the possibility to reflect on their relationships more in detail. In other words, network maps played a role as roadmaps in their imagination when reflecting their experiences during the interviews. It is important to note here that the researchers did not coerce the respondents to use them as roadmaps. Rather, they chose to do so as they felt they were relevant in explaining their life stories to us. The advantages as well as the way to conduct personal network analysis are outlined in the following section through the use of two illustrative examples.

Manifold transnational links in (migration) biographies: The case of Faruk





Faruk migrated to Germany from Turkey in the first decade of the 21st century, when he was in his twenties. Soon after, he tried to pick up his university studies in Germany, but his

previous studies in Turkey were not recognized. Later he met his future wife, a German citizen, and opened a small business in his city of settlement. Now in his thirties, he is still in frequent contact with his friends and relatives in Turkey. He calls them every day to exchange information, and travels to his hometown in Turkey three times a year to meet his family and friends. In addition to these cross-border activities, he occasionally sends small amounts of money to his two brothers, who live in Turkey. In Turkey, people refer to him as *almanci* ("German-like"), but he identifies Turkey as his "real homeland" and Germany as his "second home". A closer examination of the contacts reveals that he has 18 network members scattered among different nation-states and some of the his family members, such as siblings and cousins (marked in blue in Fig. 1), still live in Turkey and that one family member (in this case, his wife) lives in Germany.

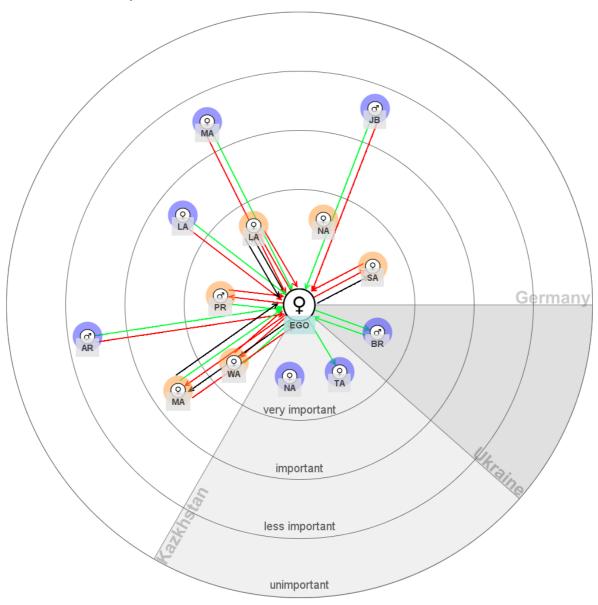
We conducted SNA before qualitative interviews and asked Faruk to name contacts with whom he exchanged protective resources within the last year (name-generator question). While he was naming his contacts, Faruk also told stories about them. Afterwards he was asked some standardized questions about them. While telling us about his friends, we learned that Faruk is being called almanci by some of his friends in Turkey. He referred couple of times being an almanci in Turkey indicated that for him, some of his relations with friends deteriorated because they considered Faruk to be migrant who left his family in Turkey for the sake of earning more money. As he explained, in his friends' eyes, Faruk earns a lot of money, which puts him under pressure to send financial remittances back to Turkey. This is in spite of the fact that he does not earn quite well during some months. At the same time, he was perceived as a Turkish labor migrant in Germany. Rather than being considered a student as he wanted to be, being referred to as a labor migrant made him reflect more on his deskilling process across borders, i.e. not being able to continue his studies. This was described as a 'difficult process' in his lifetime and changed not only his future job perspectives and expectations of migrating but also his interpersonal circle and available resources. These have changed the way in which Faruk looked back at his migration past and narrated his life story. By asking for his contacts during the network part we could identify Faruk making sense of his ethnic belonging and employment pattern. We were also able to gain insight into his more general protective relationships. When Faruk was placing his contacts he also discussed their importance to different aspects of his life. For example, he recounted that his wife has been very caring and loving when he was struggling to establish a career in Germany. Moreover, as the visualization of his network was completed, we could identify the composition of his network at a glance (which can be used during the

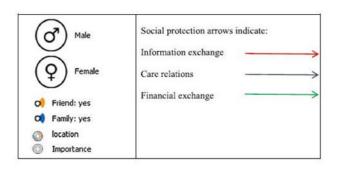
investigation of life history), and then run tests of structural analyses. This last step is out of the scope of this paper but Bilecen and Sienkiewicz (2015) have provided more detail in this regard.

When Faruk saw his network map as he put the names, he once more realized the importance of his family for his life. One contradiction he had was that how he was supporting his family more than he receives tangible resources from them. It made him reflect more during the interview and enrich the analysis. He mentioned that the network map clearly reflects that day's situation and when he was younger he received more resources from his family and now in his thirties it is his turn to take care of them. He mentioned the time aspect in intergenerational relations and how through the stages of life supportive roles tend to change. Making this reflection, having the network map clearly helped him to think about time and the dynamics of intergenerational supportive exchanges.

Scarce transnational links in (migration) biographies: The case of Natalya

Our second example is Natalya, a middle-aged woman who resettled from Kazakhstan to Germany in the late 1990s with her husband and their two adult children. Due to her legal status as a resettler, she and her family were naturalized as German citizens upon their arrival in Germany. At the time of her resettlement most of her friends and her wider family circle were already living in Germany. This changed Natalya's narration of her life story as well as her interpersonal relationships. During the network analysis, while she was writing her contacts in the map, she told about being a resettler and that because they came as a family to Germany, there are not so many significant others left in Kazakhstan. Natalya had received vocational training in Kazakhstan and after retraining in Germany she found a job in a bakery. Her children had completed vocational training in Kazakhstan as well. Her husband had been receiving retirement benefits. Natalya is much less in contact with her significant others in Kazakhstan than Faruk — the only relatives she has in Kazakhstan are her two elderly aunts. Natalya calls them once a month and once a year she sends parcels with home-grown herbs and small amounts of money. She is also in contact with her cousin in Ukraine, who moved there from Kazakhstan after the breakup of the Soviet Union. Natalya has not been back to her city of origin since she came to Germany and says she is glad to have very close relatives and friends in the city she lives in now. They exchange information, help one another in times of illness and have fun together. She also states that she will never go back to Kazakhstan; nevertheless, she and her friends refer to themselves as *rusaki* ("Russian-like"). The network chart clearly shows that the personal network of the Natalya is composed primarily of family members in Germany, Kazakhstan, and Ukraine.





Natalya's ethnic belonging and citizenship plays an important role in the ways she reflects on and organizes her protective relationships. As it can be explicated from her network chart, she has a clear orientation towards her friends and family in Germany. Although like Faruk she also has some in other nation-states, she does not exchange much with them as he does. Because of being a resettler and being aware of its advantages like citizenship which gives direct access to formal state structures, Natalya narrated on how she could readily do another vocational training where she could learn the formal system in Germany. As a result she prefers to rely on more formal social protection than her interpersonal contacts. These have changed the way in which Natalya looked back at her migration past and recounted her life story. Similarly to Faruk, by asking for her contacts during the network part, we could identify Natalya's meaning-making of her ethnic belonging as a rusaki and gained insight on her overall protective relationships. For example, Natalya told that her friends whom she knows from her workplace in Germany are usually more close and protective to her than her family members in Germany. Moreover, while she was putting her significant others on the map, she realized herself that she grew apart with her family members in Germany but have closer relationships with her friends. This proved to be useful for Natalya, but this could also be the case more generally for other biographers as they locate their contacts. The network maps were also useful for us the researchers. First, as the respondents' narrated, they aided in understanding the life stories of biographers as embedded in relationships. Second, when they further referred to their contacts during the interviews, mostly to describe certain important life events and important persons, it was helpful in reconstructing their life histories.

Within the framework of this study we collected network data at only one time interval. Yet, longitudinal network analysis – meaning that information on persons' relationships about what has happened over time (see for example Lubbers et al., 2010) – would be beneficial in biography research, especially for commenting on and fully understanding of a person's life history. In other words, because networks represent a snapshot at a particular point in life, they can be asked at several intervals. For example, in migration research it would be interesting to collect such longitudinal data to observe whether the relationship of the migrants with their significant others change over time, say before and after migration or after particular life events such as birth of a child, entry into labor market, divorce, separation, or loss of a family member (e.g. Bidart and Lavenu, 2005).

Conclusion

In this paper we argue for SNA's usefulness in conducting biographical research and empirically illustrated the ways in which it could be carried out in order to gain a fine-grained analysis of their transnational biographies. The first main benefit of using SNA or studying biographies (both for life story and life history) is its relational dimension. Personal biographies cannot be isolated from contexts of personal relations and SNA provides the tools to investigate such relations. Moreover, as researchers, we do not only retrieve information about the ego but also get the chance to learn about their significant others, how our respondent is surrounded by others, evaluations about them, and what their social environment looks like in addition to the researched/biographers' perspectives. Second, through its systematized analysis techniques, SNA enables researchers to investigate the broader social circles of the researched individuals. Based on the respondents' network data, researchers can run tests with specialized software to investigate structural characteristics of the networks such as density, size, and centrality measures.

Third, as exemplified above, through visualization of networks and personal narratives on their relationships, a more innovative approach to studying biographies can be gained. The individuals' evaluation of the events and relationships during the SNA procedure can be recorded and qualitatively analyzed which gives us a holistic picture of events. For instance, in addition to responding to fixed choice questions, participants have the possibility to give more heterogeneous and evaluative responses which gives us the possibility to analyze meaning patterns as we have illustrated above. This qualitative material, together with a quantitative record about each individual and their relationships, increasingly makes it possible to produce understandings of individual life stories and life histories within their broader social context. In other words, life stories as narrated by the biographers can be captured visually during the interview through handwriting or software based network analysis, which places the contacts biographers' reflect upon in their life stories. Visualization techniques of networks not only aid the biographers but also the researchers, particularly during qualitative interviews when the respondents' refer to certain persons who are important to them. Particularly when it is collected longitudinally, researchers would benefit by having a better understanding of the respondents' life histories.

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