DISCUSSION PAPER SERIES

IZA DP No. 6146

Contextualised Mobility Histories of Moving Desires and Actual Moving Behaviour

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November 2011

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zur Zukunft der Arbeit
Institute for the Study
of Labor

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ABSTRACT

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Conceptually, adopting a life course approach when analysing residential mobility enables us to investigate how experiencing particular life events affects mobility decision-making and behaviour throughout individual lifetimes. Yet although a growing body of longitudinal research links mobility decision-making to subsequent moving behaviour, most studies focus solely upon examining year-to-year transitions. As a result of this 'snap-shot' approach, little is known about how pre-move thoughts and subsequent mobility relate over longer periods within the context of dynamic life course trajectories. Current research therefore fails to distinguish ephemeral moving desires from those which are persistently expressed. This study is one of the first to move beyond investigating year-to-year transitions to explore the long term sequencing of moving desires and mobility behaviour within individual life courses. Using innovative techniques to visualise the sequences of a panel of British Household Panel Survey respondents, the study demonstrates that the meanings and significance of particular transitions in moving desires and mobility behaviour become apparent only when these transitions are arranged into individual mobility histories. We uncover previously ignored groups of individuals persistently unable to act in accordance with their moving desires. Visualising mobility histories also highlights the oft-neglected importance of residential stability over the life course.

JEL Classification: J61, R23

Keywords: residential mobility, moving desires, life course, sequence analysis, longitudinal data

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Introduction

Over the last twenty five years, research examining the residential mobility of households has been enriched by situating residential moves within the context of the life course (Clark and Davies Withers 2007). Within this framework, mobility is conceptualised as a mechanism which enables households to adjust their housing, neighbourhood and locational consumption to meet their changing needs and preferences (Clark and Ledwith 2006). Events and gradual changes in the life courses of household members are known to produce this housing disequilibrium and thereby trigger the initiation of the mobility decision-making process (Mulder and Hooimeijer 1999).

The initial reaction to disequilibrium is often conceptualised as the expression of a desire to move (Sell and De Jong 1983). Over time, moving desires can be succeeded by an expectation of moving and an eventual move response, providing that the individual is not restricted or constrained by household or macro-contextual factors (Coulter, van Ham and Feijten forthcoming). A growing literature has begun to investigate this decision-making process, linking individuals' expressed pre-move thoughts to their subsequent moving behaviour (eg. Coulter et al. forthcoming; De Groot, Mulder, Das and Manting 2011; Lu 1999). These studies have developed our understanding of which individuals are able to act upon their prior desires and expectations of moving. Yet although this literature makes use of longitudinal data, few studies can be considered to adopt a 'true' life course approach when analysing mobility decision-making and behaviour. Most studies only examine short snapshots of individual life courses, either by analysing year-to-year transitions or by investigating whether individuals thinking about moving at year *t* have done so at *t+x* (eg. De Groot et al. 2011; Lu 1999).

Although studying year-to-year transitions has yielded important insights into the mobility decision-making process, focusing on short periods within individual lives does, however, neglect key conceptual features of the life course approach. The life course framework enables us to conceptualise how events and states are ordered and experienced over long periods of biographical and historical time (Feijten 2005). In addition, a focus on life courses emphasises the importance of the household- and macro- contexts within which decision making and life events (do not) occur (Dykstra and Van Wissen 1999). Conceptually, analyses of mobility decision-making and behaviour ought therefore to be situated within the long term trajectories of individual life courses. Without adopting a long term and longitudinal perspective, we cannot distinguish people whose moving desires are ephemeral from those who persistently desire to relocate.

Investigating the ordering of pre-move thoughts and subsequent behaviour across individual life courses requires an important adjustment of our analytical framework. Analysing how moving desires and mobility behaviour are sequenced implies a shift away from explaining variation *between* individuals, towards an emphasis on variation over time *within* each person (Aisenbrey and Fasang 2010). This innovative focus on sequences will therefore enable us to

better situate our knowledge of specific transitions within the wider context of life course trajectories (Pollock 2007; Stovel and Bolan 2004). Just as individual photographs gain greater meaning when ordered and compiled into albums, so the meanings and significance of experiencing (un)desired (im)mobility may only become apparent when located within the long term mobility histories of individuals (see Gershuny, Rose, Scott and Buck 1994). The meaning of experiencing an (un)desired move may, for example, only become apparent when it is known whether or not the person is subsequently content in their new location.

Conceptually, analysing the sequencing of moving desires and mobility behaviour may enable us to better understand how individuals experience and react to housing disequilibrium over the life course. A variety of factors can inhibit people from moving, even if they report that moving is desirable. For some people, intangible factors such as life aspirations, cultural values or social and kin networks may bind them to their current location, despite the tangible benefits which could be accrued elsewhere (Lundholm, Garvill, Malmberg and Westin 2004). Household resources and the macro-scale opportunity structures of regional housing and labour markets are also known to condition whether an individual is able to move when this is desired (Mulder and Hooimeijer 1999). Yet no research has considered whether some individuals may be *persistently* unable to act in accordance with their moving desires. This could be either through a consistent inability to act upon a moving desire, or through repeatedly moving against their will. Understanding what distinguishes these individuals from those who quickly realise their moving desires is particularly important given the continuing impacts of the global financial crisis on the British housing and labour markets.

With this in mind, this study has two central aims. We firstly seek to gain insight into individual mobility histories, by investigating how moving desires and actual moves are sequenced over individual life courses. Secondly, the study aims to develop our understanding of the links between individual mobility histories and events occurring elsewhere in the life course. To address these aims, this study is one of the first to construct individual mobility histories. Drawing upon a sample of British Household Panel Survey (BHPS) respondents tracked for 17 years, we use novel sequence analysis techniques and innovative graphical plots to situate these mobility histories within the wider context of life course trajectories. By tracking individuals over a long period of time, we are able to harness the full power of panel data.

Conceptual framework

Disequilibrium and the life course model

It has been well documented that households relocate to reduce the disequilibrium generated when their housing supply and geographical location no longer meet their changing needs and preferences (Clark and Ledwith 2006). To

conceptualise how disequilibrium is experienced by individuals, Brown and Moore (1970) argue that living with disequilibrium produces housing 'stress'. When stress rises past an acceptable internally defined threshold, households begin to search for dwellings and neighbourhoods which they anticipate will satisfy their new needs and preferences (Brown and Moore 1970).

The root cause of disequilibrium is often linked to the distance a household is prepared to move (Niedomysl 2010). A large literature has shown that people typically migrate over long distances for economic reasons. In this literature, migrants are thought to move to improve the income of their household unit, to invest in their human capital (via education or training), or to relocate to places which are perceived to offer greater access to job opportunities (see Böheim and Taylor 2002; Sjaastad 1962). In contrast, shorter distance residential mobility is often thought to be driven by a desire to adjust housing and neighbourhood consumption (Niedomysl 2010). Households are thought to be reluctant to move long distances for housing and neighbourhood reasons, as it is usually possible to resolve this disequilibrium locally without the need for a costly and disruptive long distance move (Mulder and Hooimeijer 1999).

There is, however, increasing evidence that this residential mobility-migration dichotomy is becoming less certain in contemporary post-industrial societies. Cross-national survey evidence suggests that economic factors may be a precondition rather than a motivation for many long distance moves. Several studies have shown that many households move long distances to enhance their quality of life, providing that they can also maintain their economic participation and income levels at the destination (eg. Boyle, Feng and Gayle 2009; Morrison and Clark 2011; Niedomsyl 2010). Social and kin ties, as well as cultural affiliations, are also known to influence many long distance movers (Lundholm 2007; Pettersson and Malmberg 2009; Michielin, Mulder and Zorlu 2008).

Our understanding of how individuals and households experience and respond to these diverse causes of disequilibrium has been enhanced by situating analyses of residential mobility within the conceptual framework of the life course (Clark and Davies Withers 2007). Adopting a life course approach enables us to think of individual lives as unique *biographies* (Dykstra and Van Wissen 1999). Each individual biography is created by the life events a person experiences. As households can be thought of as networks of 'linked lives' (Bailey, Blake and Cooke 2004), events in the lives of other household members also influence individual biographies. Conceptually, life events can be grouped into separate household, housing, education and labour force 'life careers' (Mulder and Hooimeijer 1999). These careers run in parallel and are linked together, as events in one career can have effects on the trajectories of the other careers.

A key contribution of the life course model is the recognition that it is not only the occurrence of events, but also the *sequence* and contexts within which these events are experienced, that produces life careers and the overall individual biography (Dykstra and Van Wissen 1999; Feijten 2005). For example, childbirth can have different impacts on individuals depending on the age of the parents, the household structure within which the child is born and whether the

birth takes place before or after marriage. To understand an individual's present situation requires that we therefore also understand their past biography and life career trajectories (Dykstra and Van Wissen 1999). This means that we must follow the same individuals over long periods of time to fully understand the causes and consequences of specific life events (Feijten 2005).

Residential mobility within a life course framework

Many studies of residential mobility decision making and behaviour adopt a life course approach, emphasising that events within the life careers of household members create disequilibrium and hence motivate relocation (Mulder and Hooimeijer 1999). Although the life course model requires us to situate our analyses of mobility within the context of long term life careers and mobility histories, most longitudinal analyses focus upon year-to-year transitions (Stovel and Bolan 2004). These studies have shown that certain life events necessitate immediate residential moves, which may not be desired or anticipated (De Groot et al. 2011). Such events are considered to constitute mobility *triggers*, as an individual has to move to resolve the sudden occurrence of disequilibrium (Michielin and Mulder 2008). For instance, forming or dissolving a partnership typically requires at least one partner to relocate (see Feijten and Van Ham 2010). A large proportion of trigger events occur in the household careers of individuals, as educational and employment events usually trigger moves only if the event forces the individual to adjust their daily activity space (Mulder and Hooimeijer 1999).

As trigger events force rapid relocations, a year-to-year analytical framework seems at first glance to be an appropriate way to investigate how these events are linked to mobility decision-making and behaviour. Yet ignoring the longer term life course trajectories and mobility history within which these relocations occur may be problematic in two ways. Firstly, such an approach neglects the possibility of anticipatory effects, even though the anticipation of events such as marriage and childbirth has been linked to residential moves (Michielin and Mulder 2008). Secondly, failing to situate mobility within a long term individual biography ignores the possibility that moves can have long lasting effects on future decision-making. This can happen because certain events constrain the immediate moving decisions of individuals, affecting their subsequent moving desires and behaviour. This can occur directly, for instance when an individual has to move to a certain location to form a partnership or to access a particular workplace.

Perhaps more importantly, life events can also indirectly constrain the housing choice set available to individuals by altering the resources available to the household. Unanticipated events necessitating immediate moves and events involving household changes may cause individuals to lack the time or resources to choose a new dwelling and location which meets their needs. Such moves may therefore actually perpetuate disequilibrium, necessitating further adjustments in response to the moving desire this disequilibrium creates. For example, Feijten and Van Ham (2010) show that separation and divorce often

impact on individual mobility behaviour for several years after the initial dissolution event. These long lasting impacts of life events on residential (im)mobility may only become visible when we situate specific events and transitions within a long term individual mobility history.

While disequilibrium can arise rapidly and directly trigger relocation, gradual changes in the life career trajectories of individuals can also incrementally produce housing stress and stimulate the decision to move (Mulder and Hooimeijer 1999). Rossi (1955) identified the changing space needs of individuals as they move through different household types as the key factor in this gradual production of housing stress. In Rossi's model, experiencing increasing housing stress triggers the desire to move to a more suitable dwelling and location (see also Brown and Moore 1970). This approach was extended by Speare, Goldstein and Frey (1975), who argued that the link between housing stress and the desire to move is mediated by dissatisfaction (also Speare 1974).

Influenced by these pioneering studies, a growing body of work has sought to investigate the links between mobility decision-making and subsequent moving behaviour. Many studies have examined both who desires to move and how these expressed moving desires affect the subsequent moving behaviour of households (see Buck 2000; Coulter et al. forthcoming; Coulter, van Ham and Feijten 2011; Ferriera and Taylor 2009; Landale and Guest 1985). Although studies are becoming increasingly sensitive to the importance of household contexts (eg. Coulter et al. 2011; Ferreira and Taylor 2009), most do not situate their analyses within the context of long term mobility histories. This is problematic, as the generation of housing stress can occur gradually over long periods of time. Analysing who acts upon a moving desire between only two time points means that we cannot separate people who have desired to move for fifteen years from those who only began to think about moving within the last year. These may be qualitatively different forms of moving desire, which if left unrealised may have very different consequences for individual wellbeing. If understanding particular life events requires that we situate these within the long term biographies of individuals (Dykstra and Van Wissen 1999; Feijten 2005), then we also need to track the relationship between moving desires and actual moving behaviour within individuals over long periods of time.

Adopting a longer term approach may be particularly valuable for investigating *why people do not move*, even though they may wish to do so. From existing studies we know that the ability to act upon a desire to move is heavily dependent upon the micro-context of the household, as well as the wider housing and labour market contexts within which the moving desire is expressed (Mulder and Hooimeijer 1999). Household characteristics such as income, housing tenure and the caring, work and social ties of household members all condition the ability of households to move when this is desired by one or more household members (see Coulter et al. forthcoming). Macro-contextual factors such as the structure of labour and housing markets also constrain the choice set available to households seeking to relocate (Clark and Dieleman 1996). Uncovering whether certain individuals are consistently unable to act in accordance with their moving desires can only be accomplished through a long

term and longitudinal analysis of the sequencing of moving desires and actual moving behaviour over individual life courses. Developing such an approach is the fundamental contribution of this paper.

Dataset and sample selection

In order to track the same individuals over a long period of time, this paper makes use of British Household Panel Survey (BHPS) data covering the years 1991-2007. The BHPS was initiated in 1991, when a nationally representative sample of over 10,000 adults from around 5,500 households was drawn from 250 postcode sectors across Great Britain (Taylor et al. 2010). These Original Sample Members (OSMs) completed interviews covering a wide range of topics and have been tracked and re-interviewed each subsequent year. At each wave after the initial sweep, new individuals could also enter the BHPS sample. This study however used only the records from OSMs first contacted in 1991, to ensure that all sequences could have the same potential length. The records of these individuals were then transformed into person-year format.

Each year, the BHPS collects information on the moving desires of respondents. These were identified through the response given to the question *'If you could choose, would you stay here in your present home or would you prefer to move somewhere else?'* This question guides individuals to express their personal moving desires rather than their moving intentions or plans, as respondents are directed to try and ignore any constraints which they think may prevent them from actually moving. A small minority of individuals who replied that they 'did not know' whether they desired to move were treated as having no moving desire, as they appeared to have given moving little prior thought. Subsequent moving behaviour was then coded based upon whether the person was observed to have changed address between waves *t* and *t+1*. This time gap (rather than *t* to *t+2* or *t* to *t+3* etc) was chosen to maximise the level of detail within each person's mobility history.

As we are interested in how moving desires and mobility behaviour are sequenced over the life course, we discarded all person-years provided by individuals who at any point had missing values on the moving desire or actual mobility variables. The final sample consisted of 4,026 individuals providing 68,442 person-year observations. As 9,912 people completed a full interview in 1991, this means that our sample contains about 41% of OSMs. We recognise that this sample may be selective and may under-represent individuals with certain characteristics. We anticipate that we undercount serial movers, as sample attrition is known to be associated with mobility (Buck 2000). There is also likely to be selective attrition of older respondents, as the elderly are more likely to have incomplete sequences due to death. As we investigate a potentially non-representative subset of total sequences, we have avoided making inferences at the population level based upon the results presented.

By comparing an individual's expressed moving desire at time *t* with their observed moving behaviour at *t+1*, an 'element variable' was then coded to

categorise each person-year based upon the combination of moving desire and mobility behaviour reported at that year (Table 1). We then used SQ-Ados in Stata v.10.1 to create individual sequences of moving desires and subsequent moving behaviour, by tracking the ordering of this element variable over each of the person-years provided by each respondent (Brzinsky-Fay, Kohler and Luniak 2006). The resultant mobility histories can be visualised as a series of 4,026 individual timelines (see Figure 1).

Table 1 about here

Within these plots, each horizontal line contains the mobility history of an individual between 1991 and 2007. The timeline is colour coded for each of the years the person was interviewed, based upon the combination of moving desire and subsequent behaviour observed at that survey sweep. Each category in Table 1 is therefore assigned a different colour and it is the sequence of these states experienced by each individual which makes up their mobility history. In this paper we do not investigate intra-household variation in the type of sequence experienced. Our focus on individual sequences rather than just one sequence per household seems justified, as individuals can move through many different household situations over a seventeen year period. In addition, prior research shows that intra-household disagreement over whether moving is desirable is common (Coulter et al. 2011; Ferreira and Taylor 2009). Hence it would be conceptually problematic to attempt to think of overall 'household histories', as each individual within each household experiences their own sequence across the study period.

Analytic strategy and results

Most studies linking mobility decision-making to subsequent moving behaviour have investigated the likelihood of individuals realising their pre-move thoughts across several waves of a longitudinal study (eg. De Groot et al. 2011; Lu 1999). Table 2 replicates this focus on wave-to-wave transitions for all pairs of person-years in our sample. The results hint that state dependence is common for stayers, as both desired and undesired stayers (people who desire to move but who do not realise this desire in the next year) are likely to remain in the same state across two consecutive survey waves. Mobility typically resolves disequilibrium, as the majority of (un)desired moves are followed by the individual becoming a desired stayer. Intriguingly, there are comparatively few differences in the subsequent states of individuals making desired and undesired moves.

*** Table 2 about here***

While informative, Table 2 does not enable us to investigate how these transitions are situated within the wider life course trajectories of individuals. For instance, we do not know whether the stability within the undesired stayer category is caused by a small number of individuals remaining undesired stayers

for a long time, or whether many individuals experience short spells in this state. As a result, we can infer little about the meaning or long term consequences of an individual experiencing a particular transition from this wave-to-wave approach. The meaning and consequences of remaining an undesired stayer over two waves is likely to be highly dependent upon the wider sequence of moving desires and mobility behaviour within which this experience is situated.

Figure 1 about here

To focus upon individual mobility histories, Figure 1 provides a visualisation of the sequences of moving desires and moving behaviour experienced by all 4,026 sample members between 1991 and 2007. Each horizontal line represents the sequence of one individual; with the coloured blocks indicating the combination of moving desire and subsequent behaviour recorded at each survey wave (see Table 1). The figure shows that there are considerable regularities in the types of sequence experienced. Large numbers of individuals remain desired stayers for very long periods of time, while the steadily diminishing cones of undesired stayers indicates that many people also spend long periods harbouring a frustrated moving desire. This seems to validate Cooke's (2011) assertion that an empirical focus on *immobility* is important if we are to develop our understanding of the meaning and consequences of mobility. This is only possible by tracking the same individuals' moving behaviour over long periods of time.

The long blue tails (signifying spells as a desired stayer) visible after many move events in Figure 1 imply that moving is often a positive experience, meeting the needs and preferences of individuals. While it is also clear that many people have highly complex mobility histories, overall the figure highlights the value of situating each transition within a wider mobility history. This enables us to identify individuals for whom the same year-to-year transition may have widely differing meanings and implications. For example, while some people appear to remain undesired stayers for long periods of time, others oscillate in and out of this state or subsequently manage to become content by relocating.

By grouping all sequences into one plot, Figure 1 follows individuals across different sections of their life courses. As many studies show that moving propensity varies systematically over the life course (Clark and Dieleman 1996), Figure 2 presents the mobility sequences of individuals subdivided by the respondent's age in 1991. The figure shows that sequence stability increases with age, as a greater proportion of older people remain desired stayers for long periods of time. This increase in stability does not necessarily signify increased contentment, as a larger proportion of middle aged and older individuals appear to remain as long term undesired stayers (as the red cones increase in size between the under 35s and 35-54s). While sequence stability increases with age, sequence complexity simultaneously drops. Very few people in the oldest age band make multiple moves, while it is comparatively unusual for younger people to never move. Although age is clearly an important factor for explaining sequence type, Figure 2 clearly shows that individuals across the age brackets experience similar sequences (such as making a desired move and then

becoming a desired stayer). Life events which can occur at different ages for different individuals (such as changing jobs or forming new partnerships), obviously impact on the type of sequence experienced. By highlighting the lack of an unambiguous relationship between age and mobility sequences, the plot shows that mobility decision-making and behaviour cannot be fully understood within a more normative life cycle approach.

Figure 2 about here

Studies investigating the sequencing of life course events typically seek to classify the identified sequences into a typology (eg. Clark, Deurloo and Dieleman 2003; Pollock 2007; Stovel and Bolan 2004). This often involves the use of optimal matching (OM) methods (see Abbot and Tsay 2000; Aisenbrey and Fasang 2010). OM analyses involve using algorithms to compute the 'distance' between all pairs of sequences. These distances can then be used to group sequences using cluster analysis (eg. Pollock 2007). In this paper we use a series of theoretically informed rules to classify sequences into groups. As with OM methods, this approach can be considered to be "an empirically informed subjective decision" (Pollock 2007: 171). We use rules because we want our groupings to have conceptual relevance, with individuals allocated to groups based upon the (non)observance of particular states and transitions in their sequences. Using these rules we identified eight types of mobility history: the rooted, wishful thinkers (cf. Sell and De Jong 1983), contented movers, discontented movers, adaptive movers, oscillators, the highly mobile and miscellaneous. The identification rules and a description of the main group features are contained in Table 3.

Table 3 about here

Figures 3a and 3b present the plots of the individual sequences within each group. Overall, the plots demonstrate that there is a high degree of regularity in the types of sequence experienced by individuals. A large proportion of individuals never move (the rooted and wishful thinkers). Of those individuals who do move, many frequently make desired moves which seem to resolve their housing disequilibrium (contented movers). Comparatively few individuals consistently desire to move immediately after making previously (un)desired moves (discontented movers). Interestingly, many individuals do not appear to be disadvantaged by moving when this was not always desired (adaptive movers). Relatively few individuals also repeatedly express and abandon moving desires (oscillators) or make multiple moves within the study period (highly mobile). While there is undoubtedly heterogeneity within each category, the plots demonstrate that there are clear patterns in the long term sequencing of moving desires and actual mobility behaviour over life courses. This has not been the subject of previous research.

Figures 3a and 3b about here

The above figures deepen our understanding of the heterogeneous meanings and consequences of spending time in particular states. For instance, the meaning and significance of experiencing a spell as an undesired stayer clearly varies across the groups. While wishful thinkers consistently express a desire to move, the moving desires of oscillators are much more ephemeral. This may indicate that individuals in these two groups wish to move for different reasons. The meaning of experiencing a spell as a desired stayer also varies by group. For the rooted and for contented movers, such spells indicate contentment with the current dwelling and neighbourhood. In contrast, discontented movers and oscillators may experience spells as desired stayers after reluctantly abandoning an unattainable desire to move. For these individuals, spells as a desired stayer may indicate that the respondent has jettisoned their desire to move to reduce the cognitive dissonance induced by an inability to relocate.

Following individuals over a long period of time also deepens our understanding of the varied meanings and consequences of moving or experiencing transitions in states. While the desired moves of contented movers appear to satisfy their needs and preferences by reducing disequilibrium, making desired moves seems to be a less positive experience for discontented movers and for the highly mobile. These individuals often desire to relocate again immediately after moving. Similarly, making undesired moves can be both a positive and a disruptive event. Although adaptive movers do not appear disadvantaged by undesired moves, discontented movers typically wish to relocate again immediately after making an undesired move. These split experiences suggest that we observe two forms of undesired mobility. Individuals who do not appear disadvantaged by undesired moves may, in fact, have actually desired to move, although this remains unobservable because the desire was first expressed just before the move took place. Alternatively, such individuals could have come to accept that the benefits to be gained from moving outweighed the unwanted disruption of relocating. In contrast, individuals who are disadvantaged by an undesired move may have actively wished to stay in their current dwelling but have been forced out by exogenous circumstances, such as the demands of their partner's job, union dissolution or eviction. This complexity of meanings and experiences can only be observed if we track the desires and behaviour of individuals over long periods of time. Such an approach helps us to situate our understanding of specific transitions and continuity in states within the wider life courses of individuals.

One of the main challenges for studies investigating the sequencing of life course careers has been to explain the patterns observed (Wu 2000). Using sequence type as the dependent variable, we now seek to analyse how the trajectories of other life course careers are associated with the mobility sequence people experience. As Figure 2 shows that the type of sequence experienced varies with age, Figure 4 displays the probability of individuals in each age bracket in 1991 experiencing each type of sequence. Broadly speaking, the expected patterns are evident. As age rises, the probability of an individual being rooted increases, while the likelihood of being a contented or discontented mover

drops. Individuals over 35 in 1991 are unlikely to be highly mobile. Interestingly, middle aged respondents are the most likely to be wishful thinkers. This may be because family and career ties to locations often peak at this stage in the life course. While the young are most likely to be adaptive movers, older individuals are also more likely to experience this type of sequence than middle aged individuals. This may be because older individuals are making unwanted but necessary moves for health or care reasons. While the complexity of many youthful sequences means that young individuals are slightly over-represented in the miscellaneous category, the proportions of middle aged and older individuals are almost equal.

Figure 4 about here

To analyse how mobility histories are linked to the wider trajectories of individual life courses, we now estimate a series of multivariate models with sequence type as the dependent variable. This required the construction of a series of independent variables summarising the trajectory of each respondent's household, housing, education and labour force careers (Table 4). To avoid the restrictive assumptions of the multinomial logit model, we estimate a series of 6 separate logistic regression models. Each model analyses the propensity for individuals to experience a given sequence type (excluding miscellaneous sequences). The reference category for each model is contented movers. We use contented movers as the reference category as we are interested in how the independent variables affect mobility experiences and not just moving propensities. In each model, a small number of individuals missing data on the independent variables were removed. The Cox-Snell pseudo-r^2 and adjusted count r^2 values show that the models' explanatory power varies. While the rooted, discontented movers and the highly mobile are predicted well, the logit models for adaptive movers and oscillators fit poorly. This suggests that these categories are the least distinct, perhaps due to internal heterogeneity or because unobservable factors distinguish these respondents from contented movers.

Table 4 about here
Table 5 about here

Individuals are more likely to be rooted than contented movers if they are older, without children, homeowners or with a low income. Wishful thinkers appear quite similar, although both young and older individuals are less likely than the middle aged to experience this type of sequence. This may be due to unobserved factors such as occupational ties. The strong negative effect of household income suggests that a lack of resources persistently hinders the realisation of moving desires. The likelihood of being discontented with moves appears to rise if the person is female, single or changes marital status. This latter result may indicate that further adjustments are needed to resolve the housing disequilibrium generated by household changes. A highly variable

income, perhaps associated with a fractured employment history, is also associated with discontentment, as is changing tenure (particularly exiting homeownership or having a complex housing career). Individuals are most likely to be adaptive rather than contented movers for similar reasons. The findings suggest that undesired moves can be both positive and negative experiences, as adaptive movers are more likely to be entering partnership or exiting homeownership.

Oscillators are poorly predicted by their model, although there is tentative evidence that individuals who are younger, gain children and those with higher incomes are less likely to oscillate than act successfully upon their moving desires. The highly mobile parameters are as expected. Older individuals and those with more stable life courses appear less likely to be highly mobile. Overall, the lack of significant education effects is unanticipated, although these effects may be captured by close associations between education and income. The results from the models clearly demonstrate the close links between the type of mobility history experienced and the trajectories of other life course careers.

Conclusions

This paper is one of the first to investigate how individuals express moving desires and experience residential mobility over long periods of time. Although many studies have adopted a life course framework when linking moving desires to subsequent moving behaviour, most empirical analyses have been based around the analysis of year-to-year transitions. This approach has yielded valuable insights, but only provides snap-shots of individual mobility histories. This paper argues, in line with life course theory (see Dykstra and Van Wissen 1999), that the meanings and consequences of experiencing mobility events can be better understood when these are situated within life course biographies. By constructing individual mobility histories using innovative sequence analysis techniques, our study fits within a growing body of sociological literature seeking to empirically operationalise the concepts of long term life course trajectories (see Abbott and Tsay 2000; Aisenbrey and Fasang 2010; Pollock 2007; Stovel and Bolan 2004). Investigating mobility histories enables us to therefore link the empirical study of residential mobility more closely to life course theory.

Three sets of findings are of particular relevance for our understanding of the links between mobility decision-making and behaviour. Firstly, the results highlight that the meanings and consequences of experiencing particular combinations of moving desire and behaviour will vary depending upon how these states and transitions are situated within wider mobility histories. Remaining an undesired stayer for fifteen years is likely to be a much more negative experience than desiring to move for two years before relocating. Equally, a long term approach seems valuable if we are to understand the heterogeneous consequences of particular move events. While some individuals seem to adapt quickly to undesired moves, others are left unfulfilled by desired mobility. This suggests that resolving housing disequilibrium may often take a

considerable period of time and multiple residential moves. Alternatively, some individuals may have such dynamic life careers that relocations are regularly desired. This heterogeneity of experiences is missed in year-to-year analyses. To develop our understanding of how mobility thoughts relate to subsequent behaviour, it seems valuable to track individuals over long periods of time.

The importance of immobility throughout the life course is the second key insight provided by an empirical examination of sequences. While wave-to-wave analyses implicitly privilege move events, Figures 1-3 remind us that mobility (or even desiring to move) actually occurs relatively infrequently within individual life courses. After reaching age 35, immobility seems to be the norm for many individuals. These findings seem to support Cooke's (2011) contention that mobility research could be enhanced by greater consideration of *why people do not move* (also Hanson 2005), especially when moving may provide them with new opportunities. An increased focus on stability seems particularly pertinent given that our analyses show that many immobile individuals want to move but are unable to do so. This finding would seem to suggest that place attachment and social or kin ties cannot explain the persistent immobility of many individuals, as we would expect these factors to inhibit individuals from even expressing a desire to move. Greater focus on these wishful thinkers would therefore be valuable, particularly given the reduced opportunities to move in the currently depressed UK housing and labour markets. Understanding the barriers persistently inhibiting desired mobility may also become increasingly relevant as the British population ages over the next few decades, as people are known to make most of their residential moves early in the life course.

Identifying and characterising persistently disadvantaged groups of wishful thinkers and discontented movers is this paper's final empirical contribution. These groups can only be identified by adopting a long term life course perspective. Low levels of income appear to be a greater barrier than family ties in persistently preventing individuals from acting from upon their moving desires, as shown by the lack of significant partnership or children effects for the propensity to be a wishful thinker. Given that unmet moving desires have been linked to worsening psychological wellbeing (Ferreira and Taylor 2009), these findings suggest that providing support for low income households to make desired moves may be beneficial. This may be particularly valuable given that living in unsatisfactory and potentially poor quality dwellings and neighbourhoods has been shown to strongly stimulate desiring to move (Coulter et al. forthcoming). In contrast, discontentment with mobility seems associated with changes in household situation. There is also evidence that fluctuating incomes and changes in housing tenure (particularly exiting homeownership) are linked to negative experiences of moving. This may be because these life events trigger unwanted moves, which in turn produce further disequilibrium and dissatisfaction as individuals may lack either the resources or the time to select an appropriate dwelling and neighbourhood.

Conceptually, our results show that it is valuable to adopt a biographical approach when studying mobility decision-making and behaviour. Peoples' pre-move thoughts and their moving behaviour at a given time point cannot be easily

understood without some knowledge of their past experiences of (im)mobility. Although common in qualitative studies, the biographical framework adopted by this paper remains rare within the quantitative literature. While data constraints have traditionally inhibited work of this kind, the continuing investment in panel and linked register datasets should enable further quantitative analysis of residential mobility and other life course biographies.

Acknowledgements

Maarten van Ham contributed to this paper while working at the Centre for Housing Research, University of St Andrews

Disclaimer

The data used in this study were made available through the ESRC Data Archive. The data were originally collected by the ESRC Research Centre on Micro-Social Change at the University of Essex (now incorporated within the Institute for Social and Economic Research). Neither the original collectors of the data nor the Archive bear any responsibility for the analyses or interpretations presented here.

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Figures and Tables

Table 1. Combinations of moving desire and subsequent moving behaviour

Moving desire at wave *t*	**Actual moving behaviour between waves *t* and *t+1***	
	No move	Move
No desire	Desired stayer	Undesired mover
Desire	Undesired stayer	Desired mover

Table 2. Moving desires and subsequent moving behaviour across two consecutive survey waves

Moving desire and subsequent moving behaviour at *t*	Moving desire and subsequent moving behaviour at *t+1*				Total (100% and N)
	Desired stayer	Undesired stayer	Undesired mover	Desired mover	
Desired stayer	84.50	11.17	2.46	1.87	39,079
Undesired stayer	22.71	66.89	1.24	9.16	16,915
Undesired mover	60.93	15.94	9.41	13.72	1,487
Desired mover	64.87	17.84	6.39	10.90	2,909
Total (% and N)	65.67	27.21	2.48	4.64	60,390

Source: BHPS, author calculations
Pearson chi^2 p<0.001

Table 3. Sequence groupings and classification rules (N=4,026 individuals)

Sequence group	N_i (%)	Rules for identification	Description
Rooted	1112 (27.6)	1) Never move 2) Desire to move at <25% of waves	Rooted individuals have very stable histories. They never move across the period and rarely express a desire to relocate. When moving desires are expressed, these are largely ephemeral.
Wishful thinkers	595 (14.8)	1) Never move 2) Desire to move at >25% of waves 3) Abandon 3 or fewer moving desires	Wishful thinkers never move despite regularly and consistently expressing a moving desire. Wishful thinkers rarely abandon their desire to move.
Contented movers	770 (19.3)	1) Make up to 3 desired moves 2) Make no undesired moves 3) No longer wish to move after making each desired move	These individuals make one or more desired moves, often after desiring to move for many years. These moves seem to relieve disequilibrium, as individuals become desired stayers following moves.
Discontented movers	328 (8.1)	1) Make up to 3 moves 2) Abandon 3 or fewer moving desires 3) <50% of moves followed by the person becoming a desired stayer	Discontented movers are individuals for whom moving appears not to satisfy their needs and preferences. These individuals typically report desiring to move again immediately after relocating.
Adaptive movers	500 (12.4)	1) Make >=1 undesired moves and <=3 total moves 2) Abandon 3 or fewer moving desires 3) All undesired moves are followed by becoming a desired stayer	These individuals differ from contented movers as they make at least one undesired move. Adaptive movers do not however seem disadvantaged by these moves, as they always subsequently become a desired stayer.
Oscillators	138 (3.4)	1) Abandon at least 4 moving desires	The sequences of oscillators are characterised by the frequent expression and abandonment of moving desires.
Highly mobile	326 (8.1)	1) Moved in over 25% of waves	These sequences are characterised by frequent moves. Many highly mobile individuals also report desiring to move for considerable periods of time.
Miscellaneous	257 (6.4)	1) Sequences which do not fit into any of the above categories	Many of these sequences are unclassifiable as we lack the necessary information on subsequent mobility to categorise people who moved between 2006 and 2007. Others in this category exhibit highly complex sequences.

Table 4. Variable summary statistics (N individuals=4,026)

Categorical variables	**Frequency**	**%**
Age of respondent in 1991 (ref=35-54)		
Under 35	1,552	38.55
Over 55	848	21.06
Partnership sequence 1991-2007 (ref=stable couple)		
Stable single	476	11.82
Enter couple	416	10.33
Exit couple	409	10.16
Fluctuate between couple and single	481	11.95
Presence of dependent children in household 1991-2007 (ref=never)		
Always children	409	10.16
No children-children	489	12.15
Children-no children	942	23.40
Fluctuate between children and no children	442	10.98
Modal education level 1991-2007 (ref no qualifications)		
Low (basic secondary school level-eg. GCSE)	1,056	26.23
Medium (higher school or vocational qualifications-eg. A Level)	1,515	37.63
High (university degree and above)	516	12.82
Unknown	22	0.55
Housing tenure sequence 1991-2007 (ref=stable homeowner)		
Stable renter (social or private)	434	10.78
Enter ownership	337	8.37
Exit ownership	137	3.40
Fluctuate between renting and owning	441	10.95
Unknown	63	1.56
Continuous variables	**Mean**	**S.D.**
Log median household income 1991-2007[1]	9.99	0.50
Variance in log household income 1991-2007[1]	0.19	0.36

[1] Annual household incomes were adjusted to 2005 values and deflated using the McClements Before Housing Costs equivalence scale, to take into account differences in household size and composition

Source: BHPS, author calculations

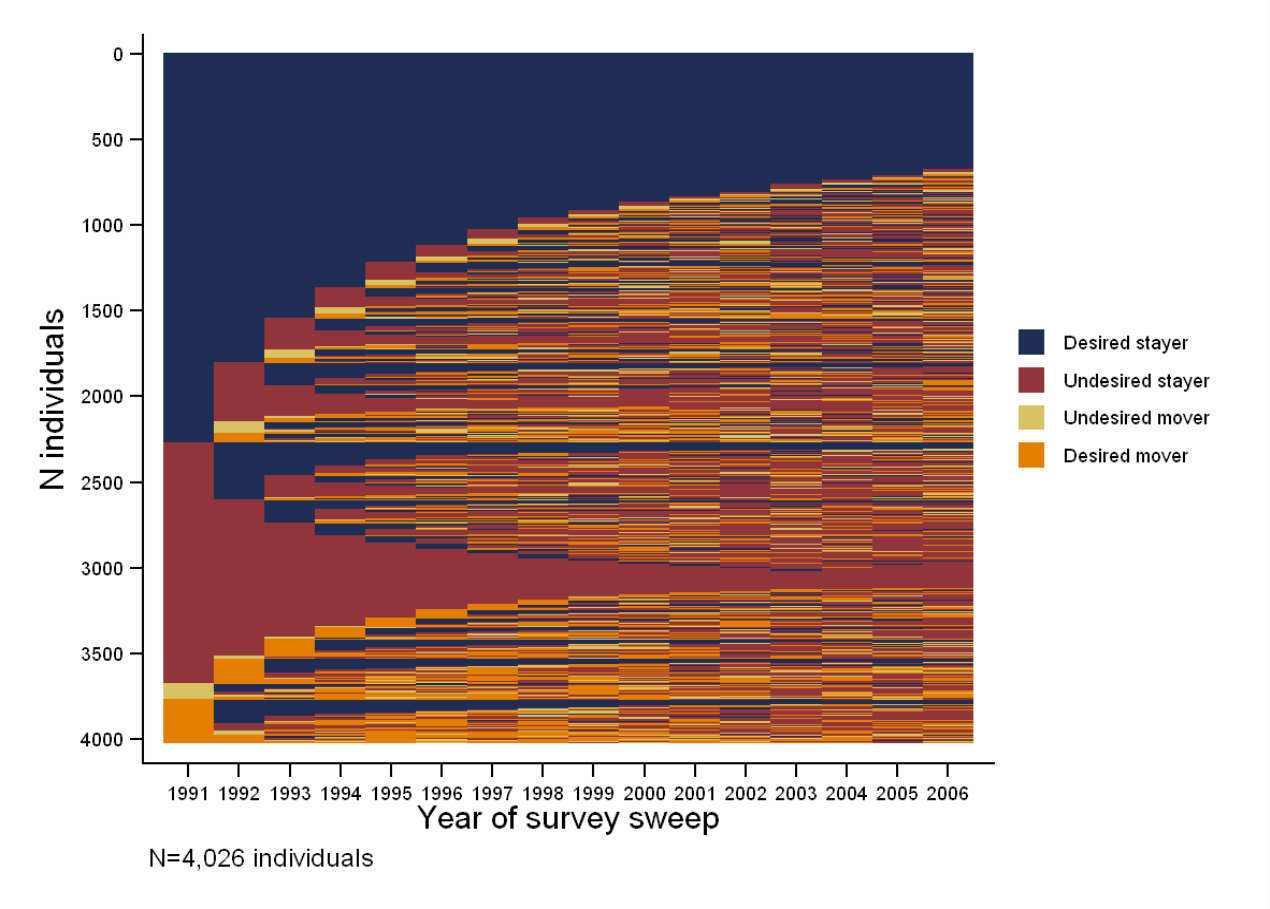
Table 5. Six logit models estimating the likelihood of experiencing each sequence type (ref=contented mover)

Variable	Rooted		Wishful		Discontented		Adaptive		Oscillator		Highly mobile	
	Coeff	S.E.	Coeff	S.E.	Coeff	S.E.	Coeff	S.E.	Coeff	S.E.	Coeff	S.E.
Age in 1991 (ref 35-54)												
<35	-1.207***	0.156	-0.753***	0.160	-0.257	0.193	-0.101	0.162	-0.755**	0.279	0.439	0.301
>55	0.331**	0.160	-0.443**	0.192	-0.993**	0.307	0.019	0.208	0.535	0.304	-2.252**	0.727
Female	0.018	0.111	-0.085	0.123	-0.421**	0.154	-0.092	0.125	-0.242	0.200	-0.242	0.233
Partnership sequence (ref stable couple)												
Stable single	0.282	0.176	-0.113	0.208	0.749**	0.267	-0.021	0.227	0.331	0.328	0.403	0.466
Enter couple	-0.972**	0.297	-0.551**	0.279	1.161***	0.224	0.928***	0.195	-0.119	0.450	1.276***	0.315
Exit couple	0.022	0.192	-0.200	0.225	0.696**	0.279	0.457**	0.216	0.030	0.340	0.414	0.475
Fluctuates	-0.742**	0.248	-0.332	0.242	1.096***	0.239	0.661**	0.206	-0.332	0.467	2.200***	0.302
Children sequence (ref never children)												
Always children	0.002	0.215	-0.432	0.239	0.302	0.289	-0.252	0.247	0.696	0.386	0.031	0.443
No children-children	-1.301***	0.278	-0.846**	0.263	0.258	0.268	-0.150	0.215	-1.601**	0.779	0.494	0.360
Children-no children	0.113	0.151	0.255	0.165	0.238	0.227	0.166	0.181	0.802**	0.288	0.124	0.371
Fluctuates	-0.035	0.220	-0.115	0.242	0.588**	0.266	0.274	0.233	0.751**	0.361	1.018**	0.378
Modal education level (ref very low)												
Low	0.181	0.160	0.106	0.175	-0.178	0.252	-0.129	0.190	0.452	0.288	0.118	0.416
Medium	-0.136	0.156	-0.077	0.172	-0.058	0.235	-0.359	0.187	0.190	0.283	0.013	0.412
High	-0.009	0.222	-0.102	0.248	-0.130	0.310	-0.210	0.244	-0.028	0.427	0.523	0.480
Median log of household income	-0.421**	0.137	-0.855***	0.158	-0.040	0.191	-0.064	0.150	-0.528**	0.249	0.035	0.283
Variance in log household income	0.013	0.178	-0.409	0.307	0.570**	0.223	0.116	0.241	0.373	0.349	0.916**	0.334
Housing tenure sequence (ref stable owner)												
Stable renter	-0.604**	0.192	-0.272	0.202	0.595**	0.266	0.279	0.215	-0.505	0.345	1.575***	0.410
Enter ownership	-0.799***	0.230	-0.428	0.224	0.643**	0.225	0.343	0.191	-0.694	0.439	1.192***	0.312
Exit ownership	-3.179***	0.631	-2.698***	0.750	1.702***	0.315	0.736**	0.292	-0.312	0.532	2.949***	0.451
Fluctuates	-0.999**	0.367	-0.629	0.419	2.085***	0.274	1.166***	0.272	-1.010	0.775	4.176***	0.317
Constant	5.132***	1.387	9.042***	1.607	-1.169	1.962	0.056	1.529	3.417	2.515	-4.408	2.931
Loglikelihood	-1046.949		-833.095		-552.804		-798.246		-345.764		-282.803	
(improvement)	(220.468)		(95.096)		(107.177)		(42.267)		(38.785)		(359.869)	
Chi^2(d.f.)	440.936(20)		190.193(20)		214.354(20)		84.535(20)		77.570(20)		719.740(20)	
Cox-Snell r^2	0.210		0.131		0.179		0.065		0.082		0.488	
Count r^2 (adjusted)	0.732(0.346)		0.641(0.173)		0.764(0.199)		0.636(0.067)		0.850(0.007)		0.903(0.661)	
N	1873		1356		1088		1257		904		1074	

*** p<0.05 *** p<0.001*

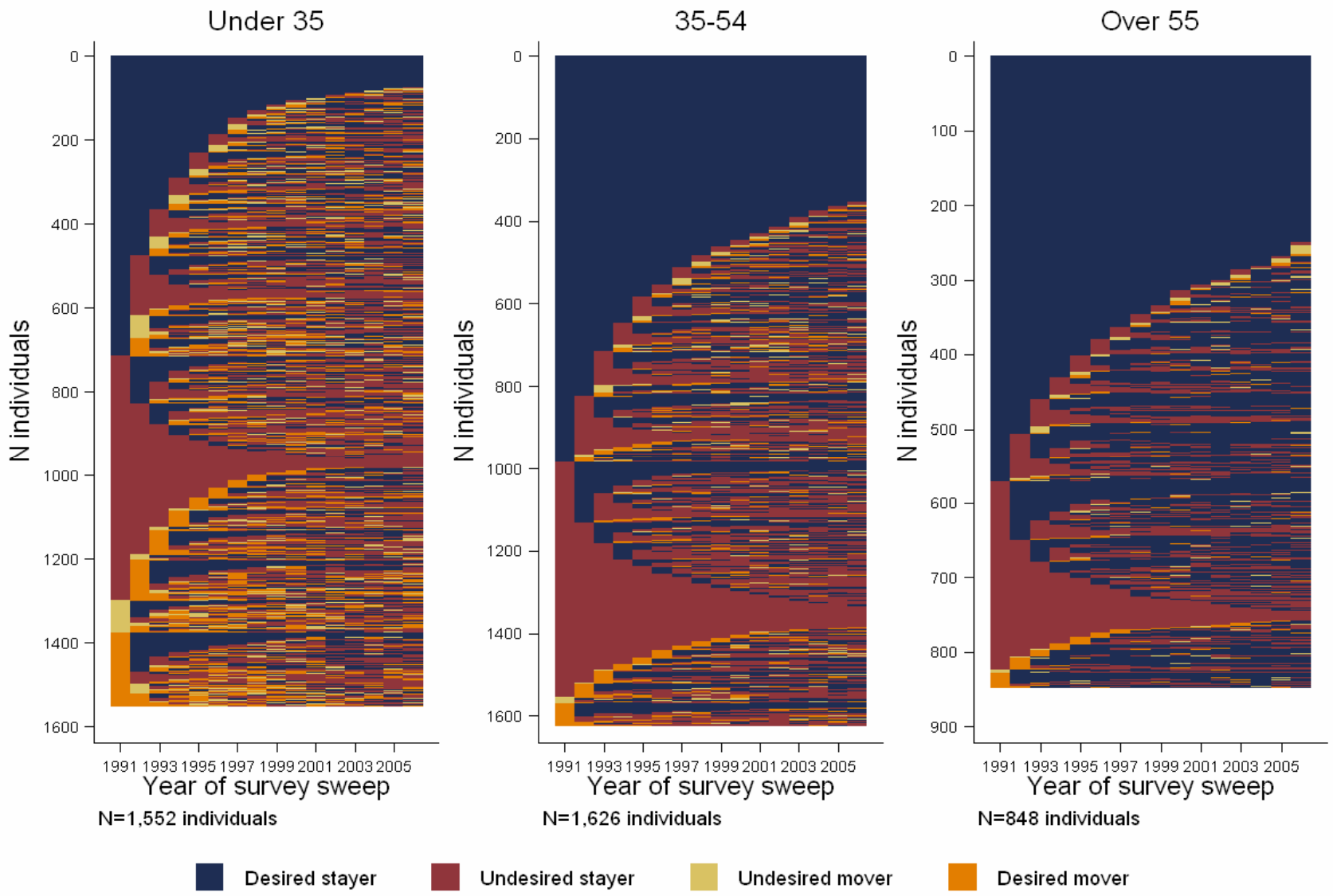
Source: BHPS, author calculations

Figure 1. Mobility histories of selected BHPS respondents, 1991-2007



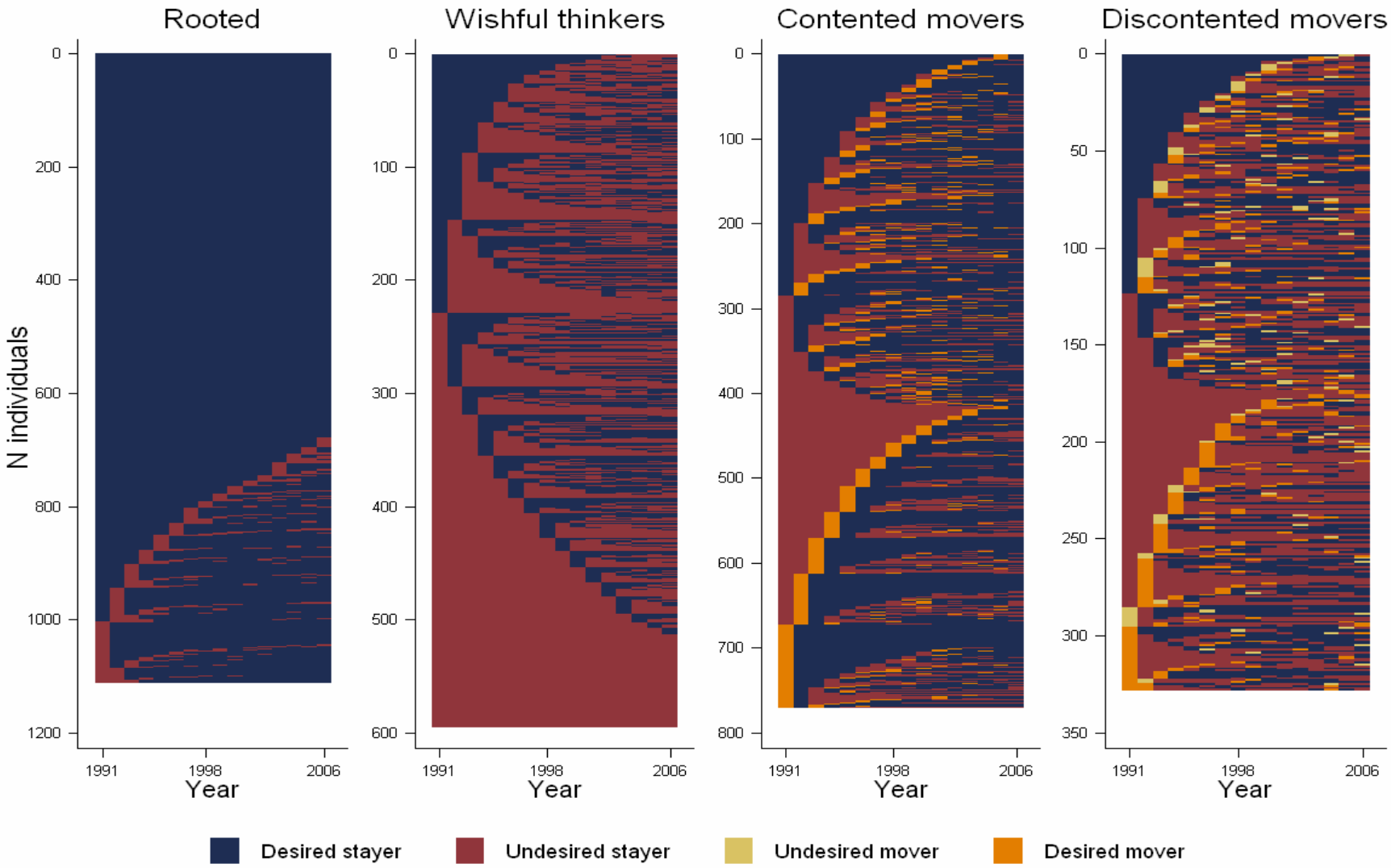
Source: BHPS

Figure 2. Mobility histories subdivided by the age of the respondent in 1991



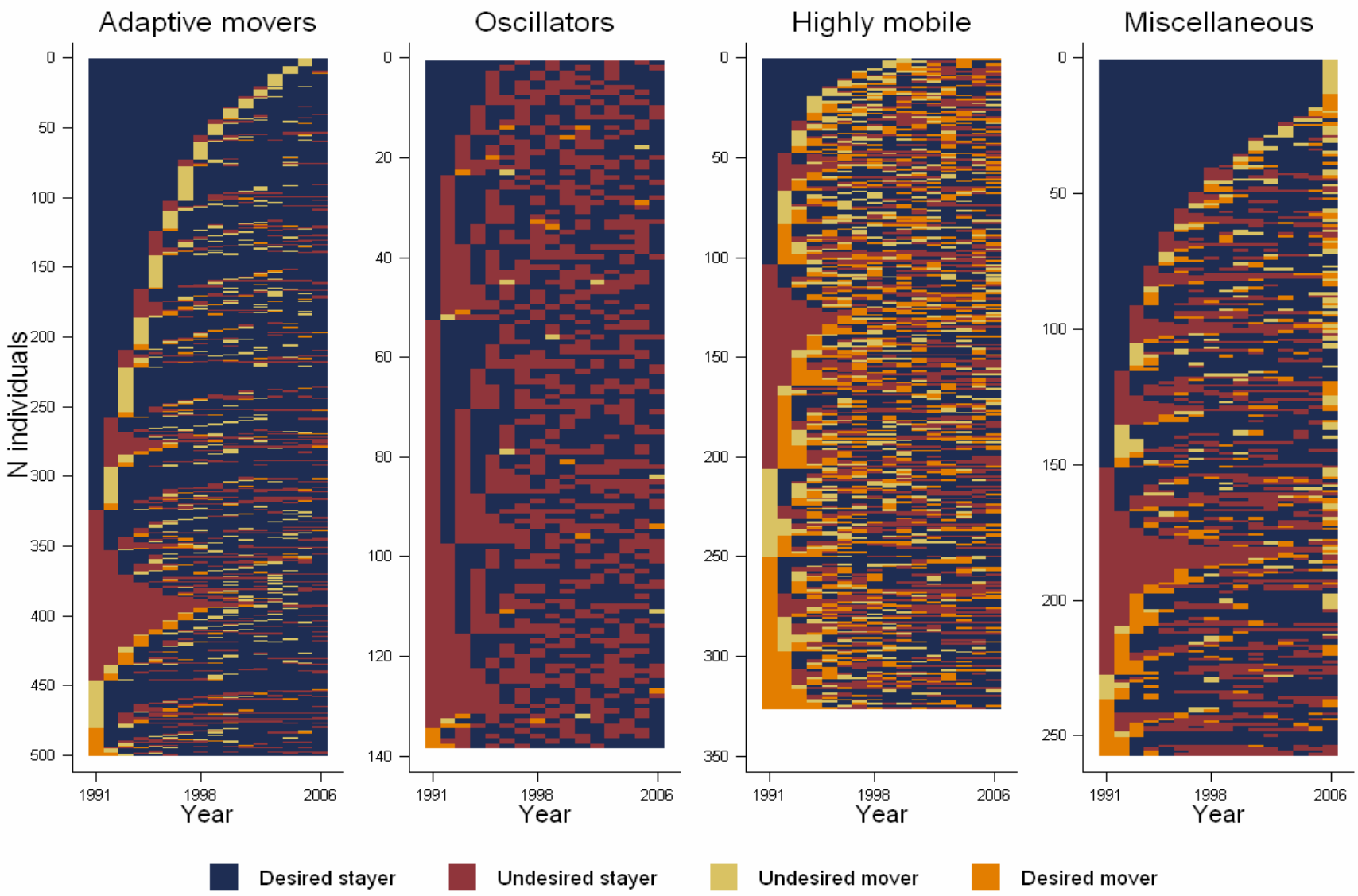
Source: BHPS

Figure 3a. A typology of mobility histories 1991-2007



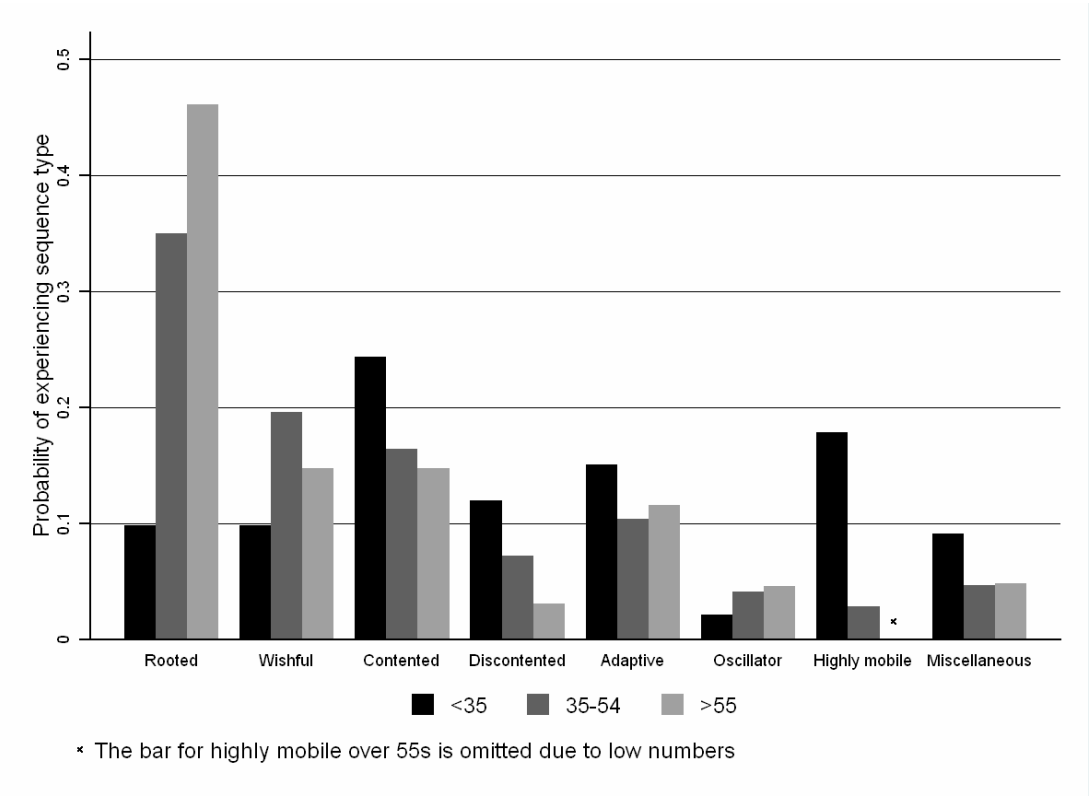
Source: BHPS

Figure 3b. A typology of mobility histories 1991-2007 continued



Source: BHPS

Figure 4. Age in 1991 and the probability of experiencing each sequence type



Source: BHPS, author calculations