

Straight-line assimilation in home-leaving? A comparison of Turks, Somalis and Danes

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ABSTRACT The impact of mobility on segregation and the specific transition taking place when leaving home are both under-researched. This paper has analysed the home-leaving patterns of Danes, Turkish immigrants, Turkish descendants and Somali immigrants. The focus was on testing the evidence for spatial assimilation and straight-line assimilation in a Danish context. The analyses led to two main findings. First, while spatial segregation patterns were clear for the home-leavers, inter-generational mobility did take place, supporting the notion straight-line assimilation. Second, inter-generational effects were identified. While there was no indication that parental socio-economic situation affected the spatial segregation of home-leavers, clear and substantial effects were found for the share of ethnic minorities in the parental neighbourhood: the higher the share of ethnic minorities in the parental neighbourhood, the higher the hazard for moving to an ethnic neighbourhood and the lower the hazard for moving to a non-ethnic neighbourhood. Similarity in the patterns of natives and the three ethnic minority groups indicates that the processes taking place might be about more than assimilation between generations.

Keywords: ethnic neighbourhoods, home-leaving, event history analysis, spatial assimilation, straight-line assimilation

Introduction

In recent years, a fear of the consequences of spatial segregation has spread between politicians in many Western countries (Musterd & de Vos 2007; Zorlu & Mulder 2007). Simultaneously, extensive research has been carried out on various aspects of spatial segregation and its implications: residential mobility between neighbourhoods (e.g. Bolt & van Kempen 2010; Schaake 2014), housing careers (e.g. Abramsson et al. 2002; Magnusson Turner & Hedman 2014), and the link between segregation and integration (e.g. Musterd & De Vos 2007; Bolt et al. 2010) to name some of the key themes. As barriers to spatial mobility can function as barriers to social mobility (Bolt & van Kempen 2003), it is essential to identify barriers to spatial mobility and the relative importance of individual and household characteristics in overcoming such barriers.

Despite the prevalent focus on spatial segregation, not much is in fact known about the settlement dynamics of ethnic neighbourhoods and the mobility of the people living in them (Musterd & de Vos 2007). The primary reason is the lack of suitable data for identifying the relative importance of covariates on moving to ethnic neighbourhoods. Longitudinal data on housing careers is required and such data are scarce (Özüekren & van Kempen 2003; Magnusson Turner & Hedman 2014). While cross-sectional data can be utilised for comparing the development of segregation levels over time, it cannot identify mobility patterns (Bolt & van Kempen 2010). The Danish population registers offer a unique possibility in this respect, containing substantial yearly data for the total population of Denmark. Individuals can be followed over time, allowing for longitudinal analyses and the estimation of the relative importance of covariates.

Housing situations are part of a housing career where the links between situations are essential (Pickles and Davies 1991). Understanding housing situations as dynamic parts of a housing career is fundamental as it underscores the nature of housing as ever-changing and closely linked to other aspects of life. Through conducting a housing career, it becomes possible for the household to adjust its housing situation to changing needs and resources (Magnusson & Özüekren 2002). Housing situations are linked over time in that early situations influence the ensuing options and preferences, potentially creating path-dependency (Wingens et al. 2011). This highlights the importance of early transitions such as home-leaving. If segregation patterns spill over from parental household to the initial housing situation of young adults, it adds an additional perspective to the discussion of the issues of ethnic concentration namely the impact of inter-generational effects. Furthermore, as home-leaving signifies the onset of a housing career and influence the ensuing housing career, establishing whether the housing careers start differently is vital for understanding the housing attainment of different ethnic groups. Despite its significance, ethnic differences in home-leaving is however under-researched (Zorlu & Mulder 2011).

The purpose of this paper is to provide empirical knowledge on the mobility patterns of home-leaving Somalis, Turks and Danes with respect to ethnic spatial segregation. The analyses will evaluate the evidence for spatial assimilation and straight-line assimilation with respect to home-leaving in a Danish context. The focus is on the impact of individual and parental acculturation and socio-economic situation on whether young home-leavers move to an ethnic or a non-ethnic neighbourhood when leaving home.

Four groups are under study: Danes, Turkish immigrants, Turkish descendants and Somalis. Turks constitute the largest ethnic group in Denmark and one of the first groups that started migrating more systematically to Denmark as migrant workers. Turkish descendants are by far the largest descendant group. Somalis constitute a major refugee group and one of the earliest refugee groups to arrive in Denmark. Somalis' socio-economic situation is worse than that of Turks as the unemployment rate is higher and divorces are more common (Kleist 2007). The size of the two groups and the differences between them make them interesting groups to study in a Danish context. Furthermore, both groups are spatially segregated, as 43% of the adult population of Turkish origin and 49% of the adult population of Somali origin live in neighbourhoods with at least

30% non-Western ethnic minorities (source: database based on Danish registers). Danes have been included in the analyses in order to be able to establish whether identified patterns are specific for the ethnic groups or resembles that of natives.

Explanations of ethnic settlement patterns

Overall, two complementary explanations can be given for ethnic differences in housing attainment (Bolt & van Kempen 2002). On one hand, it can be caused by ethnic differences in the possibilities for realising preferences i.e. by differences of the possibilities and restraints of households regarding especially financial resources, knowledge of the housing market, discrimination as well as social networks, the latter e.g. through the shared knowledge that households draw on when house-hunting (Özüekren & van Kempen 2002; Özüekren & van Kempen 2003). On the other hand, ethnic differences in housing attainment can be caused by ethnic differences in needs and preferences. Ethnic groups might simply strive for different things within the housing market, meaning that the difference in attainment is a consequence of choice. One cause of differences between ethnic minorities and natives is a preference of some ethnic minority groups for living with friends, family and/or co-ethnics more generally (Skifter Andersen 2006, 2010).

Several theories have been put forward for explaining the development of ethnic settlement over time. These are primarily based on American studies. The word assimilation is here used in the meaning stated by Alba & Nee: *“In the most general terms, assimilation can be defined as the decline, and at its endpoint the disappearance, of an ethnic/racial distinction and the cultural and social differences that express it”* (1997:863). This definition does not presuppose for the process to be one-sided, it can be either one-sided or more mutual – or both. Focus in this paper is on the assimilation of ethnic minorities with respect to *where* ethnic minorities live and not *how* they live their lives.

According to *spatial assimilation theory* (Massey & Mullan 1984; Massey 1985; Alba & Nee 1997; Zorlu & Mulder 2007), ethnic minorities concentrate in ethnic areas on arrival in a new country in order to benefit from the ethnic community and its shared knowledge. Over time, however, cultural assimilation and socio-economic assimilation leads to spatial assimilation (Bolt & van Kempen 2003; Alba & Nee 1997). Inclusion in the labour market and/or educational attainment leads to socio-economic mobility. Concurrently, ethnic minorities acquire the language, norms and cultural values of the destination country as they become settled in the destination country. A gradual acculturation takes place (Bolt & van Kempen 2010). Thus, it becomes possible and desirable to leave the ethnic neighbourhoods with socio-economic mobility providing the resources for moving and acculturation leading to preferences more similar to those of natives e.g. for non-ethnic neighbourhoods. Based on spatial assimilation theory, the notion of *straight-line assimilation* has been developed: that there is a generational dynamic in the assimilation process with the generations being the motor for change towards increased assimilation (Alba & Nee 1997). The *segmented assimilation perspective* offers a modification of the spatial assimilation theory. This suggests that there might be differences in the assimilation

patterns of different ethnic groups based on their differences in resources (Zorlu & Mulder 2007). An earlier Danish study (Skifter Andersen 2006) showed significant differences between Somalis and Turks concerning their resources and their social integration measured by language knowledge, participation in the labour market and social contacts to Danes. Based on the segmented assimilation perspective, Somalis should thus be more concentrated in ethnic neighbourhoods than Turks. All in all, the spatial assimilation approach implies that newcomers should be more segregated than settled migrants; that second generation immigrants should be more spatially assimilated than first generation immigrants; and that differences can be expected between ethnic groups based on differences in resources.

An alternative understanding is offered by the *place stratification theory*. While spatial assimilation theory emphasises the individual and household levels, place stratification theory emphasises ethnic differences of the constraints faced on the housing market (Bolt & van Kempen 2003). Discrimination and the structure of the housing market hinder the progress of minorities' housing careers and lead to spatial stratification. As a consequence, ethnic minorities are unable to realise their preferences. This will not be changed by acculturation or the acquisition of socio-economic resources. With a similar result but a different cause, the *ethnic resources theory* states that because ethnic minorities have access to ethnic resources in ethnic neighbourhoods, they tend to stay in these neighbourhoods and conduct their housing careers within them (Portes & Bach 1985; Skifter Andersen 2010).

Spatial assimilation theory would imply that if you control for socio-demographic characteristics, differences in settlement patterns should disappear. In contrast, both place stratification theory and ethnic resources theory should lead to ethnic concentration despite acculturation and socio-economic mobility. Natives face restraints on the housing market as well, but since they are not hindered by discrimination, the impact of economic resources should be weaker for minorities than for the majority (Bolt & van Kempen 2003). Bolt & van Kempen argue based on Alba & Nee that previous American research indicates that: "*While the place stratification model is more appropriate for the residential mobility of the most stigmatized groups (such as black immigrants in the American context), the spatial assimilation is more suitable to groups that face less discrimination, such as Asians and Hispanics*" (2003:212; Schaake 2014). Consequently, it might be that the above models have different explanatory power for explaining residential segregation patterns of different ethnic groups.

Life-course analysis

On a more general level, the paper is based in life course analysis. The life course perspective offers a fruitful approach for migration studies (Wingens et al. 2011). It is founded in an ambition to overcome the divide between structure and agency by studying the dynamic interplay between the two over time. Underlying the focus on spatial assimilation in this paper is the notion that spatial assimilation is a process by which the individual adjust to the structures of the destination country over time.

Currently, life course analysis offers an analytical approach as opposed to an actual, coherent theoretical framework. From the life course approach, guiding principles for empirical work can be formulated (Wingens et al. 2011). Particularly fundamental for the purpose of this paper is the principle of linked lives. This states that the life course of an individual is closely linked to that of others and that changes in the life course of one individual can impact on the life course of others. For studying home-leaving, this implies that the parental housing situation and parental resources can be expected to influence the home-leaving patterns of their children. The focus in this paper on inter-generational effect of acculturation and socio-economic mobility is tied to the principle of linked lives, in this case between parental household and young home-leavers.

Other life course principles are useful to note here as well. The principle of time and place highlights the importance of the social and historical context. A housing career is carried out in a context that influences the possibilities of the household e.g. the general economic situation and the situation in the housing market (Özüekren & van Kempen 2003). Consequently, the cohort is a key covariate as it ties the individual to a specific historical time (Ryder 1965). The principle of agency underscores the importance of acknowledging agency within the opportunities and constraints individuals face. While the agency of the individual cannot be analysed with register data, its importance should not be forgotten. The principle of linked careers emphasises the linked nature of the various careers of life (Mulder & Hooimeijer 1999). In relation to housing, the family and work careers are central, as they impact greatly on housing needs, motives for change and financial opportunities. Key covariates to control for thus relate to the family and employment situation of the individual.

Purpose of the paper

The purpose of the paper is two-fold. First, the paper investigates the extent to which the notion of straight-line assimilation can be supported in the home-leaving process of Turks and Somalis in a Danish context. The focus is on *inter-generational mobility* in the first transition in the housing career, based on the research question:

Are there indications of straight-line assimilation taking place, leading to ethnic minority home-leavers moving less often into ethnic neighbourhoods when they leave home compared to when they lived with their parents? Are there ethnic differences in indications of straight-line assimilation?

Second, the paper investigates the *inter-generational effects* in the first transition in the housing career, based on the research question:

Does the parental degree of acculturation and socio-economic situation impact on whether home-leavers move into ethnic neighbourhoods? Are there ethnic differences in terms of this?

Together, the two questions establish the relevance of the theories presented above for the home-leaving process of Somalis and Turks in a Danish context.

Home-leaving descendants can be seen as potentially more acculturated than home-leaving immigrants. The descendants grew up in Denmark and have been exposed to Danish culture and norms all their life. Their language level and knowledge of Danish society can be expected on an average level to be higher than that of immigrants even if home-leavers per definition have lived parts of their childhood in Denmark. Hence, by comparing Turkish immigrant and Turkish descendant home-leavers, it becomes possible to identify potential differences in their level of acculturation. The inclusion of Turks and Somalis is relevant based on the notion of place stratification being more appropriate for the most stigmatised groups and spatial assimilation for the less stigmatised (Bolt & van Kempen 2003; Schaake 2014). Previous studies have identified Somalis as being at the bottom of the ethnic hierarchy in Denmark (Kleist 2007). They can thus be expected to face more discrimination than Turks, who as a group have been in Denmark for longer and are less stigmatised.

The Danish housing market and ethnic settlement within it

Ethnic neighbourhoods in Denmark are found only in areas dominated by public rental housing, which comprises one-fifth of Danish dwellings (Skifter Andersen 2010). Public rental is not need-dependent in Denmark and the sector is accessible to all Danish residents¹. Units are administered through waiting lists. Rent levels are subject to strict rent control with rent levels based on the building and maintenance costs of each specific housing estate. As there is no connection between location, demand and rent levels, some estates are highly popular resulting in long waiting lists. Other estates on the other hand are less popular and a unit can be obtained almost instantly. While this means that house-hunters are less likely to be forced to live with relatives in crowded conditions, it also creates a housing market potentially prone to ethnic concentration. Those with the least choices in the housing market end up in the areas with the shortest waiting lists. In recent years, new allocation systems have given local authorities the power to regulate the admission to housing estates with high concentrations of unemployed, which is also used to reduce concentrations of jobless immigrants. Crowded housing conditions, limited financial means and limited networks for house-hunting are all factors leading to fewer choices in the housing market and at the same time these are characteristics that are more predominant in ethnic minority groups.

An ethnically diverse population is a fairly new phenomenon in a Danish context. Currently, the share of non-Western immigrants and descendants living in Denmark is 7.2% (2014), having risen from 1% in 1980. Likewise, the spatial concentration of ethnic minorities is still a fairly new phenomenon in Denmark. The database for this project contains a division of Denmark into

¹The Danish public housing sector is often referred to as social housing. It does function as social housing by providing housing for those in need. However, as it is accessible to all, the term public housing is used here.

approx. 9,000 neighbourhoods with in average about 600 residents². Here it is evident that prior to 1995, neighbourhoods of more than 30% non-Western inhabitants were a phenomenon of limited prevalence and magnitude (table 1). In 2008, a quarter of a million people lived in such neighbourhoods. At the same time, the average share of non-Western inhabitants has grown substantially in all areas: the neighbourhoods have in general become more ethnic.

Table 1: Neighbourhoods with >30% non-Western ethnic minorities in Denmark, 1985-2008

Year	>30%			<30%			Total		
	No. of areas	No. of residents	Mean non-Western inhabitants	No. of Areas	No. of Residents	Mean non-Western inhabitants	No. of areas*	No. of residents	Mean non-Western inhabitants
1985	15	7,910	35.4%	9,213	4,969,617	1.4%	9228	4,977,527	1.4%
1990	49	24,640	36.1%	9,182	5,110,769	2.3%	9231	5,135,409	2.5%
1995	131	76,578	42.5%	9,224	5,043,464	3.0%	9355	5,120,042	3.6%
2000	287	171,872	43.8%	9,068	5,158,148	4.0%	9355	5,330,020	5.2%
2005	401	223,506	44.3%	8,926	4,871,338	4.8%	9327	5,094,844	6.5%
2008	444	236,426	45.5%	9,943	5,059,187	5.2%	9387	5,295,613	7.1%

Source: database based on Danish registers.

*Changes in address codes over time have meant that some addresses cannot be linked to an area. This in turn means that some of the very small areas cannot be included for all years.

The housing situation of ethnic minorities in Denmark has been described and analysed through numerous research studies (e.g. Skifter Andersen 2006, 2010; Damm et al. 2006, Børresen 2006). They show that there are significant differences between the housing situation of ethnic minorities and Danes. First, more than 60% of ethnic minority households live in public housing compared with only 20% of all households in Denmark. Second, while only 2% of all households live in ethnic neighbourhoods, 22% of ethnic households do so. (Skifter Andersen 2010³). Skifter Andersen (2010) finds support for the spatial assimilation theory in a Danish context: a study of the in- and out-mobility in ethnic neighbourhoods shows that those moving out are more integrated and have more resources than those moving in. However, as the study is cross-sectional rather than longitudinal, it is not possible to follow the transitions of individuals over time.

Data and methods

The data sources for the analyses in this paper are the extensive Danish public registers. These contain information on all individuals living in Denmark on a wide variety of fields such as family composition, housing situation, financial situation, employment situation and educational attainment. Data have been gathered since as early as 1980 and the registers thus offer unique

² The neighbourhoods have been created by combining 100x100 meter grids based on a range of criteria e.g. physical barriers, proximity and homogeneity regarding housing tenure and type. They were originally created for a research project for the Rockwool Foundation and have kindly been shared with us. For more information see Damm et al. 2006.

³ In the study by Skifter Andersen, an ethnic neighbourhood is defined as a neighbourhood with more than 40% ethnic minorities.

opportunities for longitudinal analysis. Based on the registers, a database was created containing yearly data on individuals from age 16 and above for the years 1986 to 2006 for the total population of Turks and Somalis and a random 7% sample of Danes.

The analyses were carried out as event history analysis by estimating Cox regression models for the time until leaving the parental home (see Allison 2010 for an in-depth description including formulas). Cox regression models are characterised by allowing for the inclusion of individuals who do not experience an event (censoring) and for the use of time-dependent variables. The Cox regression model is semi-parametric and therefore does not require the selection of a particular distribution for the time to event. Models were estimated in a 'competing risks design' of leaving the home to live in a non-ethnic neighbourhood versus leaving home to live in an ethnic neighbourhood. Continuous models were used: while data is only registered yearly, a true but an unknown ordering of the event times lies behind the yearly grouped event times (Allison 2010). Tied data were handled with the EXACT method⁴, which is suitable for heavily tied data.

The unit of analysis was the individual. While many housing career moves are made as part of a household, leaving home is an independent move, as the housing situation prior to home-leaving is individual. Compared with other transitions in life, home-leaving is a particular kind as almost everyone will experience it at some point. Therefore, it is not a matter of whether you leave home but a matter of what you leave it for and how quickly you do it.

The event of interest is limited to the first, permanent move away from the parental home. Home-leaving is a process and some individuals leave home more than once (Mitchell 2000). However, leaving home for the first time, home-returning and repeated home-leaving are distinct transitional behaviours which cannot be presumed to carry similar characteristics. Furthermore, only permanent moves defined as living outside the parental home for at least two consecutive years were analysed. Those who live outside the parental home for one year e.g. to do military service or attend a one-year continuation school then to return to the parental home are not seen as actual home-leavers. Permanent is thus not defined as not returning. Instead it is defined as having actually left the parental home to live independently, whether you return later or not.

An individual was included in the analyses if he/she lived at home when turning 17 and still did when turning 18. Immigrants were only part of the study population if they had migrated to Denmark before turning 17 and had lived with their parents at least initially after arriving in Denmark and until turning 18. Thereby, it was ensured that we knew what had happened in the adult life course of the home-leavers prior to leaving home. The individual was then followed until the first permanent home-leaving took place or until turning 30, dying or leaving the country for at least two consecutive years, in which cases the individual was censored. By definition, data was thus only right-censored. The first year an event could happen was 1986 and the last was 2006.

Making a common and general definition of what constitutes an ethnic neighbourhood is not possible. Extensive debates have taken place on appropriate definitions. To go into these here

⁴ For the three biggest models, EFRON had to be used. The EXACT method for those models required the allocation of more than 4 GB which was not possible with the SAS 9.3 available on the research server of Statistics Denmark. For all the other models there was however hardly any difference in the estimates based on EFRON and EXACT respectively.

would be too far-reaching as well as besides the purpose of the study. Therefore, a simple threshold definition was chosen. Ethnic neighbourhoods were here defined as neighbourhoods where the share of inhabitants originating from a non-Western country, including Eastern Europe, is higher than 30%. Such a threshold is inevitably arbitrary (Bolt & van Kempen 2010). However, as the share of non-Western immigrants and descendants living in Denmark is 7.2%, 30% identifies neighbourhoods with a substantial and noticeable over-representation of ethnic minorities compared with the average neighbourhood.

Covariates

A range of covariates were included in the Cox regression models based on the literature of spatial assimilation and of home-leaving patterns. All the covariates concerned the 1st of January of the year during which home-leaving took place⁵. The only way to be sure that the covariates could potentially have influenced home-leaving was to choose a time of measurement that preceded the event of home-leaving. The majority of the covariates are time-dependent, recognising the fact that over time, the individual and household circumstances that influence housing options change (Abramsson et al. 2002).

Household income and households' social group are key indicators of parental socio-economic situation. These are included in the models. Acculturation of parents is more difficult to identify with register data. However, for the purpose of this study, the share of non-Western minorities living in the parental neighbourhood was seen as an indicator of the parental degree of acculturation. Based on spatial assimilation theory, acculturation of parents would lead to them moving to neighbourhoods with a smaller share of ethnic minorities. However, place stratification theory would argue that the cause of the parental segregation is not acculturation but discrimination. In this paper, I argue that it is fair to presume that acculturation plays some part in the parental housing situation, at least in a Danish context. Ethnic neighbourhoods in Denmark are only found in public housing areas; a sector which is regulated by specific rules of allocation. If anything, the new allocation rules should lead to less ethnic concentration as the municipality and the housing associations are allowed to give priority to people in employment and education which impact ethnic minorities disproportionately as they have lower employment rates. Thus, it is reasonable to presume that one cause of parental segregation level is the level of acculturation.

Individual income and educational level of the young home-leavers are key covariates for determining the effect of own socio-economic situation. As emphasised by life course analysis, the cohort is essential as it ties the individual to a historical time, where specific home-leaving patterns existed. Furthermore, an effect of the share of minorities in the parental neighbourhood on the hazard for moving to an ethnic neighbourhood could be caused by home-leavers moving to a unit within the same neighbourhood as their parents. Consequently, a covariate was included to control for this. Additionally, as the change in home-leaving patterns over time could lead to

⁵ Except information on employment which refers to November the year before leaving home. The reason is that register data for employment are from November.

different effect of covariates for different cohorts, the models were checked for interaction between cohort and covariates. The only significant interaction term was that of cohort and same neighbourhood as parents. This was thus included in the models. Finally, a range of other covariates relevant for home-leaving were also controlled for (Mitchell 2000, Mulder et al. 2002, Zorlu & Mulder 2011)⁶. Some of these relate to the family and employment career of the individual, thereby taking the notion from life course analysis of linked careers into account. While they are crucial to control for, these covariates were however not of specific interest here. Furthermore, they did not reveal differences in hazards that would explain the differences between the two neighbourhood outcomes and between the four ethnic groups. Consequently, they are not presented in the paper.

Acculturation and socio-economic mobility between generations

In the transition from living in the parental home to the first independent living situation, there were in fact indications of straight-line assimilation. For the three ethnic minority groups of the study, the share living in ethnic neighbourhoods was smaller post than prior to leaving home. The greatest change happened for Turkish descendants, where the share fell from 41% to 30% (for Somalis it fell from 46% to 38%; for Turkish immigrants from 34% to 27%). Still, there were major differences compared with Danes: while 2% of Danish home-leavers moved into ethnic neighbourhoods when leaving home, 27% of Turkish immigrants, 30% of Turkish descendants and 38% of Somali immigrants did so. This indicates persistent segregation patterns despite acculturation and socio-economic mobility between generations. It supports the notion that spatial assimilation is a process that takes time (Bolt & van Kempen 2010).

Turning to the link with parental spatial segregation, it was clear that those living in an ethnic neighbourhood with their parents were much more likely to move into ethnic neighbourhoods when leaving home (table 2). Even for Danes, this was the case. Home-leavers moving to the same neighbourhood as their parents only accounted for part of this. There thus seem to be an effect of living in an ethnic neighbourhood with your parents. This indicates that housing situations are indeed linked over time even between generations and that lives are linked as life course analysis predicts.

Table 2: Transitions between neighbourhoods when leaving home, in %

	Somalis		Turkish immigrants		Turkish descendants		Danes	
	From ethnic n'hood	From non-ethnic n'hood	From ethnic n'hood	From non-ethnic n'hood	From ethnic n'hood	From non-ethnic n'hood	From ethnic n'hood	From non-ethnic n'hood
Move to same ethnic n'hood	12.0	-	18.0	-	13.0	-	9.5	-

⁶ Social group (employed, retired, unemployed or studying), civil status and gender of home-leaver; tenure type of parental housing unit, size of parental household (2-5 people, more than 5 people), relative size of parental home (at least one room per person, less than one room per person), whether the young adult lived with both parents, mother or father and finally whether the parental home was located in Copenhagen, the three biggest cities outside CPH or other.

Move to different ethnic n'hood	42.1	24.2	33.0	14.0	34.8	17.9	14.7	2.0
Move to same non-ethnic n'hood	-	6.7	-	14.2	-	10.3	-	6.0
Move to different non-ethnic n'hood	45.7	69.1	49.0	71.0	52.2	71.3	75.8	92.0
Total	99.7	100.0	100.0	99.2	100.0	99.5	100.0	100.0

N = 116,204.

The notion of ethnic differences was supported by an estimation of Cox regression models without covariates except ethnic background (table 3). Somalis were 26 times more likely than Danes to move into an ethnic neighbourhood. Turks were 11 times as likely to move into ethnic neighbourhoods and half as likely to move into non-ethnic neighbourhoods as Danes. The ethnic differences were major. When including covariates in the model, however, the effect of ethnic background became smaller. The difference in hazard for moving to an ethnic and a non-ethnic neighbourhood respectively was thus partly explained by covariates e.g. by differences in socio-economic situation. Nevertheless, the differences in hazards did not disappear. When controlling for key covariates, Somalis were three times as likely and Turks almost twice as likely as Danes to move into an ethnic neighbourhood. Turks were half as likely as Danes to move into non-ethnic neighbourhoods.

Table 3: Results from Cox regression models for ethnic background

	Model without covariates		Model with covariates*	
	Ethnic n'hood	Non-ethnic n'hood	Ethnic n'hood	Non-ethnic n'hood
Danes	-	-	-	-
Turkish immigrants	10.575****	0.581****	1.814****	0.566****
Turkish descendants	10.768****	0.518****	1.799****	0.583****
Somali immigrants	25.676****	1.034	3.004****	1.007

*HR's for covariates not shown. The covariates included are the same as in the model shown in the next section.

- = reference category. **** p < .0001. N=116,204.

Inter-generational effects of acculturation and socio-economic mobility

In this section I turn to the question of whether the parental degree of acculturation and socio-economic situation impact on home-leavers moving into ethnic neighbourhoods or non-ethnic neighbourhoods respectively.

Table 4: Results from Cox regression models, selected hazards

Variables		Somali immigrants		Turkish immigrants		Turkish descendants		Danes	
		Ethnic	Non-ethnic	Ethnic	Non-ethnic	Ethnic	Non-ethnic	Ethnic	Non-ethnic
z(t)	HH income: up to approx. EUR 46,900	-	-	-	-	-	-	-	-
z(t)	HH income: approx. EUR 46,900-67,000	1.019	1.099	0.756***	0.806****	0.819**	0.788****	0.764**	0.838****
z(t)	HH income: approx. EUR 67,000-87,100	0.505^	0.660	0.613****	0.603****	0.479****	0.634****	0.831^	0.844****
z(t)	HH income: above approx. EUR 87,100	0.242	1.028	0.427****	0.491****	0.414****	0.528****	0.802*	0.910****
z(t)	HH: employed	-	-	-	-	-	-	-	-
z(t)	HH: Unemployed or outside work force	0.898	1.077	1.253**	1.064	1.116	0.971	1.761****	1.167****
z(t)	HH: studying	1.424^	0.888	1.201	1.024	1.140	1.118	1.218	1.147****
z(t)	HH: retired	2.795*	1.976	1.955	1.843*	0.996	1.229	0.933	1.331**
z(t)	Income: up to approx. EUR 5400	-	-	-	-	-	-	-	-
z(t)	Income: approx. EUR 5400-10,700	3.056****	2.958****	1.805****	1.640****	1.877****	1.521****	2.199****	2.086****
z(t)	Income: approx. EUR 10,700-16,100	2.714***	3.537****	1.636****	1.638****	1.833****	1.453****	2.226****	2.388****
z(t)	Income: above approx. EUR 16,100	0.973	2.131*	1.869****	1.698****	1.897****	1.866****	2.113****	2.733****
z(t)	Basic schooling	-	-	-	-	-	-	-	-
z(t)	Vocational training	0.725	0.780	0.884	1.045	0.972	0.970	0.705****	0.949****
z(t)	Upper secondary ('Gymnasium')	1.081	0.802	1.297*	1.259***	1.153	1.286****	0.946	1.001
z(t)	Further education	3.121^	0.653	2.184****	1.206	1.171	1.141	1.239^	1.263****
z(t)	0-10% ethnic minorities (PH)	-	-	-	-	-	-	-	-
z(t)	10-20% ethnic minorities (PH)	0.896	0.860	1.512**	0.904^	1.116	0.959	1.667****	0.998
z(t)	20-30% ethnic minorities (PH)	1.027	0.906	1.821****	0.848**	1.422*	0.899	2.678****	0.944^
z(t)	30-40% ethnic minorities (PH)	1.534	0.712^	3.849****	0.564****	2.421****	0.674****	6.962****	0.751****
z(t)	40-50% ethnic minorities (PH)	1.979*	0.466***	4.740****	0.446****	2.708****	0.654****	7.335****	0.709****
z(t)	50-60% ethnic minorities (PH)	2.192**	0.460**	4.147****	0.332****	3.346****	0.505****	7.407****	0.679***
z(t)	60-70% ethnic minorities (PH)	2.352**	0.502*	4.262****	0.411****	2.419****	0.564****	5.755****	0.654*
z(t)	70-80% ethnic minorities (PH)	2.623**	0.381***	5.328****	0.245****	2.869****	0.492****	14.525****	1.133
z(t)	80-90% ethnic minorities (PH)	1.913^	0.444*	5.732****	0.537*	2.473****	0.310****	0.000	0.293
z(t)	90-100% ethnic minorities (PH)	0.000	0.000	23.059**	0.000	4.143*	0.656	0.000	0.012
z(t)	Different n'hood than parents	-	-	-	-	-	-	-	-
z(t)	Same n'hood as parents	4.342****	1.432	5.256****	1.756***	5.991****	1.945****	1.825****	2.021****
x	Cohort 1980-1988	Not relevant	Not relevant	-	-	-	-	-	-
x	Cohort 1974-1979	Not relevant	Not relevant	1.179^	1.353****	1.037	1.390****	0.629****	1.146****
x	Cohort 1968-1973	Not relevant	Not relevant	0.843	1.312****	Not relevant	Not relevant	0.304****	1.205****
	Interaction same n'hood*cohort 1980-1988	-	-	-	-	-	-	-	-
	Interaction same n'hood*cohort 1974-1979	Not relevant	Not relevant	0.523***	0.524***	0.371****	0.635**	0.628*	0.573****
	Interaction same n'hood*cohort 1968-1973	Not relevant	Not relevant	0.341****	0.655*	Not relevant	Not relevant	0.214***	0.560****
N		1,404		5,624		6,422		102,487	

*p < .05 **p < .01 *** p < .001 **** p < .0001 ^ p < .1

- = reference category; x = time-independent variables; z(t) = time-dependent variables; PH = parental home; HH = head of household.

With regards to parental household income, the analyses showed that a higher household income led to less likelihood of leaving home both for ethnic and non-ethnic neighbourhoods. This is in line with the feathered-nest hypothesis that young adults living in parental homes of high standards stay longer in the parental home (Mulder et al. 2002). For Somalis, parental household income had no effect which could be due to the lower share with a household income above the lowest category. For each of the ethnic groups, the hazards for the income groups were very similar for ethnic and non-ethnic neighbourhoods. Thus, there is no indication that the parental economic situation impacts on the neighbourhood outcome of the home-leaver and thus no indication that a better economic situation of the parents leads to less likelihood of moving into an ethnic neighbourhood. Parental employment situation did impact on the home-leaving of their children but a clear effect in terms of moving to an ethnic or non-ethnic neighbourhood was not found.

The income level of the home-leavers themselves showed very similar patterns across ethnic groups: an income above the reference category of up to approx. EUR 5400 led to a higher hazard for home-leaving to both neighbourhood types. The only exception was for the Somalis of the highest income category where the hazard for moving to an ethnic neighbourhood was close to one and insignificant from the lowest category. This could be due to the low share of Somalis with an income in the highest category. Educational attainment of home-leavers showed no clear difference between educational level and spatial segregation, except for 'further education' leading to a higher hazard for moving to an ethnic neighbourhood for Somali and Turkish immigrants. There are thus very limited indications of the individual socio-economic situation impacting on whether you leave to move to an ethnic or a non-ethnic neighbourhood.

The share of ethnic minorities in the parental neighbourhood, on the other hand, had a major impact on the hazard for moving to an ethnic or a non-ethnic neighbourhood. The tendency was clear and similar across the ethnic categories: the higher the share of ethnic minorities in the parental neighbourhood, the higher the hazard for moving to an ethnic neighbourhood. Turkish immigrants living with their parents in a neighbourhood with 90-100% of ethnic minorities of non-Western origin were 23 times as likely to move to an ethnic neighbourhood as those who lived in neighbourhoods with 0-10% ethnic minorities⁷. Interestingly, the pattern was similar for Danish home-leavers: living in a neighbourhood of 70-80% ethnic minorities made the home-leavers almost 15 times more likely to move to an ethnic neighbourhood than if they had lived in a 0-10% neighbourhood. A potential explanation for this could be that the experience of living in an ethnic neighbourhood as part of the parental household leads to less prejudice against such neighbourhoods.

Interestingly, the hazards for Turkish descendants were markedly lower than those for Turkish immigrants. Thus it seems that the share of minorities in the parental neighbourhood affects immigrants more than descendants. For all the four groups, the higher the share of ethnic

⁷ The share of Somalis and Turks living with their parents in neighbourhoods with 0-10% non-Western ethnic minorities is approx. 20% for the total data selection (treating the data selection of those living in the parental home as person years).

minorities in the neighbourhood, the lower the hazard for moving to a non-ethnic neighbourhood. Thus, on one hand the analyses can be argued to support the notion that low parental acculturation leads to a higher hazard for moving to an ethnic neighbourhood. On the other hand, Danes showed a similar pattern which can hardly be ascribed to parental acculturation. Two opposing explanations can be put forward: either the cause of the patterns differs between the ethnic groups. Or the cause is the same, meaning that parental acculturation is not the cause of the Somali and Turkish patterns. A third option is that it is a combination. In any case, the similarity of the patterns warns us against presuming that parental acculturation is the (only) cause.

Other interesting findings emerged from the estimated Cox regression models. For Turks and Danes, a clear pattern was found for the effect of cohort. The older cohorts had higher hazards for moving to a non-ethnic neighbourhood. For Danes, the older cohorts also had lower hazards for moving to an ethnic neighbourhood. As the older cohorts in general had left home at a time when there were fewer ethnic neighbourhoods, this is not surprising. Furthermore, moving to the same neighbourhood as your parents generally led to a higher hazard for home-leaving. However, for the three ethnic minority groups the hazard for moving to an ethnic neighbourhood was more than double the hazard for moving to a non-ethnic neighbourhood if moving to the same neighbourhood as the parents. Thus, it seems that lives are indeed linked and that inter-generational effects are at play. Moving to the same neighbourhood was the only covariate with significant interaction with the cohort. For the older cohorts, the effect of moving to the same neighbourhood on the hazard for moving to either an ethnic or a non-ethnic neighbourhood was approx. halved for all groups.

Conclusion

The purpose of this paper was to analyse the inter-generational mobility and the inter-generational effects in the home-leaving patterns of Somalis, Turkish immigrants, Turkish descendants and Danes and the extent to which different patterns can be identified between the ethnic groups.

The first part of the analysis found evidence to support straight-line assimilation taking place: for all three minority groups, the share of home-leavers moving to an ethnic neighbourhood was lower than for their parents. However, it was still significantly higher than for Danes. Furthermore, those living in an ethnic neighbourhood with their parents were much more likely to move into ethnic neighbourhoods when leaving home. There were major ethnic differences in the hazard for moving to an ethnic neighbourhood; however these diminished substantially when controlling for key covariates. These results indicate that despite acculturation and socio-economic mobility between generations, spatial assimilation is a slow process.

The second part of the analysis found no indication of parental economic situation impacting on the neighbourhood outcome of the home-leaver. In contrast, the share of ethnic minorities living in the neighbourhood of the parental home had a clear and major impact: the higher the share of ethnic minorities in the parental neighbourhood, the higher the hazard for moving into an

ethnic neighbourhood and the lower the hazard for moving into a non-ethnic neighbourhood. Interestingly, this effect existed for ethnic minorities and Danes alike. Bolt & van Kempen (2010) argue that proponents of spatial assimilation theory: “assume that the effect of socio-economic status will be comparable among ethnic minorities and indigenous groups alike” (pp. 218-219). This seems indeed to be the case for home-leavers on the Danish housing market, thus supporting the notion of spatial assimilation as opposed to place stratification theory. However, whether the explanation for these similar patterns is the same cannot be identified in analyses of register data. Qualitative studies would be able to add insights into the individual reasons of the home-leavers for moving to an ethnic or a non-ethnic neighbourhood. In any case, the similarity in the patterns warns us against presuming that parental acculturation is the (only) cause of ethnic settlement patterns of home-leavers.

The share of ethnic minorities in the parental neighbourhood affected Turkish immigrants more than it did Turkish descendants. This could indicate that home-leaving descendants are more spatially assimilated than home-leaving immigrants i.e. support for the notion of straight-line assimilation. The share of ethnic minorities in the parental neighbourhood also affected Turkish immigrants more than Somali immigrants. Accordingly, there is no indication that the spatial assimilation model is less relevant for the more stigmatized group, the Somalis, compared to the less stigmatized group, the Turks. On the contrary. Overall, however, the ethnic differences were minor, meaning that the segmented assimilation perspective did not seem to be of relevance to the home-leaving patterns of the groups under study here.

Returning to the fears of spatial segregation touched upon in the introduction, the analyses could on one hand be seen to support this fear, as the home-leavers were indeed affected by the parental level of spatial segregation. On the other hand there were signs of spatial assimilation and straight-line assimilation taking place as well as of very similar patterns for the three ethnic groups and for Danes. Further studies on the continued progress of the ethnic housing careers are needed to establish whether or not the higher hazard for starting in an ethnic neighbourhood leads to careers conducted only in ethnic neighbourhoods. With respect to home-leaving patterns specifically, however, the results presented in the paper provides the basis for a less pessimistic view on spatial segregation patterns in a Danish context: while perhaps a slow process, spatial assimilation is taking place.

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