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ORIGINAL ARTICLE

Personal network analysis from an intersectional perspective: How to overcome ethnicity bias in migration research

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Abstract

Through qualitative personal network analysis from an intersectional perspective, this article contributes to the debate on the salience of ethnicity as a defining, yet essentialized, category in transnational migration research. The article includes a theoretical and methodological discussion of qualitative personal network analysis as a means to alleviate the risks of overemphasizing ethnicity over other categories, which provides the background to the empirical analysis. Drawing on 20 personal networks and qualitative interviews with Chinese international students who were studying in the United States, the findings of this study indicate that ethnicity, as a precursor to culture, along with gender and class, is important in friendship formations but not necessarily for job-relevant issues. Moreover, through an intersectional personal network analysis, transnational family ties were problematized based not on their ethnicity but on gendered expectations and social norms.

KEYWORDS

China, international student mobility, intersectionality, personal network analysis, qualitative research, transnational ties

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INTRODUCTION

Although network mechanisms and their associated vocabulary were always present in migration research, in their empirical investigations, migration scholars are often criticized as being disconnected from or a latecomer to the tools of social network analysis (Bilecen et al., 2018; Dahinden, 2016; Eve, 2010; Krissman, 2005). Nonetheless, networks are very much at the core of migration research, particularly when addressing initiation of migration, settlement, and migrants' transnational practices, which connect a variety of countries and regions (Bilecen & Lubbers, *in press*). The majority of such research is concerned with integration/assimilation patterns of international migrants in the host societies (e.g., Gordon, 1964; Nee & Sanders, 2001). In that line of research, ethnicity of personal ties has received most of the attention. Such research has shown that having inter-ethnic ties to the host population (also known as 'bridging ties') as a major indicator for migrants' 'social integration' (Gordon, 1964) or 'labour market integration' (Kanas et al., 2009; Lancee, 2012a, 2012b). Research also has shown that co-ethnic relationships (also known as 'bonding ties') have benefits during the settlement phase (Boyd, 1989; Portes & Rumbaut, 1996) in terms of creating a sense of belonging and emotional attachment (Geven et al., 2016). Economic benefits of co-ethnic ties have also been studied (Portes & Sensenbrenner, 1993; Waldinger, 1995). Similarly, the international student mobility literature has shown that ties with local students serve as indicators for 'sociocultural adjustment' and better academic performance (Beech, 2015), while co-ethnic ties are associated with well-being and emotional support (Bochner et al., 1977; Brown, 2009).

Although ethnicity serves as an important category in demarcating the boundaries between migrants and natives (Wimmer, 2008) as well as among migrant groups (Boccagni, 2014; Breton, 1964), a recent critique of this perspective considers the normalization and essentialization of ethnicity as an important area of analysis in migration research (Amelina & Faist, 2012; Anthias, 2007; Dahinden, 2013, 2016). In other words,

When we study ethnic niches, ethnic networks and ethnic capital, we give ethnicity a certain structural fixity (and therefore ontological reality) in order to account for the (important) ways in which 'it' structures social relations. Ethnicity may indeed be important, but its importance should not go unquestioned, its relevance should not be assumed. [...] Ethnicity's significance and salience to migrants' everyday lives is exaggerated through a research design which privileges it in sampling methods and data collection (Fox & Jones, 2013, p. 386).

This critique overlaps with the 'cultural turn' in network studies that emphasizes the deconstruction of taken-for-granted meanings of categories such as ethnicity in certain social contexts and network analysis (Emirbayer & Goodwin, 1994). The common thread of these research lines is that categories should not be essentialized but, rather, have multiple meanings, depending on the contexts and groups under consideration. Tackling the essentialization of ethnicity is the main starting point of this article.

This article questions the salience of ethnicity as a category in international students' experiences and social lives through personal network analysis using an intersectional approach. In doing so, multiple categories are deconstructed and reconstructed and, as such, are not essentialized. Through an examination of personal networks and experiences of international Chinese students in the United States, which categories become salient in relation to others are demonstrated. In addition, this article further investigates when ethnicity becomes important for migrants from their perspective in which other categories emerge as relevant for their experiences and how they intersect with ethnicity. Because of research that focuses on only one dimension, that is, the ethnicity of ties, it ignores other relevant categories and risk misinterpretation of the real implications of social ties (Ryan, 2011).

The empirical dataset of this article comes from qualitative personal network analysis with Chinese international students enrolled at elite universities in the United States. Chinese students are key actors in the recent surge in international mobility. According to the Center for China and Globalization (2018), since 1978, approximately

4.58 million Chinese students have studied abroad, and, as a result, they constitute the largest international student body in the world. Following the 1978 economic reform and open-door policies linked to privatization and marketization, China has undergone economic and educational transformations (Xu & Mei, 2009). 'The stratification and reproduction of varying social classes has changed with the transition from a socialist planned economy to a market economy, and higher education in general and external higher education in particular have played a major role' (Li & Bray, 2007, p. 408). The social transformation that China has been experiencing is characterized by a rapid social stratification of society. Against this background, in the last two decades, tertiary education enrollments have dramatically expanded in China, which increased competition for places at Chinese universities and also made international education attractive for those who could afford it (Donzuso, 2015; Xiang & Shen, 2009). At the same time, China prioritizes efforts to push for internationalization of its higher education and has developed extensive policies to boost both ingoing and outgoing flows of students (Hawkins, 2012). This is reflected in the numbers of students who go to the United States, which is the main country of education for Chinese students; '35% of international students in the United States come from China alone' (Organisation for Economic Co-operation and Development, 2016, p. 332).

This article is organized as follows. The first section concerns migration studies and the use of network analysis. The section also provides an introduction to the intersectional lens and ways to conduct personal network analysis using this intersectional lens. The intersectional lens is useful for the qualitative analysis of personal networks because it enables (i) the anti-categorical imperative of network research and (ii) identification of how certain categories are referred to in relation to others in understanding social positions within networks. The second section presents the research design and the sample for the current study. The third section concerns the analysis, for which the main findings centre on the meaning and salience of ethnicity in international Chinese students' study-abroad experiences in terms of certain categories and circumstances. The article concludes with a summary of the main contributions of this study and their relationship to the extant literature.

PERSONAL NETWORK ANALYSIS, MIGRATION, AND INTERSECTIONALITY

Migration research and network thinking

Network thinking is a different approach than 'classical methods', as it focuses on characteristics of relationships rather than on individuals. In doing so, the observations in a network study are not independent but, rather, interdependent (Wasserman & Faust, 1994). A personal network represents an individual's set of connections to others and the ways that each person is connected to one another. Personal network analysis thus differs from the sociocentric network analysis, which views relationships among all network members in a bounded population set by the researcher. Through personal network analysis, researchers usually investigate the composition and structure of networks from the eyes of the participant, the so-called ego, as well as the consequences of their embeddedness in such networks (Wellman, 2007). Although the structure of networks indicates the presence/absence of ties and their patterning and, thus, how tightly knit they are, the composition of networks refers to whom an ego is connected (called *alters*). In migration studies, network composition often refers to whether migrants are surrounded by co-ethnic ties or a mix of other ethnicities. In such research, the ethnic composition of personal networks is deemed important for migrants' integration into the societies of immigration (e.g., Kanas et al., 2009; Williams, 2006). For instance, in a study of Chinese American university students, Ying et al. (2000) found that those who have arrived in the United States after the age of 12 mainly had co-ethnic personal networks, whereas second-generation Chinese migrants who were born in the United States had ethnically mixed networks. They conclude that those with ethnically mixed networks had enjoyed more sense of coherence with the larger society. Thus, personal network analysis has the potential to illuminate not only the structure of networks but also the role that homogeneity of ethnicity plays within these networks (Dahinden, 2016).

From a resource perspective, it is argued that the human capital of migrants is not easily transferable or less appreciated in the labour market of the countries of immigration because of which these migrants construct or maintain their co-ethnic social capital (Anthias & Cederberg, 2009; Kanas & Van Tubergen, 2009). Co-ethnic ties are considered as helpful for migrants mainly in their entrepreneurial activities (Bhachu, 2017; Portes & Sensenbrenner, 1993) and information flows about the countries of immigration (Boyd, 1989; Haug, 2008).

Nevertheless, there is evidence that ethnically defined personal networks do not always yield benefits or advantages. For example, in a study of El Salvadorians in San Francisco, Menjívar (2000) found that ethnic personal networks do not translate into economic benefits because they also lack other necessary resources for the labour market. Similarly, in a study of Polish migrants in London, Ryan et al. (2008) found that although co-ethnic networks are a source of instrumental support, they have the potential to turn into conflicting and distrustful relationships. In addition, migrants usually have multiple interpersonal ties that they can rely on, located in both countries of emigration and immigration. Transnational ties, indicating those regular and dense personal ties that go beyond nation-state borders (Faist, 2000; Levitt & Glick Schiller, 2004) are argued to be important in migrants' lives in terms of social support, belonging, and identity (Bilecen, 2014, 2016; Boccagni, 2012; Dahinden, 2005; Vacca et al., 2018). Nonetheless, sometimes ethnicity is not the sole explanation; rather, a certain combination of categories might be relevant in explaining the meanings attached to certain relationships, transnational or otherwise. For instance, in studying network explanations for Korean second-generation high school dropouts in the United States, Lew (2004) found that co-ethnic ties served as a protection against dropout for middle-class families and not for the working-class ones. Although not using an intersectional approach, Lew's study elucidated that without considering class, the ethnic composition of networks cannot alone explain the educational outcomes for migrant youth. The next section presents the intersectionality lens and its relationship with the qualitative personal network as background to a discussion of how to overcome the essentialized ethnicity lens in migration studies.

Intersectional analysis of personal networks: The rationale

It is valuable to use an intersectional lens in analysing network data because the 'focus on intersectionality promises to solve one of the fundamental problems of migration research: How to reconcile structure and agency without promoting cultural essentialism' (Bürkner, 2012, p. 181). This is in keeping with the 'cultural turn' in network studies, which involves highlighting the cultural and historical contextualization of social ties while also paying attention to the meaning given to the relationships and actors' agency (Emirbayer & Goodwin, 1994; Fuhse, 2009; Mische, 2011). In terms of the 'cultural turn' in network studies, it is well acknowledged that 'cultural thinking complements and sets a new agenda for moving beyond predominant forms of structural analysis that ignore action, agency, and intersubjective meaning' (Pachucki & Breiger, 2010, p. 205). Further, qualitative analysis of personal networks has gained momentum as a method to investigate meaning-making processes in depth. Against this background, in this article, the use of an intersectional lens as an analytical strategy for qualitative personal networks is presented. The combination of the lens and personal network analysis gives researchers the necessary toolkit to analyse meanings from the perspective of cultural and feminist sociology.

According to the intersectional perspective, several dimensions of inequality, related mainly to gender, ethnicity, and class, are interwoven (Collins, 2015). There is a vast array of theorizations and applications of intersectionality. Following Anthias (2006), intersectionality in this study is defined as 'a social process related to practices and arrangements, giving rise to particular forms of positionality for social actors' (p. 27). Intersectional approaches overcome class bias in inequality research and point out that there are internal differences within classes and that the category of class overlaps with others, such as ethnicity/race and gender, in the production of social inequalities. Thus, inequalities are constituted by particular situations and contexts rather than by the uniformly accepted category of class¹ mainly conceptualized as individuals with similar economic interests and life chances based on their economic situation. The intersectional lens can help migration research to overcome its ethnicity bias because an intersectional

analysis unearths the dynamics of multiple social positions as well as the ways in which they are constituted through power relations (Amelina & Lutz, 2018). Specifically, the intersectional lens can be used in migration studies when analysing personal networks qualitatively as an approach to understand the meanings of relationships that inform the processes of inclusion/exclusion, boundary making, and thus social inequalities.

The underlying assumption of intersectionality is that categories continually and mutually construct each other and lead to (re)production of inequalities and disadvantage while not essentializing either the categories or the differences between groups based on categories. In a similar vein, the 'anti-categorical imperative' (Emirbayer & Goodwin, 1994) of relational sociology takes on relationships rather than individuals, groups, or categories as the fundamental unit of analysis. The main argument here is that conducting a personal network analysis from an intersectional perspective enables researchers to critically investigate preassigned notions of ethnicity, community, and power relations, and thereby neither predetermine which categories are salient nor essentialized categories, but rather let the participants decide which categories are used in combination with which others. The anti-categorical approach of intersectionality does not consider any category as more salient than another; rather, the categories are socially constructed and important to the research, and their relationships with each other are problematized (Winker & Degele, 2011).

An intersectional lens is used to understand categories that enable or constrain persons in their social positions because everyone experiences the world differently depending on their social position. Social position is understood here as the outcome of individuals' social, economic, and cultural capital that is convertible and relational through which power positions are determined in a given social space (Bourdieu, 1989). To understand the social positions of migrants, we need to understand their immediate surrounding relationships in the form of personal networks linking manifold localities and whom they can rely on and use as a reference point to evaluate their social positions. This idea has inspired the recent literature (e.g., Bilecen, 2013; Erel, 2010; Nowicka, 2013). As will be discussed in the subsequent section, when done in a mode of qualitative personal network analysis with visual aids, such as sociograms, migrants are able to see their personal ties and reflect on their history and the current state of their personal relationships as well as think about the resource flows they experience. Thus, it makes them realize the social structures in which they are embedded and reflect not only on their social position but also their contacts' social position in the network as well as in the societies of origin and destination. In this way, mapping social relationships around the person make researchers able to better understand the social structures to which the participants refer while giving the participants an anchoring when narrating their relationships and migration experiences. Nonetheless, during the analysis, an intersectional lens is necessary to determine the relevant categories to which participants refer.

The questions raised above and the suggestions made on using an intersectional lens in qualitative personal network analysis will be discussed more in detail drawing on the findings of the empirical study conducted with Chinese international students in the United States. The next section introduces the study, its research design, and the sample.

THE STUDY

Personal network analysis and semi-structured qualitative interviews are the main methods of inquiry used in this project, called 'Personal networks of Chinese international students: A structural and comparative analysis' funded by German Academic Exchange Services (DAAD). An ethical application was obtained from Harvard University, and all participants gave their written informed consent before the data collection. All university names and major personal identifiers were removed, and all participants were assigned pseudonyms. The data collection took place in two major cities in Germany and the United States with comparable profiles of cities, universities, and international student percentages. This article focuses on the interviews conducted in the United States.

The study's sample consists of 20 international Chinese students (10 male and 10 female participants) enrolled at two elite universities in the United States. In Bourdieu's work, higher education functions as a sorting machine (re)producing social inequalities. In particular, elite schools are argued to produce a distinct elite class not only with a valued identity by their graduates with clear social boundaries established by an exclusive education but also

recognized by the society (Bourdieu, 1996). While Bourdieu's work developed in a relatively steady environment of society, nation-state, and higher education institutions, this study shows how such stable understandings of capital are challenged through international student mobility, as it disrupts the idea of a linear (re)production of capital. Nonetheless, this study has a specific sample which has implications on the class aspect as discussed in the analysis sections and enlarging the scope of intersectional research beyond narratives of those multiply exploited.

All participants were the only child in their family due to the one-child policy enacted in 1979. Each interview lasted from one to two hours. The researcher talked to 19 graduate students and one undergraduate student enrolled at various departments, including natural and social sciences. Of the participants, 13 were in their first year of studies, and the remaining seven participants had been living in the United States for an average of 5.5 years, usually in their second or third year of studies. The students had a middle- or upper-middle-class background, and they had received a scholarship either from the United States or Chinese institutions. The interviews were conducted in English, and none of the participants raised any concerns about the language of the interview, as they were all fluent in English, which was a major prerequisite in their admission criteria.

The data collection procedure began with the use of the following name-generator question: Please think about all people you know, that is, people who are alive, who you can recognize by sight or by name, who recognize you by sight or by name, with whom you have had some contact in the past two years, either face-to-face, by phone, mail, or email, and who you can still contact if you had to.

By using the name generator, this project has a more expansive approach to the possible significant others (called 'alters') elicited (e.g., McCarty et al., 2007; Vacca et al., 2018). The way their relationships were probed was open-ended so that the participants could name anyone in their lives. They were asked to name exactly 20 persons so that their networks would be comparable. A total of 20 alters worked very well with this population, although some differences were observed in the process, as there were no participants who wanted to name more persons.

In addition to posing the name-generator question, participants were asked to put the names into three concentric circles (very important, important, less important; Antonucci, 1986). The use of a participant-aided sociogram visually aided participants to think about their alters while naming them as well as enabled them to provide detailed accounts on each person later during the interview (see also Bellotti, 2016; Bilecen, 2016, 2020a; Hogan et al., 2007; Ryan et al., 2014). After the names were elicited, participants were asked to reflect on the important criteria that they used to organize the persons in the circles (Bilecen, 2016). This question turned out to be useful in providing an understanding of their relationships in detail, including how their importance to the participants has changed over time and after they arrived in the country of education.

In the second step, the participants were asked the following about their significant others ($n = 400$): Age, gender, nationality, education, location, duration of the relationship, frequency of contact, type of relationship, and mobility experience. The participants were asked for such detailed identifying information about their alters only after they named them.

This precluded them from talking about just certain persons, such as only their parents. In addition, because the location of contacts was only asked in this step, the participants could name both their local and transnational ties. They also could name any person of any ethnicity, gender, or type of relationship. Thus, personal network analysis provides a wide perspective of the relationships of the participants. Next, participants were asked social support questions and whether their contacts know one another.

Of all the named alters in this study, 83% were Chinese, while only 9% were American, and the remaining 8% had another other ethnic/national background. In addition, 49% of all the alters lived in the United States, while 45% lived in China, and 6% in other countries. The information elicited in this way is depicted as sociograms by the software program VennMaker (Gamper et al., 2012). The sociograms include information about the ethnicity, gender, location of alters, and type of relationships, while the lines among nodes are drawn when the participants report that they know each other. There are no lines between the ego and alters because de facto there is a relationship.

After the personal network section, all participants were interviewed further about their life histories including their education and study-abroad decisions, academic and social life, general experiences in the countries of education,

feelings of belonging and home. Because the sociograms were always present during the interview part, participants usually referred to the people they placed in the concentric circles and gave more detailed accounts not only about their relationships but also about the links between different groups of friends, for example, from different schools, and the ways in which they have influenced their educational decisions, including subject and place of study. At the end, all participants completed a demographic information sheet.

Data analysis was a continuous process where constant comparisons were drawn while collecting the data, performing an inductive open coding on the interviews and field notes (Mayring, 2000). Following the earlier works of mixed-methods research with network analysis (Bilecen, 2016, 2020a; Bilecen & Sienkiewicz, 2015),² qualitative content analysis was performed to understand meanings the participants attribute to their relationships. After an initial open coding, new codes were refined and modified and grouped into larger categories. Later, the intersections of categories were regrouped, and three major analytical themes are presented in this article. Some remaining categories include 'success', 'body', and 'food', which are beyond the scope of this article. Contributing to qualitative studies with an intersectional lens, having a network component at the beginning of the study yielded results on the subjective accounts of participants' social positions and how intersections of categories address to boundaries demarcating relational power hierarchies.

INTERSECTIONAL ANALYSIS OF PERSONAL NETWORKS

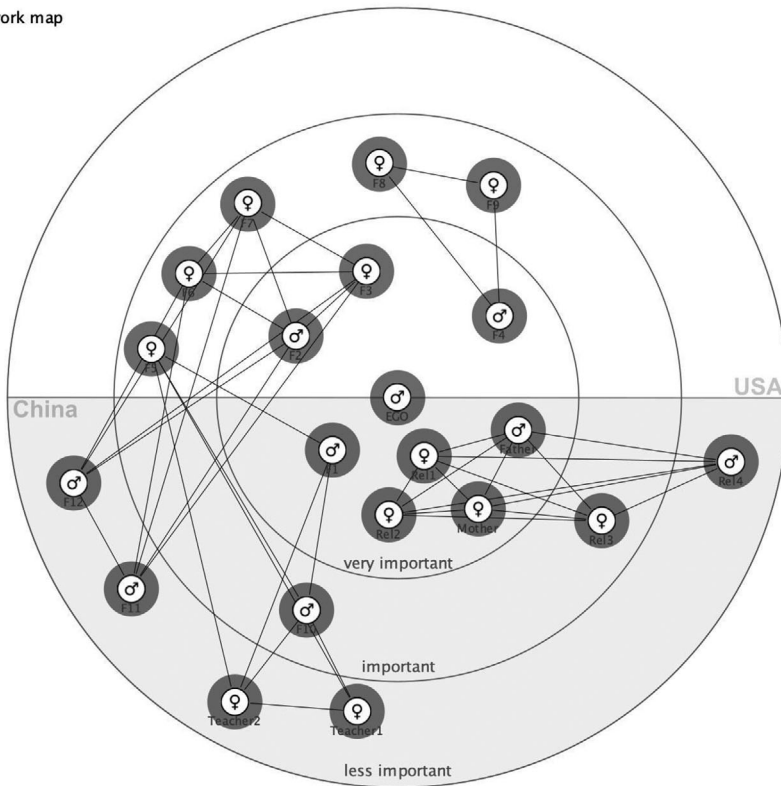
Ethnicity as a category of inclusion and exclusion

When the participants were asked to qualify the persons they put in their sociograms, one of the questions concerned ethnicity. Some had to go through the list one by one, while most of the participants simply said, 'They are all Chinese' as an encompassing term and pinpointed only to those who are not at this data collection stage. Later, during the interviews, they have reflected on the meanings of being Chinese and nuancing such categories in relation to language, province, and also addressing the differences to American-born Chinese (referred as ABCs). It was only during that question that the participants became aware of the ethnic composition of their networks. Previous studies indicate that once the networks are visualized together with the participants, they work as a recording of a participant's cognitive world (Lubbers et al., 2007), and the participants might be surprised about the composition of their network, (Hogan et al., 2007; Ryan et al., 2014), for example, if it is 'very Chinese'. The key concern here is what it means to have 'Chinese' friends and under what circumstances, and with what consequences does ethnicity matter in personal networks?

For the participants, ethnicity is usually used as a shortcut to indicate shared culture through language, food, customs, and rituals, such as celebrating the Spring Festival with their family, and cultural products, such as literature, jokes, or YouTube videos. Such shared values, common cultural and social practices were cited as making them feel closer to their Chinese friends and family members. For instance, Yiyang listed his family members and Chinese friends in his sociogram, which is represented in Figure 1. Yiyang comes from an upper-middle-class background as his parents are highly educated professionals. He was enrolled at a postgraduate degree program in social sciences, and the interview took place during his second semester. So, he has been just establishing his friendships in the United States that is also to some extent reflected in his sociogram. While most of his contacts composed of transnational ones in China including his parents, four of his friends, four relatives and two teachers, he only listed his friends in the United States. He talked about what he does with friends, including talking about recent television shows, being an international student, watching soccer, and gossiping. He states that he does not necessarily seek Chinese friends but, rather, that the things that they do together define their friendships in line with previous studies with international students from different countries (Bilecen, 2014).

Like Yiyang, all participants talked at length about their friendships at some point during the interview and when they were asked about any struggles that they might have. For instance, Hongwei mentioned that he cannot

Network map

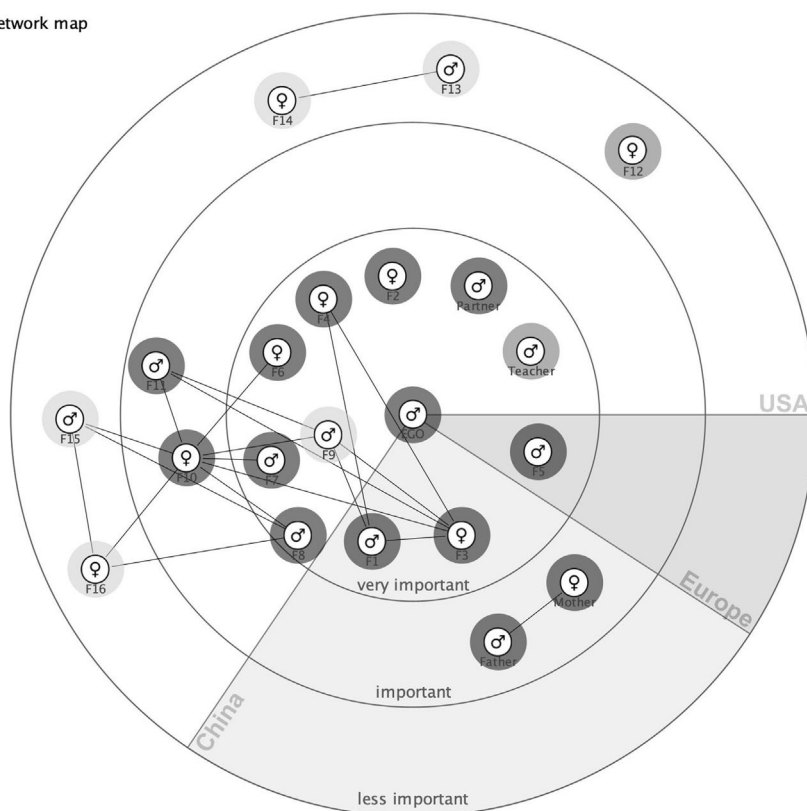
**FIGURE 1** Yiyang's personal network

NOTE: On the network maps (Figures 1–3), the straight lines indicate that the alters know each other. The dark grey actor pie surrounding alters indicates their Chinese ethnicity, lighter grey indicates that they belong to other ethnicities, and the lightest grey indicate that they are American.

understand the American jokes his classmates make because he does not have 'the cultural background'. He has interactions with Americans mainly for class assignments but does not consider them friends because, for him, friendship means 'more than just doing an assignment'. As Chen (2006) indicates, different from American or Western understandings of friendships that are casual and usually based on similarities and shared interests, 'East Asian cultures interpret friendships as long-term relationships based on sincerity and spirituality' (p. 46). Based on such different foundations, related meanings, and expectations for friendships, participants tend to be friends with other Chinese international students. For example, Zilan, who would like to 'fit into the [US] culture' and knew that 'Americans have different values or worldview', wanted to have American friends to 'get to know [other] people in depth and have deeper relationships'. Nevertheless, after a certain point, she felt that such conversations were not able to continue. It should also be noted that based on such perceived differences with American friends, and simultaneously similarities with other Chinese friends, participants tended to address 'Chinese' as an encompassing term for ethnicity. In some minor instances, certain friendships were highlighted based on the common use of Mandarin and not Cantonese or coming from different cities in specific provinces that led them to share commonalities such as in their food choices.

The participants considered not having many American friends as a problem. They had come to another country with a different academic environment and wanted to contact the host students. Nevertheless, not all participants were in the United States for the amount of time that it takes to form friendships, and the international student mobility literature highlights that, initially, international students tend to stick with their co-ethnic friendships not only due to language issues but also because they are going through similar stages, such as exploring the city and

Network map

**FIGURE 2** Shengkai's personal network

determining the administrative personnel (and, sometimes, doctors) who can help them (Bilecen, 2014; Brown, 2009). Figure 2 presents the personal network of Shengkai, who arrived in the United States in 2011 and studied for a bachelor's degree at another US university. Similar to Yiyang, Shengkai narrated that he has a privileged background and attended an elite high school in China. In his network, there are five Americans, and two contacts with other ethnicities/nationalities, relationships that he had developed over the last seven years of his education. Shengkai's network contrasts with Yiyang's because he included those contacts with different ethnicities, and who live in Europe, while he put his parents in the important circle as he had conflicting relationships. While he felt shunned by his parents, he also severed some of his friendship ties from China as a result of finding his new sexuality that he discovered during his studies. His network has different clusters mainly representing his old and new friends that have been reconfigured during his study abroad including friends who would accept his sexuality. Therefore, for him, ethnicity does not play a major role when forging new ties, but it has to do more with acceptance of his sexual identity.

Ethnicity is problematized by the participants as both an including and excluding category based on commonalities in the friendship networks. For instance, Siying, a graduate student in social sciences, was interviewed during the second semester of her postgraduate studies. Siying explained how she was made to feel excluded from her peer groups, based mainly on her ethnicity, and also in interaction with class and gender. She said that it is very difficult for her to make friends because she has an introverted personality and never had many friends. In the United States, she believes that it is even more difficult to develop new friendships due to her perceived language barrier. Later in the interview, it became clear that the language barrier is only one aspect of the difficulties in her social life. She talked at length about the pressure of being 'Asian': 'As an Asian girl, I am perceived as not knowing much'. She points to ethnicity as a category that is ascribed by the majority population and that causes exclusion from friendship networks (e.g., Wimmer, 2008).

She feels a constant need to demonstrate her abilities to her classmates to position herself. 'Although very subtle, I feel like I always need to prove myself, and they [American friends] are usually very surprised when they find out that I have had experience in the subject we are talking about'. In this example, exclusion from friendship networks was identified by Siying as occurring not only based on her ethnicity but rather at the intersection of ethnicity and gender.

Outside the campus, Siying thinks she was being perceived as a 'stereotypically good student and being privileged because [she was] studying at [an elite university]'. This situation highlights that ethnicity can be in terms of upward mobility that equates being Asian to being hardworking, that translates into her education at an elite university as a proxy to her class, but, at the same time, in terms of downward mobility, as Asians are seen as 'different' and not worthy for friendship. In this way, she refers to the view of 'Asian' students as successful, model immigrant students, dragon children raised by tiger mothers, or overachievers (Watkins et al., 2017). In line with Zhou and Xiong's (2007) arguments, Siying is perceived as belonging to a 'homogenous Asian' group while setting her apart from the rest of the society. Although she told that being perceived as 'Asian' or 'Chinese' is 'not at all something offensive'. Nonetheless, such ascriptions from the majority society also perceived by Siying as sort of a downplaying of her and her family's efforts in her education, a rather quick dismissal of all the struggles. After all, getting into an elite university with very selective admission criteria with a previous overseas degree is not possible to achieve overnight. It needs planning and investment as a whole family whose social position is also expected to be improved in China as a result of their child's international degree (e.g., Waters, 2007). Here too, ethnicity, together with class, demarcate boundaries within immediate and larger social networks and not only point to a set of unbalanced relations but also the transnational implications of such boundaries.

Similar to Siying, Xiaohui mentioned that he feels at a disadvantage even though he is receiving an excellent education. He explained that disadvantages concern language and having a mainly 'Chinese' social circle. He was one of those participants who realized during the interview that he is surrounded mainly by his Chinese social contacts, and he said that he is having difficulties in adapting to the social life in the United States. In his view, 'American culture is about partying and drinking', and he does not like it at all. To make friends, he needs to spend more time with others and engage in more face-to-face conversations, a view shared by the other participants. When they define activities and the meaning of their friendships, the participants made reference to spending time together, usually through cooking meals, studying together, talking about personal concerns, and sharing feelings of homesickness.

In China, these privileged young people have a likely high social position in a stratified society. In the United States, they experience social exclusion and negative experiences that seem new to them, which can be disturbing and undermine their social position in their eyes. Unlike their counterparts, such as second-generation Chinese Americans, most of whom experienced upward mobility through high educational aspirations and encouragement by their parents (Lee & Zhou, 2015), international students from China need to prove themselves to make new friends and overcome the fear of downward mobility. Nonetheless, they expect to transfer and maximize the value of their cultural capital (in the form of skills and educational credentials) into higher social positions for themselves and their families (e.g., Waters, 2007).

Transnational ties

Through a qualitative inquiry of personal connection using sociograms, the empirical dataset indicates that more than half of the participants' ties are located in China and elsewhere; as such, they are transnational ties (Faist, 2000). Due to the research design, participants were not asked specifically about their transnational ties but, rather, were asked to list persons in their lives, the majority of whom were living in China. This could be due to the fact that most of the participants had not lived in the United States for a long time, and they all indicated how important their parents and families were to them and talked at length about their transnational ties. In quantitative approaches, such ties would be directly categorized as family or co-ethnic ties, but the qualitative nature of the current research design enabled the researcher to also delve into implications of such ties.

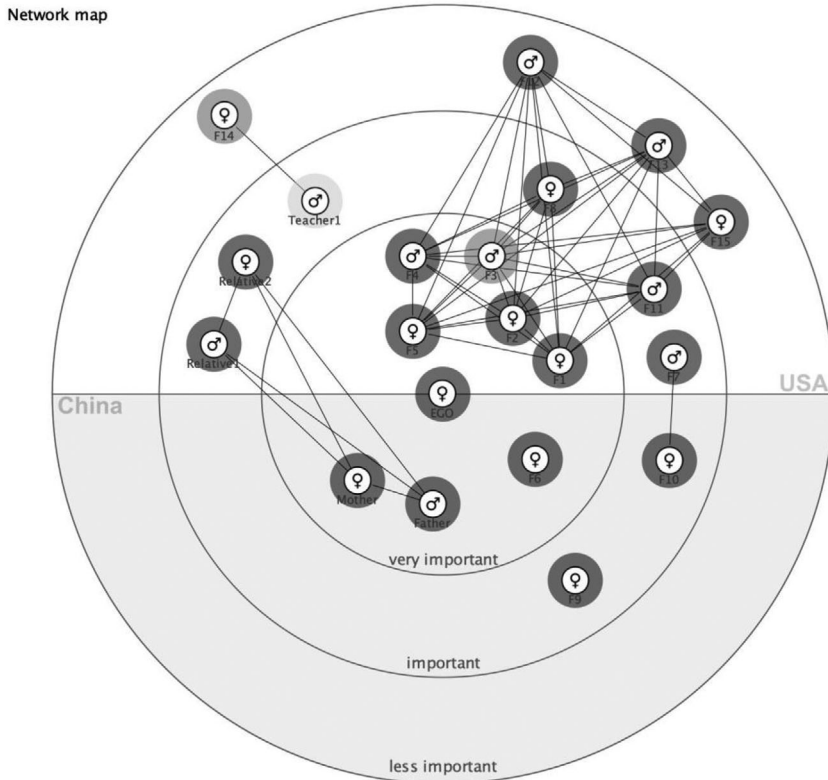


FIGURE 3 Zilan's personal network

All of the participants were thankful to their parents for their financial and/or emotional support for their 'adventure' in studying abroad. Some female participants were thankful for having non-traditional Chinese parents, described as parents who want their children and, in particular, their daughter physically nearby and available to take care of them. For instance, according to Hongwei, 'traditional Chinese parents would want their children around them all the time, to get married at a certain age, have a child, and live a peaceful life'. Thus, by not having traditional parents, they were able to go abroad and study, as the only child in the family, while staying connected across borders and time zones.

Although they are not the majority in the study sample, there were women whose parents were supportive but portrayed as 'traditional' by the participants. For these participants, the term 'traditional parents' does not necessarily mean that they would be opposed to their children's study-abroad decision. On the contrary, the parents encouraged to study abroad because they 'can brag about [their children] to their friends and neighbours' that they have a child who is studying at an elite university in the United States, which is an indication of status and potential upward social mobility in the country of origin. Instead, 'traditional' was more about the expectations for the child after the study period. To study abroad was approached by parents as a temporary separation of the family that they needed to endure.

Nonetheless, students were concerned about their parents' getting older and their care duties and responsibilities toward their parents as they age. For example, Zilan thinks that she has a rather 'traditional family' because her mother asks questions about finding a suitable Chinese husband. When she visits China, she avoids her relatives because they tend to ask too many questions about possible boyfriends, as she is expected to have a family like all of her cousins in China did. In her sociogram (Figure 3) she listed only two relatives in the important circle living in another city in the United States; these relatives are supportive of her decision to study abroad. For Zilan who have been in the

United States since three years, her network seems to have more ties located in the United States than China similar to Shengkai, suggesting that through time, networks tend to change shape. She has listed three friends and her parents in China with whom she has contact almost every day. It seems that due to a lot of questioning on her family formation, she has severed many ties in China, although she has said that she would like to have a family 'and cannot imagine having a relationship other than a Chinese man' indicating ethnicity is important for her in marital decisions.

It was the female participants who were concerned about their families, which is in keeping with the notion that '[m]igrants often become particularly aware of the relational and contextual nature of gender as they attempt to fulfil expectations of identity and behaviour that may differ sharply in the several places they live' (Donato et al., 2006, p. 6). The participants perceive their studies as a form of temporary mobility with the aim to return to China due to their being the only child and an expectation that they must take care of their families. A gendered narrative in support relations was seen when the participants were talking about their personal relationships, particularly about their parents. Most of the participants referred to a general discourse of constructing women as the main caregivers to the elderly (Amelina & Lutz, 2018; Anthias et al., 1992). In this sense, decisions about studying abroad and returning are bounded to a gendered caregiving social norm in the country of origin. Therefore, gender is a salient category in which the participants always referred to in all these contested personal relationships; however, it is not used alone or free-floating from the personal relationships and the socio-spatial context.

When ethnicity becomes not so important

The study-abroad experience and having an international degree are closely related to the expectation of having a job right after the completion of education. The interviewees talked at length about their future plans, their dream jobs, and where they would be living. Some were already considering some job opportunities. Expectations related to university rankings, the reputation of supervisors, and areas of study were all mentioned by the interviewees as factors deemed to be important in finding jobs. They all seemed to have the idea of accumulating job experience in the United States, with the ultimate goal to return to China. These participants do not have any disadvantages related to educational credentials, which is usually the case in other types of migrant streams (e.g., Bilecen, 2020a). They are proud of being enrolled in elite universities and worked hard to be admitted. Although the degrees from certain institutions are expected by the participants to pave the way into the labour market, they were still uneasy due to not having US *guanxi*, which is a deep-rooted cultural phenomenon that refers to personal relationships in China, where mutual obligations, reciprocity, and trust are the foundations for mobility (Yang, 1994).

In line with the findings of Li (2013), who studied postgraduate international Chinese students' employability in the United Kingdom, the importance of *guanxi* was also very much discussed among this study's participants. The interview process made them aware of their surrounding relationships, which they deemed as not very useful in finding jobs in the United States. Their concerns were related to potential constraints and the social positions of their connections and not their ethnicity in terms of the job market. This finding is in line with Anthias (2007, p. 797) who argued that 'advantages of ethnic networks depends on the position of the network in the hierarchical social order'. In this case, ethnic networks were perceived as not as advantageous as those networks based on other criteria.

Rather than a simple dichotomy of co-ethnic or not, it is more helpful to think about a range of factors in particular situations, such as finding a job. Unlike the findings of earlier research (e.g., Remmenick, 2013), ethnicity became obsolete in the narratives of the international Chinese students when they talked about finding a job. They were concerned with who could help them to be called for a job interview or to land a job and realized that being connected to certain others who could act as a bridge for the desired job, regardless of their ethnic background, was of importance. For example, Wuke, who has been studying design for one semester, shared his concern about lacking an appropriate social network once he was on his own:

International students lack the connections who can introduce you to jobs. My parents are in China, and they know many people [there], so it would be much easier [to get a job in China]. Only having an elite university degree on your résumé is not that helpful. I had a friend who got a job in another US city through an introduction [from someone who] graduated from an Ivy League university, but her diploma only was not enough to get the job.

Participants were aware of the importance of social capital in finding jobs they want and sometimes feel at a disadvantage because they studied abroad and their families' social capital is left at home in China. They are already worried about post-graduation and refer to 'increased competition worldwide'. They are much more concerned about the geographic location and social positions of their personal ties than their ethnicity. Thus, when they are forming and sustaining friendships, ethnicity factors in mainly in the form of a shared culture but not necessarily in other situations, such as finding jobs, where social position or other factors become more relevant to the issue at hand. Therefore, in line with the research of Ryan (2011), the analysis as related to the job market illustrates that ethnicity is not the only or most important category.

CONCLUSION

The article starts with the observation that previous studies concentrated too much on the ethnicity dimension of migrants' networks in the settlement phase of migration or in terms of finding a job. It can also be read as a methodological endeavour putting previous similar observations of the ways in which ethnicity as an essentialized category in migration research (e.g., Amelina & Faist, 2012; Anthias, 2007; Dahinden, 2016; Fox & Jones, 2013) into practice. The main argument of the article is that while ethnicity is an important category in an analysis, it is not the only important category, and an intersectional lens in qualitative personal network analysis helps to overcome essentialized ideas of ethnicity. The earlier sections of the article laid the groundwork for how to combine personal network analysis with an intersectional lens, and the remainder of the article was devoted to explaining the research design and its implementation. The analysis showed that ethnicity plays a role in international students' experiences, such as forming friendships, but not in all other realms, including transnational family ties and finding a job. Thus, it is argued that the use of personal network analysis, with an intersectionality approach, provides a more promising starting point for migration/mobility research.

The combination of these approaches has benefits for different strands of research and is the main contribution of this article. The qualitative personal network analysis and its relational thinking supply the necessary methods to an intersectional analysis by taking into consideration multiple categories, their interactions, and, more importantly, the social structure, according to the participants. The intersectionality approach supplies relational sociology and, for migration studies, a lens by which it can investigate perceived disadvantages and meaning-making processes that go beyond a single category—ethnicity. It was through putting them together that novel findings were discussed: When ethnicity becomes unimportant, when it is important and what it refers to, and to which categories ethnicity was important. The ethnic lens, which takes the importance of co-ethnic ties for granted, can inhibit studies from analysing social actors' relationships and behaviour—an important on-going discussion to which this article contributes.

Although this article showed the potential of personal network analysis, particularly the use of sociograms, and its implementation from an intersectional perspective, the study also has shortcomings. First, as is the case in all personal network studies, the relationships, exchanged resources, and effects of certain personal ties are all only subjective accounts of the focal participants. Second, the sample in this article composed of international students who are enrolled at global elite universities in the United States, which makes them very unique. International Chinese students in other types of universities embedded in different spatiotemporal contexts might experience different network configurations, negotiations, and identifications. Thus, it is not the intention of this study to generalize its findings neither to those enrolled in those elite universities nor to all Chinese students in the United States. Third, all of the networks

represented here are solely snapshots and are subject to change through time and life events, which is also why they were complemented by qualitative interviews. Nonetheless, the way the study was conducted, including qualitative interviews and giving freedom to the participants to evaluate their ties at length, made it possible for the researcher to understand, comment, and analyse the social networks in which participants were embedded. Therefore, this study provides new insights into and an initial roadmap for an intersectional analysis of personal networks that is necessary to overcome the ethnicity bias in migration research.

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ENDNOTES

- ¹ This definition of class is more in line with Weber and Marx. Recent definitions of class consider also non-economic factors, where Bourdieusian ideas are prominent (Bilecen, 2020b). In migration scholarship, social and cultural practices along with lifestyle and consumption patterns are also considered as part of class definition (e.g., Cederberg, 2017; Nowicka, 2013) as well as how classes demarcate and maintain boundaries (Lamont, 2000).
- ² Although in my earlier work, social scientific hermeneutic analysis was used to understand the meanings given to certain personal relationships and resources, in this article, qualitative content analysis was performed. It is mainly because for a hermeneutic analysis, a group of researchers are required and analysis procedures differ. While in the earlier phases of the fieldwork, a Chinese research assistant supported me in participants recruitment and discussed my initial findings; the later stages of the analysis are done only by myself. One year later, I had the chance to further discuss my findings with the same research assistant who also corroborated the findings.

REFERENCES

- Amelina, A., & Lutz, H. (2018). *Gender and migration: Transnational and intersectional prospects*. Routledge.
- Amelina, A., & Faist, T. (2012). De-naturalizing the national in research methodologies: Key concepts of transnational studies in migration. *Ethnic and Racial Studies*, 35(10), 1707–1724.
- Anthias, F. (2006). Belongings in a globalising and unequal world: Rethinking translocations. In N. Yuval-Davies, K. Kannabiran, & U. M. Vieten (Eds.), *The situated politics of belonging* (pp. 17–31). Sage.
- Anthias, F. (2007). Ethnic ties: Social capital and the question of mobilizability. *The Sociological Review*, 55(4), 788–805.
- Anthias, F., & Cederberg, M. (2009). Using ethnic bonds in self-employment and the issue of social capital. *Journal of Ethnic and Migration Studies*, 35(6), 901–917.
- Anthias, F., Yuval-Davis, N., & Cain, H. (1992). *Racialized boundaries: Race, nation, gender, colour, and class and the anti-racist struggle*. Routledge.
- Antonucci, T. C. (1986). Measuring social support networks: Hierarchical mapping technique. *Generations*, 10(4), 10–12.
- Beech, S. (2015). International student mobility: The role of social networks. *Social & Cultural Geography*, 16(3), 332–350.
- Bellotti, E. (2016). Qualitative methods and visualizations in the study of friendship networks. *Sociological Research Online*, 21(2) 198–216. <https://doi.org/10.5153/sro.3936>
- Bhachu, P. (2017). *Immigration and entrepreneurship culture, capital, and ethnic networks*. Routledge.
- Bilecen, B. (2013). Negotiating differences: Cosmopolitan experiences of international doctoral students. *Compare: A Journal of Comparative and International Education*, 43(5), 667–688.
- Bilecen, B. (2014). *International student mobility and transnational friendships*. Palgrave.
- Bilecen, B. (2016). A personal network approach in mixed-methods design to investigate transnational social protection. *International Review of Social Research*, 6(4), 233–244.
- Bilecen, B. (2020a). Asymmetries in transnational social protection: Perspectives of migrants and nonmigrants. *The Annals of the American Academy of Political and Social Science*, 689(1), 168–191.

- Bilecen, B. (2020b). Theories of social stratification and inequality. In G. Ritzer (Ed.), *The Blackwell encyclopedia of sociology* (2nd edition). John Wiley & Sons. Available at: <https://doi.org/10.1002/9781405165518.wbeoss273.pub2>
- Bilecen, B., & Lubbers, M. J. (in press). The networked character of migration and transnationalism. *Global Networks*.
- Bilecen, B., Gamper, M., & Lubbers, M. J. (2018). The missing link: Social network analysis in migration and transnationalism. *Social Networks*, 53, 1–3.
- Bilecen, B., & Sienkiewicz, J. J. (2015). Informal social protection networks of migrants: Typical patterns in different transnational social spaces. *Population Space and Place*, 21(3), 227–243.
- Boccagni, P. (2012). Rethinking transnational studies: Transnational ties and the transnationalism of everyday life. *European Journal of Social Theory*, 15(1):117–132. <https://doi.org/10.1177/1368431011423600>
- Boccagni, P. (2014). "I'm not like all these Ecuadorians": Promises and dilemmas of immigrants' selective ethnicity appropriation. *Social Identities*, 20(1), 57–73.
- Bochner, S., McLeod, B., & Lin, A. (1977). Friendship patterns of overseas students: A functional model. *International Journal of Psychology*, 12(4), 277–294.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, 17(1), 14–25.
- Bourdieu, P. (1996). *The state nobility: Elite schools in the field of power*. Stanford University Press.
- Boyd, M. (1989). Family and personal networks in international migration: Recent developments and new agendas. *International Migration Review*, 23(3), 638–670.
- Breton, R. (1964). Institutional completeness of ethnic communities and the personal relations of immigrants. *American Journal of Sociology*, 70, 193–205.
- Brown, L. (2009). An ethnographic study of the friendship patterns of international students in England: An attempt to recreate home through conational interaction. *International Journal of Educational Research*, 48(3), 184–193.
- Bürkner, H. -J. (2012). Intersectionality: How gender studies might inspire the analysis of social inequality among migrants. *Population, Space and Place*, 18(2), 181–195.
- Cederberg, M. (2017). Social class and international migration: Female migrants' narratives of social mobility and social status. *Migration Studies*, 5(2), 149–167.
- Center for China and Globalization. (2018). *Annual report*. Retrieved from <http://en.ccg.org.cn/html/top-issues/2463.html>
- Chen, Y. W. (2006). Intercultural friendship from the perspective of East Asian international students. *China Media Research*, 2(3), 43–58.
- Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review of Sociology*, 41, 1–20.
- Dahinden, J. (2005). Contesting transnationalism? Lessons from the study of Albanian migration networks from former Yugoslavia. *Global Networks*, 5(2), 191–208.
- Dahinden, J. (2013). Cities, migrant incorporation, and ethnicity: A network perspective on boundary work. *Journal of International Migration and Integration*, 14(1), 39–60.
- Dahinden, J. (2016). A plea for the "de-migrantization" of research on migration and integration. *Ethnic and Racial Studies*, 39(13), 2207–2225.
- Donato, K. M., Gabaccia, D., Holdaway, J., Manalansan, M., & Pessar, P. (2006). A glass half full? Gender in migration studies. *International Migration Review*, 40, 3–26.
- Donzuso, N. N. (2015). "Equality of opportunities" in education for migrant children in China. *Global Social Welfare*, 2(1), 9–13.
- Emirbayer, M., & Goodwin, J. (1994). Network analysis, culture, and the problem of agency. *American Journal of Sociology*, 99(6), 1411–1454.
- Erel, U. (2010). Migrating cultural capital: Bourdieu in migration studies. *Sociology*, 44(4), 642–660.
- Eve, M. (2010). Integrating via networks: Foreigners and others. *Ethnic and Racial Studies*, 33(7), 1231–1248.
- Faist, T. (2000). *The volume and dynamics of international migration and transnational social spaces*. Oxford University Press.
- Fox, J. E., & Jones, D. (2013). Migration, everyday life and the ethnicity bias. *Ethnicities*, 13(4), 385–400.
- Fuhse, J. (2009). The meaning structure of social networks. *Sociological Theory*, 27, 51–73.
- Gamper, M., Schönhuth, M., & Kronenwett, M. (2012). bringing qualitative and quantitative data together: Collecting and analyzing network data with the help of the software tool VennMaker. In M. Safar & K. A. Mahdi (Eds.), *Social networking and community behavior modeling: Qualitative and quantitative measures* (pp. 193–213). Information Science Reference.
- Geven, S., Kalmijn, M., & Van Tubergen, F. (2016). The ethnic composition of schools and students' problem behaviour in four European countries: The role of friends. *Journal of Ethnic and Migration Studies*, 42(9), 1473–1495.
- Gordon, M. (1964). *American life: The role of race, religion, and national origins*. Oxford University Press.
- Haug, S. (2008). Migration networks and migration decision-making. *Journal of Ethnic and Migration Studies*, 34(4), 585–605.
- Hawkins, J. N. (2012). Regionalization and harmonization of higher education in Asia: Easier said than done. *Asian Education and Development Studies*, 1(1), 96–108.
- Hogan, B., Carrasco, J. A., & Wellman, B. (2007). Visualizing personal networks: Working with participant-aided sociograms. *Field Methods*, 19(2), 116–144.

- Kanas, A., & Van Tubergen, F. (2009). The impact of origin and host country schooling on the economic performance of immigrants. *Social Forces*, 88(2), 893–915.
- Kanas, A., Van Tubergen, F., & Van der Lippe, T. (2009). Immigrant self-employment: Testing hypotheses about the role of origin and host country human capital and bonding and bridging social capital. *Work and Occupations*, 36(3), 181–208.
- Krissman, F. (2005). Sin coyote ni patrón: Why the “migrant network” fails to explain international migration. *International Migration Review*, 39(1), 4–44.
- Lamont, M. (2000). *The dignity of working men: Morality and the boundaries of race, class, and immigration*. Harvard University Press.
- Lancee, B. (2012a). *Immigrant performance in the labour market: Bonding and bridging social capital*. Amsterdam University Press.
- Lancee, B. (2012b). The economic returns of bonding and bridging social capital for immigrant men in Germany. *Ethnic and Racial Studies*, 35(4), 664–683.
- Lee, J., & Zhou, M. (2015). *The Asian American achievement paradox*. Russell Sage Foundation.
- Levitt, P., & Glick-Schiller, N. (2004). Conceptualizing simultaneity: A transnational social field perspective on society. *The International Migration Review*, 38(3), 1002–1039.
- Lew, J. (2004). The “other” story of model minorities: Korean American high school dropouts in an urban context. *Anthropology & Education Quarterly*, 35(3), 303–323.
- Li, Z. (2013). A critical account of employability construction through the eyes of Chinese postgraduate students in the UK. *Journal of Education and Work*, 26(5), 473–493.
- Li, M., & Bray, M. (2007). Cross-border flows of students for higher education: Push-pull factors and motivations of mainland Chinese students in Hong Kong and Macau. *Higher Education*, 53, 791–818.
- Lubbers, M. J., Molina, J. L., & McCarty, C. (2007). Personal networks and ethnic identifications. *International Sociology*, 22(6), 721–741.
- Mayring, P. (2000). Qualitative content analysis. *Forum: Qualitative Social Research*, 1(2), 20. Retrieved from <https://www.qualitative-research.net/index.php/fqs/article/view/1089/2385>
- McCarty, C., Molina, J. L., Aguilar, C., & Rota, L. (2007). A comparison of social network mapping and personal network visualization. *Field Methods*, 19(2), 145–162.
- Menjívar, C. (2000). *Fragmented ties: Salvadoran immigrant networks in America*. The University of California Press.
- Mische, A. (2011). Relational sociology, culture, and agency. In J. Scott & P. Carrington (Eds.), *The Sage handbook of social network analysis* (pp. 80–97). Sage.
- Nee, V., & Sanders, J. (2001). Understanding the diversity of immigrant incorporation: A forms-of-capital model. *Ethnic and Racial Studies*, 24(3), 386–411.
- Nowicka, M. (2013). Positioning strategies of Polish entrepreneurs in Germany: Transnationalizing Bourdieu’s notion of capital. *International Sociology*, 28(1), 29–47.
- Organisation for Economic Co-operation and Development. (2016). *Education at a glance 2016: OECD indicators*. OECD.
- Pachucki, M., & Breiger, R. (2010). Cultural holes: Beyond relationality in social networks and culture. *Annual Review of Sociology*, 36, 205–224.
- Portes, A., & Rumbaut, R. G. (1996). *Immigrant America: A portrait* (2nd ed.). University of California Press.
- Portes, A., & Sensenbrenner, J. (1993). Embeddedness and immigration: Notes on the social determinants of economic action. *American Journal of Sociology*, 98(6), 1320–1350.
- Remmenick, L. (2013). Transnational lifestyles among Russian Israelis: A follow-up study. *Global Networks*, 13(4), 478–497.
- Ryan, L. (2011). Migrants’ social networks and weak ties: Accessing resources and constructing relationships post-migration. *The Sociological Review*, 59(4), 707–724.
- Ryan, L., Mulholland, J., & Agoston, A. (2014). Talking ties: Reflecting on network visualisation and qualitative interviewing. *Sociological Research Online*, 19(2), 16. <https://doi.org/10.5153/sro.3404>
- Ryan, L., Sales, R., Tilki, M., & Siara, B. (2008). Social networks, social support, and social capital: Polish migrants in London. *Sociology*, 42(4), 672–690.
- Vacca, R., Solano, G., Lubbers, M. J., Molina, J. L., & McCarty, C. (2018). A personal network approach to the study of immigrant structural assimilation and transnationalism. *Social Networks*, 53, 72–89.
- Waldinger, R. (1995). The other side of embeddedness: A case study of the interplay of economy and ethnicity. *Ethnic and Racial Studies*, 18(3), 555–580.
- Wasserman, S., & Faust, K. B. (1994). *Social network analysis: Methods and applications*. Cambridge University Press.
- Waters, J. L. (2007). “Roundabout routes and sanctuary schools”: The role of situated educational practices and habitus in the creation of transnational professionals. *Global Networks*, 7(4), 477–497.
- Watkins, M., Ho, C., & Butler, R. (2017). Asian migration and education cultures in the Anglo-sphere. *Journal of Ethnic and Migration Studies*, 43(14), 2283–2299.
- Wellman, B. (2007). Challenges in collecting personal network data: The nature of personal network analysis. *Field Methods*, 19(2), 111–115.

- Williams, L. (2006). Social networks of refugees in the United Kingdom: Tradition, tactics and new community spaces. *Journal of Ethnic and Migration Studies*, 32(5), 865–879.
- Wimmer, A. (2008). The making and unmaking of ethnic boundaries: A multilevel process theory. *American Journal of Sociology*, 113(4), 970–1022.
- Winker, G., & Degele, N. (2011). Intersectionality as multi-level analysis: Dealing with social inequality. *European Journal of Women's Studies*, 18(1), 51–66.
- Xiang, B., & Shen, W. (2009). International student migration and social stratification in China. *International Journal of Educational Development*, 29(5), 513–522.
- Xu, X., & Mei, W. (2009). *Educational policies and legislation in China*. Zhejiang University Press.
- Yang, M. M. (1994). *Gifts, favors, banquets: The art of social relationship in China*. Cornell University Press.
- Ying, Y. W., Lee, P. A., Tsai, J. L., Lee, Y. J., & Tsang, M. (2000). Network composition, social integration, and sense of coherence in Chinese American young adults. *Journal of Human Behavior in the Social Environment*, 3(3-4), 83–98.
- Zhou, M., & Xiong, Y. S. (2007). The multifaceted American experiences of the children of Asian immigrants: Lessons for segmented assimilation. *Ethnic and Racial Studies*, 28(6), 1119–1152.

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