Social Indicators Research
https://doi.org/10.1007/s11205-025-03554-5

ORIGINAL RESEARCH

Space-Sets: Introducing and Testing a Multi-dimensional Measure of Individual Transnational Mobility

Ettore Recchi[1,2]

Accepted: 9 February 2025

Abstract
Existing research on the transnational mobility of individuals tends to rely on limited and possibly misleading indicators. Arguing that mobility experiences are in fact multidimensional and cumulative over the course of a lifetime, this paper proposes a novel concept called 'space-set' and applies it to representative samples of the population in France, Germany and Italy (ELIPSS, GP.pop and Doxa surveys). A space-set is defined as the collection of each person's geographical places known through first-hand experience. In a transnational perspective, its key dimensions are Size (the number of countries visited), Width (the farthest distance traveled), and Focus (being emotionally attached or not to more than one country). This new indicator measures individual-level inequalities of geographical mobility. As a proof of concept, the empirical part of the paper uses space-sets to address two research questions that loom large in different strands of the literature on social transnationalism: on the one hand, the social stratification of cross-border travel, on the other the association between transnational mobility and supranational orientations (i.e., cosmopolitan and pro-EU attitudes). Results confirm that space-sets are socially stratified by both class and education, and that larger, wider, and more transnationally oriented space-sets are associated with supranational orientations. Comparatively, all dimensions of space-sets are stronger in the German population than in their French and Italian counterparts.

Keywords Transnationalism · Mobility · Inequalities · Europe

1 Introduction

At the beginning of the twenty-first century, the average Western European travels ten times as far as their great-grandparents did on the eve of World War I—about 18,000 km per year in the 2010s (Bigo, 2020: 184, using French data). The part of these movements that crossed national borders was subject to an uninterrupted increase from the 1960s until the Covid-19 pandemic of 2020, after which it may have resumed its growth path (Deutschmann, 2021).

✉ Ettore Recchi
ettore.recchi@sciencespo.fr

1 Sciences Po, CRIS, CNRS, Paris, France

2 Migration Policy Centre, European University Institute, Florence, Italy

However, our quantitative knowledge of transnational mobilities has a major limitation: it comes almost exclusively from macro data, i.e. aggregated statistics produced by national or intergovernmental organizations, as well as private companies collecting information for the travel and tourism industry (Gygli et al., 2019; Recchi et al., 2019; Deutschmann et al., 2022). This leaves open the question of the sociological underpinnings of a major trend that has become a defining feature of our time, with enormous cultural, economic and environmental implications.

In particular, in a historically unprecedented mobile world, there is surprisingly little systematic evidence on the social differentiation of human mobility practices. It is true that a basic distinction between 'movers' and 'stayers' is an implicit foundation of migration studies (Hammar & Tamas, 1997; Schewel, 2020). Similarly, Zygmunt Bauman (1996) introduced a popular but empirically unsupported typology of 'tourists' vs. 'vagabonds' as icons of late modernity. However, these distinctions polarize what is in fact a continuum and do not do justice to the variety and articulation of travel experiences that characterize individual lives. This paper proposes a novel notion called 'space-set' and applies it—as a proof of concept—to the study of the transnational mobility of the populations of France, Germany and Italy, relying on representative sample surveys. In a nutshell, this new indicator measures individual-level inequalities of transnational geographical mobility.

Quantitative research has explored the relevance of travel as a stratifying variable in the form of transnational capital (e.g., Gerhards et al., 2017). Other scholars have emphasized the impact of transnational mobility on worldviews (e.g., Kuhn, 2015). However, the literature tends to focus on poor and possibly misleading indicators, most commonly limited to recent spatial movements (e.g., 'In the past 12 months have you visited another EU country?', Eurobarometer 65.1; on the difficulty of capturing individual-level long-distance mobility: Mattioli & Adeel, 2021). The space-set approach proposes a more complex view, taking into account three dimensions of actual transnational mobility with a lifelong perspective, including all biographical experiences of travel.

The paper is structured as follows. The first section illustrates the space-set concept, its analytical dimensions, and its roots in different literatures. Drawing on existing quantitative studies, it also outlines two major research questions that the space-set approach can address more systematically: namely, the social stratification of geographical mobility and the link between transnational mobility and supranational orientations (i.e., cosmopolitan and pro-EU attitudes). The second section describes the data used to apply the approach in France, Germany, and Italy. The third section presents empirical results on the social stratification of space-sets in the three countries and their associations with several indicators of supra-national orientations. The final section summarizes the findings, discusses limitations and possible avenues for advancing a research agenda on the social differentiation of transnational mobility.

2 Background

2.1 Space-Sets: The Concept and Its Antecedents

Among the many dimensions that differentiate and stratify individuals is their mobility across places. In common parlance, people are more or less 'well-traveled'. Social stratification research, however, tends to downplay individuals' spatial mobility as a relevant source of access to opportunities and thus social differentiation (Savage, 1988). This is unfortunate

given some prominent classical antecedents—like Georg Simmel's emphasis on the spatial anchorage of social configurations and the Chicago School's attention to the territoriality of social organization (Simmel, 1908; on the Chicago School, Abbott, 2017; see also Gieryn, 2000; Löw, 2016; Recchi & Flipo, 2019). The initiator of social mobility research, Pitirim Sorokin, observed that 'in Western contemporary societies […] a greater and greater number of individuals change the place of their abode; the number of such changes is increasing more and more; and the spatial distance crossed by the individuals during their life becomes greater and greater' (Sorokin, 1927: 382)—with ramifications on social stratification. These positions have been recognized as foundational and inspirational by the so-called 'new mobility paradigm' (Sheller, 2017; Urry, 2004, 2007, 2010). However, quantitative studies of actual micro-level mobility experiences have not been the primary focus of Urry and colleagues (for a qualitative exception, see Elliott & Urry, 2010).

Not surprisingly, individual mobility as an object of study has gained more traction in geography. Conceptually, Tuan (1977) and Moles and Rohmer (1972) argue for the spatiality of individual identities, whereby people are constituted and differentiated according to their own experiences of mobility in space. With a greater sensitivity to social stratification, other geographers elaborate on the notion of 'spatial capital' as a complement to Bourdieu's famous three capitals—economic, cultural and social (Lévy, 1994; Cailly, 2007; for a more general discussion, Belton Chevallier et al., 2019). In this vein, a seminal paper building on Amartya Sen's (1993) framework for inequality research considers the ability to be mobile ('motility') as an emerging dimension of geographically based social differentiation, insofar as mobility opens up the range of achievable life chances (Kaufmann et al., 2004).

Drawing on these literatures, the notion of 'space-set' is introduced to refer to the array of geographical locations in which individuals unfold their social existence (Recchi, 2013; Recchi & Kuhn, 2013; Recchi, 2015: 150–153; Recchi, 2016). The term is derived from the notions of 'status set' (set of positions) and 'role set' (set of social roles) coined by Robert K. Merton to denote the complex of statuses and roles that individuals assume and possess in the course of their lives (Merton, 1968: 422). From an operational point of view, it also draws on Torsten Hägerstrand's 'time geography' (Lenntorp, 1999; Pred, 1984). The latter, in turn, is echoed in the study of 'lived spaces' or 'life spaces' used at the intersection of French geography and demography (Courgeau, 1985, 2021; Cristofoli & Guérin-Pace, 2014; Di Méo, 1990; Frémont, 1974; Guérin-Pace et al., 2003).

However, these approaches focus on the spatial environments of everyday life and routines. Little or no attention is paid to places experienced through *past* movements. This is a major limitation in a world where mobility has expanded tremendously and permeates most people's biographies in a cumulative way (Cresswell, 2006). Evidence in this regard is limited, especially from a comparative perspective. A pioneering study estimates that more than half of the German population has some links with people living in another country as a result of previous personal mobility (Mau, 2010). Similarly, a six-country European study finds that at least 40 percent of the population regularly communicates with family or friends abroad, and at least a quarter (but 72 percent in Denmark and 62 percent in Germany) has traveled to another EU member state in the previous 24 months in the 2010s (Salamonska & Recchi, 2019: 69). However, these empirical results are punctual and miss the cumulative dimension of mobilities in people's biographies. In fact, space-sets provide a lifelong perspective on individual mobilities.

2.2 Dimensions of Space-Sets

A space-set is each person's map of geographical places known and remembered through first-hand experience. This concept brings together and treats mobilities that have traditionally been analyzed separately in different literatures—such as residential mobility, tourism, and migration—but without categorizing them. In this respect, the space-set approach resonates with the plea for the 'demigranticization' of migration studies (Dahinden, 2016), which ultimately leads to an emphasis on mobility experiences per se, detached from ready-made political and social classifications (Mazzucato, 2024). In the study of space-sets, all sorts of typification of human mobilities—as assigned by external authorities on the basis of categorizations of mobile people and events—are discarded in order to understand them as experiences of spatial movements that constitute an individual's territorial 'lifeworld' (sensu Schütz, 1970). Ultimately, the notion of space-set relies on a phenomenological positioning on social life. What counts are the agent's memories of the places they have navigated. Space-sets are personal maps that emerge from the memory of mobility experiences of individuals over the course of their lives.[1]

For analytical purposes, space-sets can be parsimoniously conceived in the same way as network analysis traditionally describes ego-centered networks (Perry et al., 2018; Scott, 2017), but where knots are not other agents but places. Similar to network analysis, three main dimensions of spatial sets are highlighted: Size, Width, and Focus (Fig. 1). *Size* is an objective measure: it counts the number of meaningful places that Ego remembers having visited in their life. The scale of measurement can be more or less fine-grained: neighborhood, city, region, state, and so on. In this paper it will be referred to as 'countries'. *Width* captures information about the geographic extent of space-sets. Operationally, it is measured as the distance between the subjectively defined center of the space-set and its most distant point. It can be expressed in various units of measurement: kilometers, miles, or travel time. In this paper, it will refer to the distance between countries in kilometers. *Focus* is a subjectively chosen point that corresponds to the most significant place(s) for Ego. Different parts of a space-set can be ranked according to the intensity of the connections individuals have with each of them: for example, the place where Ego lives or grew up is often a paramount spatial magnet of emotional attachment. Theoretically, the focus dimension can be articulated in several ways. For example, previous work has operationalized it as the preferred level of subjective attachment (city, region, nation, etc.) (Recchi et al., 2021). In this paper, focus is treated as a dichotomous variable, distinguishing between a subjective spatial attachment to either the country of residence or a plurality of countries (two or more)—indicating a national or transnational focus.[2]

[1] While research on 'mental maps' (Gould and White, 1986; see also Zerubavel, 1997) is certainly an inspiration of the space-set concept, it should not be confused with it as the latter emphasizes the recollection of actual experiences of places, not the imagination of geographical configurations of the world.

[2] Conceptually, space-sets can also be classified according to the *duration* of personal experiences in different places. Elsewhere, three levels of space-sets have been outlined: cognitive, experiential, and residential space-sets (Recchi et al., 2021). The first includes all places visited and for which Ego retains a memory based on even an ephemeral journey (e.g., a one-day trip); the second, all places where Ego has stayed for a minimum number of consecutive days (e.g., one week, given the importance of the week as a standard in the distribution of social time); the third, all places where Ego has settled for a longer period of time (e.g., at least three consecutive months, as is typical of an internship or work assignment). This paper is concerned with the most comprehensive transnational configuration of space sets – that is, a space-set that includes all countries ever visited and remembered, regardless of the length of stay at the destination. Still another analytical dimension could be the *heterogeneity* of places visited (in cultural or structural terms). I thank an anonymous reviewer for suggesting this possible additional indicator.

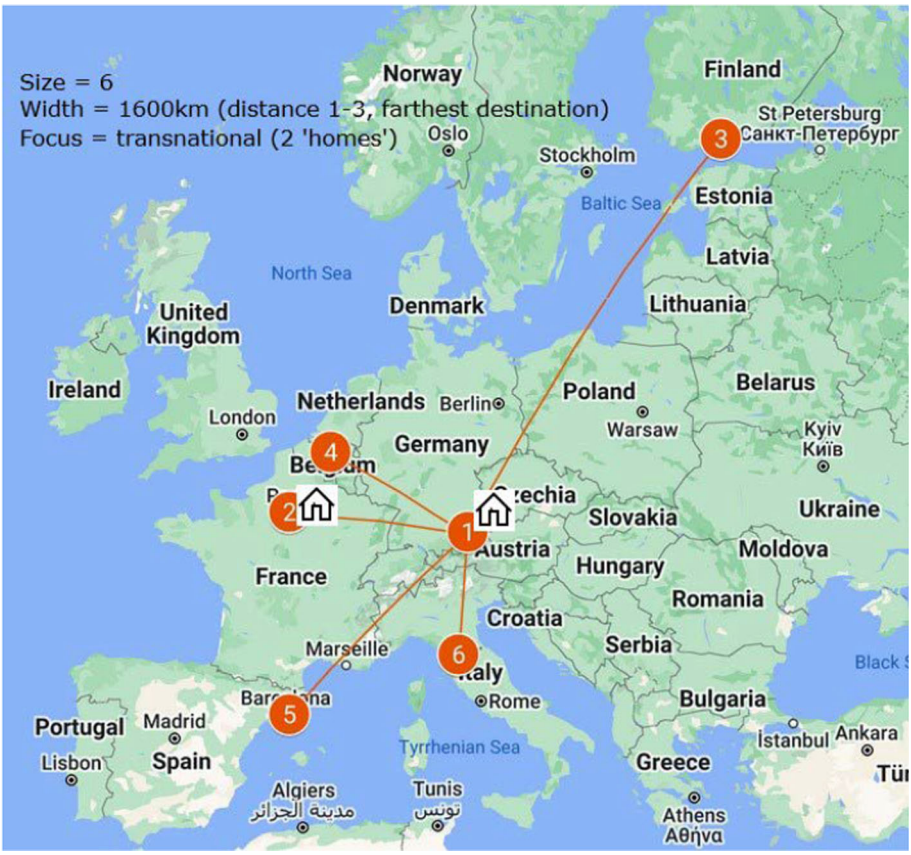

Fig. 1 Size, Width and Focus: Three analytical dimensions of transnational space-sets (fictitious example). *Source*: Own elaboration of the author

2.3 Leveraging Space-Sets for Empirical Research: Two Applications

To illustrate the usefulness of the concept for different strands of research, the rest of the paper employs the space-set notion to address two descriptive research questions that loom large in two relatively separate areas of the literature on social transnationalism: the stratification of transnational mobility, and the association between personal experiences of cross-border travel and supranational orientations. Indeed, several studies suggest that transnational mobility experiences can have transformative effects on individuals in two distinct ways—in terms of resource accumulation and worldview formation.[3]

First, individuals may retain transnational human capital from their previous mobilities: foreign language knowledge, habitus, and non-cognitive skills that are difficult to acquire out of context (Andreotti et al., 2013; Carlson et al., 2017; Diez Medrano, 2016; Gerhards & Hans, 2013; Wagner, 2007). Being 'well-traveled' and transnationally connected opens up socioeconomic opportunities that are unavailable to more localized individuals, and can be

[3] Occasionally, the literature links the two issues. In particular, Fligstein's (2008) core argument in *Euroclash* is predicated on the social stratification of support for the EU stemming from the social stratification of transnational resources among Europeans.

played out in a variety of markets. In a Bourdieusian perspective, transnational mobilities add up to an abundance of resources that facilitate the social reproduction of privilege (Bourdieu, 1973; Coulangeon & Lemel, 2009). This leads to the first research question:

RQ1. Are the transnational size, width and focus of space-sets aligned with the social stratification of the population by economic and cultural capital?

Second, transnational mobility can be transformative for value orientations: in line with an original intuition by Simmel (1908: 685–7), life experiences in different spatial contexts are expected to foster a sense of supranational belonging and cosmopolitanism (Mau et al., 2008; Rother & Nebe, 2009; Kuhn, 2015; Recchi, 2015; Favell & Reimer, 2021; Lopez Berengueres, 2022). Empirically, this idea has been studied mainly in relation to support for European integration (Fligstein, 2008), thus testing Karl Deutsch's 'transactional thesis' on supranational communities (Deutsch, 1960). However, the indicators used to test this theory are usually short-hand proxies, such as 'having traveled abroad in the last 12 months' or 'being in touch with someone who lives in another country' (Salamonska & Recchi, 2019). The point is that a more detailed mapping of actual mobility experiences is hardly available in sufficiently large representative samples of the population. The space-set toolkit can fill this gap. This leads to the second research question:

RQ2. Are the transnational size, width and focus of space-sets associated with a stronger supranational orientation of individual attitudes (in the European case, support for the EU)?

3 Data and Variables

Data on space-sets were collected in three separate but consistent surveys in Italy, France and Germany. The same conceptual framework was applied to all of them, with only slight divergences in operationalization and implementation that are not expected to yield major differences in outcomes. For analytical convenience, a single integrated Three Country Space-Set Dataset was created, including all variables that could be harmonized and are used in this paper.

Temporally, the first survey was conducted in Italy as a module (called 'Mobilità') of the Doxa Institute's permanent online panel of Italian residents (www.bva-doxa.com). Respondents were selected from the panel to be representative of the population in terms of age, gender and education (N = 1,004). Fieldwork was conducted between October and December 2015.

The French survey was designed in parallel and fielded in February 2016 as a module of the ELIPSS longitudinal survey entitled 'Mobilités et rapport à l'espace dans le cycle de vie (Mobilités)', managed by the Centre des Données Socio-Politiques (CDSP, Sciences Po Paris: https://cdsp.sciences-po.fr/en/projects/elipss-panel/). ELIPSS is a probability-based panel that was in its early stages at the time of this particular module. A general description of the panel can be found in Duwez and Merklé (2021). The Mobilités module had 700 respondents, which were subsequently weighted by age, sex and education in the descriptive analysis. The Italian and French surveys were conducted entirely online. The operationalizations of the variables used in this paper were fully equivalent. In particular, both surveys used a list of countries and a world map as a guide for selecting the countries visited by respondents.

The German survey was fielded in February-April 2018, as part of the GESIS Panel, now renamed the GESIS Panel Population Sample (GP.pop: https://www.gesis.org/en/gesis-panel/about-gesis-panel). A full description of GP.pop can be found in Bosnjak et al. (2018). The key module for this paper was designed in response to a public call and is entitled 'Space-sets:

scope and characteristics of mobility experiences', including space-set indicators already used in the Italian and French surveys. The final German dataset includes 4137 respondents.

Three particularities of the German survey are worth mentioning. First, GP.pop includes an offline component. To account for this, the multivariate models in the paper control for each mode of survey participation with a dummy variable (online or offline). The second difference is that the question about the size of space-sets was not supported by a map in GP.pop: respondents had to select the places they visited from lists of countries by continent. Arguably, if this methodological choice introduces an estimation bias, it should be downward: people with more choices (i.e., a list and a map, like in Italy and France) have an easier time remembering and indicating where they have been in the past. In fact, as we will see, the size of space-sets is definitely larger among German respondents, and thus the potential bias at worst reduces the already significantly higher travel experience declared by Germans. The third difference is in the way the question about the 'focus' of space-sets was formulated. While the Italian and French surveys asked which of the places previously listed by respondents were 'most familiar to you', possibly including subnational areas, the German survey asked: 'Is there a foreign country that is most important to you personally?' For the sake of data harmonization, the Italian and French open-ended responses were transformed into dummies (respondents mentioned only places in Italy or France or also places abroad: 'national' vs. 'transnational' focus, respectively) in order to harmonize them with the German indicator.

In this paper, the Focus of space-sets refers to respondents' identification of their most 'familiar/important' places, either exclusively in their country of residence or in a plurality of countries. The Size of space-sets is measured by the number of countries that respondents declare to have visited during their life, while Width corresponds to the farthest country ever visited. The distance for Width is measured in kilometers from the main airport of the country (Rome Fiumicino in Italy, Paris CDG in France, Frankfurt-am-Main in Germany).[4]

In all models, the main socio-demographic heterogeneities in the population are controlled for. *Age* is considered relevant in two opposing ways: on the one hand, because the passage of time means more opportunities to accumulate transnational mobility experiences; on the other, because younger generations tend to have better foreign language skills and may therefore be more inclined to travel. *Gender* differences can reflect life course constraints (especially motherhood) and prejudices that in more traditional societies would discourage women from traveling. I also control for having a *migrant background*—that is, either being born in another country or not being a citizen of the country of residence. Such information is available in the three countries as part of the sampling design. This may encourage a more transnational focus, but not necessarily a greater size or width of respondents' space sets. *Education* and *social class* are key to answering the question of a possible Bourdieusian 'homology' of space-sets with higher cultural and economic capital (Coulangeon & Lemel, 2009). Education is captured in four categories (primary/lower secondary, upper secondary, lower tertiary, and upper tertiary); class is operationalized using a five-category Erikson-Goldthorpe-Portocarero (EGP) classification (manual labor class: VI–VII; self-employed and lower middle class: IIIb–IV; blue-collar supervisors and upper middle class: V–IIIa; salariat and entrepreneurial class: I–II). I also include a control for *inactivity* as a sign of exclusion from the labor market that is not captured by social class. Finally, the models include two methodological dummies. *Having lived abroad* dichotomizes a short-hand measure of transnational mobility experience to test whether this simpler information is sufficient as

[4] This assumes that most long-distance trips are made by air and from major airports, which is not always the case; however, data do not include information on the mode of transport for each trip or the exact place of departure. Overall, departure from the main international airport of the country of residence is likely to be the predominant case for long-distance trips.

a driver of transnationalism, while having responded *offline* (for the German survey only) controls for the effect of this mode of survey participation, which signals a form of digital marginality.

In the second part of the analysis, space-set dimensions are used as predictors of supranational orientations, addressing RQ2. Four dependent variables derived from the three surveys (in Germany, the underlying questions were asked to the same respondent in different modules of GP.pop) are used as indicators of supranational orientations:

Anti-nationalism: 'Would you say you are proud to be German/French/Italian?' (five-point scale, *coded in reverse order*).

Anti-protectionism: 'In order to protect the German/French/Italian economy, the import of foreign products should be restricted' (five-point scale, *coded in reverse order*).

EU support: 'Do you think that Germany's/France's/Italy's membership of the European Union is a bad thing, a good thing or something in-between?' (dichotomized: bad/in-between vs good thing).

EU attachment: 'If the EU were to be dissolved tomorrow, would you feel sad/pretty sad vs. pretty happy/happy'. In Germany, the scale was analogous, but the question was a proxy: 'Should European integration continue or has it gone too far?' The variable was then dichotomized in the three countries (EU-attached vs. not attached).

Table 2 reports main summary statistics for all the variables used in the empirical analyses.

4 Findings

4.1 Space-Set Size, Width and Focus: Descriptive Evidence

What is the first-hand knowledge of the world out of one's country borders among Western Europeans? The size of space-sets tells us that the average number of countries visited by the French and Italians is about the same, between six and seven, while that of their German counterparts is twice as large: thirteen countries (Table 1). If we take the median, we find that half of Italians have visited no more than four countries, half of the French have visited five, and half of the Germans have visited twelve. There are 12.6 percent of Italians and 12.9 percent of French who have never been out of their country, compared to less than 1 percent of Germans. In short, Germans have traveled the world a lot more.

Table 1 Transnational size, width and focus of space-sets in Germany, France and Italy: descriptive statistics. *Source*: Three-Country Space-Set Dataset, N = 3998 (DE), 698 (FR), 1003 (IT)

	Germany			France			Italy		
	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD
Size	12	13.60	9.59	5	6.70	7.98	4	6.13	6.57
Width	6100	6093	4971	2217	4545	4411	1898	4113	4221
Focus	79.0%			23.7%			33.6%		

Size measures the number of countries ever visited, Width the highest travel distance in km, and Focus the proportion of respondents subjectively attached to (also) a country different from the one of residence

For the French and Italians, I can identify the countries that have been visited by a larger number of respondents (Fig. 2; individual-level country-specific data for Germany are not available for privacy reasons). Not surprisingly, these are in large part neighboring or nearby countries. More than 50 percent of respondents in Italy have been to Spain and France; approximately the same proportion of the French population has been to Spain and Italy. Most of the other Western European countries are known first-hand by 20–40 percent of each national

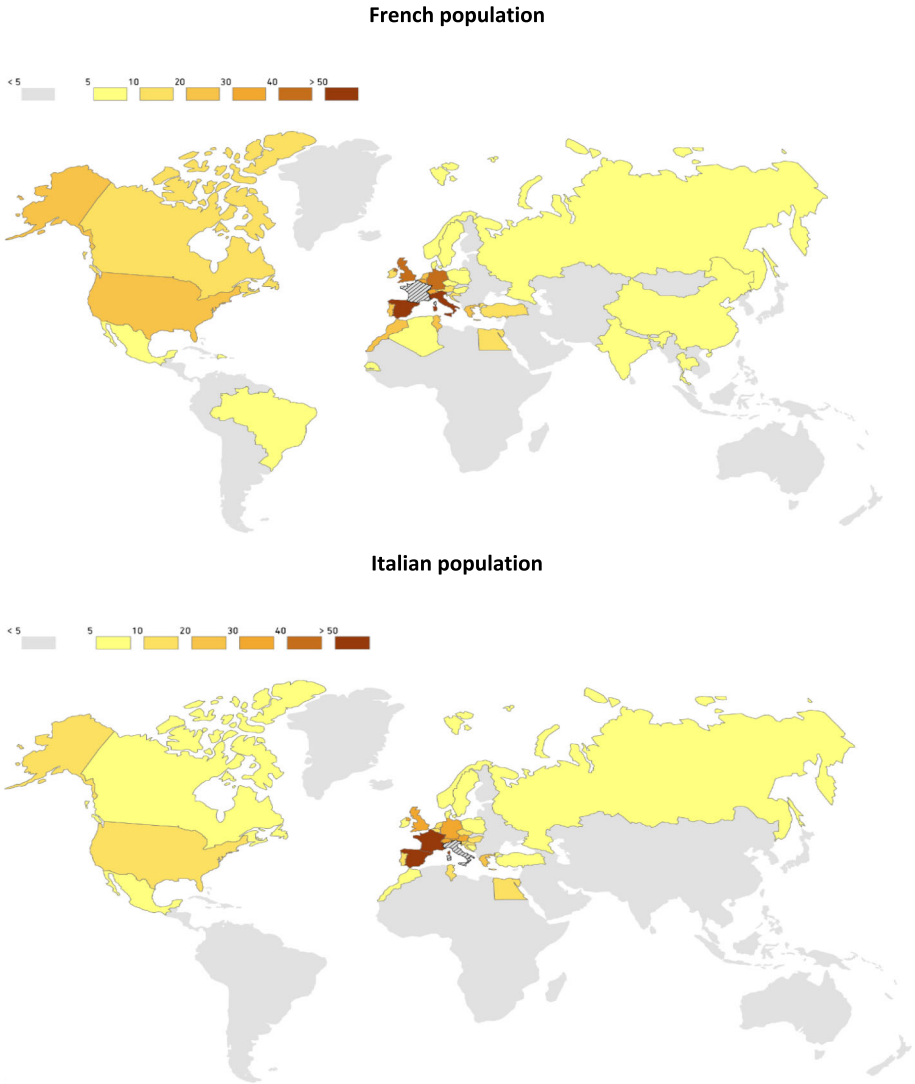

Fig. 2 World countries visited by more than 5 percent of French and Italian populations. *Sources*: Enquête Mobilités Elipss (N = 698, FR), Indagine Mobilità (N = 1003, IT). Reading: 5 to 10 percent of French respondents have been to Brazil or India; 10 to 20 percent to Canada or Egypt; 20 to 30 percent to the USA or Morocco; and so on. Note: an analogous figure cannot be drawn for Germany, as information about specific country visits are not released by the GESIS Panel for privacy reasons

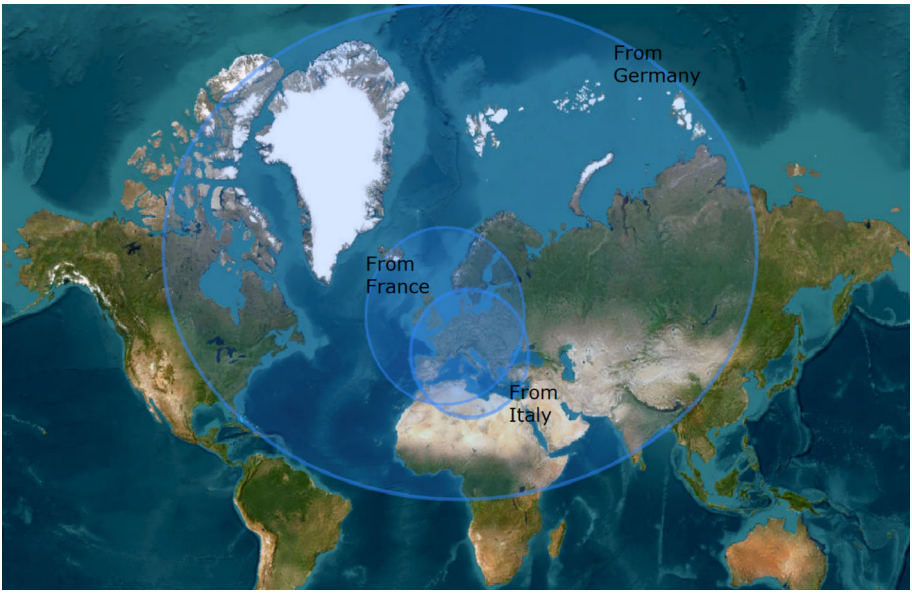

Fig. 3 Radius of potential farthest transnational travel among German, French and Italian residents. *Source*: Three-Country Space-Set Dataset, N = 3998 (DE), 698 (FR), 1003 (IT). Reading: the diameter of the 'bubbles' touches the farthest travel destination reachable with the median value of the space-set width of each population. Note: the map was drawn with www.maps.ie taking the main airport of the country as center

resident population (with slightly higher proportions among the French); Scandinavia and Central Eastern Europe are much less common destinations in the mobility biographies of the French and Italians. Italians are even less likely to have traveled to South America, Africa and East Asia (no country in these regions was visited by more than 5 percent of respondents). Overall, however, the size of space-sets is quite similar in France and Italy.

Such a pattern is repeated for the width of space-sets, that is, the farthest transnational distance traveled.[5] The median is around 2000 km for the French and Italians, and more than 6000 km for the Germans. Figure 3 is the result of plotting this median distance as a radius around a plausible center in each of our three countries, namely the international airport with the largest number of passengers (Paris CDG, Rome Fiumicino, and Frankfurt Airport). While this radius is not representative of respondents' actual destinations, it does indicate the potential reach of transnational mobility for each population. The farthest journeys of the average French and Italian residents do not go beyond European and North African destinations. In other words, since the radius is the median, half of the respondents never went beyond the area within each 'bubble'. The German bubble is much larger, extending to North America, the Caribbean, Central Africa, and Southeast Asia. At least some of these destinations are part of the mobility experience of half the German population.

However, this bird's eye view based on averages tells only part of the story. The fact that the mean of the size and width of space-sets in Germany is very similar to the median, unlike what is found in France and Italy, seems to suggest a more 'democratic' distribution

[5] Only international travel is considered in the analysis. This is particularly relevant for the French case, given the existence of national territories overseas which are as far as 16,800 km from Paris (Nouvelle Calédonie). The ELIPSS survey only includes residents of mainland France.

of transnational mobilities in the population (that is, the mean is not skewed upwards by a minority of extremely well-traveled respondents). Interestingly, yet, this is the result of a bimodal distribution of width, with one peak at around 1500 km and another between 8000 and 10,000 km. Nowhere is this bimodality more pronounced than for German residents, resulting in this unusual convergence of mean and median (Fig. 4, panel B). It may Reflect a split between those who limit their travel to Europe and those who venture to other continents. The overall distribution of space-set size is more similar across national cases (Fig. 4, panel A), corresponding to a typical power-law curve—many people have traveled to few countries, and few people have traveled to many countries (see Deutschmann, 2021: 142). As multivariate analyses will show in more detail, the space-set dimensions are consistent with existing research on specific modes of transport, which show marked social inequalities in transnational mobilities (Demoli & Subtil, 2019; Büchs & Mattioli, 2021; Craps, 2021; Demoli & Dobruszkes, 2024).

Finally, the gap between France and Italy on the one hand and Germany on the other is perhaps even more striking in subjective terms when measuring the transnational focus of space-sets. Almost four out of five Germans name at least one country other than Germany

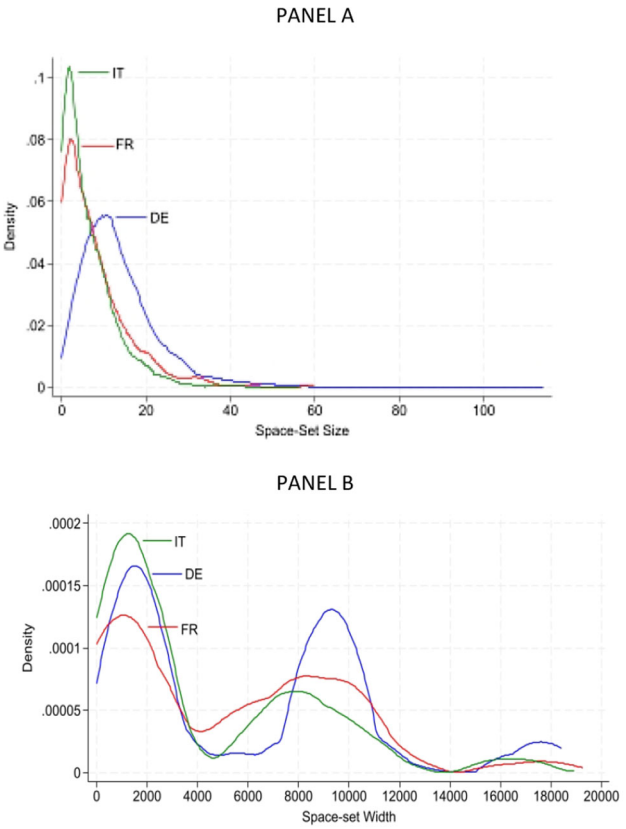

Fig. 4 Distribution of space-set size (panel A) and width (panel B) in the German, French and Italian populations (Kernel density). *Source*: Three-Country Space-Set Dataset, N = 3998 (DE), 698 (FR), 1003 (IT). Size consists of the number of countries visited, Width of the farthest distance traveled

that they know personally as being important to them. This is the case for only one in three Italians and one in four French. In other words, a sense of familiarity with a foreign country is the exception rather than the rule in France and Italy. This evidence is consistent with the objective difference in the size and width of the space-sets in the three countries, but it adds a subjective meaning—more travel gets under the skin and expands the scope of territorial attachments.

4.2 Heterogeneities in Space-Sets

Space-sets vary considerably across individuals. Although they are not completely unrelated, the three dimensions of space-sets outlined in this paper speak to different facets of mobility experiences. It is worthwhile to examine their heterogeneity in the population, one by one, in a multivariate regression approach that takes into account socio-demographic categories (Table 3). The same models are also run separately by country to explore possible national specificities, but in fact reveal only some nuances (analyses available upon request).

Confirming the descriptive findings, the regression analysis shows that the number of countries visited—i.e., the size of space-sets—and the longest distance traveled—i.e., the width of space-sets—are significantly smaller in France and Italy than in Germany. Moreover, the most relevant within-country heterogeneities are consistent with a view of transnational mobility as socially stratified by education and class. The size and width of space-sets increase monotonically with the level of education, with the largest gap between respondents with lower secondary and higher secondary education. Similarly, both dimensions increase as we move up the social class ladder; this time, the gap is the largest between the upper-middle class and the upper class (classes IIIb–V and I–II, in EGP notation). The results are very similar in this respect for the two different dimensions of space-sets. As for the focus of space-sets, the only major difference is that the gradient is less pronounced across educational qualifications and social classes. Nevertheless, a gradient does exist, marking a clear divide between the primary and lower secondary educated and the more educated on the one hand, and the working class and the middle and upper classes on the other. A transnational orientation of the space-set focus is definitely less likely among the less educated and lower class. All in all, the answer to the first research question of the paper is a clear 'yes': there is correspondence between individuals' economic and cultural capital and transnational mobility experiences, in their diverse components.

However, as previous research has found, education and class inequalities are not the only determinants of transnational practices, and other heterogeneities must be taken into account (Delhey et al., 2015). Women's space-sets are slightly smaller in size and width and more nationally oriented in their focus, although neither of these effects is statistically significant. More importantly, there is a temporal cumulation in all dimensions of space-sets: as people get older, they tend to have visited a greater number of countries and traveled to greater geographical distances. The possible higher propensity to transnational mobility of younger generations does not cancel out this time-dependent aspect of space-sets.[6] Even older generations have been exposed over their life course to the expanding mass travel industry of the last half-century—a veritable 'mobility revolution' for citizens of high-income

[6] Given the cross-sectional nature of the data and the retrospective nature of the space-set information, such an effect may be even greater due to memory gaps among respondents. Clearly, longitudinal data collection on travel experiences could improve the reliability of space-set indicators and provide an opportunity to identify possible life course effects and causal relationships between mobility and other individual and contextual events.

countries (Recchi, 2015). Finally, the country-specific analyses signal that in France and Italy, but not in Germany, the population with a non-national background has significantly larger and more transnationally oriented space sets. In this respect, Germany is perhaps the exception, as nationals are 'catching up' with immigrants in their particularly high propensity to transnational mobility.

4.3 Space-Sets and Supranational Orientations

Inspired by Karl Deutsch's 'transactionalist thesis', and with a particular focus on its validity in the European Union as a unique space of free movement and cross-border relations, there is now a non-negligible literature on the nexus between social transnationalism and supranational orientations (for a review, see Teney & Deutschmann, 2018). In this section, I dig deeper into this relationship by taking advantage of the specific thrust of the space-set notion—namely, the cumulative nature of mobility experiences. Are individuals who have visited more countries, traveled greater distances, and attached some biographical significance to foreign countries more likely to embrace supranational orientations? I address this question through OLS and logit regressions of four different indicators that touch on different aspects of supranational orientations. Two indicators—anti-nationalism and anti-protectionism—speak to 'denationalization', i.e. the distance of respondents from a nation-centered world view, emphasizing either a political-cultural (anti-nationalism) or a political-economic (anti-protectionism) nuance. In fact, EU support and EU attachment speak to attitudes toward the most important supranational entity for continental Europeans—the European Union. These variables are—not surprisingly—correlated, but not enough to be considered as proxies (see Table 4).

Tables 5, 6 and 7 report the regression analyses (OLS for denationalization, logit for dichotomous pro-EU variables) including the same set of covariates, except for the three dimensions of space-sets, which are introduced alternatively to avoid collinearity (size in Table 5, width in Table 6, focus in Table 7). The same models are also tested on a country-by-country basis to explore possible national specificities, but only very modest differences are found (analyses available upon request).

The results are quite similar across the board, although the statistical effect of transnational focus is comparatively smaller. Overall, the three space-set dimensions are significant predictors of supranational orientations, with the exception of anti-nationalism.[7] This particular indicator—more precisely, the inverse of 'pride in one's own country'—is in fact significantly associated with an experience of 'living abroad'. Settling in another country may temper nationalism (in its more explicit expression, 'pride': Smith & Kim, 2006) more than transnational mobility per se. In general, space-set indicators are more consistent with 'intellectualized' or 'rational' arguments in favor of supranationalism, such as a rejection of protectionism and a view that European integration is a good thing. These statements are less emotional than expressing 'pride in one's country' or 'regret' at the dissolution of the EU (hostility to EU expansion in the German case).[8]

[7] An exception is 'transnational focus' in France, where this dimension is significantly associated with anti-nationalism.

[8] One can suspect that attitudes towards the EU may have changed between the French and Italian surveys on the one hand, and the German one, which was conducted after the Brexit referendum – a major shockwave for the European project. While I cannot control for this exogenous effect in the dataset, the Eurobarometer trend file shows that changes in the responses to the so-called Moreno question about 'feeling European' between Spring 2016 and Spring 2018 were minimal: Germans who defined themselves 'European' (exclusively or as

The models convey additional messages that resonate with existing studies. In particular, education is consistently an important correlate of supranational and pro-European dispositions (Hackverdian et al., 2013; Fernández et al., 2024), with a monotonic increase in effects as respondents' qualifications increase. Such a pattern is ubiquitous in the models. The effect of social class is similar, but most visible for anti-protectionism and EU support, possibly again as a reflex of a rational view of supranationalism as beneficial for the reproduction of class privilege (Fligstein, 2008; Haller, 2008). Finally, it is worth noting that the stronger supranational orientation of the German population is not entirely explained statistically by space-set dimensions nor by other compositional effects. Net of their transnational mobility experiences, education and social class, German respondents are still more averse to national pride and protectionism and more pro-EU (in both its subdimensions) than their French and Italian counterparts.

5 Discussion and Conclusion

Apart from anecdotes and speculations about the social stratification of travel, such as Bauman's (1996) stereotypes of 'tourists' and 'vagabonds', the question of 'who moves and how much' has loomed large in research on geographical mobility—without empirically grounded answers. By collecting detailed survey data from representative samples of the Italian, French and German resident population, I was able to systematically address this issue. The surveys were tailored to the concept of 'space-set', which is meant to organize a recollection of lived experiences of travel at different spatial scales. In this paper I focused on the transnational scale. I examined three dimensions of transnational space-sets: size (the number of countries ever visited), width (the farthest geographic points ever reached while traveling), and focus (the subjective significance of countries other than the one in which respondents live). There are three main takeaways of the analyses, two of which answer the research questions through which the concept of space-set is applied in this paper—namely, on the social stratification of mobility and the association between cross-border mobility and supranational orientations.

First, ceteris paribus, Germans have much more direct experience of foreign countries, have traveled farther from their country of residence, and attach greater importance to other parts of the world than their French and Italian counterparts.

Second, there is a pronounced social stratification of transnational mobility along educational and social class lines across the board. Leaving aside all other socio-demographic differences, people with an upper tertiary degree or in an upper social class position have on

Footnote 8 continued
well as 'German') increased only slightly, from 69 to 71 per cent. I am grateful to an anonymous reviewer for pointing this out.

average been to five more countries than those with a lower secondary degree (or less) or in a working class occupation, have traveled over 2000 km further, and are more than twice as likely to feel at home in a foreign country.

Third, people with larger space-sets (along the three dimensions mentioned) are also significantly more likely to hold supranational orientations, to reject protectionism, and to favor European integration, although they are not necessarily as anti-nationalist as might be expected.

The combination of the second and third findings reflects the claim that 'social globalization' is predominantly a middle-upper class phenomenon, reviving a global class division centered on mobility and settlement opportunities, which in turn may fuel neo-nationalism and populism among the less privileged and mobile (Azmanova, 2011; Kriesi et al., 2012; Teney et al., 2014). This is most evident between countries, depending on the power of passports (Schachar, 2009; Kochenov & Lindeboom, 2017). However, this paper sheds light on the within-country aspect of this mobility divide, paving the way for even more detailed investigations of the links between socioeconomic inequalities, mobility, and opportunities for class reproduction.[9]

This paper has three major limitations. Despite its comparative design, the three countries studied have much in common in terms of economic development, geopolitical situation, and political culture. Analyses of the space-sets of non-European and non-Western populations could disentangle the still open question of whether the capacity for transnational mobility ('motility') is more stratified between or within countries. The second limitation is the cross-sectional nature of the data. Although the space-set approach is fundamentally a retrospective tool that collects information with a life-course perspective, our data are not longitudinal. This makes it impossible to identify the mechanisms by which mobility may trigger socioeconomic opportunities and shape attitudes. The third limitation is that the dataset at hand does not include other dimensions of transnationalism. It remains to be seen in what ways and under what conditions space-sets correlate with more relational aspects of social life (like friendship or partnership). Overcoming these limitations is the main challenge for future research on the sociological foundations and consequences of transnational mobility. As both social stratification and attitudinal research tend to overlook 'human extensibility' (Janelle, 1973) across geographic places, the space-set approach may provide the conceptual and measurement tools to fill this lacuna.

[9] The capacity of economic elites to purchase passports, and thus engage in hypermobility, blurs the lines of 'between-within' country inequality in mobility rights (Surak, 2023). At a lower level of affluence, dual citizenship can also be framed as a form of 'distinction' and an 'insurance' for middle-upper classes in contexts at risk (Harpaz, 2019).

Appendix

See Tables 2, 3, 4, 5, 6 and 7.

Table 2 Summary statistics of variables employed in the multivariate models. *Source*: Three-Country Space-Set Dataset

	Mean or %	SD	N
Age (10 categories)	6.59	2.70	5555
Gender: man	49.86	–	2897
Gender: Woman	50.14	–	2913
Migration status: native, citizen	92.20	–	5357
Migration status: Non-native or non-citizen	7.80	–	453
Education: Primary, lower sec	40.98	–	2381
Education: Higher secondary	27.49	–	1597
Education: Lower tertiary	16.47	–	957
Education: Upper tertiary	15.06	–	875
Employment status: active	67.77	–	3745
Employment: inactive	32.23	–	1781
EGP class: VI–VII	15.55	–	826
EGP class: IIIb–IV	31.83	–	1691
EGP class: IIIa–V	36.16	–	1921
EGP class: I–II	16.45	–	874
Lived abroad: no	77.69	–	4391
Lived abroad: yes	22.31	–	1261
Survey mode: online	76.82	–	4486
Survey mode: offline	23.18	–	1354
Space-set size	11.67	9.63	5700
Space-set width	5631	4847	5701
Space-set (transnational) focus	64.43	–	5840
Anti-nationalism	2.47	1.27	5319
Anti-protectionism	3.03	1.07	4934
EU support: yes	68.88	–	3628
EU support: no	31.12	–	1639
EU attachment: yes	75.68	–	4216
EU attachment: no	24.32	–	1355

Table 3 Predicting space-set transnational size, width and focus with socio-demographic characteristics: OLS (for size and width) and logit (for focus) regressions. *Source*: Three-Country Space-Set Dataset

	Space-set size			Space-set width			Space-set focus		
	Coeff		SE	Coeff		SE	OR		SE
Country: DE (ref)									
FR	− 7.631	***	0.363	− 1971.361	***	204.637	0.046	***	0.005
IT	− 8.985	***	0.348	− 3184.558	***	196.011	0.076	***	0.008
Age (ref)	0.771	***	0.051	151.975	***	28.541	1.058	***	0.016
Gender: man (ref)									
Woman	− 0.378		0.235	− 69.100		132.438	0.995		0.071
Migr status: native, citizen (ref)									
Non-native or non-citizen	0.141		0.438	− 91.527		247.105	1.526	***	0.223
Educ: Primary, lower sec (ref)									
Higher secondary	3.234	***	0.32	1394.343	***	180.633	1.648	***	0.166
Lower tertiary	4.735	***	0.353	1984.470	***	199.289	2.371	***	0.285
Upper tertiary	5.572	***	0.386	2603.127	***	217.870	2.389	***	0.300
Employment status: active (ref)									
Inactive	0.224		0.284	− 325.524	**	160.327	1.126		0.097
EGP class: VI-VII (ref)									
IIIb-IV	1.923	***	0.369	620.950	***	208.262	1.387	***	0.150
IIIa-V	2.571	***	0.371	1009.450	***	209.302	1.964	***	0.218
I-II	5.040	***	0.459	2215.731	***	259.000	2.460	***	0.347
Survey mode: online (ref)									
Offline	− 2.610	***	0.327	− 1390.451	***	184.417	0.651	***	0.063
Constant	4.852	***	0.518	3918.965	***	292.206	1.466	**	0.228

N = 4917 (size), 4912 (width), 5000 (focus). R^2 = 0.27 (size), 0.13 (width), 0.23 (focus; pseudo-R^2). ***p < 0.01, **p < 0.05, *p < 0.10.

Table 4 Correlation matrix of the supranational orientation indicators. *Source*: Three-Country Space-Set Dataset

	Anti-nationalism	Anti-protectionism	EU Support
Anti-protectionism	0.181		
EU support	0.041	0.293	
EU attachment	− 0.026	0.125	0.324

Table 5 Predicting supranational orientations with socio-demographic characteristics and space-set *size*: OLS and logistic regressions. *Source*: Three-Country Space-Set Dataset

	Anti-nationalism			Anti-protectionism			EU Support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
Country: DE (ref)												
FR	− 0.783	***	0.058	− 0.967	***	0.047	0.299	***	0.033	2.617	***	0.352
IT	− 0.768	***	0.057	− 0.861	***	0.047	0.354	***	0.039	1.582	***	0.185
Age	0.022	***	0.008	− 0.026	***	0.007	1.027	*	0.016	0.978		0.016
Gender: man (ref)												
Woman	0.122	***	0.036	− 0.173	***	0.030	0.988		0.069	1.154	**	0.082
Migr status: native, citizen (ref)												
Non-native or non-citizen	− 0.205	**	0.08	0.119	**	0.059	0.755	**	0.100	0.739	**	0.097
Educ: Primary, lower sec (ref)												
Higher secondary	0.253	***	0.05	0.105	**	0.042	1.631	***	0.156	1.187	*	0.115
Lower tertiary	0.260	***	0.056	0.214	***	0.046	2.552	***	0.298	1.457	***	0.160
Upper tertiary	0.372	***	0.061	0.358	***	0.050	3.063	***	0.390	1.409	***	0.174
Employment status: active (ref)												
Inactive	0.039		0.044	0.060	*	0.036	1.007		0.084	0.995		0.086
EGP class: VI–VII (ref)												
IIIb–IV	− 0.104	*	0.058	0.096	**	0.048	1.068		0.112	1.150		0.124
IIIa–V	− 0.084		0.058	0.215	***	0.048	1.266	**	0.136	1.089		0.118

Table 5 (continued)

	Anti-nationalism			Anti-protectionism			EU Support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
I–II	− 0.171	**	0.072	0.369	***	0.059	1.722	***	0.241	1.345	**	0.195
Lived abroad: no (ref)												
Yes	0.095	**	0.045	0.002		0.037	1.063		0.095	1.179	*	0.109
Space-set size	0.003		0.002	0.011	***	0.002	1.036	***	0.005	1.013	***	0.005
Survey mode: online (ref)												
Offline	− 0.114	**	0.052	− 0.093	**	0.044	0.824	**	0.081	0.936		0.088
Constant	2.399		0.082	3.182		0.068	1.005		0.164	1.854		0.293

N = 4604 (anti-nationalism), 4374 (anti-protectionism), 4539 (EU support), 4737 (EU attachment). $R^2 = 0.09$ (anti-nationalism), 0.20 (anti-protectionism), 0.10 (EU support, pseudo-R^2), 0.03 (EU attachment, pseudo-R^2). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Table 6 Predicting supranational orientations with socio-demographic characteristics and space-set *width*: OLS and logistic regressions. *Source*: Three-Country Space-Set Dataset

	Anti-nationalism			Anti-protectionism			EU Support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
Country: DE (ref)												
FR	− 0.803	***	0.056	− 1.019	***	0.045	0.254	***	0.027	2.509	***	0.329
IT	− 0.790	***	0.055	− 0.909	***	0.045	0.303	***	0.032	1.546	***	0.174
Age	0.024	***	0.008	− 0.020	***	0.007	1.042	***	0.016	0.983		0.015
Gender: man (ref)												
Woman	− 0.121	***	0.036	− 0.176	***	0.030	0.982		0.068	1.152	**	0.082
Migr status: native, citizen (ref)												
Non-native or non-citizen	− 0.205	**	0.080	0.125	**	0.059	0.766	**	0.101	0.742	**	0.098
Educ: Primary, lower sec (ref)												
Higher secondary	0.261	***	0.050	0.118	***	0.042	1.686	***	0.16	1.187	*	0.114
Lower tertiary	0.272	***	0.056	0.235	***	0.046	2.715	***	0.314	1.463	***	0.159
Upper tertiary	0.384	***	0.061	0.380	***	0.050	3.218	***	0.407	1.407	***	0.173
Employment status: active (ref)												
Inactive	0.040		0.044	0.066	*	0.036	1.032		0.086	1.009		0.087
EGP class: VI–VII (ref)												
IIIb–IV	− 0.099		0.058	0.109	**	0.048	1.108		0.116	1.158		0.125
IIIa–V	− 0.078		0.058	0.227	***	0.048	1.323	***	0.142	1.093		0.118
I–II	− 0.159	**	0.072	0.390	***	0.059	1.839	***	0.256	1.342	**	0.193

Table 6 (continued)

	Anti-nationalism			Anti-protectionism			EU Support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
Lived abroad: no (ref)												
Yes	0.095	**	0.045	− 0.002		0.037	1.035		0.092	1.170	*	0.108
Space-set width	0.002		0.004	0.014	***	0.003	1.048	***	0.008	1.031	***	0.008
Survey mode: online (ref)												
Offline	− 0.120	**	0.052	− 0.101	**	0.044	0.802	**	0.078	0.939		0.088
Constant	2.407		0.083	3.177	***	0.069	1.077		0.167	1.764		0.280

N = 4604 (anti-nationalism), 4374 (anti-protectionism), 4539 (EU support), 4737 (EU attachment). $R^2 = 0.09$ (anti-nationalism), 0.20 (anti-protectionism), 0.10 (EU support, pseudo-R^2), 0.04 (EU attachment, pseudo-R^2). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Table 7 Predicting supranational orientations with socio-demographic characteristics and space-set transnational *focus*: OLS and logistic regressions. *Source*: Three-Country Space-Set Dataset

	Anti-nationalism			Anti-protectionism			EU support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
Country: DE (ref)												
FR	− 0.787	***	0.062	− 0.988	***	0.051	0.270	***	0.032	2.220	***	0.312
IT	− 0.779	***	0.058	− 0.904	***	0.048	0.298	***	0.033	1.328	**	0.158
Age	0.024	**	0.008				1.048	***	0.016	0.988		0.015
Gender: man (ref)				− 0.019	**	0.007						
Woman	0.121	**	0.036	− 0.176	***	0.030	0.982		0.068	1.147	*	0.082
Migr status: native, citizen (ref)												
Non-native or non-citizen	− 0.207	*	0.080	0.113	*	0.059	0.760	**	0.100	0.743	**	0.098
Educ: Primary, lower sec (ref)												
Higher secondary	0.261	***	0.050	0.132	***	0.042	1.766	***	0.167	1.247	**	0.119
Lower tertiary	0.272	***	0.055	0.255	***	0.045	2.887	***	0.332	1.568	***	0.17
Upper tertiary	0.384	***	0.060	0.405	***	0.050	3.538	***	0.443	1.533	***	0.187
Employment status: active (ref)												
Inactive	0.040		0.044	0.058		0.036	1.011		0.084	1.001		0.087
EGP class: VI–VII (ref)												
IIIb–IV	− 0.098		0.058	0.112	*	0.048	1.127		0.118	1.191		0.128
IIIa–V	− 0.078		0.058	0.230	***	0.048	1.352	***	0.145	1.146		0.124
I–II	− 0.159	*	0.071	0.406	***	0.059	1.949	***	0.269	1.467	***	0.210

Table 7 (continued)

	Anti-nationalism			Anti-protectionism			EU support			EU attachment		
	Beta		SE	Beta		SE	Odds ratio		SE	Odds ratio		SE
Lived abroad: no (ref)												
Yes	0.097	*	0.045	0.008		0.037	1.039		0.092	1.182	*	0.109
Space-set focus (transnational)	0.031		0.045	0.097	**	0.038	1.234	**	0.101	0.894		0.079
Survey mode: online (ref) 1												
Offline	− 0.121	*	0.052	− 0.120	**	0.044	0.761	***	0.074	0.899		0.083
Constant	2.392			3.168		0.073	1.114		0.181	2.125		0.356

N = 4605 (anti-nationalism), 4375 (anti-protectionism), 4540 (EU support), 4378 (EU attachment). $R^2 = 0.09$ (anti-nationalism), 0.20 (anti-protectionism), 0.10 (EU support, pseudo-R^2), 0.03 (EU attachment, pseudo-R^2). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Acknowledgements This paper was elaborated in the context of the INCASI2 project that has received funding from the European Union's Horizon Europe research and innovation programme under the Marie Sklodowska-Curie grant agreement No 101130456. It has also benefitted from research conducted as partner of the MIGMOBS ERC Advanced Grant (101097240, ERC-2022-AdG). Views and opinions expressed are however those of the author only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them. Data collection in France and Italy was made possible by a SAB grant of the Scientific Direction of the Fondation Nationale des Sciences Politiques (FNSP) for the project "The Power of Personal Geographies" (2014). The author thanks Steffen Pötzschke, Emmanuelle Duwez, Aurore Flipo and Susanna De Luca for their collaboration in data collection in Germany, France and Italy. Special thanks go to Siresa Lopez Berengueres for her invaluable help in harmonizing the three national datasets. Figure 2 was drawn by Yannick Savina, whom I thank. I am also grateful to Juan Diez Medrano and Adrian Favell for their insightful comments on previous drafts of the manuscript.

Funding Open access funding provided by European University Institute - Fiesole within the CRUI-CARE Agreement.

Data Availability The dataset used in this paper is available upon request to the author.

Declarations

Conflict of interest The author declares no competing interests.

References

Abbott, A. (2017). *Department and discipline: Chicago sociology at one hundred*. University of Chicago Press.

Andreotti, A., Le Galès, P., & Moreno Fuentes, F. J. (2013). Transnational mobility and rootedness: The upper middle classes in european cities. *Global Networks, 13*, 41–59.

Azmanova, A. (2011). After the left-right (dis)continuum: Globalization and the remaking of europe's ideological geography. *International Political Sociology, 5*(4), 384–407. https://doi.org/10.1111/j.1749-5687.2011.00141.x

Bauman, Z. (1996). *Tourists and vagabonds: heroes and victims of postmodernity*. Institut für Höhere Studien (IHS). https://nbnresolving.org/urn:nbn:de:0168-ssoar-266870

Belton-Chevallier, L., Oppenchaim, N., & Vincent-Geslin, S. (2019). *Manuel de sociologie des mobilités géographiques*. Presses universitaires François Rabelais.

Bigo, A. (2020). *Les transports face au défi de la transition énergétique. Explorations entre passé et avenir, technologie et sobriété, accélération et ralentissement.* Doctoral dissertation. Institut Polytechnique.

Bosnjak, M., Dannwolf, T., Enderle, T., Schaurer, I., Struminskaya, B., Tanner, A., & Weyandt, K. W. (2018). Establishing an open probability-based mixed mode panel of the general population in Germany: The GESIS Panel. *Social Science Computer Review, 36*(1), 103–115. https://doi.org/10.1177/0894439317697949

Bourdieu, P. (1973 [2018]). Cultural reproduction and social reproduction. In R. Brown (Ed.), *Knowledge, education, and cultural change* (pp. 71-112). Routledge.

Büchs, M., & Mattioli, G. (2021). Trends in air travel inequality in the UK: From the few to the many? *Travel Behaviour and Society, 25*, 92–101. https://doi.org/10.1016/j.tbs.2021.05.008

Cailly, L. (2007). Capital spatial, stratégies résidentielles et processus d'individualisation. *Annales De Géographie, 654*(2), 169–187.

Carlson, S., Gerhards, J., & Hans, S. (2017). Educating children in times of globalisation: Class-specific child-rearing practices and the acquisition of transnational cultural capital. *Sociology, 51*(4), 749–765.
Coulangeon, P., & Lemel, Y. (2009). The homology thesis: Distinction revisited. In K. Robson & C. Sanders (Eds.), *Quantifying theory: Pierre Bourdieu* (pp. 47–60). Springer.
Courgeau, D. (1985). Interaction between spatial mobility, family and career life-cycle: A French survey. *European Sociological Review, 1*(2), 139–162. https://doi.org/10.1093/oxfordjournals.esr.a036382
Courgeau, D. (2021). *Méthodes de mesure de la mobilité spatiale : Migrations internes, mobilité temporaire, navettes*. Ined.
Craps, A. (2021). What are the changes in LCA passengers' mobility practices? Insights from a European survey. *Transportation Research Interdisciplinary Perspectives, 12*, 100477. https://doi.org/10.1016/j.trip.2021.100477
Cresswell, T. (2006). *On the move: Mobility in the modern western world*. Taylor & Francis.
Cristofoli, P., & Guérin-Pace, F.(2014). L'espace d'une vie: une cartographie des trajectoires individuelles à l'aide des méthodes d'analyse des réseaux sociaux. In CIST (Ed.),*Fronts et frontières des sciences du territoire* (pp. 120–126). Collège International de Sciences du Territoire. https://cist.cnrs.fr/colloques-internationaux/cist2014-fronts-et-frontieres-des-sciences-du-territoire
Dahinden, J. (2016). A plea for the 'de-migranticization' of research on migration and integration. *Ethnic and Racial Studies, 39*(13), 2207–2225.
Delhey, J., Deutschmann, E., & Cirlanaru, K. (2015). Between 'class project' and individualization: The stratification of Europeans' transnational activities, *International Sociology, 30*(3), 269–293.
Demoli, Y., & Dobruszkes, F. (2024). Are high-speed rail and airplane mobilities socially stratified? In E. Recchi & M. Safi (Eds.), *Handbook of human mobility and migration* (pp. 113–127). Edward Elgar.
Demoli, Y., & Subtil, J. (2019). Boarding classes. Mesurer la démocratisation du transport aérien en France (1974–2008), *Sociologie 10* (2), 131–151.
Deutsch, K. W. (1960). The propensity to international transactions. *Political Studies, 8*(2), 147–155.
Deutschmann, E. (2021). *Mapping the transnational world: How we move and communicate across borders, and why it matters*. Princeton University Press.
Deutschmann, E., Recchi, E., & Vespe, M. (2022). Assessing transnational mobility on a global scale. In S. Pötzschke & S. Rinken (Eds.), *Migration Research in a Digitized World: Using Innovative Technologies to Tackle Methodological Challenges* (pp. 169–192). Springer/Imiscoe.
Diez Medrano, J. (2016). Globalization, transnational human capital, and employment in the European Union. *International Journal of Comparative Sociology, 57*(6), 449–470.
Di Méo, G. (1990). De l'espace subjectif à l'espace objectif: l'itinéraire du labyrinthe. *L'Espace Géographique, 19*(4), 359–373.
Duwez, E., & Mercklé, P. (Eds.). (2021). *Un panel français: L'Étude longitudinale par Internet pour les sciences sociales (Elipss)*. Ined.
Elliott, A., & Urry, J. (2010). *Mobile lives*. Routledge.
Favell, A., & Reimer, D. (2021). European outliers? Rethinking Europeanisation and Euroscepticism in Britain and Denmark. *European Societies, 23*(2), 285–307.
Fernández, J. J., Teney, C., & Díez Medrano, J. (2024). Mechanisms of the effect of individual education on pro-European dispositions. *Journal of Common Market Studies*, *62*(5), 1119–1140.
Fligstein, N. (2008). *Euroclash: The EU, European identity, and the future of Europe*. Oxford University Press.
Frémont, A. (1974). Recherches sur l'espace vécu. *L'espace Géographique, 3*(3), 231–238.
Gerhards, J., & Hans, S. (2013). Transnational human capital, education, and social inequality. Analyses of international student exchange. *Zeitschrift Für Soziologie, 42*(2), 99–117.
Gerhards, J., Silke, H., & Carlson, S. (2017). *Social class and transnational human capital: How middle and upper class parents prepare their children for globalization*. Routledge.
Gieryn, T. F. (2000). A space for place in sociology. *Annual Review of Sociology, 26*(1), 463–496.
Gould, P., & White, R. (1986). *Mental maps*. Allen and Unwin.
Guérin-Pace, F., Dupont, V., & Bertrand, M. (2003). *Espaces de vie. Une revue des concepts et des applications*. Ined.
Gygli, S., Haelg, F., Potrafke, N., & Sturm, J. E. (2019). The KOF globalisation index–revisited. *The Review of International Organizations, 14*, 543–574. https://doi.org/10.1007/s11558-019-09344-2
Hakhverdian, A., Van Elsas, E., Van der Brug, W., & Kuhn, T. (2013). Euroscepticism and education: A longitudinal study of 12 EU member states, 1973–2010. *European Union Politics, 14*(4), 522–541.
Haller, M. (2008). *European integration as an elite process: The failure of a dream?* Routledge.
Hammar, T., & Tamas, K. (1997). Why Do People Go or Stay? In T. Hammar, G. Brochmann, K. Tamas, & T. Faist (Eds.), *International migration, immobility and development: Multidisciplinary perspectives* (pp. 1–20). Routledge.
Harpaz, Y. (2019). *Citizenship 2.0: Dual nationality as a global asset*. Princeton University Press.

Janelle, D. G. (1973). Measuring human extensibility in a shrinking world. *Journal of Geography, 72*(5), 8–15. https://doi.org/10.1080/00221347308981301

Kaufmann, V., Bergman, M. M., & Joye, D. (2004). Motility: Mobility as capital. *International Journal of Urban and Regional Research, 28*(4), 745–756.

Kochenov, D., & Lindeboom, J. (2017). Empirical assessment of the quality of nationalities: The quality of nationality index (QNI). *European Journal of Comparative Law and Governance, 4*(4), 314–336.

Kriesi, H., Grande, E., Helbling, M., Hoeglinger, D., Hutter, S., & Wüest, B. (Eds.). (2012). *Political Conflict in Western Europe*. Cambridge University Press.

Kuhn, T. (2015). *Experiencing European integration: Transnational lives and European identity*. Oxford University Press.

Lenntorp, B. (1999). Time-geography—At the end of its beginning. *GeoJournal, 48*(3), 155–158.

Lévy, J. (1994). *L'espace légitime. Sur la dimension géographique de la fonction politique*. Presses de Sciences Po.

Lopez Berengueres, S. (2022). *The morals after mobility: Post-migration change in orientations to cultural difference among second and third country nationals in western Europe*. Doctoral dissertation. Sciences Po.

Löw, M. (2016). *The sociology of space*. Palgrave Macmillan.

Mattioli, G., & Adeel, M. (2021). Long-distance travel. *International Encyclopedia of Transportation, 6*, 272–277.

Mau, S. (2010). *Social transnationalism: Lifeworlds beyond the nation-state*. Routledge.

Mau, S., Mewes, J., & Zimmermann, A. (2008). Cosmopolitan attitudes through transnational social practices? *Global Networks, 8*(1), 1–24.

Mazzucato, V. (2024). Diversifying analytical categories for studying youth with and without migration background: An example of mobility-based categories. *Comparative Migration Studies*. https://doi.org/10.1186/s40878-024-00385-0

Merton, R. K. (1968). *Social theory and social structure*. The Free Press.

Moles, A., & Rohmer, E. (1972). *Psychologie de l'espace*. Casterman.

Perry, B. L., Pescosolido, B. A., & Borgatti, S. P. (2018). *Egocentric network analysis: Foundations, methods, and models* (Vol. 44). Cambridge University Press.

Pred, A. (1984). Place as historically contingent process: Structuration and the time–geography of becoming places. *Annals of the Association of American Geographers, 74*(2), 279–297.

Recchi, E. (2013). Orizzonti in allargamento: space-set, mutamento sociale e integrazione europea. In E. Recchi, M. Bontempi & C. Colloca (Eds.), *Metamorfosi sociali. Attori e luoghi del mutamento nella società contemporanea* (pp. 327–348). Rubbettino.

Recchi, E. & Kuhn, T. (2013). Europeans' Space-Sets and the Political Legitimacy of the EU. In N. Kauppi (Ed.), *A Political Sociology of Transnational Europe* (pp. 191–222). ECPR Press.

Recchi, E. (2015). *Mobile Europe: The Theory and Practice of Free Movement in the EU*. Palgrave Macmillan.

Recchi, E. (2016). Space, mobility and legitimacy. *Oxford Research Encyclopedia of Politics*. Oxford University Press.

Recchi, E., & Flipo, A. (2019). Spatial mobility in social theory. *SocietàMutamentoPolitica. Rivista italiana di sociologia, 10*(20), 125–137.

Recchi, E., Deutschmann, E. & Vespe, M. (2019). Estimating Transnational Human Mobility on a Global Scale. EUI Working Paper RSCAS, 2019/30. European University Institute.

Recchi, E., Flipo, A., & Duwez, E. (2021). "Ce monde que je connais": les space-sets des Français. In E. Duwez & P. Mercklé (Eds.), *Un panel français: l'étude longitudinale par internet pour les sciences sociales (ELIPSS)* (pp. 255–280). Ined.

Rother, N., & Nebe, T. M. (2009). More mobile, more European? Free movement and EU identity. In E. Recchi & A. Favell (Eds.), *Pioneers of European Integration* (pp. 120–155). Edward Elgar.

Salamonska, J. & Recchi, E. (2019). The Social Structure of Transnational Practices. In E. Recchi et alii, *Everyday Europe: Social Transnationalism in an Unsettled Continent* (pp. 61–86). Policy Press.

Savage, M. (1988). The missing link? The relationship between spatial mobility and social mobility. *British Journal of Sociology*, 554–577.

Schachar, A. (2009). *The birthright lottery: Citizenship and global inequality*. Harvard University Press.

Schewel, K. (2020). Understanding immobility: Moving beyond the mobility bias in migration studies. *International Migration Review, 54*(2), 328–355.

Schütz, A. (1970). Some structures of the life-world. In A. Schutz (Ed.), *Collected papers III: Studies in phenomenological philosophy* (pp. 116–132). Springer.

Scott, J. (2017). *Social network analysis* (4th ed.). Sage.

Sen, A. (1993). Capability and well-being. In M. Nussbaum & A. Sen (Eds.), *The quality of life* (pp. 270–293). Oxford University Press.

Sheller, M. (2017). From spatial turn to mobilities turn. *Current Sociology, 65*(4), 623–639.
Simmel, G. (1908). *Soziologie*. Duncker & Humblot.
Smith, T. W., & Kim, S. (2006). National pride in comparative perspective: 1995/96 and 2003/04. *International Journal of Public Opinion Research, 18*(1), 127–136.
Sorokin, P. (1927). *Social mobility*. Harper and Brothers.
Surak, K. (2023). *The golden passport: Global mobility for millionaires*. Harvard University Press.
Teney, C., Lacewell, O. P., & de Wilde, P. (2014). Winners and losers of globalization in Europe: Attitudes and ideologies. *European Political Science Review, 6*(4), 575–595. https://doi.org/10.1017/S1755773913000246
Teney, C., & Deutschmann, E. (2018). Transnational social practices: A quantitative perspective. In R. A. Scott, S. M. Kosslyn, & M. C. B. Buchmann (Eds.), *Emerging trends in the social and behavioral sciences* (pp. 1–15). Wiley.
Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. University of Minnesota Press.
Urry, J. (2004). The sociology of space and place. In J. Blau (Ed.), *The Blackwell companion to sociology* (pp. 3–15). Wiley.
Urry, J. (2007). *Mobilities*. Polity Press.
Urry, J. (2010). Mobile sociology. *The British Journal of Sociology, 61*, 347–366.
Wagner, A. C. (2007). La place du voyage dans la formation des élites. *Actes De La Recherche En Sciences Sociales, 170*(5), 58–65.
Zerubavel, E. (1997). *Social mindscapes: An invitation to cognitive sociology*. Harvard University Press.