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Published in:

Geografiska Annaler: Series B, Human Geography

DOI:

10.1080/04353684.2023.2283102

E-pub ahead of print: 19/11/2023

Document Version Final published version

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Link to publication

Please cite the original version:

Monti, A., & Saarela, J. (2023). Geographical immobility and local ancestral ties: a study of three generations of natives in Finland. *Geografiska Annaler: Series B, Human Geography*. Advance online publication. https://doi.org/10.1080/04353684.2023.2283102

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# Geografiska Annaler: Series B, Human Geography

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rgab20

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**To cite this article:** Andrea Monti & Jan Saarela (19 Nov 2023): Geographical immobility and local ancestral ties: a study of three generations of natives in Finland, Geografiska Annaler: Series B, Human Geography, DOI: 10.1080/04353684.2023.2283102

To link to this article: https://doi.org/10.1080/04353684.2023.2283102

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# Geographical immobility and local ancestral ties: a study of three generations of natives in Finland

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#### **ABSTRACT**

Research concerning internal migration has increasingly recognized family members outside the household as important factors for mobility decisions. Older generations and familiar environments constitute strong attractors thanks to location-specific capital and exchange of multigenerational support. Less is known about geographical immobility across generations. Wee study immobility patterns across three generations of native Finns by examining population register data that span over five decades. We analyse how geographical immobility in terms of a person's place of residence at age 35 vs age 14 relates to the place of birth of their parents and grandparents. In this regard, Finland offers a highly useful case study because of its two main ethnolinguistic groups, Finnish and Swedish speakers, which are characterized by historically different mobility patterns and geographical concentrations. We find that geographical immobility relates strongly to local ancestral ties, that geographical immobility is much more common among Swedish than Finnish speakers, that the association between local ancestral ties and geographical immobility is stronger for Swedish than for Finnish speakers, and that it differs across geographical areas with different ethnolinguistic profiles. In terms of effect sizes, local ancestral ties have a large role in immobility behaviour, equally important as many socioeconomic and demographic factors.

#### **ARTICLE HISTORY**

Received 28 April 2023 Revised 30 October 2023 Accepted 7 November 2023

### **KEYWORDS**

Geographical immobility; ancestral ties; ethnicity; population registers; Finland

# Introduction

This article adds to a growing body of research that brings older-generation family members into the study of individual mobility behaviour within countries. Studies concerning internal migration have increasingly acknowledged the role of family members outside the household as important factors in mobility and immobility decisions (Mulder 2018). Older generations and familiar environments constitute strong geographical attractors through multigenerational support exchange and location-specific capital (Ermisch and Mulder 2019; Ghosh et al. 2019; Thomas and Dommermuth 2020; Thomas, Gillespie, and Lomax 2019). Less is known about geographical immobility across generations. Our study seeks ways to fill this gap.

Within mobility research, there is a need to understand processes of staying in relation to placespecific resources and privileges, especially for population subgroups and in the long term (Cooke 2011; Gruber 2021; Mulder 2018). Our analysis is carried out from the perspective of immobility. Thus, we answer recent calls among geographers and migration scholars to acknowledge immobility and staying not merely as the absence of mobility but as meaningful substantive processes (Gruber 2021; Stockdale and Haartsen 2018). Using high-quality population register data from Finland that span over five decades, we examine intergenerational place connections across two native ethnolinguistic groups: Finnish and Swedish speakers.

Our overarching research question is whether there is an association between geographical immobility and local ancestral ties. Thus, we investigate how geographical immobility in terms of a person's place of residence at age 35 vs age 14 relates to the place of birth of their parents and grandparents. Our main interest is whether individuals remain or move back to where they lived during late childhood and whether this is the same location as the birthplace of their parents and grandparents.

In this regard, Finland offers a highly useful case study because of its two official national languages, Finnish and Swedish, which result in two main ethnolinguistic groups. These groups are characterized by historically different mobility patterns and geographical concentrations. Here, the focus is on differences based on ethnolinguistic affiliation and regional characteristics, such as the level of urbanity, the ethnolinguistic population composition, and geographical scale.

This article asks the following four research questions. (1) Does immobility relate to local ancestral ties? (2) Are there differences in immobility between the two above-mentioned ethnolinguistic groups? (3) Are there ethnolinguistic differences in how immobility relates to local ancestral ties? (4) Does the association between immobility and local ancestral ties differ across geographical areas with different ethnolinguistic profiles?

(Im)mobilities are relational practices that link lives through time and space (Coulter, Ham, and Findlay 2016). We contribute to the field of internal (im)mobility by analysing how it relates to local ancestral ties. Therefore, we observe one form of intergenerational place connection by looking at the prevalence and context of immobility across generations. If immobility runs across generations, it may greatly impact local-specific ties, networks of social support, access to educational opportunities and specialized job markets (Hünteler and Mulder 2020; Mulder 2018; Mulder, Lundholm, and Malmberg 2020). If it also differs across ethnolinguistic groups or regions, it may affect not only the local population composition but also living conditions throughout the population.

# Geographical proximity and immobility

Internal migration – defined as a long-distance move within a country or a change of daily activity space (Roseman 1971) - has traditionally been assumed to be mostly related to employment and educational opportunities. Subsequently, scholars have noted the importance of family members in this domain. Life course research has shown that internal migration relates to the timing, occurrence and interaction of events within one or several individuals' lives and, often, within the lives of the members of the same household (Cooke 2008). However, few studies exist on the importance of family ties outside the household - that is, parents, adult children and siblings (Gillespie and Mulder 2020; Thomas and Dommermuth 2020).

The importance of extended family relations can be viewed in aspects such as mutual support exchange and care provision (Hünteler and Mulder 2020), for which geographical proximity is often essential. This kind of support is usually more common in family networks, especially in relations between parents and children, than among friends (Bengtson 2001; Silverstein and Bengtson 1997; Silverstein and Giarrusso 2010). At different stages of the life course, extended family members may enact moves that make the members live closer to one another. Some studies have found stable levels of intergenerational geographical proximity; one leaves the parental home without ever moving far away from it (Kolk 2017). Other analyses have shown that parents and children are more likely to reside in the same region once again - after the offspring's teenage years and early adulthood - because of moves made by either the children or the parents (Ghosh et al. 2019).

Family-related moves often occur in relation to household-composition changes, when the need for support is high. Typical situations include moves closer to one's grandparents that are related to marriage, childbearing and preschool-age children (Gillespie and Mulder 2020; Thomas and Dommermuth 2020). The presence of siblings at a destination also strengthens the propensity to move there (Ghosh et al. 2019; Mulder, Lundholm, and Malmberg 2020; Thomas and Dommermuth 2020). Geographical proximity to family members may function as a deterrent to mobility because it increases the psychological costs of moving and includes location-specific insider advantages (Ermisch and Mulder 2019; Fischer and Malmberg 2001; Mulder and Malmberg 2011, 2014; Sjaastad 1962). One example is older parents who live near their adult children (Thomas and Dommermuth 2020).

The extent to which family ties influence (im)mobility is dependent on several characteristics that affect the individual costs and benefits of migration and can differ across institutional and geographical contexts (Mulder 2018). For example, internal migration often occurs in conjunction with higher education and specialized job markets. Individuals with higher levels of education tend to live further away from their family members (Kolk 2017; Lundholm and Malmberg 2009; Olofsson et al. 2020). Relatedly, local social ties can be linked more strongly to geographical immobility for people who face the greatest need for support. This has been seen among low-income families in the United States (US; Dawkins 2006) and among single parents and divorced women in Sweden (Olofsson et al. 2020), where there is a higher propensity to return to the parental neighbourhood under such circumstances.

Relatively few studies have examined the role of ethnicity in this respect. Among black Americans in the US, lower mobility levels have been largely explained by local family ties, both within and outside the current household (Spilimbergo and Ubeda 2004). These ties seem to affect their mobility much more than that of their white individual counterparts. Similarly, the presence of parents and siblings in Amsterdam has been found to notably hamper out-migration from the city for Moroccans and Turks but less so for Dutch natives and Caribbeans (Zorlu 2009).

Housing structure and population density influence the possibility for extended family members to live close to each other; at the same time, these factors relate to their needs for education, work, housing and family careers (van der Pers and Mulder 2013). On the one hand, this may imply higher proximity across generations in metropolitan areas (Kolk 2017), especially from the perspective of parents who live close to their adult children in urban areas or university cities (van der Pers and Mulder 2013). On the other hand, adult children may be more inclined to live close to their parents if they move to the same rural area (van der Pers and Mulder 2013).

The relationship between the geographical proximity of family members and internal migration is endogenous. Individuals with certain personality traits – for instance, those who prefer stability and staying in one place – might also have closer family contacts because of their geographical immobility. Furthermore, this relationship is not necessarily limited to the lived present; it may be linked to longings and preferences for one's birthplace or familiar childhood environments (Ermisch and Mulder 2019).

While the geographical proximity of extended family members has garnered increased attention, less is known about geographical immobility across generations. In the broader literature on intergenerational mobility connected to socioeconomic stratification, studies focused on spatial aspects have found that living in low-income neighbourhoods recurs across generations (Gustafsson, Katz, and Österberg 2017; Hedman and Ham 2021; Sharkey 2008; Van Ham et al. 2014; Vartanian, Walker Buck, and Gleason 2007). This intergenerational spatial component is stronger in the US than it is in Scandinavia (Hedman and Ham 2021), as well as in minorities compared to natives (Sharkey 2008; Van Ham et al. 2014). This literature supports the idea of shared geographies across generations. However, it has studied neighbourhood typologies in relation to socioeconomic mobility rather than shared physical space and place in relation to actual geographical (im)mobility behaviour (Mulder 2018). Thus, the question remains whether geographical (im)mobility runs in families and under what conditions.

In the past few decades, there has been an increased interest in the processes that underlie immobility; this has been in contrast, and perhaps as a complement, to the previous emphasis on mobility as a distinctive feature of contemporary society (Sheller and Urry 2006). Leaving aside attempts to regulate international migration flows, this new interest follows the observed decline in internal migration rates within many Western societies, including the US (Cooke 2011; Foster 2017). One of the few studies that examines geographical immobility across generations has described how families and places in the US are linked over the course of families' histories (Sharkey 2015). Compared to previous generations, the most recent generation of black Americans has been found to have remained much more in place; consequently, a new geographically immobile generation has emerged.

In the literature, there are few studies on internal immobility and even fewer on immobility across generations. Hence, there is a need to understand the mechanisms behind immobility, especially in the long term, in relation to place-dependent resources and privileges, and for different population subgroups (Cooke 2011; Mulder 2018). By reconceptualising immobility and staying as processes that deserve scholarly attention, which involves various definitions of actors and agency, new tools for empirical, theoretical, and analytical research can be built in population geography and migration studies (Gruber 2021).

Sedentary populations are important for understanding places and communities because they are key parts of the regional development and civic cohesion of these places and communities (Gruber 2021; Stockdale and Haartsen 2018). People who decide not to move may thus be important for the perpetuation of place identities and may serve as anchors of identity, even for those who have moved (Barcus and Shugatai 2018). Place attachment seems to be important to understand people's preferences for being immobile, especially in rural areas. Within farm families in rural Northern Ireland and the Netherlands, for example, there appear to be strong insider advantages related to a sedentary lifestyle (Stockdale and Ferguson 2020; Stockdale, Theunissen, and Haartsen 2018). According to this qualitative evidence, the strong desire to remain in place relates to nostalgia and dwelling entangled with family histories going back generations, farm ownership, and the maintenance of strong family networks. A small-scale study of old-age stayers in an urban area of northern Sweden described staying as an active choice that is renegotiated over time (Hjälm 2014). The reasons for staying are complex and multilayered; they include the importance of linked lives and a sense of home that holds together not only living relatives but also the preceding and following generations.

Hence, through the local presence of previous generations, individuals are connected to places through family ties, a common history, and evolving social networks (Sharkey 2015). Historical rootedness has also been found to define features of place-specific resources and feelings of belonging, which influence individuals' immobility behaviours (Hjälm 2014; Stockdale and Ferguson 2020; Stockdale, Theunissen, and Haartsen 2018). Through the (indirect) presence of the family, ancestral birthplace, which is the central explanatory variable in our study, reflects a form of place connection that crosses generations. Naturally, the quality and nature of this form of place attachment may vary among individuals and families.

To broaden our knowledge of intergenerational place connection, this article will provide evidence on how immobility relates to local ancestral ties across ethnolinguistic groups and geographical entities. Our comprehensive analysis is based on five decades of register data on the entire native population of Finland; it will thus contribute to a more generalized view than has previously been achieved on intergenerational geographical immobility.

# Finnish and Swedish speakers in Finland

Finland is inhabited by two native ethnolinguistic groups: Finnish speakers, who account for almost 90% of the population, and Swedish speakers, who make up about 5% of the populace (approximately 290,000 individuals) (Saarela 2021). The two groups function as separate ethnicities based

on a common definition of ethnicity (Gordon 1964) – that is, distinguishable identities as perceived by both groups and distinct languages with different linguistic roots. The ethnolinguistic division includes separate social and cultural institutions. There are parallel school systems organized on an equal basis, as both groups have the same constitutional rights (McRae 2007). In the national population register, a person can be registered with only one mother tongue, which usually occurs soon after birth.

As a country with two official languages, Finland stands out in international comparisons. Swedish speakers in Finland do not constitute an underprivileged minority but a group with a strong social position (Saarela and Finnäs 2018). The historical roots of the Swedish-speaking population go back to times when Finland was part of the Swedish realm, and Swedish was used as the main language of government, business and culture (Liebkind, Tandefelt, and Moring 2007). Today, a common presumption is that Swedish speakers are overrepresented among the well-to-do. However, empirical studies have shown a more complex picture, with strong regional variation (Saarela 2004, 2006; Saarela and Finnäs 2003, 2004).

The share of Swedish speakers in Finland has decreased over time, from 14% in 1880 to 5% in 2019 (Saarela 2021). Approximately 95% of all Swedish speakers reside along the western and southern coasts of the country, including the Helsinki metropolitan area in the region of Uusimaa (Figure 1). They have much lower internal migration rates than the Finnish speakers. Among the latter, relatively high levels of urbanization, especially towards the Helsinki metropolitan area, have been observed during the past five decades. Among the Swedish speakers, the low internal migration rate has instead been accompanied by a higher emigration rate, in particular to Sweden (Hedberg and Kepsu 2008; Saarela 2021).

As a result, the coastal regions of Finland's mainland (especially Uusimaa), which have historically been inhabited by a unilingual Swedish-speaking population, have for several decades been characterized by an increasing share of unilingual Finnish speakers and a Swedish-speaking population in which most individuals can also speak Finnish (Allardt and Miemois 1982; Saarela and Finnäs 2018; Tandefelt 1986). At the end of the nineteenth century, more than 80% of the Swedish-speaking population lived in municipalities with Swedish as the majority language. Today, no municipality on Finland's mainland is unilingual Swedish in an official sense (Saarela 2021).

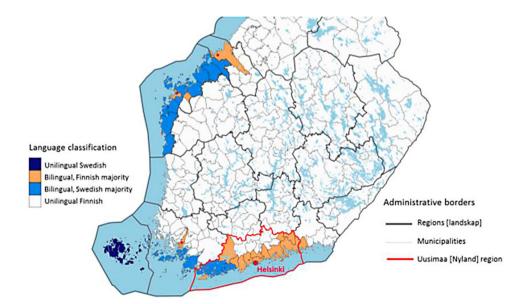


Figure 1. Map of regions and municipalities in southern Finland.

The survival of a minority language is highly dependent on a group's immediate environment, which affects the acceptance of and the ability to use the language in everyday life (Leinonen and Tandefelt 2007; Liebkind, Tandefelt, and Moring 2007). This was an issue that raised political concerns for Finland's Swedish speakers already in the 1980s (Allardt and Miemois 1982; Tandefelt 2003). Since then, there have been many signs of language loss in the country's Swedish-speaking community, especially in areas with an increasing number of Finnish speakers (Leinonen and Tandefelt 2007). However, some elements clearly testify to a continued interest in the Swedish language. In particular, a majority of children with mixed Finnish–Swedish backgrounds are registered as Swedish speakers, and a higher share of children are enrolled in Swedish-speaking schools than are registered as Swedish speakers (Saarela 2021).

In Finland, Finnish and Swedish are official languages protected at the state level, and the language classification of municipalities relates to how residents are registered based on their mother tongue rather than on fixed territorial boundaries. With the exception of the autonomous Åland Islands, which are unilingual Swedish, Finland's mainland has been characterized by flexible territorial boundaries that have been reshaped by population movements (McRae 1975, 2007; Myhill 1999). The language classification of a municipality impacts the local community not only because it reflects the share of Swedish speakers but also through the level of public services provided in Swedish.

A majority of the Swedish-speaking population resides in Uusimaa and the metropolitan region of Helsinki. Over the past century, these areas have attracted a number of internal migrants from the rest of the Swedish-speaking territory, especially from parts of Finland with unilingual Finnish-speaking settlements. The share of the Swedish-speaking population is lower in the southern parts of the country compared to the Swedish-speaking settlement area along the western coastline (Figure 1). The region of Uusimaa and the Helsinki metropolitan region are more densely populated than most other Swedish-speaking territories, which include many semi-urban municipalities and rural areas. Hence, there is considerable variation between Finnish and Swedish speakers with regard to internal migration and geographical concentration. The region of Uusimaa and other areas with Swedish-speaking settlements also differ notably in terms of their ethnolinguistic profiles.

# Data and methods

We use register data on the entire Finnish population – that is, all individuals who have ever lived in Finland at some point in the period 1970–2020. The data are accessed through Statistics Finland's remote online access system (Fiona) and are used with authorization code TK-53-1370-17.

These administrative records include information on the ethnolinguistic affiliation of every person based on the unique mother tongue. Only one mother tongue can be registered, even though many Swedish speakers are bilingual. Shifts in language registration over the life course are rare (Saarela, Kolk, and Uggla 2023). For the sake of simplicity, we have coded individuals as Swedish speakers if they were ever registered as such.

The data contain the municipalities of birth of all individuals in the register. For people born after 1952, there is a link to each parent provided the parent did not die before the end of 1970. To observe individuals reaching adulthood and to be able to link them to their parents and grandparents, the study population is derived from a focal cohort (G3) born in Finland in 1970–1985. In the results, we include those who were living in Finland at ages 14 and 35.

We add information about the parents (G2) and grandparents (G1) of these index individuals. As it is anchored to the youngest generation, the study population is not defined by older age survival (Kolk 2017). The fact that not all the parents and grandparents were alive (and residing in Finland) at the end of 1970 implies missing links to some of these relatives. We are able to link 98% of the fathers, almost 100% of the mothers, 62% of the paternal grandfathers, 69% of the paternal grandmothers, 64% of the maternal grandfathers and 71% of the maternal grandmothers. We



have information about both parents and all four grandparents for 45% of the index individuals in G3 (394,981 persons). We present results based on this setup.

### **Outcome** variable

We define immobility as an adult's 'staying in place' compared to childhood residency, rather than as the absence of movement. Immobility is further defined as living in the same place at ages 35 and 14. This means that people who are labelled as 'immobile' may not have been absolutely still; they could have moved and returned to the same place (Stockdale and Haartsen 2018). We are consequently concerned with geographical rootedness.

Persons who moved due to their studies but returned to where they lived as teenagers are thus considered immobile. A primary reason behind our approach is that incorporating moves linked to education is difficult with our data; also, doing so is beyond the scope of the article. Internal migration is very age dependent. Most moves occur in young adulthood. This is also the case in Finland, with internal mobility peaking at age 26 and then rapidly declining (Ghosh et al. 2019). Our choice of ages 14 and 35 is motivated by the fact that age 14 precedes the period of increased mobility related to education, job search and family formation, while age 35 largely follows these life course events. Any moves before age 14 are not considered, except as a control variable in the multivariate analyses, because they are usually linked to the parents' agency rather than the child's. The specific age of 14 is chosen also because, until 1993, students enrolled in schools outside their parental municipalities were usually registered as living with their parents. Therefore, measuring mobility due to a person's studies in this period and for the birth cohorts concerned would lead to biased results.

To assess the importance of geographical scale (Olofsson et al. 2017; White and Lindstrom 2005), the outcome variable of immobility – living in the same place at ages 14 and 35 – is measured in relation to the municipality (*kommun/kunta*) and the region (*landskap/maakunta*), respectively. The administrative boundaries can be seen in Figure 1. The municipality categorization of 2015 is used, meaning that the total number of municipalities is 317, and the number of regions is 19. We categorize the municipalities based on Statistics Finland's list of municipalities for each statistical year in the data. Two or more municipalities that in time were merged into one municipality by the authorities are thus treated as one in our analysis.

The difference in geographical scale between municipalities and regions can be interpreted as a proxy for short-distance versus long-distance immobility; this disregards the fact that a move across a municipal border may also be a move across a regional border. Furthermore, in this specific study context, geographical scale may reflect also barriers between the two ethnolinguistic groups. The probability that Swedish speakers will move to areas where only Finnish is used is low, which probably has to do with linguistic, cultural, social and employment barriers. Therefore, alternative destinations are more limited for Swedish speakers than for Finnish speakers, and this has been the case also in previous generations. Below, we present the results from the municipality-level specification. The findings from the regional-level specifications are found in the Appendix. Meaningful differences between the two analyses are noted in the text.

# **Explanatory variable**

The register gives us information about the birthplace of every individual in the data. Ancestral local ties are created based on the birthplace of the parents and grandparents.

The variable of ancestral ties, which is the main explanatory variable used in the statistical models, is an aggregated variable that refers to the index person's place of residence at age 14 compared to that of the parents and grandparents. We distinguish persons with (i) no ancestral ties, (ii) at least one parent but no grandparent born in the place of residence, (iii) at least one grandparent but no parent born in the place of residence and (iv) at least one parent and at least one grandparent

born in the place of residence. As is the case with the outcome variable, the ancestral ties variable refers to either the municipal level or the regional level, depending on the scale specification used in the model.

Descriptive statistics for the distribution of dummy variables that reflect whether the index person lives in the same place as the birthplace of each parent and grandparent are also presented (see Table 1 in the next section).

# Control variables

The control variables are gender, birth cohort, any move during childhood (between birth and age 14), urbanization level of the municipality of residence at age 14, educational level at age 35, living with a partner at age 35, living with children in the household at age 35, labour market status at age 35, number of siblings, birth order, and whether a parent or grandparent at some point worked in agriculture, which is a marker for sedentary life. As is the case for the outcome variable, the variable of childhood moves refers to either the municipal level or the regional level, depending on the scale specification used in the model.

## Models

We run logistic regression models in which the binary outcome is immobility (1) or its absence (0) as defined above. Central to our analysis is the comparison between Finnish and Swedish speakers. Therefore, all the models are run separately according to the index person's ethnolinguistic affiliation (i.e. mother tongue). To enable comparisons across the models, the results are presented as discrete changes in the form of average marginal effects, also known as marginal effects at means (Mood 2010). These can be directly interpreted as percentage point differences in the probability of an event – in this case, immobility.

To compare statistical significance across the models for Finnish and Swedish speakers, we run the regressions with Stata's generalized structural equation modelling (gsem) command (Mize, Doan, and Long 2019). This command combines the covariance matrices across the group-specific models and computes the cross-model covariance needed to properly compare the significance of effect differences between two groups (Canette 2014; Lindsey 2016). Since we use data on the entire population, standard errors should be interpreted as reflecting the spread of the estimates rather than as strict tests of statistical significance.

Robust standard errors clustered according to region of birth are used to consider the correlations between observations in the same geographical units. Several cluster variables have been tested. Region of birth is used because it is associated with the largest standard errors.

To capture the importance of geographical context, regressions are run separately for different areas. The ones compared are (i) the whole country, (ii) the whole Swedish-speaking settlement area, (iii) the region of Uusimaa and (iv) the Swedish-speaking settlement area outside Uusimaa (see Figure 1). In this way, we can roughly disentangle differences in ethnolinguistic composition and urban level.

## Robustness checks

The first robustness check compares the distributions and runs the models with the inclusion of the individuals who had missing information regarding their ancestral ties. The results are found in Appendix Tables A2, B2, C1 and D2. As a second robustness check, we study how sensitive the findings are to emigration by including individuals who have migrated after age 14 but have not returned by age 35. These results are found in Appendix Tables A3, B3, C2 and D3. These models exclude the variables for educational level, labour market status and household composition, as they are missing for emigrants at age 35.

**Table 1.** Generational ties to one's place of residence at age 35.

	Swedish-speaking settlement									Swedish-speaking settlement		
	Whole country			area			Uusimaa			area w/o Uusimaa		
At age 35 – living in the same municipality as:	FI	SV	Ratio	FI	SW	Ratio	FI	SW	Ratio	FI	SW	Ratio
At age 14 (ego)	43.5	52.7	0.8	33.8	55.0	0.6	31.8	52.4	0.6	43.7	56.1	0.8
At birth (ego)	37.2	47.4	0.8	30.3	49.8	0.6	26.3	47.8	0.5	43.0	50.4	0.9
Father's birthplace	24.3	36.0	0.7	16.0	37.9	0.4	12.5	34.8	0.4	25.5	39.8	0.6
Mother's birthplace	21.9	31.5	0.7	14.8	33.3	0.4	11.6	33.5	0.3	23.7	32.1	0.7
Paternal grandfather's birthplace	15.2	28.6	0.5	6.8	30.1	0.2	4.9	25.0	0.2	13.3	34.1	0.4
Paternal grandmother's birthplace	12.9	24.8	0.5	5.8	26.1	0.2	4.2	22.2	0.2	11.1	29.1	0.4
Maternal grandfather's birthplace	13.2	24.5	0.5	5.9	25.9	0.2	4.3	23.8	0.2	11.6	27.1	0.4
Maternal grandmother's birthplace	11.5	21.9	0.5	5.2	23.1	0.2	3.8	21.1	0.2	10.0	24.4	0.4
Number of Finnish speakers	374,408			73,751			71,177			20,033		
Number of Swedish speakers	20,573			19,709			8,933			10,967		

Note: Population with full information on parents and grandparents, living in Finland at age 35, municipality-level specification.

Meaningful differences are commented on below. However, as the main findings largely stay the same, the tables for the robustness checks are presented in the Appendix.

As a complement to the municipality-level specification, all the descriptive statistics are presented by using the regional-level specification of residential area, ancestral ties, childhood mobility and immobility of the index person. The same is true of the regression models run in parallel form. These distributions and results are found in Appendix Tables A1-A3, B1-B3, D1-D3 and E1.

We also split the data by non-tertiary- and tertiary-educated men and women at age 35, and we run separate models by sex and education for the main study population. These results are reported in Appendix Tables F1-F4. They reveal that the estimated effects of local ancestral ties on geographical immobility are largely similar among men without tertiary-level education, men with tertiary-level education, women without tertiary-level education and women with tertiary-level education. Therefore, the findings reported below are not considerably affected by the movements of people with different educational aspirations and by their sex.

#### Results

# Local ancestral ties and geographical immobility

Table 1 shows the percentage shares of Finnish and Swedish speakers who, at age 35, were living in the same municipalities as they had at age 14 and at birth, as well as whether these places were the same municipalities of birth of each parent and grandparent. The Swedish speakers have consistently higher shares of local ties than the Finnish speakers, and this difference grows larger with each previous generation. Compared to the Swedish speakers, only half of the Finnish speakers live in municipalities where at least one of their grandparents was born. The ethnolinguistic difference is larger in the Swedish-speaking settlement area than in the nation as a whole, which reflects historical (im)mobility patterns.

A particularly large difference is seen in the Uusimaa region. During the past decades, this area has been shaped by urbanization and an inflow of Finnish speakers without local family ties. In Uusimaa, less than 5% of the Finnish speakers live in a municipality where one of their grandparents was born, compared to well over 20% of the Swedish speakers. For both ethnolinguistic groups, and across the geographical areas, living in the birth municipalities of fathers, paternal grandfathers or paternal grandmothers is more likely than living in the birth municipalities of mothers, maternal grandfathers or maternal grandmothers. This parental and grandparental gender difference reflects the higher internal migration rates of women compared to men in previous generations.

Table 2 shows the average marginal effects of local ancestral ties on immobility based on the regression models. For the whole country, we see that having ancestral ties in the residential municipality at age 14 relates positively to the probability of living in the same area at age 35. Compared to having no ties, at least one parent (but no grandparent) born in the municipality of residence at age 14 increases the probability of being immobile by 8% points for Finnish speakers and 10% points for Swedish speakers. Having at least one grandparent (but no parent) born in the municipality of residence has a notably stronger effect on Swedish speakers than on Finnish speakers (0.18 versus 0.11). Having at least one parent and at least one grandparent born in the municipality of residence at age 14 is associated with an 18% points increase in the probability of being immobile for Swedish speakers, compared to having no local ancestral ties. The corresponding number for Finnish speakers is notably lower (11% points).

For both Finnish and Swedish speakers, the positive association between ancestral ties and immobility is particularly pronounced in Uusimaa, while it is attenuated in the Swedish-speaking settlement area when Uusimaa is excluded. Having at least one parent and at least one grandparent born in the municipality of residence at age 14 increases the probability of being immobile by 15% points for Finnish speakers and 21% points for Swedish speakers, compared to having no local ancestral ties.



Table 2. Average marginal effects of local ancestral ties and the control variables on geographical immobility.

		Whole cour	ntry	Swe. speal settlement	_	Uusimaa	a	Swe. speak. set. area w/o Uusimaa		
_		AME	Sig.	AME	Sig.	AME	Sig.	AME	Sig	
Local ancestral ties at age 14										
No parent and no grandparent (ref.)										
No parent but at least one	FI	0.06	***	0.08	***	0.09	***	0.03	**1	
grandparent	SW	0.13	***	0.12	***	0.15	***	0.09	**1	
	Diff.	-0.07	***	-0.05	***	-0.05	***	-0.06	**1	
At least one parent but no	FI	0.08	***	0.09	***	0.11	***	0.06	**:	
grandparent	SW	0.10	***	0.10	***	0.16	***	0.06	**:	
	Diff.	-0.02		-0.01		-0.05	***	0.00		
At least one parent and one	FI	0.11	***	0.10	***	0.15	***	0.08	**:	
grandparent	SW	0.18	***	0.17	***	0.21	***	0.12	**:	
	Diff.	-0.07	***	-0.07	***	-0.06	***	-0.04	**	
Gender										
Man (ref.)										
Woman	FI	-0.05	***	-0.04	***	-0.04	***	-0.05	**1	
	SW	-0.07	***	-0.07	***	-0.04	***	-0.09	**:	
	Diff.	0.02	*	0.03	***	0.00		0.05	**:	
Birth cohort										
1970–1975 (ref.)										
1976–1980	FI	-0.02	***	-0.01	**	-0.01	***	-0.01		
	SW	-0.02	***	-0.02	***	-0.02	***	-0.02		
	Diff.	0.00		0.01		0.01	**	0.01		
1981–1985	FI	-0.03	***	0.00		-0.02	***	0.00		
	SW	-0.03	***	-0.03	***	-0.04	***	-0.02	*>	
	Diff.	0.00		0.03	**	0.02	***	0.02		
Childhood immobility										
No (ref.)										
Yes	FI	0.11	***	0.10	***	0.11	***	0.10	***	
	SW	0.12	***	0.11	***	0.11	***	0.13	***	
	Diff.	-0.02		-0.01		0.01		-0.03	-×	
Municipality type at age 14 Urban (ref.)										
Semi-urbanized	FI	-0.14	***	-0.20	***	-0.14	***	-0.16	***	
	SW	0.00		0.00		-0.03	***	0.05	***	
	Diff.	-0.14	***	-0.21	***	-0.11	***	-0.21	**>	
Rural	FI	-0.19	***	-0.25	***	-0.24	***	-0.22	***	
	SW	-0.10	**	-0.10	***	-0.22	***	-0.04	**	
	Diff.	-0.10	**	-0.16	***	-0.02		-0.17	***	
<i>Agricultural ancestry</i> No (ref.)										
Yes	FI	0.00		0.00		0.01	***	0.00		
	SW	0.02	***	0.03	***	0.02	***	0.04	**>	
	Diff.	-0.03	**	-0.03	***	-0.02	***	-0.03	***	
Siblings										
No (ref.)										
Yes	FI	0.00		0.01	**	0.01		0.02	**	
	SW	0.00		-0.01		-0.01		0.01		
	Diff.	0.00		0.01	**	0.01	***	0.01		
First born No (ref.)										
Yes	FI	0.00		0.01		0.01	***	0.00		
	SW	0.00		0.00		-0.01	**	0.01	***	
	Diff.	0.00		0.01		0.02	***	-0.01	-×	
Educational level at age 35 Primary (ref.)										
Secondary	FI	-0.03	***	-0.02	***	-0.01	***	-0.02	**	
	SW	-0.05 -0.05	***	-0.02	***	-0.06	***	-0.02		
	Diff.	0.01		0.03	*	0.05	***	0.03		
Tertiary	FI	-0.19	***	-0.06	***	-0.05	***	-0.14	***	
I C.I CIGII V							***		***	
,	SW	-0.17	***	-0.17	***	-0.16	~ ~ ~	-0.18	~ ~ ~	

(Continued)

Table 2. Continued.

		Whole country		Swe. speaking settlement area		Uusimaa		Swe. speak. set. area w/o Uusimaa	
		AME	Sig.	AME	Sig.	AME	Sig.	AME	Sig.
Labour market status at age 35									
Employed (ref.)									
Unemployed	FI	0.00		-0.01		-0.03	***	0.02	
	SW	-0.04	**	-0.04	***	-0.02		-0.06	***
	Diff.	0.04	**	0.04	**	-0.01		0.08	*
Outside the labour force	FI	0.01	**	0.02	*	0.02	***	0.04	**
	SW	-0.01	***	-0.01	***	-0.02	***	-0.01	
	Diff.	0.02	***	0.03	***	0.03	***	0.05	***
Living with partner at age 35									
No (ref.)	FI	-0.11	***	-0.13	***	-0.12	***	-0.15	***
Yes	SW	-0.12	***	-0.12	***	-0.12	***	-0.12	***
	Diff.	0.01		-0.01		-0.01		-0.03	
Living with child(ren) at age 35									
No (ref.)	FI	0.08	***	0.02	*	0.04	***	0.03	
Yes	SW	0.09	***	0.09	***	0.07	***	0.10	***
	Diff.	-0.01		-0.07	***	-0.03	***	-0.07	*
Log pseudolikelihood		-251,257		-61,612		-52,623		-20,220	
Log pseudolikelihood of naive		-267,609		-63,780		-54,328		-21,266	
Number of observations FI		374,408		73,751		71,177		20,033	
Number of observations	SW	20,573		19,709		8,933		10,967	

Notes: Population with full information on parents and grandparents, living in Finland at age 35, municipality-level specification. \*\*\* < 0.01, \*\* < 0.05, \* < 0.1.

In all the models, the associations with ancestral ties that include the grandparental generation are significantly stronger among Swedish speakers than among Finnish speakers. The ethnolinguistic difference is smaller when persons have only parental local ties and no grandparental local ties compared to when they have both parental and grandparental local ties. Uusimaa is an exception in this regard. In this region, the association is 5% points stronger for Swedish speakers also when there are only parental local ties.

# Other factors related to geographical immobility

Women are generally less likely than men to stay in the residential municipality, and the gender difference is slightly larger for Swedish speakers than for Finnish speakers (Table 2). In the models that include emigrants (Table C2), the gender effect is more pronounced, which reflects women's higher emigration rates.

Younger cohorts are slightly less likely to stay in place than older ones, whereas childhood immobility is positively related to immobility later in life.

Compared to urban municipalities, residing in semi-urbanized or rural municipalities at age 14 is associated with a strong negative effect on the probability of being immobile for Finnish speakers. The effect is particularly pronounced in the Swedish-speaking settlement area, where Finnish speakers in semi-urbanized municipalities have a 20% points lower probability of being immobile and those in urban areas a 25% points lower probability. Similar negative associations cannot be seen for Swedish speakers, for whom there is even a slightly positive effect (0.05) in the Swedish-speaking settlement area outside Uusimaa. Living in rural municipalities, rather than in urban ones, is related to a lower probability of staying also for Swedish speakers, although not with the same effect size as for Finnish speakers. The ethnolinguistic difference is particularly marked in rural municipalities outside the more densely populated Uusimaa. Finnish speakers in this area experience a 22% points lower probability of being immobile compared to those living in an urban area, while the difference for Swedish speakers is only 4% points.

Having an agricultural ancestry has a close to zero effect on the probability of being immobile for Finnish speakers, while it is associated with a 2–4% points higher probability for Swedish speakers.

Having siblings or being the firstborn shows a close to zero effect on the probability of staying for both ethnolinguistic groups.

Having higher education, especially tertiary-level education, is related to a notably lower probability of being immobile, compared to only having primary education. At the national level, the effect size is almost the same for Finnish and Swedish speakers (-0.19 and -0.17, respectively), while it is more attenuated for Finnish speakers in Uusimaa (-0.05 versus -0.16).

When compared to being employed, unemployment or being outside the labour force is associated with a slightly lower probability of being immobile for Swedish speakers, while the association is also small, but not equally consistent, for Finnish speakers.

Living with a partner at age 35, as opposed to not doing so, is related to a lower probability of being immobile. The effect size is practically the same in both ethnolinguistic groups and across geographical areas (from -0.11 to -0.15).

Living with children, as opposed to not doing so, is related to a higher probability of being immobile. At the national level, the effect size is practically the same for Finnish and Swedish speakers (0.08 and 0.09), while in the Swedish-speaking settlement area, the probability is notably lower for Finnish than for Swedish speakers (0.02 vs 0.09).

#### Robustness checks results

If we include also index persons with missing generational links (the first robustness check) and those who have emigrated (the second robustness check), we reach similar conclusions to the ones presented above, both in terms of descriptive findings (Tables B1–B3) and regression results (Tables C1–C2).

Swedish speakers exhibit consistently higher shares of generational ties than Finnish speakers, at both the municipal and regional levels (Tables A1–A3). However, the positive association between having local ancestral ties and immobility is generally less pronounced at the regional level (Table D1); also, the ethnolinguistic difference in the association is not equally clear. These conclusions remain robust when the definition of the study population changes (Tables D2–D3).

The results of the regressions without the control variables (Table E1) are similar to those that include such variables, which suggests that socioeconomic and demographic control variables only partly underlie the observed association between local ancestral ties and geographical immobility.

# **Discussion**

This article contributes to the scientific field of geography in at least two important ways. First, we attempt to study individual immobility as a process in its own right, that is, as an active process, rather than as the absence of moving. Thus, we reflect active decisions of staying in conjunction with resources and constraints, instead of attempting to mirror the passive processes associated with staying put, which has been much more common in the mobility literature. With this perspective, we put light on aspects that previously have been largely neglected, and especially the importance of geographical ancestral ties on individuals' immobility decisions. Second, we are concerned with long-term patterns of immobility, both in relation to individuals' own life courses and across generations. By doing so, we highlight immobility across population subgroups, and by the level of urbanity and geographical scale, as something that may evolve and accumulate within, and particularly between, generations.

More specifically, we investigate whether there is an association between geographical immobility – the fact that a person lives in the same place at ages 35 and 14 – and local ancestral ties measured by parental and grandparental place of birth. In this regard, Finland offers a highly useful case study due to its two official national languages, Finnish and Swedish, and the resulting main



ethnolinguistic groups, which are characterized by historically different mobility patterns and geographical concentrations. Our focus is on comparing these two ethnolinguistic groups to see whether any differences vary according to regional characteristics and whether the applied geographical scale matters.

Our results suggest the following: (1) immobility relates to local ancestral ties; (2) immobility is notably more common among Swedish speakers than among Finnish speakers; (3) immobility relates more strongly to local ancestral ties among Swedish than among Finnish speakers; (4) the association differs across geographical areas with different ethnolinguistic profiles.

Swedish speakers in Finland are known for their higher emigration rates compared to Finnish speakers; this emigration is directed especially to neighbouring Sweden (Hedberg and Kepsu 2008; Saarela 2021). By looking at internal immobility, we revisit the question of ethnolinguistic mobility differences. Significant variations between the two ethnolinguistic groups are found. Swedish speakers have consistently higher shares of intergenerational ties than Finnish speakers, and the difference grows larger with each previous generation. We also observe substantial regional variation in the proportion of the population that lives in municipalities where local ancestral ties are present. Ancestral ties are more common in the Swedish-speaking settlement area outside Uusimaa, while the ethnolinguistic difference is particularly large in that region.

The findings of the multivariate analyses show that local ancestral ties are linked to sedentary behaviour and that these associations are stronger with the grandparental generation than with the parental one. In terms of effect sizes, ancestral ties play a considerable role in individual immobility; this role is at least as important as the many socioeconomic and demographic factors we have controlled for. The relationship between local ancestral ties and sedentary behaviour is notably stronger for Swedish than for Finnish speakers, in particular with regard to local ancestral ties with the grandparental generation.

In contrast to Finnish speakers, the immobility behaviours of Swedish speakers are not distorted by lower urbanization levels. Similarly, agricultural ancestry plays a small positive role in immobility among Swedish speakers, in a way that is not found among Finnish speakers. Living in a semi-urban or rural municipality, compared to living in an urban municipality, has a stronger negative association with immobility for Finnish than for Swedish speakers. Correspondingly, agricultural ancestry has a close to zero association with immobility for Finnish speakers, while it is associated with a slightly higher probability of being immobile for Swedish speakers.

We interpret these findings as being largely due to contemporary and historical differences in the geographical concentrations of the two ethnolinguistic groups in the Swedish-speaking settlement area and the nation as a whole, as well as to the notably lower internal migration rate of Swedish speakers. A remarkably larger proportion of Swedish speakers live in rural and semi-urban areas where agriculture still played a prominent role only a few decades ago. In the region of Uusimaa, which is much more urbanized than other parts of the Swedish-settlement area, there was an influx of Swedish speakers already in the 1920s and 1930s (Finnäs 1997; Waris 1973), before many of the people in our grandparental generation were born. Much of the inflow of Finnish speakers to Uusimaa occurred later or during the past few decades. The latter period coincides with the early life trajectories of our index individuals, who were born between 1970 and 1985. Therefore, our results are influenced by the period under examination, and they reflect internal mobility and immobility patterns that have accumulated across generations in a different manner for Finnish and Swedish speakers.

Swedish speakers are historically more immobile; so, it is natural for them to also show higher shares of local ancestry. Numerous studies (e.g. Saarela and Finnäs 2018; Saarela, Kolk, and Uggla 2023) have shown that Swedish and Finnish speakers differ notably with regard to various aspects of the nuclear and extended families, and this variation appears to be driven by differences in cultural norms. However, the different immobility patterns of Swedish and Finnish speakers do not necessarily depend solely on stronger local ancestral ties. They may also be due to other circumstances, especially structural conditions. Many Swedish speakers in Finland, and especially in Uusimaa,



are effectively bilingual. Still, cultural, social and job-related barriers linked to language probably affect whether and where people move, making Swedish speakers very unlikely to move to Finnish-dominated areas.

Therefore, alternative destinations are much more limited for contemporary Swedish speakers, as was the case in previous generations. If people move a medium distance, or just outside the municipal border, they can maintain ties with their family networks and their birthplaces, even if they are defined as mobile in our study. However, if there is a language barrier, the possibility of a long-distance move is presumably more limited; the alternatives may be to stay put or move even farther away (i.e. emigrate). For this reason, one may expect a stronger association between ancestral ties and immobility if moves are constrained. This is also what we can observe when comparing Swedish and Finnish speakers. The same is true when we include emigrants in the study population. Hence, the stronger relationship between immobility and local ancestral ties for Swedish speakers may be related, at least in part, to the fact that they are more restricted when it comes to moving internally.

This argument does not hold true when the results of the municipality-level and regional-level specifications are compared. The positive effect of having local ancestral ties on immobility is found to be less pronounced at the regional level than at the municipal level. The ethnolinguistic difference in the association is not either equally consistent in the regional-level models as they are in municipality-level models. The reasons behind this discrepancy are unclear and deserve further investigation. Our interpretation is that the regional-level specifications do not capture local ancestral ties in an adequate manner as they are regional rather than local. Hence, they probably do not reflect place connection across generations as well as the municipality-level specifications. The regional areas considered are geographically dispersed and probably too few to capture variation in geographical immobility behaviours, particularly for Swedish speakers.

Some other caveats must be pointed out. One is the possibility of endogeneity due to reverse causality. We cannot determine whether staying in the same place causes closer ties or whether closer ties cause people to stay in the same place. Another issue is that some variables might have been omitted because we could not capture them with the data used. These variables may affect local ancestral ties and immobility as measured here, as well as the relationship between them. For example, we evaluate only one form of place connection – living in the same place at ages 35 and 14. Another measure of place connection may be relevant and might lead to somewhat different conclusions. However, our findings do not seem highly sensitive to the moves of people with different educational aspirations or different genders.

A related issue is that we have been unable to (fully) observe the simultaneous presence of older generations and index individuals in the same place. We ignore whether members of the older generations were residing in the same place and at the same time as the index persons, or for how long. The active and simultaneous presence of older generations is probably part of the mechanisms behind our results. If this is true, it would be natural to think of them as more important for the Swedish speakers, who have lived concentrated in the same areas for several generations. Land, dwellings and other types of physical assets are often inherited from one generation to the next, and they may constitute strong insider advantages that affect immobility decisions.

In summary, this study sheds light on the association between geographical immobility and local ancestral ties, which constitute a form of intergenerational place connection that has been rarely studied thus far. To the best of our knowledge, this is the first study to use register data on an entire population and to link three generations of natives in order to capture geographical rootedness across generations. In Finland, it is clear that the ethnolinguistic group of Swedish speakers has a higher immobility level than the Finnish-speaking group. Since immobility, especially over generations, is related to place attachment and resources, proximity to family networks and kin is important for understanding the life courses and living conditions of population subgroups. Future studies can elaborate on how differences in local ancestral ties relate to socioeconomic and demographic outcomes, such as labour market performance and fertility.



# **Disclosure statement**

No potential conflict of interest was reported by the author(s).

# **Funding**

This work was supported by the Åbo Akademi University Foundation's funding of the DemSwed Internal Centre of Excellence.

# References

- Allardt, E., and K. J. Miemois. 1982. "A Minority in Both Centre and Periphery: An Account of the Swedish-Speaking Finns." European Journal of Political Research 10 (3): 265-292. https://doi.org/10.1111/j.1475-6765.1982.tb00022.
- Barcus, H. R., and A. Shugatai. 2018. "Immobile Populations as Anchors of Rural Ethnic Identity: Contemporary Kazakh Narratives of Place and Migration in Mongolia." Population, Space and Place 24 (4): e2148. https://doi. org/10.1002/psp.2148.
- Bengtson, V. L. 2001. "Beyond the Nuclear Family: The Increasing Importance of Multigenerational Bonds." Journal of Marriage and Family 63: 1-16. https://doi.org/10.1111/j.1741-3737.2001.00001.x.
- Canette, I. 2014. "Using gsem to Combine Estimation Results." The Stata Blog. March 4, 2020. https://blog.stata.com/ 2014/08/18/using-gsem-to-combine-estimation-results/.
- Cooke, T. J. 2008. "Migration in a Family way." Population, Space and Place 14 (4): 255-265. https://doi.org/10.1002/ psp.500.
- Cooke, T. J. 2011. "It is Not Just the Economy: Declining Migration and the Rise of Secular Rootedness." *Population*, Space and Place 17 (3): 193-203. https://doi.org/10.1002/psp.670.
- Coulter, R., M. V. Ham, and A. M. Findlay. 2016. "Re-thinking Residential Mobility: Linking Lives through Time and Space." Progress in Human Geography 40 (3): 352-374. https://doi.org/10.1177/0309132515575417.
- Dawkins, C. J. 2006. "Are Social Networks the Ties That Bind Families to Neighborhoods?" Housing Studies 21 (6): 867-881. https://doi.org/10.1080/02673030600917776.
- Ermisch, J., and C. H. Mulder. 2019. "Migration versus Immobility, and Ties to Parents." European Journal of Population 35 (3): 867-881.
- Finnäs, F. 1997. "Helsingfors Svenska Befolkning. Utvecklingen Under 1920-Talet och Framtidsutsikterna." In Laboratorium för Folk och Kultur, Bulletin Nr 2, 28-33. Helsinki: Brages sektion for folklivsforskning.
- Fischer, P. A., and G. Malmberg. 2001. "Settled People don't Move: On Life Course and (Im-) mobility in Sweden." International Journal of Population Geography 7 (5): 357-371. https://doi.org/10.1002/ijpg.230.
- Foster, T. B. 2017. "Decomposing American Immobility: Compositional and Rate Components of Interstate, Intrastate, and Intracounty Migration and Mobility Decline." Demographic Research 37: 1515-1548. https://doi. org/10.4054/DemRes.2017.37.47.
- Ghosh, A., V. Berg, K. Bhattacharya, D. Monsivais, J. Kertesz, K. Kaski, and A. Rotkirch. 2019. "Migration Patterns of Parents, Children and Siblings: Evidence for Patrilocality in Contemporary Finland." Population, Space and Place 25 (5): e2208. https://doi.org/10.1002/psp.2208.
- Gillespie, B. J., and C. H. Mulder. 2020. "Nonresident Family as a Motive for Migration." Demographic Research 42: 399-410. https://doi.org/10.4054/DemRes.2020.42.13.
- Gordon, Milton M. 1964. Assimilation in American Life. New York: Oxford University Press.
- Gruber, E. 2021. "Staying and Immobility: New Concepts in Population Geography? A Literature Review." Geographica Helvetica 76 (2): 275-284. https://doi.org/10.5194/gh-76-275-2021.
- Gustafsson, B., K. Katz, and T. Österberg. 2017. "Residential Segregation from Generation to Generation: Intergenerational Association in Socio-Spatial Context among Visible Minorities and the Majority Population in Metropolitan Sweden." Population, Space and Place 23 (4): e2028. https://doi.org/10.1002/psp.2028.
- Hedberg, C., and K. Kepsu. 2008. "Identity in Motion: The Process of Finland-Swedish Migration to Sweden." National Identities 10 (1): 95-118. https://doi.org/10.1080/14608940701819850
- Hedman, L., and M. V. Ham. 2021. "Three Generations of Intergenerational Transmission of Neighbourhood Context." Social Inclusion 9 (2): 129–141. https://doi.org/10.17645/si.v9i2.3730.
- Hjälm, A. 2014. "The 'Stayers': Dynamics of Lifelong Sedentary Behaviour in an Urban Context." Population, Space and Place 20 (6): 569-580. https://doi.org/10.1002/psp.1796.
- Hünteler, B., and C. H. Mulder. 2020. "Geographic Proximity to Parents, Intergenerational Support Exchange, and Migration within Germany." European Journal of Population 36 (5): 895-918. https://doi.org/10.1007/s10680-020-09558-w.
- Kolk, M. 2017. "A Life-Course Analysis of Geographical Distance to Siblings, Parents, and Grandparents in Sweden." Population, Space and Place 23 (3): e2020. https://doi.org/10.1002/psp.2020.



- Leinonen, T., and M. Tandefelt. 2007. "Evidence of Language Loss in Progress? Mother-Tongue Proficiency among Students in Finland and Sweden." *International Journal of the Sociology of Language* 2007 (187–188): 185–203.
- Liebkind, K., M. Tandefelt, and T. Moring. 2007. "Introduction: Why a Special Issue on the Swedish-Speaking Finns?" *International Journal of the Sociology of Language* 2007 (187–188): 1–11. https://doi.org/10.1515/IJSL. 2007.047
- Lindsey, Charles. 2016. "Multiple Equation Models: Estimation and Marginal Effects Using Gsem." *The Stata Blog.* May 17, 2019. https://blog.stata.com/2016/06/07/multiple-equation-models-estimation-and-marginal-effects-using-gsem/.
- Lundholm, E., and G. Malmberg. 2009. "Between Elderly Parents and Grandchildren—Geographic Proximity and Trends in Four-Generation Families." *Journal of Population Ageing* 2: 121–137. https://doi.org/10.1007/s12062-010-9022-4.
- McRae, K. 1975. "The Principle of Territoriality and the Principle of Personality in Multilingual States." *International Journal of the Sociology of Language* 4: 33–54.
- McRae, K. D. 2007. "Toward Language Equality: Four Democracies Compared." *International Journal of the Sociology of Language* 2007 (187–188): 13–34.
- Mize, T. D., L. Doan, and J. S. Long. 2019. "A General Framework for Comparing Predictions and Marginal Effects across Models." *Sociological Methodology* 49 (1): 152–189. https://doi.org/10.1177/0081175019852763.
- Mood, C. 2010. "Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do About it." *European Sociological Review* 26 (1): 67–82. https://doi.org/10.1093/esr/jcp006.
- Mulder, C. H. 2018. "Putting Family Centre Stage: Ties to Nonresident Family, Internal Migration, and Immobility." Demographic Research 39: 1151–1180. https://doi.org/10.4054/DemRes.2018.39.43.
- Mulder, C. H., E. Lundholm, and G. Malmberg. 2020. "Young Adults' Migration to Cities in Sweden: Do Siblings Pave the Way?" *Demography* 57 (6): 2221–2244. https://doi.org/10.1007/s13524-020-00934-z.
- Mulder, C. H., and G. Malmberg. 2011. "Moving Related to Separation: Who Moves and to What Distance." *Environment and Planning A: Economy and Space* 43 (11): 2589–2607. https://doi.org/10.1068/a43609.
- Mulder, C. H., and G. Malmberg. 2014. "Local Ties and Family Migration." Environment and Planning A: Economy and Space 46 (9): 2195–2211. https://doi.org/10.1068/a130160p.
- Myhill, J. 1999. "Identity, Territoriality and Minority Language Survival." *Journal of Multilingual and Multicultural Development* 20 (1): 34–50. https://doi.org/10.1080/01434639908666368.
- Olofsson, J., E. Sandow, A. Findlay, and G. Malmberg. 2017. "The Importance of Geographical Scale in Explaining the Return Migration of Young Adults to the Parental Home and to the Parental Neighbourhood." ESRC Centre for Population Change, Working Paper 2017(85).
- Olofsson, J., E. Sandow, A. Findlay, and G. Malmberg. 2020. "Boomerang Behaviour and Emerging Adulthood: Moving Back to the Parental Home and the Parental Neighbourhood in Sweden." European Journal of Population 36: 919–945. https://doi.org/10.1007/s10680-020-09557-x.
- Roseman, C. C. 1971. "Migration as a Spatial and Temporal Process." Annals of the Association of American Geographers 61 (3): 589–598. https://doi.org/10.1111/j.1467-8306.1971.tb00809.x.
- Saarela, J. 2004. "De Förmögna Finlandssvenskarna?" Janus; Revue internationale De L'histoire Des Sciences, De La Medecine, De La Pharmacie, Et De La Technique 12: 80–96.
- Saarela, J. 2006. "Wealth in Two Ethnic Groups: The Role of Internal Migration Background." Finnish Yearbook of Population Research 42: 43–64. https://doi.org/10.23979/fypr.45026.
- Saarela, J. 2021. Finlandssvenskarna 2021- en Statistisk Rapport. Helsinki: Svenska Finlands Folkting.
- Saarela, J., and F. Finnäs. 2003. "Unemployment and Native Language: The Finnish Case." *The Journal of Socio-Economics* 32 (1): 59–80. https://doi.org/10.1016/S1053-5357(03)00007-6.
- Saarela, J., and F. Finnäs. 2004. "Interethnic Wage Variation in the Helsinki Area." Finnish Economic Papers 17 (1): 35–48.
- Saarela, J., and F. Finnäs. 2018. "Ethno-linguistic Exogamy and Divorce: Does Marital Duration Matter?" Sociological Focus 51 (4): 279–303. https://doi.org/10.1080/00380237.2018.1431506.
- Saarela, J., M. Kolk, and C. Uggla. 2023. "Divorce among Exogamous Couples: The Role of Language Convergence." *Acta Sociologica* 66 (4): 402–420. https://doi.org/10.1177/00016993221129814.
- Sharkey, P. 2008. "The Intergenerational Transmission of Context." *American Journal of Sociology* 113 (4): 931–969. https://doi.org/10.1086/522804.
- Sharkey, P. 2015. "Geographic Migration of Black and White Families Over Four Generations." *Demography* 52 (1): 209–231. https://doi.org/10.1007/s13524-014-0368-8.
- Sheller, M., and J. Urry. 2006. "The New Mobilities Paradigm." *Environment and Planning A: Economy and Space* 38 (2): 207–226. https://doi.org/10.1068/a37268.
- Silverstein, M., and V. L. Bengtson. 1997. "Intergenerational Solidarity and the Structure of Adult Child-parent Relationships in American Families." *American Journal of Sociology* 103 (2): 429–460. https://doi.org/10.1086/231213.
- Silverstein, M., and R. Giarrusso. 2010. "Aging and Family Life: A Decade Review." *Journal of Marriage and Family* 72 (5): 1039–1058. https://doi.org/10.1111/j.1741-3737.2010.00749.x.



Sjaastad, L. A. 1962. "The Costs and Returns of Human Migration." Journal of Political Economy 70 (5, Part 2): 80-93. https://doi.org/10.1086/258726.

Spilimbergo, A., and L. Ubeda. 2004. "Family Attachment and the Decision to Move by Race." Journal of Urban Economics 55 (3): 478-497. https://doi.org/10.1016/j.jue.2003.07.004.

Stockdale, A., and S. Ferguson. 2020. "Planning to Stay in the Countryside: The Insider-Advantages of Young Adults from Farm Families." Journal of Rural Studies 78: 364-371. https://doi.org/10.1016/j.jrurstud.2020.06.029.

Stockdale, A., and T. Haartsen. 2018. "Editorial Introduction: Putting Rural Stayers in the Spotlight." Population, Space and Place 24 (4): e2124. https://doi.org/10.1002/psp.2124.

Stockdale, A., N. Theunissen, and T. Haartsen. 2018. "Staying in a State of Flux: A Life Course Perspective on the Diverse Staying Processes of Rural Young Adults." Population, Space and Place 24 (8): e2139. https://doi.org/ 10.1002/psp.2139.

Tandefelt, M. 1986. "The Mechnisms of Swedish-Finnish Language Shift." Nordic Journal of Linguistics 9 (1): 83-96. https://doi.org/10.1017/S0332586500001426.

Tandefelt, Marika. 2003. Tänk. om ... Svenska Språknämndens Förslag Till Handlingsprogram för Svenskan i Finland. Helsinki: Forskningscentralen för de inhemska språken.

Thomas, M. J., and L. Dommermuth. 2020. "Internal Migration and the Role of Intergenerational Family Ties and Life Events." Journal of Marriage and Family 82 (5): 1461-1478. https://doi.org/10.1111/jomf.12678.

Thomas, M., B. Gillespie, and N. Lomax. 2019. "Variations in Migration Motives Over Distance." Demographic Research 40: 1097-1110. https://doi.org/10.4054/DemRes.2019.40.38.

van der Pers, M., and C. H. Mulder. 2013. "The Regional Dimension of Intergenerational Proximity in the Netherlands." Population, Space and Place 19 (5): 505-521. https://doi.org/10.1002/psp.1729.

Van Ham, M., L. Hedman, D. Manley, R. Coulter, and J. Östh. 2014. "Intergenerational Transmission of Neighbourhood Poverty: An Analysis of Neighbourhood Histories of Individuals." Transactions of the Institute of British Geographers 39 (3): 402-417. https://doi.org/10.1111/tran.12040.

Vartanian, T. P., P. Walker Buck, and P. Gleason. 2007. "Intergenerational Neighborhood-Type Mobility: Examining Differences between Blacks and Whites." Housing Studies 22 (5): 833-856. https://doi.org/10.1080/ 02673030701474792.

Waris, H. 1973. Työläisyhteiskunnan Syntyminen Helsingin Pitkänsillan Pohjoispuolelle. Helsinki: Weilin + Göös. White, M. J., and D. P. Lindstrom. 2005. "Internal Migration." In Handbook of Population, edited by D.L Poston and M. Micklin, 311–346. Boston, MA: Springer.

Zorlu, A. 2009. "Ethnic Differences in Spatial Mobility: The Impact of Family Ties." Population, Space and Place 15 (4): 323-342. https://doi.org/10.1002/psp.560.