Maarten van Ham · David Manley
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Duncan Maclennan *Editors*

Understanding Neighbourhood Dynamics

New Insights for Neighbourhood Effects Research

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Preface

There is a wide belief in neighbourhood effects: the idea that living in disadvantaged neighbourhoods can have a negative effect on residents' life chances over and above the effect of their individual characteristics. A central question in the neighbourhood effects literature is whether living in a disadvantaged neighbourhood causes people to be poor, to suffer poor health and to have lower general wellbeing, or whether people at greater risk of poverty, who tend to have worse health and lower wellbeing, simply live in these neighbourhoods because living in more affluent ones costs too much. The answer to this question has major consequences for policy responses to deprived neighbourhoods.

This book brings together a collection of chapters which argue that neighbourhood effects cannot be fully understood without also understanding neighbourhoods more generally, but particularly the processes behind neighbourhood change. Surprisingly, given the awareness of (self) selection processes, the neighbourhood effects literature pays scant attention to the literature on selective residential mobility into and out of neighbourhoods. To further our understanding of neighbourhood effects, it is necessary to take a dynamic view of neighbourhoods, focussing on the neighbourhood as a transitory area in constant flux rather than viewing the neighbourhood as a static object. At present there is insufficient understanding either of the processes which create population turnover or change within individual neighbourhoods or of those which lead to or maintain neighbourhood segregation more generally. Both sets of processes need to be understood to further our knowledge of neighbourhood dynamics and hence neighbourhood effects.

The book has been designed to enrich neighbourhood effects research with insights from the closely related, but currently largely separate, literatures on neighbourhood dynamics. The book will be of interest to those who want to know more about what causes neighbourhoods to change, and what makes households choose to live in certain neighbourhoods. These insights are important for our understanding of cities and for the formulation of urban, housing and social policy. Collectively, the chapters in this book offer a state-of-the-art overview of literature on neighbourhood dynamics, including empirical contributions from the UK, Australia, Sweden, The Netherlands and the USA.

Many of the contributions in this book were presented at the seminar Understanding Dynamic Neighbourhoods on 8 and 9 September 2010 at the University of Manchester. The seminar was part of a wider ESRC Seminar Series, Challenges in neighbourhood effects research: does it really matter where you live and what are the implications for policy (RES-451-26-0704). The first book based on this seminar series, *Neighbourhood Effects Research: New Perspectives*, appeared in 2012 with Springer. The seminar series, and the associated book series with Springer, is the result of a collaboration between researchers from OTB Research Institute for the Built Environment at Delft University of Technology, the School of Geographical Sciences at the University of Bristol, the Centre for Housing Research at the University of St. Andrews, Urban Studies at the University of Glasgow and the Cathie Marsh Centre for Census and Survey Research at the University of Manchester.

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Chapter 1
Understanding Neighbourhood Dynamics: New Insights for Neighbourhood Effects Research

Maarten van Ham, David Manley, Nick Bailey, Ludi Simpson, and Duncan Maclennan

Introduction

To date, one of the main challenges in the neighbourhood effects literature has been to identify causality – that is, a causal effect of living in a poverty concentration neighbourhood on an individual over and beyond their own characteristics. A previous volume with Springer (Neighbourhood Effect Research: New perspectives; van Ham et al. 2012b) offered new perspectives on neighbourhood effects through state of the art research, and refocused the debate on neighbourhood effects. The research presented

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in this volume is a direct response to one of the major findings of the previous book: the challenge presented by the highly structured and non-random distribution of individuals over space and time into specific neighbourhoods. A substantial problem for researchers attempting to establish whether neighbourhood effects are present is that selective inflows of households into neighbourhoods can significantly bias the outcome of studies trying to measure these effects (see Duncan et al. 1997; Hedman 2011; Hedman and van Ham 2011; Galster 2008; van Ham and Manley 2010).

This book places neighbourhood selection at the centre of the neighbourhood effects literature and argues that neighbourhood effects cannot be fully understood without understanding neighbourhoods more generally, and in particular the drivers and processes behind neighbourhood population change, such as selective mobility into and out of neighbourhoods. Surprisingly, given the latent awareness of both (self) selection processes and discrimination by institutions, the neighbourhood effects literature pays scant attention to the literature on selective residential mobility or neighbourhood dynamics in general. Looking further into the future there is a clear agenda for neighbourhood effects researchers as a group: to move forward, we must understand better the processes of neighbourhood selection, and we must incorporate this understanding in our studies of neighbourhood effects.

Developing a better understanding of the mechanisms behind neighbourhood dynamics is also beneficial for a number of cognate literatures. The housing choice literature focuses mainly on characteristics of dwellings. These dwelling characteristics are not independent from neighbourhood choice as different neighbourhoods offer different types of dwellings. An improved understanding of neighbourhood choice is also crucial for our understanding of neighbourhood change. Changes in the demographic or socioeconomic structure of neighbourhood populations can in part be explained through selective inflow (and outflow) of households. As a result of the issues discussed in this volume, we will also be able to reach a better understanding of (the causes of) residential segregation. Whilst segregation is frequently conceptualised as a static state, making linkages with neighbourhood sorting enables segregation to be better understood as a process. Determining how households end up in certain neighbourhoods will enrich the segregation debate.

This volume is not, however, merely concerned with connecting disparate sets of academic literature. Within a wider context, developing a better understanding of neighbourhoods is also important for policy. Belief in the presence of neighbourhood effects is often one of the major justifications for the use of area based initiatives (ABIs) as a means to break the cycle of disadvantage and negative individual outcomes (see for instance Tunstall 2011). The central question in the neighbourhood effects literature is whether living in a disadvantaged neighbourhood causes people to be poorer, to suffer worse health and to have lower general wellbeing, or whether these people with greater risks of poverty simply live in these neighbourhoods because living in more affluent ones costs too much (see Cheshire 2012). The answer to this deceptively simple question has major consequences for policy responses to deprived neighbourhoods.

In addition, selective mobility into and out of target areas is often seen as a weakness of ABIs, diluting the impact on the target areas. Those able to take the most advantage of the ABI outcomes are also the most likely to move out of the neighbourhood after the ABI. The process of (self) selection by households out of neighbourhoods serves

to frustrate attempts to engineer more mixed population compositions. Post-ABI, the process of selective mobility can re-sort the population so that the neighbourhood level gains are lost. There is also the issue that residents who are displaced by the ABI might end up in other disadvantaged neighbourhoods, where they might be exposed again to negative neighbourhood effects. A broader understanding of what motivates individuals and households to move into and out of neighbourhoods and what characteristics are most likely to lead to moves will aid the formulation of ABIs that can better target intended populations.

Definition of Neighbourhood

An issue that must be dealt with before we go any further concerns the notion of neighbourhood itself. The definition of neighbourhood can vary from person to person, even between individuals living relatively close to each other. There is a long line of literature that has attempted to define neighbourhoods, including the multi-scalar approach of Suttles (1972) or the exploration of the spatial extent of communities in Chicago by Hunter (1982). More recently, Galster (2001, p. 2111) noted that 'neighbourhood' is a "term that is hard to define precisely, but everyone knows it when they see it […] Yet, even a cursory survey of definitions in the literature reveals some crucial differences in what the implicit 'it' is". The diversity of definitions can become even more problematic when neighbourhoods need to be made operational for research. Frequently, the approach taken to defining neighbourhoods is borne out of pragmatism: the definition matches the economic and administrative units that are employed by governments and other agencies for collecting statistics and organising civic functions. Some authors have suggested that it is better to create bespoke neighbourhoods depending on the object under study. A bespoke neighbourhood can, for example, be defined as consisting of the nearest 500 individuals (see for example Östh et al. in press) or as an area in which there is a relatively high level of homogeneity (see for example Manley et al. 2006). Galster (2001) presents one of the few comprehensive studies of "what" a neighbourhood could be, and demonstrates the wide variety of definitions in existence. He starts by highlighting that neighbourhood can be thought of in an ecological sense and emphasises the importance of social organisation, geographical connectedness, and shared identities with a common boundary (p. 2111). Within this discussion, Galster presents ten dimensions along which neighbourhood definitions can be judged, including aspects such as the type of buildings, infrastructure, demographic characteristics, class and status of residents, tax and public service groupings, environmental characteristics, spatial proximity, political, social interactive and sentimental characteristics. These multiple dimensions of neighbourhood classification further demonstrate the potential idiosyncrasies that can exist in attempting to define concepts that are highly variable. Nevertheless, there is "no doubt … about the importance of neighbourhoods" (Hulchanski 2007, p. 3). In the chapters that follow in this book, the authors have all used their own definitions of neighbourhood driven by the unique perspective (and the data utilised) that their research requires.

Neighbourhoods as Dynamic Places

Neighbourhoods are not static entities: they are dynamic places that constantly change in terms of their composition, definition and relationships with the surrounding environment. They are places that are in continual flux as households and individuals move in and out, but they also change as the population in-situ changes – grows or shrinks through births and deaths, matures through ageing. As Hulchanski (2007, p. 1) notes, "[a]lthough some neighbourhoods change very little in their physical, social, and demographic composition over time, others may change significantly in the course of a few years". Some neighbourhoods change very quickly as the result of single or multiple external shocks, such as large scale neighbourhood demolition and (re)generation, or more slowly as the patterns of residential mobility change. Understanding neighbourhoods and their role in the wider urban context is crucial in developing a better understanding of how the neighbourhoods that we study develop, replicate and change over time.

A prime example of a study of neighbourhood change is by Hulchanski (2007), using Canadian Census data for the city of Toronto from 1970 through to 2005. Hulchanski took a long term perspective on neighbourhood development and change. His work demonstrates how, over time, the city of Toronto has diverged from a place of relative neighbourhood homogeneity, with many neighbourhoods in which the residents earned 'middle incomes' to one of marked social and economic divisions. Hulchanski describes this as changing from a city of neighbourhoods to a "city of disparities" (p. 10). Within this process, some neighbourhoods have experienced gentrification, others have experienced downgrading in terms of their position in the urban neighbourhood hierarchy. The analysis is very powerful and provides a rich account of a wide set of processes. However, like many neighbourhood studies, the data used are (repeated) cross sectional, and as such can only be used to describe patterns and not to investigate causes or processes. As a consequence, these studies cannot show *how* the change comes about. In order to do this, and to make connections with the residential mobility literature, it is necessary to use longitudinal data of neighbourhoods and individual residential histories.

Theories of Change

There are numerous theoretical frameworks that can be used to understand the dynamics of neighbourhoods (see for instance Grigsby et al. 1987). The sheer breadth of theories demonstrates the complexity of the subject and highlights that there are many competing arguments that set out to detail the processes that lead to the residential patterns observed in neighbourhoods. This introductory chapter only gives a brief overview of causes of neighbourhood change as each chapter in this book already expands on the theories and frameworks that they adopt. In broad terms, we can group the causes into three categories. The first set of causes places

household behaviour as central. Households "choose"[1] to live in (or leave) certain neighbourhoods and by their decisions they can alter the population composition of neighbourhoods. A second set deals with demographic and socio-economic change of neighbourhood residents (the non-movers) while the third relates to external shocks to the neighbourhood, including structural changes to the labour market and large scale (re)generations and gentrification. Within this third set are theories about the role of institutions such as banks, lending agencies and local and national governments which influence the composition of neighbourhoods, intentionally or otherwise.

There is a lively debate on the causes of household behaviour leading to neighbourhood change. Much of the literature focuses on the importance of (self) selection (or sorting) into neighbourhoods based on preferences. This can be contrasted with the literature on the role of discrimination by housing 'gatekeepers' such as financial institutions and social housing providers. The current debate on neighbourhood sorting is frequently seen as originating from the work of Schelling (1969, 1971). Schelling theorised that small differences in preferences with regard to (for example the ethnicity of) neighbours, can lead to a system with highly segregated neighbourhoods. Clark (1991) investigated Schelling's hypothesis empirically using US data from telephone surveys conducted in Omaha, Kansas City, Milwaukee, Cincinnati, and Los Angeles as part of a litigation related to desegregated cities (Clark 1991, p. 9). Analysis based on the responses of the interviewees appears to confirm that Schelling's hypothesis was broadly correct, and that even very small preferences to live with own-group ethnic members could lead to highly segregated communities. If we assume that preferences are a substantial and important driver of neighbourhood sorting and residential choice, then the processes that form such preferences are also important. There is a wide literature that suggests that many individuals wish to live in neighbourhoods that are very similar to the neighbourhoods in which they grew up (Feijten et al. 2008). Moreover, the experience of individuals in terms of the places in which they grew up has been demonstrated to be important when seeking to understand the subsequent residential career of individuals (see van Ham et al. 2012).

It is important to ensure that the role of preferences is not overstated. Schelling's work depends on group preferences as a means to drive neighbourhood residential sorting and relies on households being able to express and act on their preferences and desires. It is clear that having the luxury to act out such idealised choice sets is not always going to be possible or realistic for all sections of the population. In contrast to Schelling's preference models, some authors have demonstrated that discrimination is a key driver behind segregation and residential sorting. For instance, authors have highlighted the importance of discrimination within housing markets, either through realtors 'steering' potential buyers (e.g. on the basis of ethnicity)

[1] Not all households are free to choose where they live, with choice being mediated by tenures and financial means. For many tenants in the social sector there is very limited freedom of choice (see for example Manley and van Ham 2011; van Ham 2012).

or finance companies making credit harder to obtain for some groups (see for instance Galster 1976). Using mortgage data from the United States of America, Immergluck (2009) has investigated the geography of foreclosures and has concluded that not only is the spatial patterning of foreclosures distinct but there is also a clear racial (ethnic) dimension. In the European context Aalbers (2011, 2012, this volume) has investigated the process of redlining and the restrictions of credit by neighbourhood and ethnicity, showing that ethnic financial discrimination is present in many forms. Ethnic discrimination is not restricted to the owner occupied market. Henderson and Karn (1984, 1987) investigated the allocations of social housing across the city of Birmingham (United Kingdom) and demonstrated that ethnic minority households were excluded from some neighbourhoods when housing officers thought that the neighbourhood already contained a 'sufficient' share of ethnic minority households, or if the (ethnic minority) household was not considered 'deserving' of the dwelling or neighbourhood in question. A decade later evidence of similar practices was uncovered in the British city of Oldham where households identified as belonging to Asian ethnic minority groups were actively segregated through the process of social housing allocations (CRE 1993). What these literatures demonstrate that there are important drivers behind residential sorting that move far beyond the concept of preferences and self-sorting mechanisms.

While there are many drivers of change which revolve around households changing their residential location, neighbourhoods also alter their population composition through residential immobility. Demographic change can be a very important driver of neighbourhood change. For instance, the apparent segregation of ethnic minority groups in the north of England during the early 2000s was initially presumed to be the result of Schelling-style 'self-selection'. In fact, research showed it was a consequence of differing demographic traits between the minority and majority ethnic populations which saw ethnic minority families increasing in size while the majority White households tended to reduce in relative terms. Selective mobility was not found to be a large contributor to changes in segregation (Simpson 2004; Finney and Simpson 2009). In-situ change of households may result in large changes of neighbourhood populations over time. Populations age, young people leave the parental home, new households form, children are born, people get and lose jobs, and health situations change. These socio-economic and demographic dynamics of households will influence the composition of neighbourhood populations. Such changes can lead to changes in the services and facilities available in neighbourhoods, which in turn might alter the types of households that will look to move to these neighbourhoods, which will reinforce the altered profile or through replacement populations result in static neighbourhood characteristics.

The final set of causes of neighbourhood change can loosely be grouped around the idea of external 'shocks'. These are distinct from the mechanisms discussed above which relate to changes based on the behaviour of households. One of the most obvious shocks comes when neighbourhoods are (re)generated.[2] In the most

[2] This is written as (re)generation to signify that on many occasions the process of regeneration requires to wholesale removal of both the social and physical neighbourhood before rebuilding takes place and it is, therefore, more akin to the 'generation' of a new neighbourhood.

extreme cases, this leads to the removal and dispersal of the neighbourhood population and the destruction of the physical infrastructure. The new neighbourhoods that are built in place are frequently comprised of completely different types of housing, and therefore households, and so the population of the neighbourhood can completely change in a relatively short amount of time. Other external shocks include gentrification. Some scholars, notably Slater (2006), have been highlighting the importance of gentrification as a driver of neighbourhood change for some time, and after a relative hiatus in the academic discourse, attention appears to be being paid to the process once again. The last of the external shock mechanisms we highlight refers to how neighbourhoods relate to the wider economic setting in which they are located. These changes have been particularly prevalent in the older industrial towns and cities of Western countries. Extreme examples can be identified in places such as Detroit (USA), but a large number of cities in the US and Europe have undergone seismic changes in their labour markets since the 1960s and 1970s, with profound impacts on the neighbourhoods within them. As manufacturing industry and therefore manual jobs have relocated elsewhere, previously vibrant neighbourhoods have declined to places where there are roads of empty houses, where apparently few people want to live. These are neighbourhoods that, as a result of the external economy have become undesirable. While national welfare systems have cushioned these shocks to a greater or lesser extent, changes in welfare systems have tended to reinforce decline in these places (Wacquant 2008).

Challenges

There is now a vast neighbourhood effects literature (some 18,000 papers, book chapters and reports, van Ham et al. 2012a) but relatively little of the research covered in that body of work genuinely links theory to empirics and demonstrates the existence of causal neighbourhood effects by empirical investigation. One recent example that shows what can be achieved when these connections are made is the research completed by Beatriz Caicedo Valasquez at the University of Bristol in a Ph.D. investigation into the impact of the neighbourhood environment on adolescent behaviour in Colombia (Valasquez 2012). The careful formulation of a theoretical framework of potential causal transmission pathways lead to clear hypotheses of causal mechanisms which were subsequently tested by empirical analysis. Thus, a major challenge for researchers investigating neighbourhood effects is to make a more explicit connection between theory and empirical investigation.

A second challenge is to pay much more attention to the definition and spatial scale of neighbourhoods. This is connected to the previous challenge as the spatial scale of the investigation cannot be seen separate from the hypotheses which are tested. The challenge, therefore, is to make the question of spatial scale explicit and to operationalize neighbourhoods in ways which make sense with respect to the causal mechanism(s) being investigated. There is little point in investigating large scale neighbourhoods if the causal mechanisms hypothesised are thought to work at a very local scale and vice versa. Finally, the third challenge for neighbourhood effects research is the collection and use of detailed longitudinal data enabling

research over a long time scale. It is unlikely that exposure to a negative set of circumstances for a short period of time will have the same impact on the individual as a long term or repeated exposure (see Galster 2012). Thus, studies must seek not to investigate yearly or even five yearly outcomes. Rather studies should seek to examine as much of the life course as is possible adopting a 20 or even 30 year horizon of study and incorporating exposure time as well (see van Ham et al. 2012, for recent advances along these lines using Swedish data).

Book Structure and Contents

The remainder of this book is organised around 11 chapters by researchers from Australia, The Netherlands, Sweden, the United Kingdom and the United States of America. The first chapter by Bailey, Barnes, Livingston and Mclennan provides an explicit link between the neighbourhood population dynamics literature and the neighbourhood effects literature. Next, Meen, Nygaard and Meen offer a long-term perspective to neighbourhood change and the (im)possibilities of policy changing the history of a neighbourhood. Aalbers highlights the influence of financial institutions on neighbourhood dynamics and change. Then there are two chapters, one by Posthumus, Bolt and van Kempen and one by Bråmå which investigate the effects of urban renewal on neighbourhoods and the rest of the city. The next two chapters – by Völker, Mollenhorst and Schutjens, and by Permentier – investigate the link between neighbourhood characteristics and residential mobility decisions of residents. Jivraj and Finney offer a holistic and integrative view of neighbourhood dynamics by investigating both the effects of mobility into and out of neighbourhoods and in-situ change of neighbourhood residents. The chapter by Dekker investigates the relationship between neighbourhood ethnic and socio-economic composition and satisfaction with the neighbourhood. The final chapter by Clark and Rivers focusses on ethnic sorting across neighbourhoods. There are several important links between chapters in the book. For example, several chapters focus on the ethnic dimensions of neighbourhood dynamics. Much of the literature on neighbourhood population change is concerned with changing ethnic compositions of neighbourhoods. The causes of these changes are debated and chapters discuss, and test, various theories of change. The remainder of this introductory chapter provides a detailed overview and summary of all the book chapters.

Chapter 2 by Nick Bailey, Helen Barnes, Mark Livingston and David Mclennan starts with the observation that non-random sorting of residents into neighbourhoods provides neighbourhood effects researchers with a major challenge. The neighbourhoods which people choose reflect their incomes and other factors and, as a result, neighbourhood characteristics are endogenous, causing bias in models of neighbourhood effects. So understanding neighbourhood choice is at the heart of a better understanding of neighbourhood effects. This chapter reviews what is known about patterns of wresidential mobility and selective migration, in order to provide a clearer understanding of these dynamics on which to build research on neighbourhood effects.

The literature review discusses three findings of research on residential mobility and population turnover which receive broad support. The first is that neighbourhood characteristics have a relatively weak influence on the desire to move, on moving intentions and on actual mobility. The second is that general indicators of satisfaction with the neighbourhood appear to be more closely related to the desire to move and to moving intentions than indicators measuring specific aspects of the neighbourhood. And the third is that neighbourhood change may be a stronger driver for moving intentions than current neighbourhood characteristics.

The literature review continues to discuss how differences in residential mobility rates between social groups (selective migration) can lead to changes in the social composition of a neighbourhood. It is argued that this area of research is less well developed than the residential mobility literature. This section of the chapter presents five initial conclusions or hypotheses. First, selective migration processes are difficult to study, being sensitive to measurement error, and we should be particularly cautious of results as a consequence. Second, while there is general support for the view that selective migration can lead to spatial segregation, the influence it has on this process is relatively weak, and studies are far from consistent in their findings. Third, mobility associated with ageing and the life-course plays a fundamental role in selective migration flows, frequently cutting across other factors. Fourth, selective migration is not the only process at work in driving neighbourhood change, nor is it necessarily the most important. Fifth, the relative importance of selective migration and other processes may vary between different kinds of place.

The literature review concludes that residential mobility and selective migration are both heavily influenced by ageing and life-course events, where a "demographic conveyor" brings younger adults to lower income areas, most of whom will soon move on to better places. It also concludes that neighbourhood context may be defined as much by flows as by static or cross-sectional characteristics (see also the chapter by Nissa Finney). As a consequence, complex neighbourhood typologies can be constructed. Finally, the chapter concludes that responses to a given neighbourhood context may be more varied and subjective than previously assumed. It is suggested that objective neighbourhood characteristics themselves may matter less than how individuals respond to them, and these responses are generally not very well understood using quantitative modelling.

The chapter ends with a discussion of the relative strengths of some recently-developed data sources in the UK, and their potential to shed new light on residential mobility and selective migration. An overview is given of longitudinal survey data, census-based longitudinal data, and administrative sources. No one kind of data source is likely to provide researchers of neighbourhood dynamics with everything they need but combinations of different kinds of data have great potential.

Chapter 3 by Geoff Meen, Christian Nygaard and Julia Meen is concerned with understanding why urban structures arise, persist and change, with a specific focus on long term neighbourhood change. They argue that, typically, neighbourhoods exhibit persistence in social structures over very long periods of time. Relative spatial patterns of wealth and poverty within cities can remain broadly unchanged for decades if not centuries. Analysing long term neighbourhood change is challenging

as long-term time series data are not readily available. The chapter starts with a discussion of initial urban population distributions and argues that geography and geology are crucial in understanding these early distributions, using Melbourne, Australia as a case study. Meen, Nygaard and Meen argue that once initial social patterns become established, they become locked in by the history of development. Path dependence in the development of neighbourhoods may arise not only from geology, but also because of the longevity of the housing stock, which creates spatial lock-in. Next, the chapter considers whether spatial structures persist over time and the extent to which structures change in response to large external shocks. Neighbourhood change may occur both gradually or in discrete jumps and it is suggested that neighbourhood change takes place in response to four types of shocks: exogenous innovations, such as wars; policy innovations, such as slum clearance and major regeneration schemes; technological innovations; and endogenous change, such as migration. The authors conclude that these shocks occur irregularly and have to be very large to have any impact.

In the remainder of this chapter, the authors review three strands of research: approaches based on social interactions; tests of non-linear thresholds and spatial variations in local housing supply elasticities from cross-sectional data; and evidence based on very long-run data sets. Out of these three strands, social interaction models are highlighted as the most elegant approach for explaining the dynamics of change, but these models are also the most difficult to test empirically. The chapter therefore presents evidence from related approaches, mainly based on the work of Schelling (1971), which illustrate how interactions can lead to segregation as a stable state, but also how structural change in neighbourhoods can result from purely random shocks which take neighbourhoods to a threshold or topping point. The second strand of research examines the empirical evidence for thresholds, using a cross-section model of local house prices. These models show some support for the idea that some of the most deprived neighbourhoods become stuck in poverty traps and that only very large sums of money can reduce deprivation and to promote such areas to a take-off point where they become self-sustaining. More modest policy changes may be insufficient and therefore stable patterns emerge. Finally, the third strand of research discussed provides evidence of long-run change since the nineteenth century. Such a long term approach is needed because there is limited evidence of change over shorter periods. In a case study for London, this approach suggests that post-war slum clearance programmes have locked-in or even increased social stratification.

Chapter 4 by Manuel Aalbers argues that the actions of mortgage lenders can play an important role in understanding the trajectories of some of the most deprived neighbourhoods in Western cities. In his chapter he makes a distinction between social and abstract space, where social space refers to how people think about the places where they live, and where abstract space refers to how institutions think about spaces for political or economic gain. It is argued that mortgage lenders conceptualise neighbourhoods in abstract space and use the notion of the neighbourhood as a means to reduce their risk or to extract profit, and as such can exercise destructive powers over the neighbourhood.

Through the practice of redlining, mortgage lenders may write of whole neighbourhoods as being too risky for investment. This is an example of place-based discrimination or social exclusion where mortgage lenders reduce risk not by excluding specific individuals, but by excluding whole areas. As a result, homeowners in such neighbourhoods might be unable to sell their dwelling, becoming trapped in their neighbourhoods. Others are unable to buy in these areas because lenders deny them access. In some cases, mortgage lenders require higher interest rates or down-payments to lend in particular areas. Aalbers calls this practice 'yellowlining' and sees it as an example of sub-prime predatory lending where mortage lenders target the most vulnerable in society to extract maximum profit.

Aalbers argues that redlining and place-based predatory sub-prime lending are not opposites as is sometimes argued, but are two adjacent positions on a continuum of exclusionary lending practices. The practices of redlining and predatory lending are in many ways very similar and can have similar effects on neighbourhoods. Both can be categorised as a neighbourhood effect, where the neighbourhood you live in not only has a direct causal effect on your ability to obtain a loan, but also on the conditions of that loan. Redlining and predatory lending disproportionally hit the same socio-economic groups: low-income groups and ethnic minorities. The discussion on redlining in the US has been connected to debates on the causes of ethnic segregation. Redlining is named explicitly as a form of an institutionalised discriminatory practice leading to segregation in both the US and the Netherlands. Although the key factor in red-lining is place-based, it is suggested that the underlying cause, in some cases, may be race-based.

To illustrate how redlining and predatory lending affect neighbourhoods, two case studies are discussed: a neighbourhood in Rotterdam, the Netherlands and one in Cleveland, Ohio, USA. Research in Rotterdam showed that neighbourhood decline was one of the reasons for lenders to redline the area, but also that redlining was a major cause of the further decline of the area. Aalbers demonstrates that a limited number of neighbourhood characteristics (high shares of low-income households, unemployed, and ethnic-minorities) are able to accurately predict 80% of the redlined cases. The case of the neighbourhood in Cleveland shows that mortgage lender practices not only hit individual borrowers, but also resulted in housing abandonment at the neighbourhood level. As such, these practices have severe spill-over effects on house prices, crime and neighbourhood decline. Aalbers clearly illustrates that the neighbourhood in which you live can enable or constrain you in obtaining a mortgage, and as such can also influence the trajectory of a neighbourhood as a whole.

Chapter 5 by Hanneke Posthumus, Gideon Bolt and Ronald van Kempen presents a study investigating forced moves as a result of neighbourhood renewal programmes in three cities in the Netherlands. It is argued that an underlying motivation for many urban renewal programmes is to create social mix in areas which are characterized by concentrations of low incomes. Such a mix is thought to be beneficial to mitigate assumed neighbourhood effects, although this is highly debated. The main instrument for social mix policies is the mixing of housing types and tenures and, through this, the mixing of socio-economic groups. Creating a mix of housing tenures

and reducing the density in neighbourhoods implies that part of the population has to move elsewhere. Little is known about the neighbourhood careers of these displaced households. It is argued that, if such forced movers move to other deprived neighbourhoods, then the policies have not reduced the assumed negative effects of living in a deprived neighbourhood for them. This chapter asks two questions. First, how can neighbourhoods to which displaced households move be characterized? Second, how do the neighbourhoods to which many displaced households move, differ from their previous neighbourhoods?

To answer these questions, data is used from three Netherlands cities: Breda, Ede, and Rotterdam. Previous regeneration schemes during the 1970s and 1980s focused on the pre-WWII neighbourhoods in Rotterdam. During this period of neighbourhood renewal, residents were rehoused in renovated properties mainly in the same neighbourhood and as a result most of these neighbourhoods remained amongst the poorest in the city after the urban renewal process. Nowadays, the urban restructuring process is more focused on post-WWII neighbourhoods with a large proportion of social rented dwellings. In medium sized cities like Breda and Ede, these post-WWII neighbourhoods are amongst the worst in terms of income and unemployment. In Rotterdam, however, the post-WWII neighbourhoods currently targeted for restructuring are not always the worst. For all three cities, data was available on those who were forced to relocate due to urban renewal. Although the allocation systems varied between the three cities, all those forced to move received some form of assistance or a priority status in finding a new dwelling.

The results show that despite the wide variety of neighbourhoods to which displaced households move, there is a tendency for households to concentrate in neighbourhoods with certain characteristics. These neighbourhoods are in general near their old neighbourhood, have inexpensive housing stock, a low average socio-economic status, and a large share of ethnic minorities. In all three cities it was observed that restructured and receiving neighbourhoods are relatively similar in characteristics. However, forced movers in Breda and Ede are slightly more likely to move to a better neighbourhood than their neighbourhood of origin, while in Rotterdam they tend to move down the neighbourhood hierarchy. This is most likely a result of the structure of the local housing market opportunities.

The re-concentration of displaced households in rather similar neighbourhoods can have negative effects for these receiving neighbourhoods, although relative numbers of displaced residents are small in comparison with the total population of the receiving neighbourhoods. In any case, the re-concentration of displaced households implies that mixing – and the assumed positive effects – does not take place at a city-wide scale. Ultimately, this means that urban restructuring does not automatically result in more mixed neighbourhoods as some neighbourhoods might become more and not less segregated as a result.

Chapter 6 by Åsa Bråmå also investigates the relocation of residents who were forced to leave a renewal area but takes an alternative perspective. The focus of the chapter is on the effects of neighbourhood regeneration on the population composition of the regenerated neighbourhood, as well as on the changing position of the neighbourhood in the overall hierarchy of neighbourhoods within the city. The impact of

neighbourhood regeneration on the wider city environment has received little attention in the literature, and has broad implications for our understanding of processes of neighbourhood change. In the literature review Bråmå focuses on the side effects of neighbourhood regeneration for other parts of the city. In particular spill over (or replacement) effects and displacement effects are discussed, two processes which are strongly related. There is some evidence in the literature that, through displacement, social upgrading of a neighbourhood is a 'zero sum game' when considered across the city as a whole. Various types of displacement – derived from the gentrification literature – are discussed: direct last-resident displacement; direct chain displacement; exclusionary displacement; and displacement pressure.

The case study area in this chapter is a large housing estate (Ringdansen) situated in Norrköping, Sweden. Before regeneration, the neighbourhood had a very bad reputation, and was one of the poorest neighbourhoods in the city, and avoided by more affluent city residents. It was generally seen as a place of last resort in the local housing market. From 1996 the neighbourhood underwent a major regeneration programme, consisting of both physical changes to the housing stock and social projects. Also the name of the neighbourhood was changed to avoid associations with the pre-regeneration period. To investigate the effects of regeneration on the neighbourhood population of Ringdansen and other neighbourhoods in the city, longitudinal, geo-coded data from the GeoSweden database was used. This dataset includes annual demographic, socioeconomic and geographic information on all individuals who have resided in Sweden between 1990 and 2008.

The analyses showed that the regeneration programme had raised the neighbourhood's position in the overall hierarchy of neighbourhoods in the city of Norrköping's. However, the chapter discusses how this relative change has occurred not only as a result of the regeneration of Ringshansen, but also as a consequence of other neighbourhoods in the city gaining worse reputations. The increasing number of neighbourhoods at the bottom of the hierarchy in Norrköping comprise mainly of the rental neighbourhoods in the neighbouring district of Hageby. The deteriorating situation in Hageby seems to be the result not of direct displacement of the socioeconomically weak residents from Ringdansen, but of exclusionary displacement of vulnerable households from Ringdansen. The rent increases following the regeneration of Ringdansen has resulted in a redirection of migration flows consisting of the most vulnerable groups away from Ringdansen towards other more affordable destinations, mainly Hageby.

The results of this study have wider implications for our understanding of neighbourhood change. The study shows very clearly how change in a particular neighbourhood in a city cannot be seen separately from developments in other parts of the same city. Neighbourhood regeneration is likely to affect the surrounding neighbourhoods as well as more distant parts of the city, and this should be taken into account in regeneration policy. There is a real risk that regenerating one neighbourhood will cause problems in other parts of the city, thereby reducing the overall effects of investment in neighbourhood regeneration.

Chapter 7 by Beate Völker, Gerald Mollenhorst and Veronique Schutjens reports findings from research in the Netherlands that links the level of neighbourhood social capital and the change in neighbourhood social capital between 2002 and

2006 with moving intentions and actual moves. The chapter starts with the observation that increasing attention is being paid to the role of the neighbourhood in the literature. It is also noted that the literature on social capital has grown enormously over the last few decades, and that although there are some important links to be made between the two literatures, these are often explicit. The main underlying hypothesis is that those who live in a neighbourhood with high levels of macro level social capital are better off than others, even when they themselves do not have many actual social ties themselves. If neighbourhoods with high levels of macro social capital are good for you, than it can be hypothesised that those living in neighbourhoods that lack of macro level social capital are more likely to develop an intention to leave their neighbourhood and act on this desire. The research question addressed in this chapter is: Does the amount of neighbourhood social capital and its change between 2002 and 2006 affect an individual's intention to leave the neighbourhood and an individual's moving behaviour?

The chapter briefly reviews the literature on moving intentions and actual moving behaviour and links this literature to the social capital literature. Social capital at the macro level is defined as the degree to which residents have friendly relationships with each other and assume that they can ask each other for help. As such, macro level social capital will enhance the feelings of belonging and community and can be expected to discourage residents from expressing an intention to move, or from actually moving. It was hypothesised that the more neighbourhood social capital available, the less likely people are to state that they want to leave the neighbourhood. Those on low incomes are thought to be most dependent on neighbourhood social capital, and are therefore thought to be the least likely to express an intention to move in neighbourhoods with high levels of social capital. A drop in neighbourhood social capital is expected to have a positive effect on pre-move thoughts and actual moving behaviour, especially for the better off.

The study uses 2002 and 2006 data from the Netherlands Housing Demand Survey (Woon), which is a national representative sample of citizens of the Netherlands. Neighbourhood social capital is estimated using an ecometric procedure, which accounts for systematic respondent biases in the perception of social capital. The analyses indeed confirm that low and decreasing neighbourhood social capital stimulates moving intentions and actual moving behaviour. It is suggested that to get a better understanding of the interactions between moving intentions, moving behaviour and social capital, future work should inquire more deeply into the conditions which cause social capital in neighbourhoods to change.

Chapter 8 by Matthieu Permentier focuses on neighbourhood reputations as a factor in understanding neighbourhood dynamics. The reputation of a neighbourhood is thought to affect selective inflow-and out-flow of residents, which might result in stable neighbourhood characteristics, or in gradual or rapid neighbourhood change. The neighbourhood effects literature places great importance on neighbourhood reputations as it is hypothesized that living in a neighbourhood with a poor reputation reflects on the individuals living there, and can reduce their ability to, for example, get a job, or might have a negative effect on their self-esteem. Poor neighbourhood reputations might also be a problem in neighbourhood renewal, where although a

neighbourhood has received major investments and major changes in the social and physical structures have been made, the neighbourhood might still suffer from a poor reputation for historical reasons, reducing the effect of urban renewal because more affluent city residents do not consider living in these places.

The chapter discusses in detail the literature on neighbourhood reputations. It is argued that neighbourhood reputations are based on a collective shared view of neighbourhoods, and that reputations are thought to differ between residents and non-residents. Therefore a distinction is made between internal and external reputations. The notion of neighbourhood reputations also contains a stratification element: the reputation reflects the individual status of the residents. As a result, the neighbourhood can be used as a symbol of residents' socio-cultural and/or socio-economic position in society and their preferences. This leads to a hierarchy of neighbourhoods based on their reputation.

In this chapter, Permentier focuses on one aspect of selective outflow of neighbourhood residents: their intentions to leave their neighbourhood, and how these intentions are influenced by neighbourhood characteristics such as (perceived) neighbourhood reputations. A clear distinction is made between neighbourhood (dis)satisfaction and neighbourhood reputations. For instance, people might be satisfied with their neighbourhood, but might still want to leave because they believe that others have a negative view on their neighbourhood. Although neighbourhood reputations are likely to have a substantial impact on residential mobility, and on the dynamics of neighbourhoods, the literature on residential mobility seldom includes the neighbourhood's reputation as an explanatory variable. The empirical analyses in this chapter are based on a survey from 2006 in the Netherlands city of Utrecht. More than 1,300 respondents in 24 different neighbourhoods were asked about the reputation of their neighbourhood, and how they think others perceive this reputation.

The results show that a negative perception of neighbourhood reputation increases the probability that residents will express an intention to leave the neighbourhood. This result holds even when people are satisfied with their current neighbourhood. This is important as it is suggested that neigbourhood satisfaction and neighbourhood reputation are two partly separate factors. This result will contribute to our understanding of individual residential mobility behaviour, neighbourhood dynamics and understanding the success of neighbourhood renewal. The results suggest that for neighbourhood regeneration to be successful, it is important to change the image of the neighbourhood, to make it more attractive for other city residents.

Chapter 9 by Stephen Jivraj investigates socioeconomic neighbourhood change. Most studies investigating neighbourhood change use repeated cross-sectional data to document how neighbourhood characteristics change over time. Although such analysis can be useful, it cannot give insight into the causes of change. The population composition of a neighbourhood can change because of compositional differences in the in-flow and out-flow of residents. Neighbourhood population characteristics can also change because the characteristics of sitting residents change (for example their employment status). In this study Jivraj explores the causes of neighbourhood change by investigating how the effect of residential mobility of low income primary

school-aged pupils in England compares with other components of change in the concentration of low income pupils in an area. Because the effect of residential mobility on the change in the concentration of low income pupils in an area is likely to vary between different spatial scales, the analyses are carried out for four different geographical units. The components analysed are the net effect of internal migration (residential mobility), entry and exit to and from the primary school system (school turnover), late entry and early exit to and from the primary school system (a proxy for international migration), and improved and declined socioeconomic status without moving (in-situ change).

Pupils who claim Free School Meals (FSM) are used as a proxy for low income households, a method which is used widely in educational research. To be eligible for FSM, a child must be living in a household claiming a means-tested income benefit. The analysis is conducted at different spatial scales using the FSM indicator recorded in the English School Census and the Townsend deprivation index. The School Census records details of all state school pupils in England and is derived from an electronic administrative form completed by each school. The inclusion of a unique pupil number allows pupils to be followed over time. Data derived from the School Census is averaged for each isolated component over consecutive 1 year periods between 2002–03 and 2006–07. Change in the concentration of FSM pupils for each component is measured at Local Authority District, Statistical Ward, Lower Level Super Output Area and Output Area levels.

The results show that the two dominant components of neighbourhood change are in-situ change and residential mobility. In-situ change, which refers to households changing their income status, either by improving or declining their income while staying in the same neighbourhood, decreased the concentration of FSM pupils at every spatial scale. The effect of residential mobility was not as strong as that of in-situ change, and it increased the concentration of FSM pupils in the most deprived areas. The effect of both of these components is greatest in deprived areas where in-situ change marginally decreases the concentration of FSM pupils whereas residential mobility marginally increases the concentration of FSM pupils. These results are consistent across spatial scales, however, the effects are accentuated the finer the spatial granularity.

The results of this study have significance for our understanding of neighbourhood change especially in deprived neighbourhoods. It is often assumed that selective mobility is the greatest driver of neighbourhood change, but this study seems to indicate that in-situ change is more important. It must be said however, that the data used was from 2002 to 2007, a period in which the use of FSM dropped in the whole of England. Repeating the analysis using more recent data from the economic crisis might reveal different patterns. In-situ change can be expected to be even more important than selective migration during the economic crisis and can be expected to increase the concentration of poverty. The effects of migration are hard to predict as the crisis might prevent people from moving at all. However, if only certain people are moving (those forced to) the effect of selective migration might be quite large.

Chapter 10 by Nissa Finney argues that there is a return to concerns about ethnic difference, ethnic conflict and ethnic residential segregation in cities. In the context of changing residential ethnic mix, static conceptualisations of neighbourhoods do

not help to understand the social meaning of neighbourhoods. She argues that neighbourhoods are dynamic and in constant flux, and that categorisations of neighbourhoods should be based on dynamic factors. The ethnic make-up of a neighbourhood is determined by constant demographic processes of births, deaths, in-migration and out-migration. This chapter contributes to the literatures about ethnic neighbourhoods by examining neighbourhoods in terms of their demographic functions. It suggests that neighbourhoods can be thought about in terms of their population change, and the mechanisms of that change. The chapter contributes to debates about the demographic function of neighbourhoods by examining how population dynamics of ethnic groups vary within and between areas, and whether areas play the same demographic role for all ethnic groups. The chapter has three specific aims: first, to describe the geography of population dynamics of ethnic groups in neighbourhoods; second, to provide a conceptualisation and operationalization of ethnic group population dynamics of neighbourhoods; and third, to present an indication of how population dynamics relate to social cohesion.

The chapter uses a typology of population dynamics which characterises the relationship between natural change and migration for each ethnic group across neighbourhoods. The typology has a number of categories based on population growth and decline. The chapter uses estimates of components of population change for wards of Britain for the decade 1991–2001 and results from the 2005 Citizenship Survey. Finney finds considerable variation in ethnic group population dynamics (in terms of the relative importance of natural change and migration) and their geographies which are not accounted for in existing models of demographic and mobility transitions. To an extent ethnic differences can be interpreted in terms of group age structures and immigration histories. These differences might disappear when minority populations mature, but this is not necessarily the case. Finney found clear ethnic differences in geographic patterns of population dynamics, with urban-rural differences in migration behaviour for the white population, but not so much for minority groups.

The chapter proposes a four category typology of ethnic group population dynamics which accounts for dynamics in population change in 70% of Britain's wards. The categories of ethnic group population dynamics are Family Growth/White migration loss, Attractor, Replacement and Multi-ethnic Growth, for each of which there are clear geographies. The categorisation demonstrates that neighbourhoods can have different demographic functions for different ethnic groups. A neighbourhood can operate a single demographic function for one ethnic group, or multiple demographic functions for a set of ethnic sub-populations.

It was hypothesised that dynamic neighbourhoods would have low levels of community cohesion due to increases in diversity. However, descriptive results from the 2005 Citizenship Survey do not indicate this to be the case. Lowest levels of neighbourhood belonging and cohesion were found to be associated with Family Growth/White Migration Loss areas. The chapter does not show why this is the case, but suggests that future research should focus on a combination of diversity and population instability. The chapter finally suggests that using a categorisation of neighbourhood ethnic group population dynamics as an alternative to static measures