Article

Places That Bond and Bind: On the Interplay of Space, Places, and Social Networks

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Abstract
Social networks of socially disadvantaged individuals can help them in coping with everyday life and avoiding social exclusion. At the same time, social ties also have the power to bind an individual to their disadvantageous situation, perpetuating the risks of social exclusion. One mechanism through which ties can be established are "foci": extra-network structures around which common interactions occur (e.g., family, workplace, clubs) that usually have spatial anchor points (places) where joint interactions happen. To better understand this interplay of places and networks, we use a methodological novelty that connects a person's everyday places with their ego-centred network (two-mode network). We analyse in depth two cases (elderly women living alone) from a mixed-methods study conducted in rural peripheries in eastern Germany, and we combine data from GPS tracking, qualitative interviews, and egocentric networks. A central finding of our analysis is that tie formation in places is more successful if ego has certain resources (e.g., cultural, financial, or time resources) that allow them to utilise places as foci—hence, ego and places must "match" in their characteristics. Beyond that, the existing foci (and their spatial anchoring as places in everyday life) in which ego is integrated must be considered as structures. Even if a person has enough resources and easy access to places with characteristics that promote contact, this does not automatically mean that they will form ties in such places, as the person's network plays a major role in whether they frequent these places and establish new ties there.

Issue
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1. Introduction

Research on social inequality has shown that the social networks of socially disadvantaged individuals help them cope with everyday life by providing support and resources (Klärner & Knabe, 2019; Lubbers, Small, & García, 2020; Matthews & Besemer, 2015). By providing resources defined as social capital (Bourdieu, 1986), social networks may mitigate social inequalities and enable social inclusion, as access to "possibilities pro-

duced by human development" (Therborn, 2013, p. 21). However, social networks do not guarantee the realisation of these possibilities, understood here as life chances. Indeed, social networks can also limit opportunities, because support-receiving individuals may be bound by reciprocity obligations (Offer, 2012). We argue that people are especially likely to have limited opportunities when their constraining network ties are linked to places visited repeatedly in everyday life. Hence, to better understand the ambivalent effects of social networks

on the mitigation or reproduction of social inequality, we aim to address their spatial contextualisation, and the conditions under which they are formed and maintained.

Before the resources of social networks can be used by a focal individual (ego) to improve their life chances, these networks must first be constituted through ties to other individuals (alters). In this context, social network theory stresses the importance of focus (plural: foci), which is "a social, psychological, legal, or physical entity around which joint activities are organized (e.g., workplaces, voluntary organizations, hangouts, families, etc.)" (Feld, 1981, p. 1016). Although foci are not just physical places, they usually have spatial anchor points where joint interactions take place. Consequently, the spatial environment and preconditions for establishing network ties merit our attention. Drawing on this perspective, we seek to identify mechanisms of network formation and empirically extend established concepts of network research. Methodologically, we do so by linking a person's everyday places with their network members, which results in two-mode networks. To our knowledge, this approach has not been implemented before.

As well as providing a methodological novelty, this article aims to broaden the spatial perspective by shifting the context to rural peripheries. Previous studies that explicitly dealt with the functioning of foci and their effects on social networks investigated foci in urban contexts, such as childcare centres (Small, 2009) or anti-poverty organisations (Lubbers, García, et al., 2020; Mazelis, 2020). By contrast, rural peripheries are far away from the nearest administrative urban centre and can be described as spatially disadvantaged because, in these areas, labour market opportunities, places for meeting daily needs, and institutional help are more difficult for residents to reach than they are in more prosperous or urban areas (Kühn, 2015). Given that social networks often provide fewer resources even in deprived urban neighbourhoods (Huszti et al., 2021), and places that have been identified in previous research as potential foci for tie formation (Newman, 2020) are more difficult to reach in rural peripheries, the formation and maintenance of social contacts may be systematically weakened in such areas (Klärner & Knabe, 2019). Thus, in our study, we examine in depth how places visited in everyday life serve as foci for tie formation, which factors help or hinder this process, and the implications this interplay has for individual life chances.

2. Places and Networks

We draw on social network theories and on empirical studies on the role of physical space in the formation of social networks to show how places function as foci that can enable tie formation. The places people visit in their everyday lives can influence their social networks, as it is "the presence or absence of fixed places that make social interaction possible or likely" (Small & Adler, 2019, p. 116). These places of social interaction can become

foci, which are "extra-network social structure[s] that systematically produce patterns in a social network" (Feld, 1981, p. 1016). Accordingly, we investigate whether the places people visit regularly include places that enable social interactions and promote tie formation and/or maintenance—and thus serve to build social capital that may mitigate social inequalities.

Before turning to the various criteria that previous research has found to be conducive to successful tie formation in places, it is important to note that spaces evolve and places are not static. Political ideologies, spatial planning, economic and market processes, social movements, etc., can transform spaces and the characteristics and functions of places (Horgan & Dimitrijević, 2021; Lefebvre, 1996; Sevilla-Buitrago, 2015). In our study, we focus on rural peripheries in eastern Germany. The spaces of rural areas are generally subject to diverse transformation processes, of which the diminishing importance of agricultural production for the economies of the Northern Hemisphere is only the most obvious (Shucksmith et al., 2012). In the former socialist states of Central and Eastern Europe, including eastern Germany, the changes have been even more drastic (Bański, 2019). Here, the most important trends have been political peripheralisation and reductions in financial and infrastructure resources flowing to these areas. Many places, such as grocery stores in small villages, cultural clubs run by the socialist party, and, above all, factories were closed and were not replaced by market or welfare state actors. Our research takes as its starting point the assumption that, in former socialist states, this profound transformation of rural spaces and the closure of many places that facilitated social encounters affected the existence of potential foci where residents of these rural peripheries could establish new contacts.

Previous research shows that places must have certain characteristics to function successfully as foci. Routinely visited organisations, like childcare centres, seem to be more successful in enabling not only meeting but also mating (i.e., tie formation) when their institutional norms promote frequent, long-lasting social interactions oriented towards others, and are focused on common tasks (Small, 2009; Small & Gose, 2020). In addition, the likelihood that the ties formed will be long-lasting increases if they stem from family or neighbourhood contexts, i.e., from foci with strong emotional and/or spatial closeness (Mollenhorst et al., 2014). That the temporal rhythmicity of places affects their ability to facilitate social contact was pointed out even more explicitly by Lager et al. (2015). In their study of a Dutch neighbourhood, they showed that while the weekly regularity of local activities (e.g., food market, card club) was important, the asynchronous time geography of elderly pensioners and young working people in the neighbourhood minimised opportunities for encounters.

While the characteristics of places play a role in the chances of having encounters and forming ties, the characteristics of ego and their economic and cultural

resources influence whether they build new ties at a potential focus (Crossley, 2013, p. 141). Knabe et al. (2018) showed that individuals need to have psychological capabilities and interpersonal skills to use places to form and maintain social ties. In their study on how people in Barcelona used informal networks to cope with poverty, Lubbers, García, et al. (2020) found that the causes of poverty (such as low economic resources and mental illness) also prevented many individuals from attending social foci and limited their access to leisure activities, which in turn reduced their contacts. Furthermore, the authors found that individuals with economic problems were more likely to form ties in an organisation for evicted people started by others who had been evicted than in charity organisations. They attributed this finding to the network mechanism of homophily, which means that individuals are more likely to form ties with people who have similar characteristics, such as the same gender, ethnicity, or education (McPherson et al., 2001). Thus, conceptually, we regard the two mechanisms of homophily and foci as closely related, as foci often attract people with similar attributes (Lubbers, García, et al., 2020, p. 68), and membership in foci may in turn generate similar attitudes.

People's foci are in a reciprocal relationship, i.e., as individuals are involved in constraining foci (Feld, 1981, p. 1019), they spend considerable time and resources on activities associated with those foci. Family and work are usually highly constraining foci, as they are not easy for outsiders to join; and the members involved in each focus typically form ties with the other members (Feld, 1981, p. 1030). In addition, there may be constraints on the participation of ego in other foci: "It may be difficult, costly, and time-consuming to disassociate from the focus and/or become associated with others" (Feld, 1982, p. 797). Mollenhorst et al. (2014) observed that when new network ties emerge over time, they are more likely to be chosen from long-standing contexts, such as ego's family or neighbourhood. Similarly, Ortiz and Bellotti (2021) showed that social networks can take on a cumulatively reinforced supportive or exploitative character over the life course of ego. The worse the socio-economic situation of the individuals, the more likely it is that their networks constrain their life choices, and the denser their networks are likely to be. This suggests that the structure of such networks is dominated by a few long-standing foci. We argue that this double constraint of foci highlights the extent to which people's foci can systematically limit their life chances by preventing them from joining alternative foci, and potentially forming *weak ties* (Granovetter, 1977) there. Against this background, we define a focus as a structure that, as Giddens (1984, p. 25) put it, "is always both constraining and enabling," and that has spatial anchor points in the form of places. Accordingly, whether people visit certain places may be based on these network structures; and these places in turn have spatial characteristics that tend to enable or impede the formation of new contacts.

To empirically address these three points—the characteristics of places, ego's characteristics and resources, and the foci ego is involved in—it is necessary to apply a methodological design that captures the existing foci of a person (ego), the characteristics of these foci and the members of ego's network associated with them, and the potential foci (as places) that ego visits, but from which no ties result.

3. Data and Methods

We analyse data from the international research project Social Disadvantage in Rural Peripheries in Eastern Germany and the Czech Republic (Keim-Klärner et al., 2021) that investigates living conditions in rural peripheries in Central Europe, and focuses on three social groups: (a) elderly living alone, (b) labour market disadvantaged, and (c) single parents. These groups were selected because they are at risk of experiencing multiple disadvantages. For the present study, we perform an in-depth analysis of two individual cases from group (a) who lived in the eastern German rural peripheral regions of Mansfeld-Südharz and Vorpommern-Greifswald, which were selected due to their poor services and transport accessibility (ESPON, 2017). All respondents were recruited in person and signed informed consent forms prior to their participation.

3.1. Problem-Centred Interviews and Collection of Egocentric Network Data

First, we conducted a problem-centred interview (Witzel & Reiter, 2012) in which we asked about the respondent's everyday life, job, health, finances, education, and social ties (Interview I). At the end of Interview I, we collected egocentric network data using the software VennMaker (Gamper et al., 2012). Using a name generator approach (Perry et al., 2018, pp. 68–108), we asked for the names of people (alters) (a) with whom ego does things in their leisure time, (b) who support ego emotionally and (c) practically in everyday life, (d) who could give ego informational support when searching for a new job, (e) who could give ego mobility support, (f) who actually gave ego mobility support recently, and (g) with whom ego has conflictual relationships. Our name generators capture different dimensions of social support, sociability, and conflictual ties. Alters could be named in one, multiple, or up to all seven of the name generators. We then asked for information about each of the alters. The name interpreters (Perry et al., 2018, pp. 109–128) were sex, age, type of relationship to ego, employment status, household composition, frequency of contact with ego, and residential distance to ego (in minutes). Lastly, the ties between alters were determined by asking whether two alters "know" each other, i.e., whether they would recognise and talk to each other even without ego's presence. Accordingly, the alter-alter-ties, unlike the ego-alter-ties, could not be multiplex.

Respondents were actively involved in drawing the network map (Figure 1) by placing their alters on concentric circles depending on how emotionally close they felt to them. During this final step, the participants were encouraged to reflect on their network: Has anything changed in their network in the past? Would they like to change something in their network? Is there support they would like to receive but are not? Do they (sometimes) feel lonely?

3.2. Collection of GPS Data and Mobility Interview

Following Interview I, the interviewees' spatial mobility and the places they visited in their daily lives were determined with the help of a two-week GPS tracking process. Participants were instructed to carry a GPS logger (Qstarz BT-Q1000XT) with them every time they left their home for 14 consecutive days. This period is considered long enough to capture most of the places they visit in their everyday lives (Stanley et al., 2018).

The GPS data were processed into maps using a geo-information system that depicted the places ego visited. These maps served as narrative stimuli for a semi-structured interview (Interview II) in which all visited places were discussed chronologically. Thus, the quantitative GPS data were enriched with ego's subjective perceptions about why they visit this place, for how long, and with what regularity; what they do while there; and whom they met or usually meet there.

3.3. Affiliation of Everyday Places and Alters

In a final step of Interview II, the everyday places that had so far been discussed were linked to the alters of the ego-centred network. For this purpose, the interviewer went through the list of alters one by one and asked in which of the previously discussed places ego usually meets the alter in question. The resulting affiliations formed two-mode or bipartite networks.

3.4. Analytical Approach

Both interviews were tape-recorded and fully transcribed. Qualitative data analysis was performed using the software MAXQDA 2020 by applying an a priori coding scheme based on the interview guidelines and open coding to capture themes emerging from the material. These codes were used to write systematic case portraits for comparative analysis (Witzel & Reiter, 2012).

The affiliation matrices of the everyday places with the alters were manually created, and the places were categorised according to why they were visited, i.e., the meaning ego attributed to them during Interview II when reporting on the respective visits. The processing, analysis, and visualisation of the network data were performed using R (v3.6.0; R Core Team, 2019), and the igraph (v1.2.4.1; Csardi & Nepusz, 2006) package.
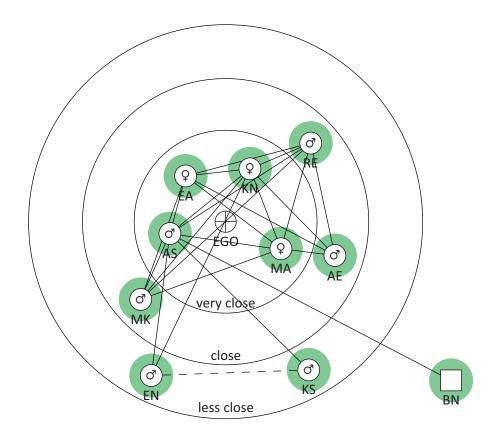

Figure 1. Anonymised network map of Mrs Lindemann (see Section 4.2). Own illustration with VennMaker.

4. Results

The two cases presented have several common features: Both are elderly women who are living alone and are retired, both have relatively large networks, and both visit a wide range of places in their everyday lives. However, in terms of their life chances, there are clear differences between them that make their cases valuable to compare, and that provide insights into the interplay of social networks, everyday places, and life chances.

4.1. Case A—Mrs Lena Schmidt: Effective Foci by Matching Ego and Places

Lena Schmidt is a 70-year-old widow who lives alone. She and her deceased husband previously had their own business with several employees, hence, she is financially relatively well-off. She is in good health for her age. She has a biological son and a stepson who was already an adult when she married her second husband. Both sons live in the region, about a 40 minutes' car drive away. She lives in her own house in a village of about 300 inhabitants, which is comparatively remote even within the peripheral research region. Mrs Schmidt has her own car, which enables her to meet her everyday needs.

The death of her husband eight years ago and her retirement were clear breaks from her previous life. After

these events, she was mostly alone, except for contact with her two sons and her sister. She then began to actively establish new relationships in her village. Now her network (Figure 2) consists of eight closely connected alters who are either neighbours, friends, or relatives.

Mrs Schmidt's two-mode network (Figure 3) consists of the eight alters and 37 places she visited during the 14-day tracking period. Fourteen of the places are connected to alters, while 23 of the places—predominantly shops and medical facilities—have no affiliations. Of the places she visits, two regularly host cultural events: an art yard and an old church tower (Figure 3). As Mrs Schmidt reported, these places are important for the formation and maintenance of her social ties within the village. She visits these places to bring variety into her everyday life, but above all to meet her friends and neighbours:

I had never attended [the village events] before, when I was going to work. But you must seek out people now, when you're at home. I hardly knew anyone here in the village. Because we [ego and her husband] really only went to work early and came home in the evening, and then we had things to do here, and then the next day we had to go back to work. So, when I was staying home, I had to somehow get in touch with some people. And then I started going with them regularly to the art yard and got involved a bit.
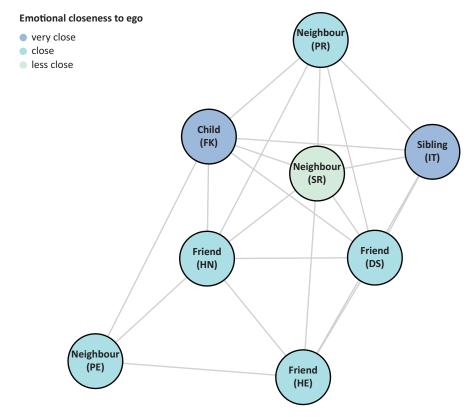

Figure 2. Ego-centred network of Mrs Schmidt. Notes: Alters' labels are derived from the relationship type reported by ego and a two-letter anonymisation key; emotional closeness to ego is indicated by node colour; ties between alters indicate that they "know each other" according to ego's account; layout based on the Fruchterman-Reingold algorithm. Own illustration.

For Mrs Schmidt, these two public cultural places function as foci. At these places, "20, 30 women" meet, they talk about organising coming events, and "then it is always the turn of one or two to make coffee or to bake a cake." These women know each other, even when they do not necessarily all talk to each other: "There are also people there with whom you don't necessarily want to chat…but somehow communities are formed, when you get along well." The nature of these foci allows Mrs Schmidt to seek contact with people who share her views (*homophily* mechanism), and to avoid people she finds unsympathetic. As ties to these groups of women are not represented in the ego-centred network, they can be considered *weak ties*. But Mrs Schmidt visits these places regularly with Friend HE and Neighbour SR (Figure 3), and these regular visits have strengthened their relationships. HE has become an important and close friend. She is affiliated with several of the everyday places Mrs Schmidt visits, which reinforces their relationship.

In addition, Mrs Schmidt's two-mode network shows that the other important places for meeting network members are private homes. She visits almost all network members in their private homes. However, the most central place in the network is Mrs Schmidt's own home (Figure 3). Her house is important for her everyday life, but also for strengthening and maintaining her

social ties. Since the death of her husband, her home has taken on special qualities as a meeting place, as it allows, for instance, her best friend HE or her sister IT to engage in private exchanges with no men present:

> Actually, we [HE and ego] prefer to meet at my place, she prefers to come to me. Because she still has a husband, and…well, when women talk, the husband doesn't necessarily always have to sit with them [laughs].

Mrs Schmidt's home can be seen as a form of *bonding spatial capital*, since it provides her with resources to maintain her social ties as she pleases. All network members are connected to her home, but not at the same time. With this spatial capital, she can flexibly organise her relationships with heterogeneous ties (very close sister, close friends, less close neighbour). Her home helps her consciously diversify her network, without being concerned about repulsion between her alters (i.e., the avoidance of dissimilar people as the opposite of homophily; see Skvoretz, 2013). Thus, her bonding spatial capital *home* enables her to have different relationships to meet different needs (leisure activities, practical support, etc.):
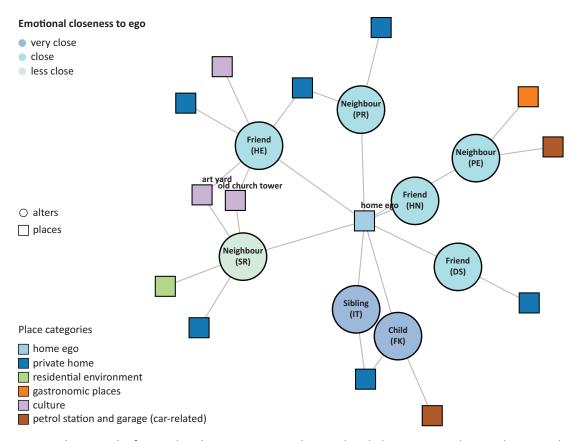

Figure 3. Two-mode network of Mrs Schmidt. Notes: Twenty-three isolated places are not shown; places are depicted as squares and annotated when they are mentioned in the analysis; alters are depicted by circles and their emotional closeness to ego is indicated by node colour; ties between alters and places indicate that ego and alter meet at these places or they visit them together according to ego's account; layout based on the Fruchterman-Reingold algorithm. Own illustration.

Just fixating on one person is not good....You can have a best friend with whom you talk about all kinds of things, but you still have to have other acquaintances....Not everything has to be so tight...how do you say...[you need] the man for all cases [laughs], the person for all cases [laughs].

For clarity of illustration, we did not include in Figure 3 everyday places without affiliations to alters; nonetheless, they are worth investigating. These places are mainly shopping venues and doctors' offices where Mrs Schmidt does not report having any encounters with members of her network. Particularly interesting is the village cemetery (not depicted in Figure 3), which is a place she regularly visits to take care of her husband's grave, but where she actively avoids meeting other people because she feels they drag her down in their grief and make her feel guilty for not mourning constantly. This observation is congruent with Mrs Schmidt's efforts to consciously differentiate her network according to functions that are helpful to her in her everyday life, or that serve her well-being. As she does not want to grieve constantly, she deliberately avoids meeting people at the cemetery by visiting it in the mornings, as she knows that most people go there in the evenings. It thus appears that places can have a time structure or rhythm that influences their potential to function as a focus.

4.2. Case B—Mrs Hanna Lindemann: The Double Constraint of Foci

Mrs Hanna Lindemann is a 60-year-old divorced mother of two who receives a work-incapacity pension because she has chronic illnesses that also restrict her mobility. Since German reunification in 1990, and the subsequent collapse of the eastern German economy, she has held precarious jobs and been long-term unemployed. She lives in a midsized city in a rural periphery where she rents a two-room apartment. She cares intensively for her 35-year-old son AS, who has serious health issues, is unemployed, and lives part-time in her apartment. Her daughter has been living far away for some time and is not included in her network.

Mrs Lindemann's ego-centred network (Figure 4) of 10 alters consists of a tightly-knit group of emotionally close to very close neighbours and relatives (bottom left), less close individuals (KS and EN), and authorities as institutional helpers (BN) for herself, but mostly for her son. She has ambivalent and partly conflictual ties (highlighted by red node frames) with both her son AS and authorities BN, which—according to the respective name generator—prevent her from leading her life as she would like to. Her son is playing an important role in Mrs Lindemann's everyday practices and he also has a central position in her ego-centred network, as he is tied
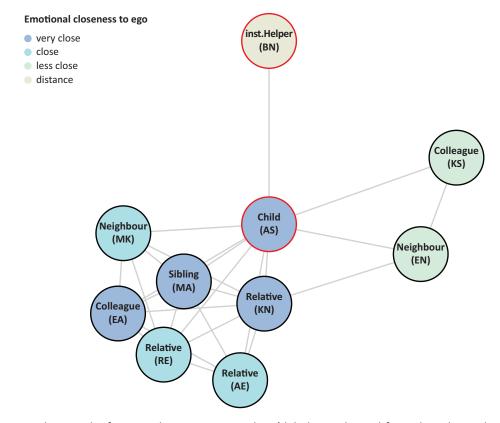

Figure 4. Ego-centred network of Mrs Lindemann. Notes: Alters' labels are derived from the relationship type reported by ego and a two-letter anonymisation key; emotional closeness to ego indicated by node colour; conflictual relationships with ego indicated by red node frames; ties between alters indicate that they "know each other" according to ego's account; layout based on the Fruchterman-Reingold algorithm. Own illustration.

with all other alters. The bottom-left cluster of closely connected alters consists of former work colleagues (still stemming from her employment in the GDR in the 1980s) and relatives who live in her immediate neighbourhood. She regularly looks after two members of this cluster who are older than she is: her aunt KN (aged 76) and her former colleague EA (female, aged 80). Apart from the institutional helpers BN, she has known these people for decades, and these ties are thus characterised by a high degree of continuity.

Mrs Lindemann's two-mode network (Figure 5) consists of 10 alters and 29 uniquely visited places. Fourteen of the places are connected to alters, while 15 of the places—predominantly stores—have no affiliations. We can find no clubs, associations, or cultural places. The affiliation of alters and everyday places illustrates Mrs Lindemann's care practices. Her son AS stays with her Mondays to Wednesdays and both social service facilities are connected to him (food bank and social care institution; Figure 5). The weekly visits to the social care institution in which she accompanies her son are a major burden for her.

The four members on the upper-right side of the two-mode network (EN, KN, EA, MK; Figure 5) live within

walking distance of Mrs Lindemann's home and include her aunt KN, as well as her former colleague EA, for whom she provides household and shopping support. They are connected via private places (home KN, home EA) or local public transport (i.e., when they are travelling together to do the shopping), but, interestingly, not via Mrs Lindemann's home, which indicates that her visits are unilateral and that her care practices towards KN and EA require her to be the mobile one. Moreover, due to the spatial proximity of the emotionally very close alters to whom she has (or believes she has) care obligations, she feels constantly monitored and pressured to meet their expectations. The influence of this emotionally and spatially close part of her network becomes clear when she talks about her avoidance strategies in relation to these alters during the review of the network map produced in Interview I (Figure 1):

> The way the situation is, it's sometimes a little bit like that, like a cocoon, everybody tugs at you….You must be careful not to kick anyone….Sometimes I say, "I have such a terrible stomachache today, it's like a migraine, I'm lying on the bed." And there, because I don't feel well, but then I had to switch
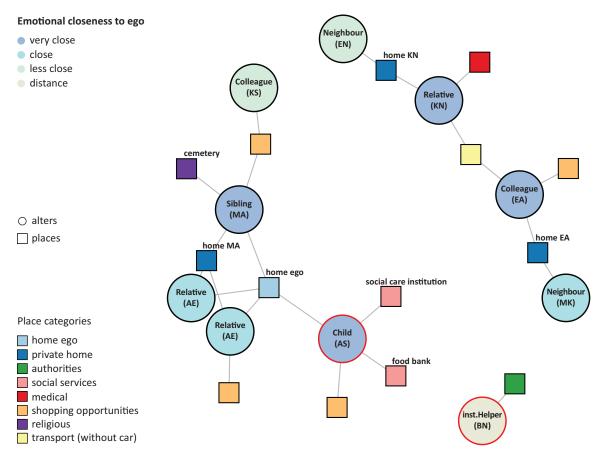

Figure 5. Two-mode network of Mrs Lindemann. Notes: Fifteen isolated places not shown; places are depicted as squares and annotated when they are mentioned in the analysis; alters are depicted by circles, their emotional closeness to ego is indicated by node colour, and conflictual relationships with ego are indicated by red node frames; ties between alters and places indicate that ego and alter meet at these places or they visit them together according to ego's account; layout based on the Fruchterman-Reingold algorithm. Own illustration.

off….Sometimes you must fight back like that….It's not nice when you don't have people around, but I know it's also bad when you have too many and too close.

Nevertheless, this part of her network also offers her significant emotional support in dealing with her son. Family ties, especially her emotionally very close sister MA, are important sources of (emotional) support. Significantly, the only places that have positive connotations for Mrs Lindemann are those that are affiliated with her sister (home MA, cemetery; Figure 5).

In Mrs Lindemann's case, 15 out of her 29 everyday places are not linked to members of her network. These are mostly isolated shopping venues with a purely functional character; she often visits them to run errands for AS, KN, or EA. Nonetheless, Mrs Lindemann, like Mrs Schmidt, regularly visits at least one place that has the potential to serve as a focus. She visits the food bank (Figure 5) weekly, and the GPS data indicate that she is usually there two hours before the actual distribution of food takes place. Her son AS then arrives when the food is distributed and helps her transport the food to her home. When asked, she confirms that she always meets the same people there, and they talk and share food:

> And Tuesdays are food bank days, where we always meet, we all meet quite early, and we usually get things done pretty early. The [food bank employees] arrive at half past 11 and we usually meet at around 10 and have a chat. Today, an acquaintance brought nuts from her garden. Then we exchange such food items and help each other.

However, unlike for Mrs Schmidt, for Mrs Lindemann, these regular, focused interactions do not lead to ties that are reflected in the network we have collected. We assume that there are at least two reasons for this. First, the existing *strong* and *bonding* ties that stem from her constraining foci family and former workplace have a restrictive *binding* effect on Mrs Lindemann, i.e., they make tie formation more difficult, or even prevent it altogether by tying up resources, such as time and energy. Second, the acquaintances she meets at the food bank are socially homogeneous, and in a situation that is structurally similar to hers. Although homophily prevails in this context, strengthening ties to these acquaintances is unlikely to help her in coping with everyday life and could even add to the burdens that she already carries in her closer network and that she sometimes tries to avoid.

4.3. Comparison of the Two Cases

We compared two ideal-typical cases from our sample who have in common that they are older women who live alone in rural peripheries, but who differ significantly in terms of the (dis)continuities of their life trajectories, their current life situations, their (economic) resources, their time, their health, and, correspondingly, their life chances. For Mrs Schmidt, developing social network ties has helped her lead a satisfactory life, even though she has experienced adversity. After the death of her husband, Mrs Schmidt had no local ties in the village, but she actively sought new acquaintances. She took advantage of opportunities offered by cultural institutions and events in the village that function as foci. In addition, the gatherings at these places were large enough for Mrs Schmidt—who has well-developed interpersonal skills—to interact with people whom she found sympathetic (*homophily*) and to avoid people she did not like. The discontinuity in her network was accordingly accompanied by discontinuity in the everyday places she visited.

For Mrs Schmidt, public places are important opportunity structures for forming and strengthening social ties, and it is important to note that such places are present even in peripheral rural areas. Nonetheless, it is only through her resources (social, cultural, financial, time, health) and her agency that she has gained access to these places, i.e., ego and the places "matched." Building on the encounters she had at these places, she consciously expanded (and diversified) her network, which now offers her the variety and the practical support in everyday life she wants. Thus, the places she visited offered her opportunities to expand her social capital strategically. Mrs Schmidt has a variety of life chances available to her, and she actively seizes them. Hence, she is very satisfied with her life: "I like living here. It's nice when I get up early….I can do what I want."

In contrast to Mrs Schmidt, Mrs Lindemann's life trajectory and her social ties are characterised by a high degree of continuity, and her individual resources are low. Her care obligations explain a large share of the everyday places she visits. The foci of Mrs Lindemann's family and former colleagues are *doubly constraining* and tie her to places in ways that make it both difficult for new members to join and difficult for her to participate in other foci. Accordingly, she has no ties beyond these long-term foci. However, previous gathering places of these foci have disappeared (e.g., her workplace), or it has become more difficult for her to reach them due to the reduction in public transport. Because she is bound to these constraining foci, and her home cannot function as *bonding spatial capital* where she could manage her ties spatiotemporally, Mrs Lindemann cannot structure her network either emotionally or spatially in the ways that Mrs Schmidt can. Mrs Lindemann describes her life situation as a "constant struggle." Her opportunities for gaining access to different kinds of social contacts (to establish new social capital) by visiting places that differ from those she currently visits are severely constrained. Hence, her life chances, as well as her agency, are limited, and there seems to be no prospect of change.

Even though it was not the primary analytical focus, spatial mobility turned out to be a central factor in both the opportunities to visit places and the degree of

strain caused by these visits. Mrs Schmidt reported visiting places in her everyday life as she pleases (regardless of whether they are affiliated with her ego-centred network members), and with a high degree of agency. Mrs Lindemann, on the other hand, reported being driven to a large degree by (perceived) demands from emotionally close parts of her network when visiting places in her everyday life. In addition, her poor health makes her comparatively low mobility potential even lower. She has neither her own car nor a driving licence. Hence, when visiting places, she is mostly dependent on local public transport, which operates relatively well within the city where she lives by day, but is insufficient for trips outside the city, and is, she believes, unsafe at night.

5. Discussion and Conclusion

We found that the places that the two women visited reflected their respective life situations, their resources, and their existing network structures (as foci) and, conversely, that the places influenced these conditions. Hence, we illustrated the interplay between each woman's everyday places and her social network, while showing that this interdependency could have positive or negative effects on individual life chances.

The three central findings of our analysis are the following: That (a) tie formation in places is more successful if ego has certain resources (such as cultural, financial, or time resources) that allow them to utilise places as foci—hence, ego and places must "match." Moreover, (b) the existing foci (and their spatial anchoring as places in everyday life) in which ego is integrated must be considered as structures that shape their actions. Even if a person has enough resources and easy access to places with characteristics that promote contact, this does not automatically mean that they will form ties in such places, as the person's network plays a major role in whether they frequent these places and establish new ties there. Finally, (c) the relational embeddedness of an individual in physical space, i.e., daily mobility, and its preconditions need to be considered to better understand why a person does or does not visit certain places, and how these actions in turn condition the structure of social networks, especially in rural peripheries.

Ad (a), our analysis revealed that an individual must have certain characteristics to be able to utilise places as foci: We identified cultural, financial, and time resources as prerequisites for access (cf. Crossley, 2013, p. 141). This adds an important dimension to findings from previous research that places tend to function better as foci when regular, long-lasting, joint activities occur there, and when institutional norms enable social contacts (Small & Gose, 2020). We conclude that ego and places must first "match" before "meeting" and "mating" can occur. The matching of people and places is relevant for rural peripheries (and other spatially disadvantaged areas), as such spaces usually have a much lower density of potential foci, like clubs or associations, and the

types of places that exist may not match the needs of individuals who would be most helped by building new (supportive) ties. Hence, a mere analysis of the spatial distribution patterns of foci that meet generic criteria is inadequate, as how well-matched the places and people of interest are must also be considered.

Ad (b), to understand how places can enable tie formation, the existing foci (and their spatial anchoring as places in everyday life) in which an individual is involved must be considered. Case B (Mrs Lindemann) showed how the focus of family, which is often characterised by multiplex exchange relationships, can be constraining in a double sense: External individuals do not enter, but highly involved individuals also hardly participate in other foci. This finding is in line with Mollenhorst et al. (2014), who found that ties formed in family or neighbourhood contexts tend to be particularly long-lasting and that new contacts are more likely to stem from them. However, by linking Mrs Lindemann's everyday spatial practices to her network, we were able to trace more precisely why the ties to her emotionally close network members are so enduring, and why her chances of making new contacts in other contexts are so low: She is compelled to seek out certain places because of the obligations stemming from her constraining foci, or because of her own challenging life situation; and she lacks the time, energy, and resources to deviate from this pattern and establish new contacts. For example, even though her regular visits to the food bank over a long period of time should have allowed for homophilic tie formation, which is crucial for establishing social capital (Lager et al., 2015), the people she met there were not represented as alters in her network. In contrast, in Mrs Schmidt's life (Case A), drastic life events (death of her husband, her retirement) eliminated the previous double constraints of the foci of family and employment and led to a reshaping of her network. For her, being alone was a prerequisite for strengthening her agency and for forming new relationships; an observation that can further refine the results of Mollenhorst et al. (2014).

Mrs Schmidt's case also shows that the ambivalence of social capital can be avoided if ego has adequate resources and opportunities to strategically reshape and diversify her own network, and if she has bonding spatial capital (her own home) where she can manage encounters with her various alters. This finding adds another facet to the results of Ortiz and Bellotti (2021), which indicate that a good socioeconomic situation is significantly more likely to be associated with opportunities than with constraints by the network, and vice versa. By contrast, Mrs Lindemann is not free to structure her network according to her needs, either spatially or emotionally. Thus, when an individual's resources are already low and the resources in the network are also sparse, having social capital can lead to multiple disadvantages for ego through a binding effect (Offer, 2012).

Ad (c), the comparison of the two cases demonstrated that spatial mobility plays a central role in

explaining the interplay between places and networks: first, as a necessity for visiting places as spatial anchor points of potential foci and, second, as an effect of existing foci, which—as in Mrs Lindemann's case—can be the reason for a large share of everyday mobility. This observation of the pivotal role of everyday mobility relates to research on mobility and social exclusion (Cass et al., 2005). It also echoes the insight of Lubbers, García, et al. (2020) that the causes of poverty limit poor people's opportunities to participate in potential foci, which in turn reduces their options for expanding or diversifying their networks. The strong embeddedness in existing foci exerts considerable space-time constraints on ego, and therefore limits the possibilities for new social interactions, as the more time and energy that is invested in the foci, the fewer individual resources ego has. Furthermore, the social networks and the mobility biographies of both cases are mutually dependent. For example, after the death of her husband and her retirement, Mrs Schmidt began to establish local contacts in her village, but was also able to maintain her former, geographically more distant work contacts because she had sufficient (mobility) resources. Her "spatially and relationally more discontinuous social network" may have fostered "a stronger willingness for new experiences of spatial mobility" (Viry et al., 2009, p. 140)—in her case, smaller-scale local mobility. While further analyses are necessary to understand the relationship between networks and everyday mobility in more detail, the research design presented here provides suitable data for doing so, as it could address the "fundamental problem of…over-reliance on variable analysis" (Schwanen et al., 2015, p. 133) in researching the interplay of mobility and social inequalities by emphasising the role of social networks.

5.1. Limitations

As our study is qualitative, we cannot claim the representativeness of our results. However, this was not our aim. Instead, we sought to identify mechanisms of network formation and empirically extend established concepts of network research in a spatial context that has previously received little attention. To this end, we presented two contrasting cases to illustrate findings from our broader sample. A concise presentation of the analysis of the full sample could not be done within the scope of this article; not least because the quantitative analysis of two-mode networks requires new analytical approaches.

The places the interviewees visit on an everyday basis were determined using 14-day GPS tracking data. However, places that they visit regularly, but at longer intervals, may not have been included in the data. This uncertainty cannot be resolved; but when asked after Interview II, most respondents stated that the places discussed are representative of the places they visit in their everyday lives.

The information on social networks was collected via seven name generators. We asked for a specific set of alters, and therefore captured only a part of ego's networks. Furthermore, the alter–alter ties are constituted by mutual "knowing"; thus, we cannot make any differentiated claims about the specific nature of those ties. Nonetheless, we think that the resulting networks are adequate for answering our research questions.

5.2. Outlook

Because our article was narrowly focused on the relationships between personal networks, space, and places, we did not discuss in depth how space (and places) are politically constructed or transformed. For example, we did not relate our findings to the discussion on *place-making*, i.e., the "ongoing collaborative process in which diverse groups of stakeholders within a community work together to define, develop, and deliver on a common vision for spatial transformation" (Horgan, 2020, p. 145). For eastern Germany, these placemaking processes are of the utmost importance because the transition from a socialist system to a market society led to the emergence of new stakeholders and a shift in the balance of power between the state, the market, and civil society, which in turn transformed space (Sevilla-Buitrago, 2015).

Moreover, we could not relate our findings to the psychogeography of everyday life (Ellard, 2015). Nonetheless, we found numerous starting points for psychogeographic analyses in our data. Examples include the few positive descriptions of places by Mrs Lindemann, which are consistently associated with her sister; or when she mentions that she no longer uses the bus station in the evening because she feels unsafe being there in the dark, which in turn significantly reduces her mobility.

We agree with Small and Gose (2020) that the interactions between agency and context should be considered even more systematically in future research. The "iterational" dimension of agency (Emirbayer & Mische, 1998, p. 971) could prove useful for analysing the reinforcing interplay of private places in everyday life and constraining foci (as in Mrs Lindemann's case), and could therefore explain the reproduction of low life chances. At the same time, the concept of "relational work" (Zelizer, 2012, p. 149) could shed light on how individuals (as in Mrs Schmidt's case) actively shape their networks according to their needs based on spatial opportunities. The advantage of applying an agency perspective is that it allows for a more realistic consideration of the multiplexity of relationships, and thus does not depend on a binary categorisation of relationships as either supportive or burdensome. Moreover, addressing agency more systematically would complement the structural argument made in this article (the role of space in social networks) at the action level (the role of agency in the use of space). Such an approach could improve our understanding of the ways in which space contributes to the formation of social ties, and can thus

mitigate (but also reproduce) social inequalities. Further research into the interplay of space and agency would help to address one of the basic questions of sociology, namely, that of the interplay of structure and action.

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Conflict of Interests

The authors declare no conflict of interests.

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