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Article

Structural Embeddedness in Transnational Social Fields: Personal Networks, International (Im)Mobilities, and the Migratory Capital Paradox

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Abstract
In this article we focus on individuals' structural embeddedness in transnational social fields (TSFs) and examine how this is related to patterns of international mobility. The main argument is that the structure of TSFs matters for (im)mobility trajectories, and thus all actors (migrants, non-migrants, and returnees) need to be examined as a whole to obtain a deeper understanding of the role of social networks in processes of transnational mobility. Taking the case of Romanian migrants in Spain as a TSF connecting their place of origin (Dâmbovița in Romania) with their destination (Castelló in Spain), we analyze survey data for 303 migrants, non-migrants, and returnees, sampled through an RDS-like binational link-tracing design. We then categorize types of personal network using an international mobility scale to assess the degree of structural embeddedness in the TSF. An important contribution is the rigorous operationalization of TSF and assessment of the level of migratory capital of each individual. Our results reveal that migratory capital is not always linked positively with high mobility patterns and that its role is strongly related to the overall composition and structure of the TSF.

Keywords
migratory capital; mobility patterns; personal network typology; Romania; Spain; structural embeddedness; transnational social field

Issue
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1. Introduction

Research into international mobility patterns tends to focus on the immigrant population, ignoring other actors who are immobile or have other forms of mobility, such as tourists or mobile workers. However, some authors stress that mobility and immobility define each other and should be studied together (see Glick-Schiller & Salazar, 2013). For instance, mobility is often an informal livelihood strategy (cf. Fradejas-García et al., 2021) or a household strategy where some people migrate while others stay behind to take care of children, aging parents or the family business (cf. Lubbers & Molina, 2021). Thus, the immobility of some individuals allows others to be mobile (e.g., Dahinden, 2010).

To grasp the effects of international migration in the wider population, it is of great interest to know how immigrants, non-migrants, and returnees to the country of origin relate to each other and how these relations facilitate or constrain transnational mobilities. From a theoretical point of view, immigrants and/or returnees provide new experiences and resources to non-migrants (De Gourcy, 2007; Koikkalainen, 2019; Lacroix, 2014), which influences migration decisions through facilitation and normalization of the idea of migration. While many empirical studies have shown that having contacts with

people who have migrated affects one's probability of engaging in future mobility (e.g., Herz et al., 2019), some argue that these contacts can also discourage migration (Faist, 1997; Mazzella, 2014) through a negative experience or because of family obligations (e.g., if an individual is the only sibling left in the country of origin, he/she will have to take care of the aging parents). Contact with migrants can also affect other aspects of non-migrants' lives, such as their material well-being through financial remittances.

Most of the authors refer to this prior mobility experience as "migratory capital," a topic that has been the subject of numerous publications (e.g., Ryan et al., 2015). However, the usual idea of this concept remains very general and abstract, its definition varying across different works. Typically, this concept is defined as either the number of direct, personal ties an individual has to people who have experience of migration (e.g., Garip, 2008; Massey & Aysa-Lastra, 2011) or simply whether one has such ties or not; yet such measures are usually isolated from individuals' personal networks, and little is known about the characteristics of relationships with migrants, such as their role for the individual and the strength of such ties. Furthermore, the question of how these networks of migrants and non-migrants are embedded in the wider transnational social field (TSF) has hardly been studied at all empirically. However, TSFs have been explicitly defined in network terms, as a "set of multiple interlocking networks of social relationships through which ideas, practices, and resources are unequally exchanged, organized and transformed" (Levitt & Glick-Schiller, 2004, p. 1009).

This article examines how individuals' structural embeddedness in the TSF (i.e., the number and pattern of connections of individuals in the whole network across borders) relates to their international mobility. On the one hand, the concept of migratory capital allows a relational approach to be adopted in studying the resources available for migration. On the other hand, the study of migratory capital through the lens of transnationalism enables this type of capital to be examined not only among immigrants, but also among non-migrants and returnees, leading to a more accurate picture of the phenomenon. One of the key arguments of this article is that the personal environment is interrelated with the whole structure of the TSF, and thus the effect of migratory capital will depend on a focal individual's ("ego") degrees of structural embeddedness in the TSF. Our methodology is inspired by the work of Mouw et al. (2014) in the context of movement between Mexico and the USA, and our data provide a unique opportunity to test this argument in the European context. More precisely, we study the TSF between Dâmbovița in Romania and Castelló in Spain by addressing two research questions: How is the migration experience of network members related to individuals' own mobility trajectories within the TSF? Do individuals with greater migratory capital occupy structurally more central roles in the TSF?

To answer these questions, we first address several conceptual and methodological challenges. Firstly, given the inherent complexity of today's international mobility, we develop an international mobility scale based on the migration-mobility nexus that takes into an account the stage in the migration process (of migrants, non-migrants, returnees). Secondly, we use a personal network analysis approach which focuses on individuals' personal network structures and composition, to assess rigorously the level of migratory capital of each individual. Next, we develop a meaningful typology of personal networks that includes ties of both family and friendship or acquaintances that can be related to different phases and levels of the (im)mobility process. Thirdly, by measuring the TSF, we can observe different degrees of individuals' structural embeddedness in the TSF and relate them to their specific mobility trajectories.

2. Structural Embeddedness in the TSF

The focus on structural embeddedness allows one to go beyond inclusion criteria based on one location to assess the level of inclusion of different actors in transnational social structures simultaneously. The question is how to assess this structural embeddedness from a transnational perspective.

The great challenge resides in the fact that most studies that implement the perspective of TSFs do not measure or delimit precisely what lies within this field and what is outside it. To assess the degree of structural embeddedness, the TSF must first be rigorously operationalized. In this article, we do this with reference to the international corridor between Dâmbovița (Romania) and Castelló (Spain), in which transnational practices take place and cross-border social formations emerge. Our definition of this corridor through the example of personal networks is illustrated in Figure 1. More precisely, the delimitation of this TSF is based on the geographical residence of the contacts of Romanian migrants from Dâmbovița in Castelló. Those contacts who reside in either Castelló or Dâmbovița are part of the TSF; remaining contacts, namely those in Spain but not in Castelló, those in Romania but not in Dâmbovița, or those in a third country, are considered as being outside the TSF.

Summing up, the application of social network analysis to studies of international mobility and transnationalism sheds light on the relationships that are embedded in these processes and their outcomes (Bilecen & Lubbers, 2021). Thus, we argue that, by studying the composition of personal networks that make up this corridor, paying special attention to migratory capital, and by studying social network structure to measure individuals' degree of structural embeddedness in TSFs, we can not only refine the understanding of international mobility patterns, but also contribute knowledge about the clustering of mobility levels in networks. As we shall show, individuals who have more transnational links are not necessarily more central in the TSF.

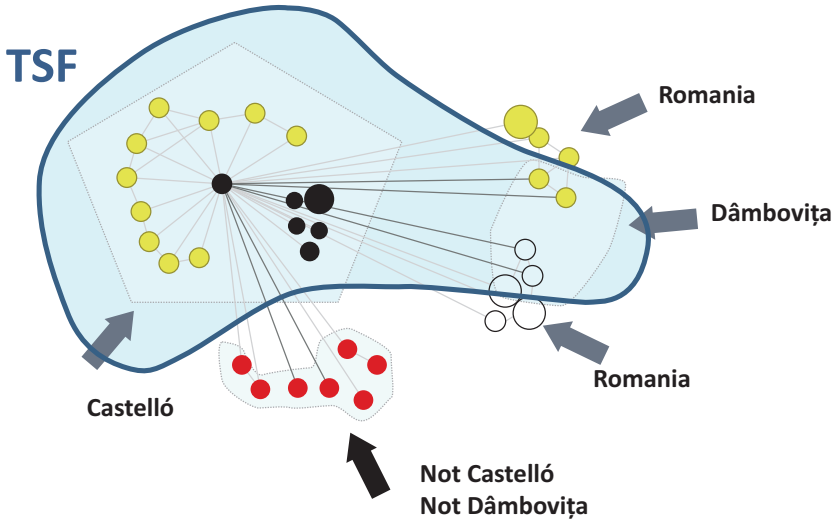

Figure 1. Delimitation of TSF based on the geographic residence of ego's contacts.

3. Data and Methods

3.1. Data

The data come from the research project ORBITS (MINECO-FEDER-CSO2015–68687-P) conducted in Spain and Romania between 2016 and 2020. We analyze the quantitative data from one of the two TSFs we have researched, connecting the region of Castelló in Spain with Dâmbovița County in Romania. In this project we replicated part of the binational link-tracing methodology used by Mouw et al. (2014) in the USA and Mexico. First, districts in Spain with more than 10% of their total populations from Romania were identified. One of them was Castelló, situated on Spain's Mediterranean coast, which has a substantial ceramics industry and is where Romanians are the immigrant group with the highest share of employees with formal contracts (Bernat & Viruela, 2011). Moreover, this municipality is characterized by "institutional completeness" (Molina et al., 2018), a concept that refers to a high density of institutions related to the area of origin, such as churches, associations, enterprises, and even a Romanian consulate.

Second, we identified the region of origin of migrants with the support of the city council and secondary sources. About 80% of the people came from Dâmbovița (Viruela, 2002), situated 78 km north-west of Bucharest. Hence, one of the aims of the ORBITS project was to measure and analyze relations within this transnational corridor.

Data collection took place between November 2017 and July 2018. The target population consisted of adult Romanian immigrants in Castelló resident there for at least six months and returnees and non-migrants in Dâmbovița who had social relationships with them. The binational link-tracing sampling design, which is similar to respondent-driven sampling (Heckathorn, 1997), started in the destination (Castelló) with a few diverse informants ("seeds") selected during preliminary ethnographic fieldwork in the community. The seeds were interviewed and asked to nominate three to six relatives, friends and/or acquaintances ("referrals") who might want to participate in the survey, ideally three in each location of the TSF. Subsequently, the referrals were contacted and interviewed upon their consent. Every new interviewee was in turn asked to list three to six referrals. As a result, using nine seeds, a sample of 303 respondents was reached: 147 immigrants in Castelló and 109 non-migrants and 47 returnees in Dâmbovița. Among the returnees, 18 had returned from Castelló, while the remainder had had their migratory experience either in another Spanish region or in another country.

The sample diverts to some extent from the demographic structure of the population in terms of sex and age, but unequally in each locality studied. While in the subsample of residents in Romania the share of females is very close to their general distribution in the population of Dâmbovița (53% females in the sample versus 51% females in the population), the average age (37) is lower than that of the total population of Dâmbovița (48). Conversely, in the Spanish subsample, women are overrepresented (72% in the sample versus 53% in the population), but the sample is similar to the Romanian population in Castelló in terms of average age (44 versus 41 years, according to the Spanish National Statistics Institute, 2017). For more detailed information about the sampling procedures, the sample characteristics, and the factors affecting the data collection see Hâncean et al. (2021).

Each face-to-face interview consisted of several parts: a core set of items for all types of respondents (like sociodemographic attributes); questions depending on respondent status (e.g., working/life situation in Romania, experience of migration to Spain, transnational practices, return and post-return experiences); and questions in order to elicit and describe personal networks. For the latter, five name generators were used to obtain up to forty network members, or "alters" in personal

network terminology. Figure 2 shows the proportion of alters elicited through each name generator by type of respondent. Average network size ranges from fourteen for immigrants to eighteen for non-migrants and returnees, producing a mean number of sixteen alters.

The respondents also provided basic characteristics of each elicited alter (place of residence, sex, occupation, type of relation, contact duration, emotional proximity, frequency of communication, religion). In addition, the questionnaire inquired about the existence of up to nine randomly selected alter-alter ties in each personal network. The data were collected by using either a paper-based questionnaire or Egonet software (http://sourceforge.net/projects/egonet). As a result, 4,834 alters were elicited by 303 respondents. After a very laborious procedure, the 303 personal networks were interconnected into a network of networks with 4,529 unique nodes (respondents and alters) and 7,876 ties (nomination ties and alter-alter ties). This network of networks thus represents a sample of the TSF between Castelló and Dâmbovița.

3.2. Measures

The following measures were used in this study.

3.2.1. International Mobility Scale

To measure international mobility patterns, we have combined three variables with different weights into a single scale: (a) the respondent's migration experience, ranging from the lowest to the highest score (never migrated, migrant in Spain without other migration experiences, and return migrant or migrant in Spain with previous migration experiences), and having the highest weight; (b) the frequency of visits abroad (no visits, one visit, or more than one visit abroad in the past two years), having a lower weight than the first; and (c) future migration intentions (depending on respondent status: plan to return to Romania within a year/plan to return to Spain within a year/considering moving abroad) with the lowest weight. The reasoning behind the attribution of the differentiated weights to the variables in the order given above was that migration is a set of *past* actions where visits abroad admittedly entail much less complexity than migration itself and that the intention to move is a plan that is not necessarily put into effect. As a result, we have developed a fourteen-point international mobility scale that ranges from immobile to highly mobile respondents (see Figure 3 for the distribution of respondents on this scale). More precisely, it goes from those who never migrated, have not made visits abroad in the last two years, and had no intention to migrate abroad in the near future (0 points on the international mobility scale), to those who are migrants in Spain with previous migration experience or returnees to Romania from Spain, with at least one visit abroad in the last two years, and still having the intention to move (migrate/return) again. This international mobility scale provides a more comprehensive view of human migratory mobility by taking into account not only migration but also other forms of mobility. It thus enables analyses that go beyond the focus on the migrant group alone, allowing a joint analysis with the non-migrant and returnee populations.

3.2.2. Network Typology

To develop a meaningful network typology providing greater insights into the role of different types of networks in international mobility patterns, we had to decide the optimal solution for our data. When analyzing personal networks, it must be realized that many of their characteristics are not independent. In light of this fact, the clustering methods seem to be adequate

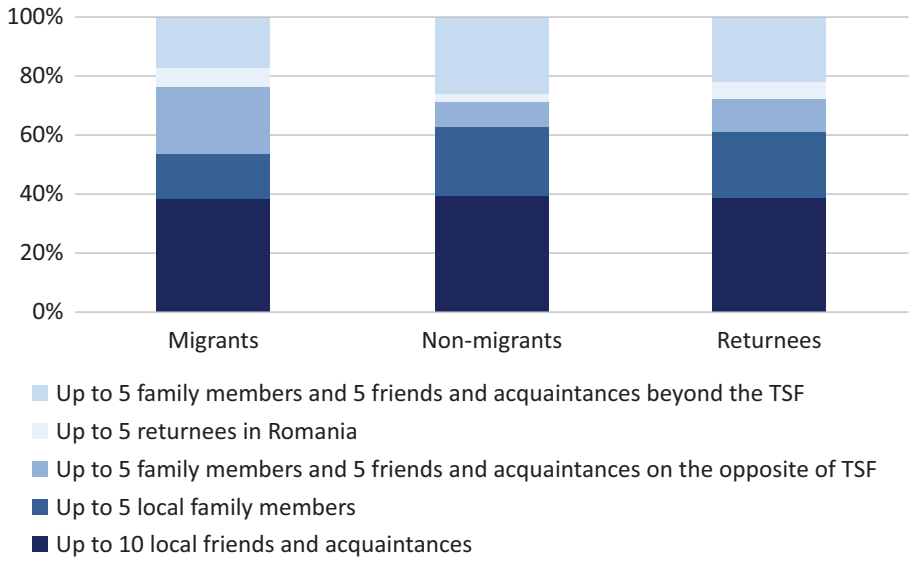

Figure 2. The proportion of ties according to type of respondent and name generator (N = 303 respondents; 4,834 alters). Source: Lubbers and Molina (2016–2020).

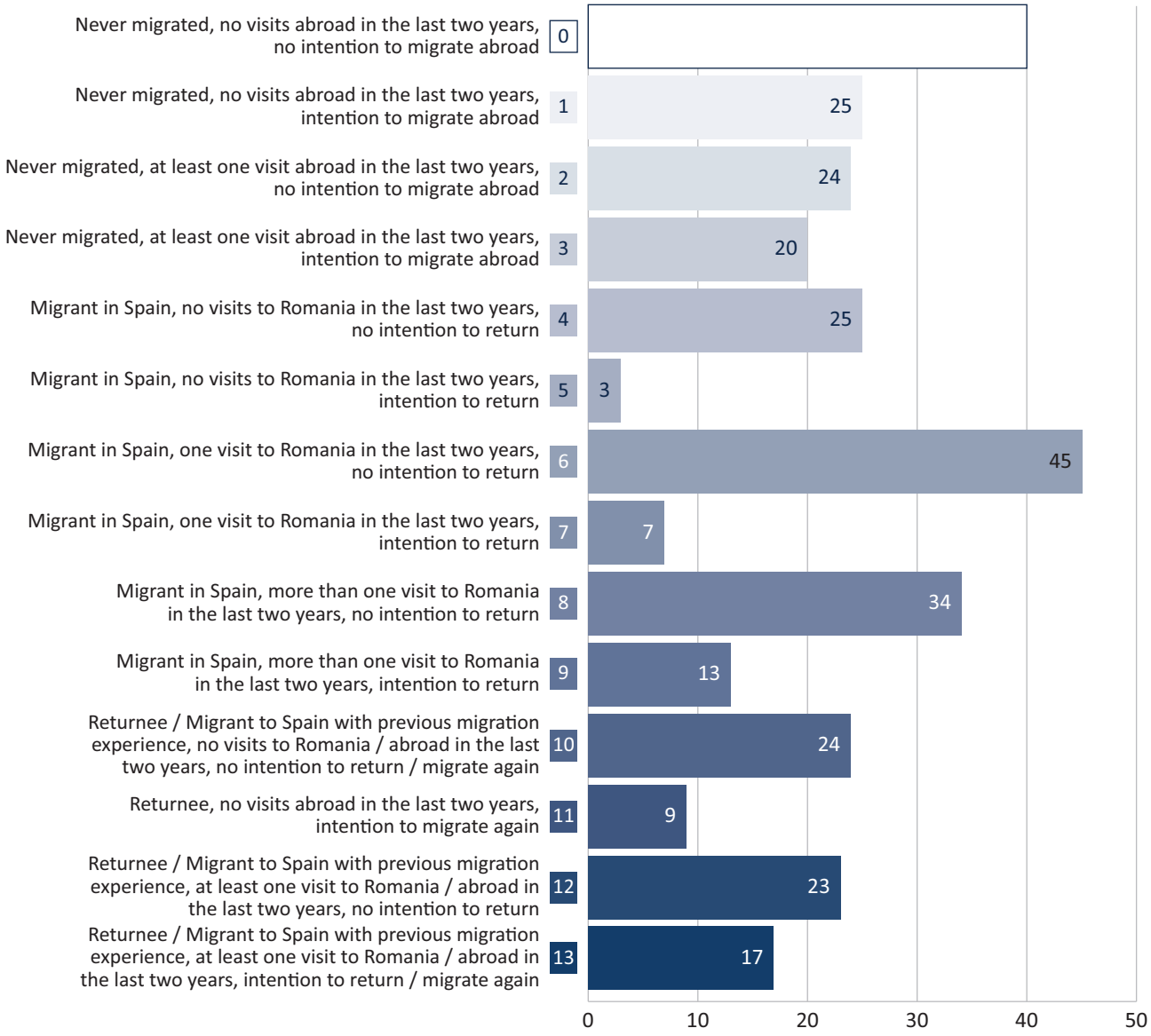

Figure 3. Distribution of cases on the fourteen-point international mobility scale (N = 303). Source: Lubbers and Molina (2016–2020).

for finding subsets of similar personal networks. Indeed, as Rong and Houser (2015) argue, studies analyzing the network environment in which individual decisions are made (here, mobility decisions and behavior) can benefit from clustering methods, as it is difficult to specify a priori the complex behavioral rules that are often behind these patterns. Although there are a number of clustering methods, not all of them are suitable for our data. For example, the increasingly popular stochastic modelling method is a very complex form of analysis applicable mainly to sociocentric data (Vacca, 2020). One of the best established and simplest procedures is K-means clustering, which in addition has proved to be efficient for the analysis of a set of personal networks (see, e.g., Lubbers et al., 2007; Vassilev et al., 2016). The basic idea behind K-means clustering is the grouping of objects (here, personal networks) into K predefined subgroups (here, network profiles) by minimizing the distances between the data and the corresponding cluster centroid (arithmetic mean of all the data points that belong to that cluster; see Yang et al., 2010). We conducted this analysis using SPSS version 23 (SPSS software, IBM Corp.), based on the following six network characteristics:

1. *Percentage of alters with current and/previous migration experience*: This variable measures the percentage of alters who are currently migrants or have past migration experience in any country outside their country of origin. This measure indicates the level of migratory capital in the respondent's network (the higher the proportion of these alters, the higher the level of migratory capital). In contrast to the majority of studies concentrating on the people's own migration experience, we address the role of the migration trajectory of

network members—a neglected issue in research—and explore its cumulative association with an individual's international mobility. One of the exceptions is a study by Herz et al. (2019, p. 102) revealing the positive effect of network members with experience abroad on the probability of engaging in future mobility and claiming that these members are a "ticket to move."

2. *Percentage of the transnational family*: This variable measures the percentage of alters who are family members living in a country other than ego's country of residence.
3. *Percentage of transnational friends and acquaintances*: This variable measures the percentage of non-kin alters living in a country other than ego's country of residence. We pay special attention to the type of relationship with network members, especially transnational ones, as they are usually seen as one of the most important drivers of international mobility. From a data availability standpoint, the analysis of family ties is predominant, while there is still a lack of clarity concerning the role of friendship ties in the mobility patterns. In many studies, the importance of non-family ties is stressed without actual verification. Some of the studies that take ties of friendship and acquaintance into account focus on a specific point in the migration process and analyze the intention to move in the future (e.g., Epstein & Gang, 2006; Herz et al., 2019; Palloni et al., 2001), while comparative studies that give an account of the different degrees of importance given to non-family ties across the whole (im)mobility process are scarce. In particular, insights into the relevance of these ties to immobility are missing.
4. *Percentage of alters residing in the transnational social field*: This variable measures the percentage of alters living in either the region of Castelló or Dâmbovița County. It records the proportion of alters in the space of interaction within the delimited TSF.
5. *Average emotional proximity of transnational ties with ego*: This variable records the mean emotional closeness between ego and his or her alters (family and/or friends/others) living in a country other than ego's country of residence. The emotional closeness of each alter was assessed by means of the following question: How close do you feel toward this person (emotionally)? The scale ranges from 1 (*not close at all*) to 4 (*very close*).
6. *Average emotional proximity of local ties with ego*: Like the previous variable, this variable measures the mean emotional closeness of ego to his or her local ties (i.e., having the same country of residence as ego). According to previous studies (e.g., Hosnedlová, 2014), comparing the quality of one's personal environment in the local situation with the transnational situation can help one achieve a more meaningful understanding of the drivers of international mobility.

As the procedure relies on Euclidean distances, all variables were standardized. The analysis was performed on 268 cases (out of 303), after removing outliers and cases with missing data on one or more network characteristics. Having examined three-, four-, five-, six- and seven-cluster solutions, we selected the five-cluster solution, which reached the lowest maximum number of iterations, was most easily interpretable and had the best proportional distribution of cases in each cluster. These five clusters represent five personal network profiles, named and described as follows:

1. The "transnational friendship network, with average migratory capital" (N = 51) is the type of network with the highest proportion of transnational friendship (28%), a low percentage of transnational family ties (13.5%), an average proportion of alters with migratory trajectories (59%) and relatively strong local ties.
2. The "transnational network based on strong ties, with average migratory capital" (N = 65) is characterized by strong local and transnational ties, with a high proportion of transnational family members (29%), but a low proportion of transnational friends (6%) and an average proportion of alters with migratory experience (60%).
3. The "network embedded in the TSF, with high migratory capital" (N = 53) is the type of network with the highest proportion of alters with migratory experience (72%), i.e., high levels of migratory capital, where most alters live in Castelló or in Dâmbovița (90%), and where transnational ties are strong and local ties are weak.
4. The "network extending the TSF, based on weak ties, with average migratory capital" (N = 40) has the highest proportion of transnational alters (44%), but with the lowest proportion of alters within the TSF (one third on average live beyond Castelló and Dâmbovița); furthermore, the transnational alters are of weak emotional proximity.
5. The "local network with low migratory capital" (N = 59) consists of a relatively low proportion of alters with current or previous migration experience (only 24%), a very low proportion of transnational alters (7.5% of transnational family members and 7% of transnational friendship ties) and a relatively low proportion of alters within the TSF, but strong relationships with local alters.

3.2.3. Structural Measures

To analyze the structural embeddedness of an individual in the TSF, two centrality measures that indicate the level of intermediation capacity have been used, calculated

using UCINET 6 for Windows (Borgatti et al., 2002): ego betweenness and brokerage:

1. Ego betweenness is calculated as the sum of the proportion of times ego lies on the shortest path between each pair of alters. If two alters are connected, the contribution to the ego betweenness of this pair is 0. If two alters are connected only through ego, then the contribution is 1 (Hanneman & Riddle, 2005).
2. Brokerage is calculated as the number of times ego lies on the shortest path between two other actors in the TSF.

The rationale for using ego betweenness and brokerage (from UCINET) in the analysis is that the former allows ego's level of embeddedness among his or her alters in the TSF to be measured, while in the latter it is ego's capacity to mediate between different regions of the whole network that is of interest. This latter capacity is related to our theoretical goal of having to take into account not just mobility but also those who are immobile and less connected to the TSF.

4. Results

4.1. Migratory Capital and Individual Mobility

To discover if there is a relationship between the international mobility scale and the profile of the personal network, we ran a non-parametric test, the Kruskal-Wallis test, since the "international mobility scale" does not have a normal distribution (see Figure 3). The result shows a statistically significant association between these two variables ($H(4) = 38.3$, $p < 0.001$), with the largest mean ranking on the international mobility scale (167.96) for individuals with the profile of belonging to a network embedded in the TSF, with high migratory capital. Conversely, individuals belonging to a local network with low migratory capital have the smallest mean mobility ranking (85.33). To evaluate how individuals with different network profiles differed from one another in their degree of mobility, we ran the Mann-Whitney U post hoc test. The post hoc tests indicate that the central tendency of the international mobility scores of individuals with the profile "local network with low migratory capital" differs significantly from all other network profiles. The profile situated on the other side of the scale ("network embedded in the TSF, with high migratory capital") also differs significantly from the other profiles, except for the profile of the "transnational friendship network, with average migratory capital." Figure 4 shows the comparison of all pairs of network profiles.

These findings can be interpreted as follows. First, the amount of migratory capital is associated with different levels of transnational mobility. More precisely, the higher the mobility score, the greater the presence of migratory capital. This is shown in Figure 5, where the network profiles are ordered by mean international mobility, from the highest to the lowest. Second, the results also suggest which type of ties play an important role in international mobility. Comparing the average international mobility of the three network profiles with similar levels of migratory capital (those with average migratory capital), it seems that friendship ties are a pull factor in networks that are less constrained by family obligations. However, we also observe that people with lower mobility have more ties outside the TSF. More precisely, individuals with "transnational friendship networks, with average migratory capital" scored on average 6.8 points on the fourteen-point scale, compared to 5.4 points on average for the individuals with a "network extending the TSF, based on weak ties, and with average migratory capital," a difference that is statistically significant. This is an interesting observation that deserves more attention. We explore this through a comparative analysis of two extreme cases (those of Gabriel and Iulian—pseudonyms).

Network profile / **Mean rank of network profile**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
(1) Network embedded in the TSF, with high migratory capital / **167.96**					
(2) Transnational friendship network, with average migratory capital / **154.76**	⊘				
(3) Transnational network based on strong ties, with average migratory capital / **140.73**	✓	⊘			
(4) Network extending the TSF, based on weak ties, and with average migratory capital / **126.73**	✓	✓	⊘		
(5) Local network with low migratory capital / **85.33**	✓	✓	✓	✓	

Legend:

✓ A statistically significant difference ⊘ No statistically significant difference

Figure 4. Network profiles ordered by mean rank and the results of comparison between network profiles using the Mann-Whitney U test ($p < .05$). Source: Lubbers and Molina (2016–2020).

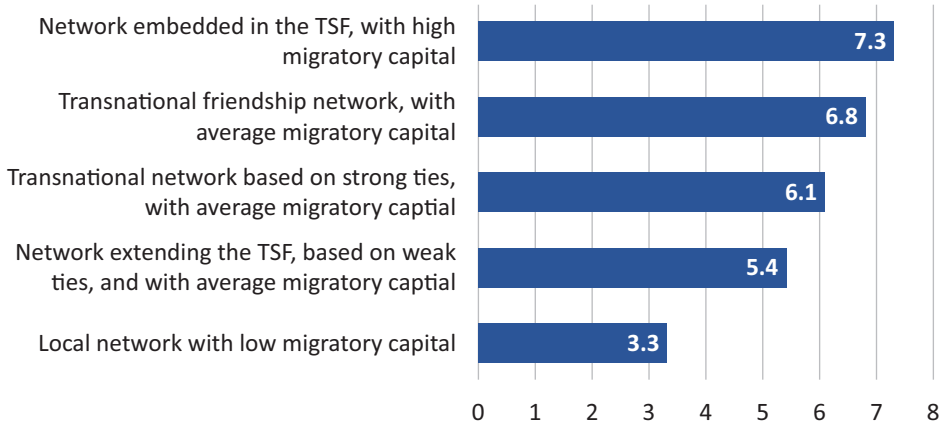

Figure 5. Average international mobility by network profile. Source: Lubbers and Molina (2016–2020).

4.2. Two Cases

We have selected two cases that are very similar in terms of their sociodemographic characteristics (sex, level of education, type of employment, family situation), for the sake of comparability. Although one is younger (Gabriel is 29 years old, Iulian 46), both men are of working age, both are married with children, and all the members of their immediate families are local. Both have completed secondary vocational school, and both are working as drivers. However, their international mobility patterns are very different. Gabriel lives in Castelló and has a highly mobile trajectory (with the highest score on our international mobility scale). His migration history started in 2000 when he was nine years old and moved from Romania to Castelló to join his parents. Later, he married a Romanian woman, and the couple returned to Romania. They had their first child, but things did not go very well there, and they decided to leave for Austria. After four years of residence there, they decided to leave, unable to adjust to Austria's climate or society. They returned to Romania, and in the summer of the same year moved to the same place in Spain where they had lived before. When the interview took place, the couple had three children and were still considering returning to Romania in the future. This case is a clear example of multiple migrations. By contrast, Iulian can be considered immobile. He scored 0 points on the international mobility scale. He has never been to Spain and has never considered moving abroad, even though several of his network members have lived in Italy, the UK, Belgium, and Castelló.

Also, they have different personal network profiles. Gabriel's network is transnational, based on strong ties, and with average migratory capital. His network has 29 ties. His transnational kinship accounts for 34% out of 29 ties and is represented by his distant relatives (in-laws and cousins) living in Romania and some in Austria. He considered all these network members emotionally very close and maintained contact on an almost daily basis with those living in Austria while communicating two or three times a year with those living in Romania. His transnational friendships, all living in the TSF, account for 21%. Communication with most of his transnational friends is infrequent. In contrast, he communicates very often with his family members (parents and spouse) and friends in Castelló. All the contacts in his network are of long duration (more than ten years), and all except one are of Romanian origin. That means that, when he migrated to Spain the second time, he was immersed in the local "same-origin" network he had created in the past, his anchorage in the local host community being almost non-existent.

As for Iulian, he has the type of network that extends the TSF, being based on weak ties and average migratory capital. Compared to Gabriel, his network is relatively small (thirteen ties). While his local ties consist of the immediate family (one parent, one sibling, and one child) and four friendships of both short and long duration, his transnational ties consist of three friends from his childhood who now live in Castelló and three extended family members who live outside the TSF, in England and Italy. While he has daily communication with local members, his communication with his transnational contacts is very scarce (lower than Gabriel's). It seems that Gabriel's transnational network, being based on strong ties with frequent communication, allows and sustains this mobility. Conversely, the network with an important proportion of its contacts outside the TSF, which is not activated very often, as in Iulian's case, does not seem to encourage international mobility. Thus, we could hypothesize that international mobility is reduced because the individual is less embedded in the TSF and is therefore less exposed to the flows and circulation of knowledge, ideas, material, monetary resources, etc., and thus to the possibilities or opportunities for moving.

Before affirming or rejecting this explanation, it is necessary to explore in more detail the characteristics of the links with alters who reside outside the TSF. It should be remembered that there are two types of ties concerning the geographical location. The first type is located in a third country (that is, in a country other than Romania or Spain); the second type is located in Romania or Spain, but in a region other than Castelló or Dâmbovița.

We could hypothesize that most individuals who are less mobile and have a high proportion of ties outside the TSF are non-migrants or returnees who have most of these contacts in other regions in Romania. This would point to the explanation that these people have highly developed local social capital, and consequently, if they opt for mobility, this mobility would be more internal than international. However, our data do not support this argument, since in this type of network most contacts outside the TSF live in third countries (71% in contrast to 58% for the rest of the networks; see Table 1). Being based in third countries, they are a potential source of migratory capital for ego, but evidently, they do not always have a positive effect on international mobility.

This encourages the argument that immobile or less mobile individuals play a special role in the dynamics of the TSF and recalls the phenomenon of the interdependence between mobility and immobility that Glick-Schiller and Salazar (2013) claimed to exist. In the following analyses, we therefore go beyond the individual's direct personal ties to address his or her structural position in the TSF and to enhance this dichotomy between mobility and immobility as mutually constructed poles.

4.3. Structural Embeddedness and Migratory Capital

Figure 6 represents the 303 personal networks of the sampled individuals. The colored dots are the egos (respondents), the colors indicating the network profiles. The white dots are the egos' contacts (alters), and the lines between the dots represent the connections between the actors (ego-alter or alter-alter). Visually, we detect some clustering on the right hand of the graph, marked by the red nodes, but most people with similar network profiles are scattered over the network.

To interpret this figure, we performed a non-parametric analysis of the association between the network profile and two structural measures introduced previously: brokerage and ego betweenness. The Kruskal-Wallis test indicates a statistically significant association between the network profile and the two structural measures: $H(4) = 54.19$, $p < 0.001$ (brokerage) and $H(4) = 17.11$, $p = 0.002$ (ego betweenness; see the mean rank for each measure of each network profile in Table 2). Consequently, the structural position the respondent occupies in the transnational social field is correlated with the composition of his or her personal network, which is in turn associated with different mobility patterns.

More precisely, respondents belonging to networks with a high proportion of alters within the TSF (green nodes in Figure 6, type 3) and a great number of alters with migration experience have low levels of structural embeddedness on both measures, and they are also the most mobile ones. This indicates that migratory capital is associated with high mobility patterns. Besides, the low levels of structural embeddedness of highly mobile egos can be explained by the brokerage role of immobile egos who bridge mobile individuals between them. According to social network theories, and more precisely the work of Gould and Fernandez (1989), brokerage is described as the role played by a social actor who mediates contact between two alters in different contexts and in different localities. This is the case for Gabriel, for example, who is in direct contact with the respondents of varied networks, as well as with an important number of people whose networks are local with low migratory capital (see the red nodes in Figure 6) and who are the least mobile. Conversely, those respondents with networks with more contacts outside the TSF (see the violet nodes in Figure 6, type 4, like Iulian) have high degrees of structural embeddedness on both measures and are the second least mobile ones.

The high mean rank of both structural measures means that the respondent is mostly in relationships

Table 1. Differentiated means of ties by network profile (N = 268).

Network profile	Mean number ofties outside the TSF	Mean proportion ofties outside the TSF in a third country with respectto all ties beyond the TSF	Mean proportion ofties outside the TSF in a third country with respectto the network size
Network embedded in the TSF, with high migratory capital	1.3	60%	7%
Transnational friendship network, with average migratory capital	3.8	65%	12%
Transnational network based on strong ties, with average migratory capital	2.3	59%	10%
Network extending the TSF, based on weak ties, and with average migratory capital	6.8	71%	23%
Local network with low migratory capital	3.8	39%	8%
Total	*3.4*	*58%*	*11%*

Source: Lubbers and Molina (2016–2020).

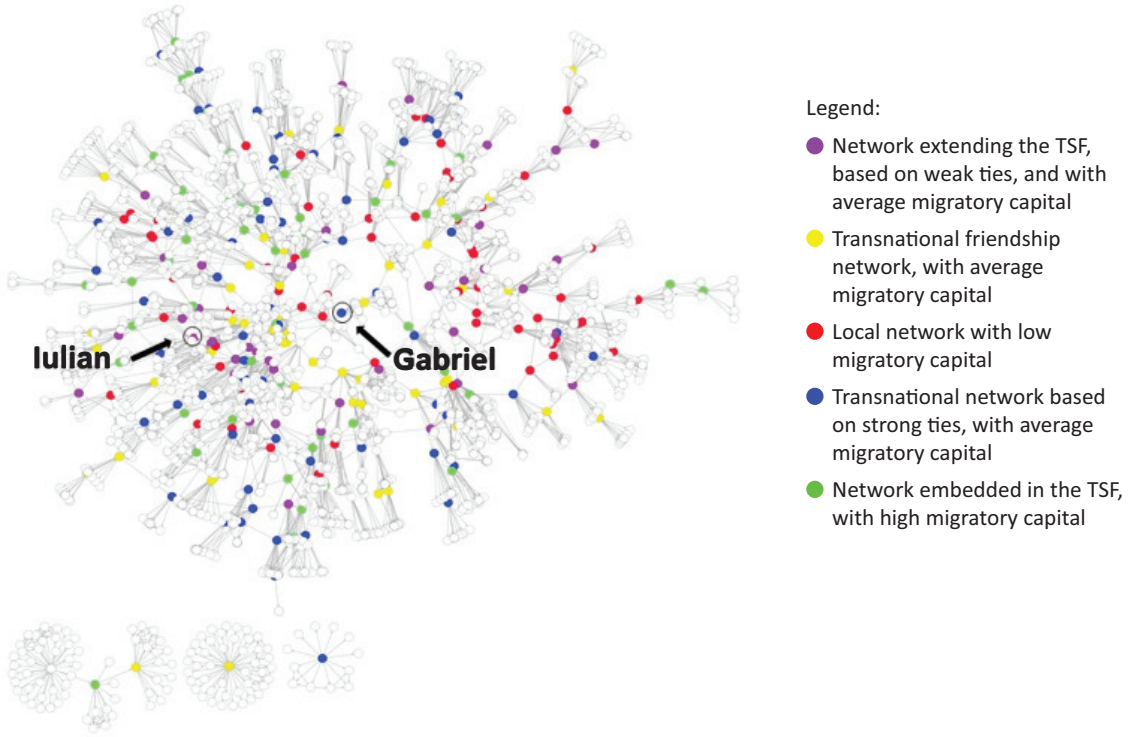

Figure 6. Visualization of the network of networks: example of TSF Castelló-Dâmbovița. Source: Lubbers and Molina (2016–2020). Notes: The egos are highlighted by their network profiles; the network profiles in the legend are ordered by the mean rank of structural measures from higher to lower. Visualization made in Visone, version 2.17 (Brandes & Wagner, 2017).

with people with the same or very similar network characteristics (see the violet and red nodes around Iulian in Figure 6), that is, with people in the two types of networks with the lowest scores on the international mobility scale. Hence, it could be presumed that this respondent is less exposed to migratory capital than the others, who are connected directly to individuals with more varied networks. Also, it can be expected that these immobile or less mobile respondents who have a high capacity for intermediation are more constrained in terms of international mobility and could exercise a special role in the TSF. For instance, some scholars have already pointed out that some family members remain immobile, as they must take care of aging parents or assume responsibility for the continuity of the family business (see, e.g., Dahinden, 2010). Nonetheless, the reason could also lie in the lack of motivation or comfort due to the inflow of remittances in money or kind. Interestingly, our data reveal that those with a "network extending the TSF, based on weak ties, and with average migratory capital" are most likely to receive remittances from the family abroad. In reverse, those with "networks embedded in the TSF, with high migratory capital," are less likely to receive financial remittances but most likely to send

Table 2. Mean ranks for different network profiles on two structural measures.

Network profile	N	Brokerage (Mean rank)	Ego Betweenness (Mean rank)
Network extending the TSF, based on weak ties, and with average migratory capital	40	177.85	160.46
Transnational friendship network, with average migratory capital	49	172.10	150.38
Local network with low migratory capital	59	140.88	140.25
Transnational network based on strong ties, with average migratory capital	65	105.71	117.98
Network embedded in the TSF, with high migratory capital	52	86.83	106.05
Total	*265*		

Source: Lubbers and Molina (2016–2020).

them. However, going into more detail about these roles and reasons for (im)mobility would imply a more qualitative approach that goes beyond the remit of this article.

5. Conclusion

In this article, we have examined the relationship between the international mobility patterns and personal networks of Romanian migrants, non-migrants and returnees within a TSF linking Spain and Romania. We have emphasized the proportion of migratory capital in personal networks and its association with (im)mobility. Moreover, we have explored their interdependencies with the degree of structural embeddedness in the TSF.

Our results reveal the positive association between migratory capital and individuals' international mobility, but they also show that a connection to a non-mobile core is also necessary. This confirms the argument of earlier studies that mobility and immobility are complementary, as one cannot exist without the other (e.g., Glick-Schiller & Salazar, 2013). In addition, we have seen that immobility and mobility are strongly related to the composition of personal networks, which in turn is linked to the structure of the TSF. Thus, not only is the immediate social environment important for mobility patterns, so is how this immediate social environment is embedded in the wider social setting. Thus, an assessment of the overall composition of TSFs and the individual's degree of structural embeddedness in it are necessary for a better understanding of international mobility and immobility.

Another important finding is that not all conveyors of migratory capital are positively associated with international mobility patterns. Although a more profound analysis is needed of this aspect, our data suggest that the effect of migratory capital on mobility depends on the type of ego's structural embeddedness in the TSF. More specifically, a high proportion of ties of kinship and friendship outside a TSF are negatively correlated with international mobility. Furthermore, those respondents with a high proportion of ties outside the TSF (of whom the majority reside in a third country, being migrants themselves) have the highest levels of ego betweenness and brokerage scores, and are the second least mobile. Together, these associations suggest that mobile people create and maintain ties that are mostly local to their places of origin and residence, which may be structurally more redundant. These outcomes represent what we call the "paradox of migratory capital," calling into question some studies whose analyses assume that having contacts abroad always has a positive impact on international mobility.

It should not be forgotten that TSFs are "hard-to-count" or "hard-to-find" populations for which there is no sampling frame. This hinders assessment of the sample's representativeness. For this reason, we have used respondent-driven sampling methodologies, which can approach unbiased samples (Heckathorn, 1997), employing a variant of link-tracing network sampling. Hence, much more research is necessary in this field, replicating the same study to compare and advance the obtained results.

In this article, quantitative methods have been prioritized. However, triangulation with more qualitative empirical material could help to shed more light on the functionality of different ties to improve understanding of the role of network members who reside outside the migration corridor or TSF in mobility processes. Also, future research could examine the influence of the previous and current migration experiences of network members separately. As underlined by Herz et al. (2019), very little is known about the role of returnees in future mobility. In addition, it could be helpful to consider the time of migration experience of network members.

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Conflict of Interests

The authors declare no conflict of interests.

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