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Understanding residential biographies and the perception of temporality: a mixed-methods study

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ABSTRACT

Instead of settling in one location for life, people today experience increasing mobility throughout their lives – whether due to family obligations, career changes, or the need to better balance work and private life. Our research employs the "Life Course Cube" (Bernardi et al., 2019) to study the dynamic residential biographies of modern individuals, whose lives are often characterized by high mobility, frequent relocations and temporality. The Life Course Cube is an analytical tool that integrates three key dimensions – Time, Life Domains and Levels – providing a framework to understand complex mobility patterns over the life course. In our study, we examine how different Life-Course-Based Housing Types affect the probability of individuals perceiving themselves as temporary residents.

Using a mixed-methods approach, we conducted a quantitative survey and qualitative interviews in two German metropolitan areas: Frankfurt/Main and Leipzig. Based on the qualitative data, we developed typologies of residential biographies that focus on temporary residents. These types are differentiated by factors such as move frequency, reasons for relocation, distance of relocation, and international experience. We quantified the Life-Course-Based Housing Types using survey data, offering a detailed description of their sociodemographic characteristics and spatial distribution. These typologies served as the foundation for modelling the relationship between biographical mobility and self-perception of temporality. Additionally, we employed qualitative data to explore the underlying motives and contextual factors influencing temporary residential arrangements. This mixed-methods approach enabled us to examine how biographical experiences, frequent relocations, and specific life circumstances influence perceptions of temporality in residential mobility.

1. Introduction

The life course "[…] can be defined as a multifaceted process of individual behavior [evolving] from the steady flow of individuals' actions and experiences, which modify their biographical states" (Bernardi et al., 2019). This definition frames life trajectories as evolving through the accumulation of actions and experiences, which over time interact with broader social and structural conditions (Shanahan & Macmillan, 2008). Decisions made at a specific point in time cannot be considered in isolation; rather, they are closely connected to previous experiences and future expectations (Elder, 1994).

The life course perspective first emerged in sociology as a framework to examine how social structures and institutional arrangements generate patterned inequalities over time (e.g. Elder, 1974). Psychology subsequently adopted related principles for example through life-span developmental theory, which conceptualizes human development as a lifelong, multidirectional process characterized by the co-occurrence of gains and losses and by varying degrees of plasticity across the life span (Baltes, 1987, 2003). Together, these approaches provide a foundation for understanding both the social embedding and the developmental dynamics of individual life trajectories.

Building on these foundations, human geographers have increasingly applied the life course framework to study spatial behavior and residential mobility. Research in this field highlights how life events such as leaving the parental home, career changes, or family formation interact with geographical and housing constraints to shape patterns of residential moves (Mulder & Hooimeijer, 1999; Finney, 2011; Clark, 2013). By integrating temporal, social, and spatial dimensions, the life course perspective allows us to analyze not just where and when people move, but also how mobility is intertwined with broader life trajectories and

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life-stage transitions.

The connection between life courses and mobility offers a distinctive perspective on the dynamics of modern societies. The New Mobilities Paradigm, shaped by Sheller and Urry (2006), has significantly expanded the concept of mobility. Mobility is now understood not only as physical movement between locations but also as social, virtual, and emotional movements. These multidimensional perspectives are evident in an increasingly digital and flexible working environment (Reuschke & Ekinsmyth, 2021). Postmodern lifestyles are characterized by high mobility and flexibility, leading to diverse structures in traditionally static concepts such as housing (Wächter, 2024a). Individuals no longer change their residence just once in a lifetime; instead, they move multiple times for various reasons – including family, career, and improving work-life balance.

As a result, residential biographies are increasingly becoming the focus of research as expressions of this mobility (e.g., Peter et al., 2022). Temporarily residing individuals – those who see themselves as living in a place temporarily – are rarely considered as research subjects. In these time-limited living arrangements, a sense of home ("homing") can emerge, despite the short duration of stay, through social and material practices (Willecke, 2024). Such temporary housing practices span all social strata and are often linked to professional mobility, flexible working conditions, and digital connectivity (Wächter, 2024b). Temporarily residing individuals navigate the demands of spatial flexibility while seeking to create a stable everyday life, making them a central focus in the analysis of modern residential biographies. To analyze these complex residential trajectories, the Life Course Cube framework (Bernardi et al., 2019) provides a comprehensive tool for understanding how temporary residents experience and shape their housing biographies within broader social and temporal contexts.

Our research focuses on the self-perception of individuals regarding their status as temporarily residing. Rather than employing a categorical system to define the temporality of housing arrangements, we allow participants to determine for themselves whether they view their living situation as temporary. In doing so, we consider temporality a subjective dimension of the residential biography – an aspect that has rarely been addressed in previous studies. In particular, we consider subjective temporality alongside objective housing and employment arrangements. Previous research with students has shown that objective and perceived temporality do not always align (Kramer et al., 2025). Furthermore, individuals' perception of temporality appears to affect their sense of belonging and integration into their residential environment.

In this study, we first develop Life-Course-Based Housing Types based on qualitative data collected from interviews with individuals who identify as temporarily residing. These types differ in characteristics related to their residential biographies. Using these types, we then code the quantitative data to conduct statistical analyses aimed at determining whether certain residential biographies are associated with the likelihood of self-perception as temporarily residing. Additionally, we examine the specific life realities, perceptions, and experiences related to temporary living that significantly influence how individuals reflect upon and categorize their housing situations. We pose the following questions:

- How do Life-Course-Based Housing Types differ in their self-perception of temporality (quantitatively), and how does the number of residential moves affect the likelihood of self-identifying as temporary?
- What life circumstances, perceptions, and experiences underlie individuals' identification as temporary residences within different Life-Course-Based Housing Types (qualitatively)?

By combining quantitative and qualitative methods, this study contributes to the analysis of modern residential biographies, demonstrating how different life courses influence self-perception regarding temporality. Moreover, for the first time, we discuss the role of specific spatial and social contexts that systematically shape these perceptions within the types. This expands the understanding of residential biographies by integrating subjective perceptions and objective typologies in a mixed-methods analysis.

This paper is structured as follows: After this introduction, we review the current state of research, highlighting the integration of time geography with life course perspectives, the formation of residential biographies throughout the life course, and the conceptual framework of the Life Course Cube (Bernardi et al., 2019) that guides our analysis. Next, we describe our research design and methodology. In the results section, we present a qualitative classification of housing types based on life course trajectories, followed by their quantitative characterization. We further examine the association between these housing types and individuals' self-perception as temporary residents, before exploring the biographical narratives that illuminate these life circumstances. Finally, the paper concludes with a discussion that integrates the findings through the lens of the Life Course Cube perspective.

2. State of the Art

2.1. Time Geography and the Interdisciplinary Integration of the Life Course Perspective

With the work "What about people in regional science" Thorsten Hägerstrand laid the foundation for classical time geography in 1970, triggering a paradigm shift in geography and the spatial social sciences (Hägerstrand, 1970). Hägerstrand developed his concept within the academic circles of the Lund School, emphasizing the central role of time as a dimension for understanding spatial phenomena. By developing time paths, he introduced a time–space model that maps an individual's movement through space over time. The behavior and decisions of individuals are influenced not only by spatial factors but also by temporal restrictions and opportunities. Therefore, time geography is regarded as the basis for activity space research (e.g., Shaw, 2012; Patterson & Farber, 2015).

The approaches of the Lund School were later expanded to incorporate a life perspective by considering not only the time paths of a day but also life paths, thereby enabling a more holistic analysis of the space–time dynamics in an individual's life (Hägerstrand, 1978). Time geography is now considered an approach that integrates the biographical perspective into human geography, comprehensively analyzing the interrelationships between cultural, socioeconomic, technological, biological, and physical processes (Klingbeil, 1980).

2.2. Residential Mobility over the life course: Forming Residential Biographies

Over the past few decades, interest in the life course perspective has steadily increased. Studies have emerged that examine individuals' mobilities throughout their lives, describing certain events in a biography as mobility triggers (Finney, 2011; Clark, 2013). Earlier research identified four age-related mobility peaks associated with specific age groups and life phases (Rogers & Watkins, 1987): In early childhood (0–3 years), mobility is often linked to family relocations, as parents typically move during this phase to secure better living conditions for their children. Young adulthood (17–30 years) is characterized by entry into the labor market, with relocations occurring due to educational and career opportunities in other cities or regions. The transition into retirement (57–67 years) may prompt a move to a more attractive location as dependency on a workplace diminishes. The final mobility peak occurs in old age (80–90 years), when individuals may need to move closer to caregiving relatives or into a care facility to receive daily support.

Later, a shift in perspective recognized specific changes and events in the life course, such as leaving the parental home, career advancement,

divorce, retirement, frailty, or chronic illnesses, as triggers for mobility (Warnes, 1992). Although this theory provides valuable insights into the connection between the life course and mobility, it has limitations, as it does not adequately account for the diversity of individual life paths, including various transitions and gender-specific differences (Falkingham et al., 2016). Clark and Davies Withers (2009) investigated how certain events, such as changes in family planning or the labor market, trigger mobility by defining "windows" around these events and testing their synchrony. Similar to other studies (e.g., De Jong & Graefe, 2008), they emphasize the complexity of residential decisions, which are influenced by the interplay of various life domains.

While the model of Rogers & Watkins (1987) provides a useful historical overview, previous research has shown that mobility tends to increase during specific life stages and in conjunction with events closely linked to individuals' needs and circumstances. However, when examining contemporary residential biographies, increasingly complex and dynamic mobility patterns are emerging, necessitating more flexible analytical approaches and an expansion of traditional models to incorporate modern perspectives.

2.3. Residential Biographies and the Life Course Cube

The paper "The Life Course Cube: A Tool for Studying Lives" by Bernardi et al. (2019) introduces an analytical tool designed to capture the complex interactions among various aspects of the life course. It serves to explore life realities, including housing situations and residential biographies. By applying the Life Course Cube to residential biographies, researchers can more effectively capture the complex and dynamic mobility patterns of contemporary society. Unlike stage-based developmental theories that conceptualize life as progressing through normative psychosocial stages, such as the model proposed by Erikson (1950), the Life Course Cube is not intended as a normative developmental framework. Rather, it serves as an analytical tool that emphasizes the interdependence and temporal ordering of life events. This perspective enables an in-depth analysis of the development and transformation of residential biographies over time. It provides insights into the diverse and evolving patterns of residential moves influenced by various life events and phases, thereby fostering a more comprehensive understanding of individual and societal housing mobility.

The Life Course Cube consists of three core axes that represent the dimensions of time, domain, and level, which are interdependent (first-order). The following sections describe these three dimensions in greater detail and conceptually apply them to residential biographies. Temporal interdependence in the life course encompasses the interrelationships among an individual's life history, specifically, accumulated experiences and resources, current living conditions, and the future life course. It examines how past experiences and resources shape the present life situation and how current decisions and behaviors influence future life trajectories. Applying the concepts of path dependence, anticipation, and turning points to residential biographies offers a comprehensive perspective on the dynamics of residential moves throughout the life course. Past experiences and resources (path dependence; Kuh et al., 2003) influence current life decisions, while future expectations (anticipation; Birg, 1991) and turning points, such as major life events (turning points; Abbott, 2001), can trigger sudden changes. An international study shows that residential moves during childhood and adolescence significantly increase housing mobility in adulthood, a phenomenon particularly pronounced in countries with generally low mobility, where moves during childhood and adolescence are less frequent (Bernard & Vidal, 2019).

The domain dimension describes the various areas or domains in which an individual's life unfolds, such as work, family, education, or leisure. These domains interact with and mutually influence one another, requiring resources to be allocated among them and often necessitating a balance. In the Life Course Cube, it is posited that individuals utilize resources to engage in activities, such as work or leisure, across various life domains (Bernardi et al., 2019). In modern living arrangements that are not intended to be permanent or that are organized across multiple locations (multilocality), resource competition, mutual support, the co-production of resources, and opportunity costs play a central role.

The level dimension refers to the connections between an individual's behavior and actions over their life course (the individual level) and those of others, including social networks and external societal opportunities (the supra-individual levels), as well as internal dispositions and psychophysiological functions (the intra-individual levels) (Bernardi et al., 2019). Various studies have examined how an individual's health, social, or financial situation is linked to their immediate social environment, for example, family networks, friend groups, or work settings (Bernardi & Klärner, 2014; Thrash & Warner, 2016). Furthermore, research has clarified how individual life courses are shaped by the dynamics of population, economic institutions, labor markets, and culture (e.g., Hagestad & Dykstra, 2016; Leisering, 2003).

The development of a person's residential biography, resulting from individual-level actions, is a multifaceted process that can only be fully understood in conjunction with external influences and interactions across different levels (Peter et al., 2022). Over the course of life, housing needs and opportunities may change to accommodate shifting resources and requirements during particular life phases. Additionally, the social environment and career opportunities significantly influence residential decisions (Wächter, 2024a). A move can provide the opportunity to establish new social contacts or access better career options. Societal trends, economic conditions, and urban planning developments, such as real estate prices, the availability of (rental) housing, renovations, or the designation of new residential areas, also affect housing choices.

By considering the interdependencies across these various levels, one can gain a more comprehensive understanding of how different factors, both individual and contextual, mutually influence and determine residential biographies. In describing the Life Course Cube (Bernardi et al., 2019) and its application to residential biographies, we focus on the so called "first-order" interdependencies, as these are pertinent for analyzing Life-Course-Based Housing Types. The Life Course Cube perspective has informed both our classification of life-course-based housing types and the analytical approach adopted in this study. It is explicitly employed in the discussion to synthesize and contextualize the findings.

3. Research design & method

This article presents the findings of an empirical study conducted as part of a research project that focused on temporary living arrangements. The study was conducted in the spring of 2023 in two major German cities, Frankfurt am Main and Leipzig, as well as two surrounding municipalities in each region. These cities were chosen because they have diverse structural characteristics, are home to international companies, serve as major trade fair hubs, and have large universities and educational institutions. We employed a mixed-method approach for our study, utilizing both quantitative and qualitative methodologies. Our research design involved triangulation, where data was collected simultaneously and then compared and correlated (Plano Clark et al., 2008).

3.1. Data Collection

For the quantitative analysis, a three-tier random sample was selected using resident registration data, stratified by residential status (primary residence, dual residency, or secondary residence). A comprehensive questionnaire was distributed by mail to a gross sample of 10.000 individuals, and respondents had the option to complete it either on paper or online. The questionnaire was available in multiple languages, including German, English, and Turkish. To ensure accurate

population estimates, design weighting techniques were applied to account for uneven address distributions and unequal selection probabilities within the sample (Sand & Kunz, 2020). A total of 1,589 individuals responded to our quantitative survey, resulting in a response rate of approximately 16%. The response rate was slightly lower in the four surrounding municipalities (14%) compared to the two major cities (18%). Interestingly, the response rates in the research areas of Frankfurt and Leipzig did not differ significantly. Additionally, there was no significant difference between the number of male and female respondents.

To collect qualitative data, we utilized a postcard that accompanied the questionnaires. The postcard asked individuals if they had multiple residences or if they considered their current place of residence as temporary. Those who indicated having multiple residences or living temporary and expressed interest in a personal interview were then invited to participate. Interviews were conducted in both German and English. In total, we conducted 49 qualitative interviews, with 23 being in the Frankfurt/Main region and 26 in the Leipzig region. These qualitative interviews adopted a narrative approach (Schütze, 1983), yet they were structured using visual methods. At the beginning of each interview, a narrative stimulus was used in the form of an open initial question (Wengraf, 2001). Interviewees were invited to talk about their living and working biographies Meanwhile, a timeline was filled out participatively, which was provided as a form on A4 paper. This was followed by a phase of internal narrative questioning, in which topics raised by the interviewees themselves were taken up and explored further. In a final phase, external narrative questions were introduced (Rosenthal, 2019), allowing previously unmentioned topics to be addressed and enabling more focused, in-depth questions concerning perceptions of temporality and processes of belonging.

The use of a timeline offers several advantages over an exclusively narrative interview design: it facilitates the introduction to the interview and can be used as a visual elicitation method as well as stimulate narratives about biographical experiences and serve as thought-structuring element during the interview (Bagnoli, 2009; Bentlin & Klepp 2021). Previous studies have shown that the use of a timeline can improve the memory process and activate further memories (Bremner, 2020). Especially when talking to people who report on very extensive and complex biographies – as is often the case with temporary residents – the visual method can increase the accuracy, detail and diversity of the narratives and make connections clear (Bremner, 2020).

3.2. Procedure of mixed-method analysis

Both the verbal interview data and the visual data on the timeline were processed and then evaluated for the analysis. The interviews were transcribed and analyzed using a coding process based on the theoretical coding procedures of grounded theory (Glaser & Strauss, 2008), supported by qualitative data analysis software (MAXQDA). The analysis involved iterative movement between different coding strategies (Flick, 2007). The coding process began with open coding, in which concepts and generalizations were assigned to sentences and text passages (e.g., reasons for relocation). This was followed by axial coding, which served to refine and differentiate the categories developed during open coding (e.g., education, employment) and to organize the codes into more complex, multidimensional categories (Flick, 2007). The analysis alternated between inductive category development and deductive reasoning, whereby emerging concepts were continuously examined against the empirical material. Finally, selective coding was applied to identify core categories that integrated the analytical framework and captured the central dimensions of the study (e.g., perceptions of temporality) (Flick, 2007).

The excerpts from the interviews are reproduced under pseudonyms in order to preserve the anonymity of the interviewees. In the sense of an extended understanding of triangulation, for the combination and integration of several qualitative data sources (Moran-Ellis et al., 2006), the verbal and visual data were already integrated into the analysis (Heinrich, 2021). By processing and supplementing the timelines with the help of the verbal data, we were able to condense the information.

Using a divisive method (Mattissek et al., 2013), we created a qualitative typification of Life-Course-Based Housing Types. The types were formed by gradually subdividing the cases according to certain characteristics. Within a type, there is as much homogeneity as possible, while in comparison to other types, the aim was to achieve as much heterogeneity as possible (Mattissek et al., 2013). Unlike quantitative algorithmic clustering, this process is guided by researcher judgment and the interpretive understanding of the data, allowing qualitative nuances and contextual information to shape the typology. The characteristics included are presented in more detail in the results chapter.

The quantitative data on residential biographies were collected using a standardized questionnaire and consist of chronologically ordered information on past residences, the duration of residence at each location, and the reasons for moving there. The characteristics used to define the Life-Course-Based Housing Types serve as the basis for coding the quantitative residential biography data, enabling statistical calculations regarding these types. First, a descriptive analysis of the sociodemographic characteristics and spatial distribution of the Life-Course-Based Housing Types is conducted. The results of the Chi^2-Test and Cramer's V indicate a significant statistical association between the respective variables and the Life-Course-Based Housing Types (Duller, 2019).

The probability of self-perception as temporarily residing was examined using two binary logistic regressions (inferential statistical analysis). Initially, the analysis assessed how membership in the Life-Course-Based Housing Types affects the likelihood of perceiving oneself as temporarily residing, with the sedentary type serving as the reference category against which the other types were compared. In the second model, the number of previous residences was used as an independent variable to analyze its influence on temporary self-perception. Logistic regression is an appropriate method for modeling relationships between a dichotomous dependent variable and both nominal and metric independent variables (Peng et al., 2002; Hosmer et al., 2013).

The first model demonstrated a significant overall fit (omnibus test: $\chi^2 = 25.720$, $p < 0.001$), with the Hosmer–Lemeshow test ($p = 1.000$) confirming a good model fit. The explained variance was indicated by Cox & Snell $R^2 = 0.092$ and Nagelkerke $R^2 = 0.134$, suggesting a moderate influence of the Life-Course-Based Housing Types. The second model, which considered the number of residences as the independent variable, also showed a significant overall fit (omnibus test: $\chi^2 = 45.262$, $p < 0.001$) with a good model fit (Hosmer–Lemeshow test: $p = 0.105$). Here, the explained variance was Cox & Snell $R^2 = 0.081$ and Nagelkerke $R^2 = 0.117$, again indicating a moderate influence. The odds ratios (Exp(β)) represent the change in the likelihood of self-perception as temporarily residing with increasing levels of the independent variables (Field, 2018; Hosmer et al., 2013).

Finally, the results of the quantitative data analysis are integrated with the narratives from the qualitative data to contextualize and deepen the statistical findings. Through thematic analysis, individual life realities, social contexts, and spatial experiences that influence the perception of temporary residence are described. By integrating both datasets, a comprehensive understanding of the life realities and perceptions within the Life-Course-Based Housing Types can be achieved.

4. Results

4.1. Classification of Life-Course-Based Housing Types

The Life-Course-Based Housing Types were formed on the basis of the timelines combined with the verbal data. The verbal data is important because it makes it possible to include motivations and reasons (main reason for the move) and to add life stages that the interviewees did not incorporate in the timeline.

Three characteristics were included in the typification:

- Number of relocations
- Distances between locations
- Reasons for relocations

The number of relocations corresponds to the visually and verbally communicated relocations. This number is therefore not closed/exclusive in terms of the upper limit. However, it can be assumed that the interviewees mentioned all moves that play an important role in their personal lives. The relocations are closely linked to the "time dimension" in the Life Course Cube Model (Bernardi et al. 2019). This dimension not only refers to life phases, but also to biographical time, particularly the age of the individuals. As such, the number of relocations is not a static figure, but one that is embedded in the progression of individual life courses. Accordingly, the age of the interviewees was included in the typification. Even if relocations were not defined further, the interviewees almost exclusively mentioned relocations across municipal boundaries. In our understanding, smaller distances are, for example, moves within a federal state or to neighboring federal states. Longer distances are accordingly relocations within the country to all other federal states. Moves across national borders and the associated phases of life abroad are referred to as "experiences abroad".

Reasons for relocation refer to the main reasons stated in the interview and categorized as such. The typification therefore neglects the fact that decision-making processes for relocations (residential mobility) are always linked to a bundle of reasons and weighing-up decisions. In line with the "domain dimension" (ibid.), these reasons can be situated within different life domains, such as work, education, or family, which often intersect and jointly influence mobility decisions. This analytical framing helps to understand relocation not as an isolated event, but as embedded within broader biographical contexts and life spheres. Detailed information on motivations and perceptions is made clear by the examples and quotes.

In the following typification (Tab. 1), temporary residents whose biographies are characterized by multiple moves were typified. 46 cases were included in the typification, which could be clearly assigned to 5 different types using a divisive clustering procedure. The types are each described below with the inclusion of an example.

Although this type does not appear in the interviews, we identified a "*Settled" Type* as a comparative type. This type is characterized by fewer than 3 moves, which take place over short distances and not across national borders. People of this type have therefore spent most of their lives in one place, often the place where they were born.

4.1.1. Education-Related Movers

We identified two types of education-related movers. These are individuals who have relocated for their education or studies (to another city) where they have lived or are living for a limited period. This category includes young individuals who are currently in this phase of life, as well as those who, after completing their education or studies, have either not moved again or have only relocated over short distances. Within this category, two Types can be distinguished: *Type 2 Selective Education-Related Movers*, who have undertaken one or two specifically education-related relocations within a limited period. *Type 3 Diverse Education-Related Movers*, who have experienced more than two education-related relocations (e.g., multiple changes of study locations in the German system, such as for a Bachelor's and Master's degree, internships, etc.), transitions between different types of education and locations, as well as international residential experiences (e.g., Au Pair, Gap Year, Work and Travel, Erasmus stays, international internships).

An example from the qualitative interviews for *Type 2* is Finn (age: 18–24) (Fig. 1a). Finn moved to a student dormitory in Frankfurt for his medical studies, marking his first independent relocation. Previously, he had moved once within Bavaria at the age of one and a half due to his parents' work. After finishing school, he initially completed a voluntary social year in a municipality in Rhineland-Palatinate before beginning a physics degree in Regensburg, which he later discontinued. For both locations, he commuted rather than relocated. Among the five universities to which he applied, Frankfurt was the only one that accepted him, which ultimately led to his move there. Finn has moved twice in his life so far, including only one relocation he decided himself for his studies.

A very different example is Yannik, who represents *Type 3* (Fig. 1b). Yannik (age: 25–34) was born in Osnabrück and grew up near Ludwigshafen. He completed his bachelor's degree in Karlsruhe, followed by a dual-location master's program in Zurich and Paris. He then pursued a PhD in Heidelberg before moving to Leipzig in 2018 for a second degree, where he stayed for four years until September 2022. He secured a scholarship for a start-up in Berlin, which required proof of residence in the city. As a result, he currently maintains a multi-local living arrangement, with two-room apartments in both Leipzig and Berlin. Yannik's biography is characterized by more than 7 changes of residence, including moves abroad to France and Switzerland, almost all moves are for educational reasons.

4.1.2. Career-Driven Movers

The next two types are career movers. These are people whose moves are mainly motivated by professional developments, such as job changes, promotions or company relocations. Type 4 local career movers tend to have few moves, often over short distances within Germany. Type 5 international career movers are characterized by a higher number of moves (more than 4), often over longer distances and have experience of living abroad (origin, educational purposes, work stations). Living practices are strongly characterized by international mobility.

An example of *Type 4* is Lena (age: 25–34) (Fig. 2a), who grew up in the Harz region and moved to Halle an der Saale for her studies, where she remained until 2019. Even during her master's program in Leipzig, she continued living in Halle, as she was already residing there with her husband. Upon entering the workforce, she relocated with her husband to Leipzig, choosing an area with convenient access to her workplace. When she later transitioned from a Leipzig-based subsidiary to the parent company, she remained in Leipzig and now primarily works remotely. Lena's biography is characterized by only two relocations, all of them within neighboring federal states in Germany. The decisive factor for her move to Leipzig was the proximity to her workplace.

Ansgar (age: 35–44) represents Type 5 and has a life trajectory characterized by frequent relocations (Fig. 2b). He grew up in Dresden and began his apprenticeship in Munich as theater painter. However, after discontinuing this program, he returned to Dresden, where he

Table 1
Life-Course-Based Housing Types.

Type	Type 1: Settled	Type 2: Selective Education-Related Movers	Type 3: Diverse Education-Related Movers	Type 4: Local Career Driven Movers	Type 5: (Internat.) Career Driven Movers	Type 6: Family-Oriented Movers
Reasons for relocation		Education	Education	Employment	Employment	Family
Number of relocations	≤ 2	2–4	>4	2–4	>4	>2
Distances between locations	short	short	large, international experience	short	large, international experience	short-large
Number of cases (qualitative Interviews)	0	6	7	9	14	10

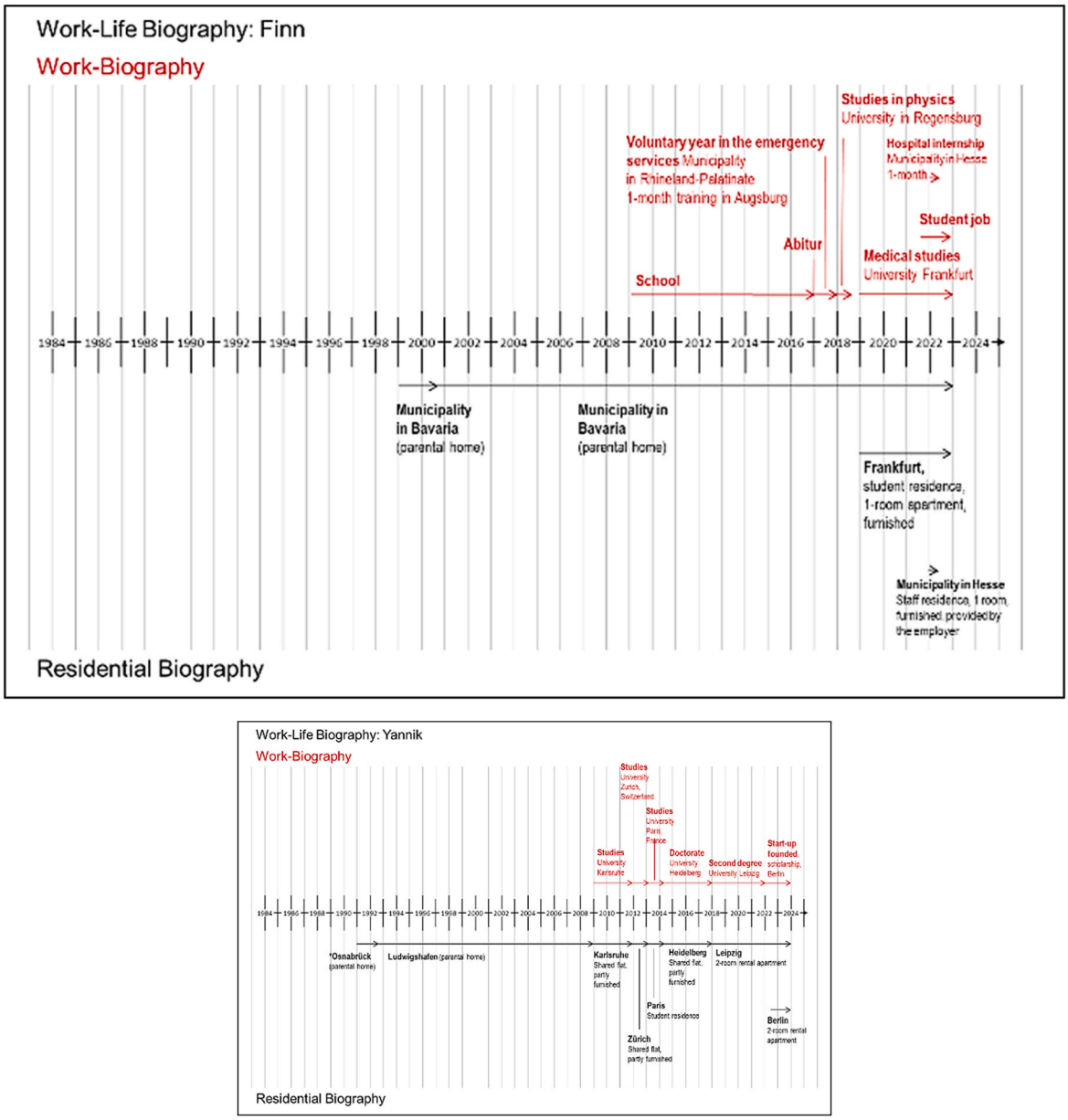

Fig. 1. A,b: Type 2: Selective Education-Related Movers (Example Finn, left), Type 3: Diverse Education-Related Movers (Example Yannik, right). The hand-filled timeline was digitized, and employer names and residential locations were anonymized. The names of municipalities with less than 100,000 inhabitants are replaced by the term "municipality".

pursued various internships, completed his high school diploma, and prepared for a music degree. As this did not work out, he instead began an apprenticeship as an instrument manufacturer in Vogtland. After spending a year working in Spain and undertaking various short-term jobs, he moved to Gießen to work for a guitar manufacturing company, where he obtained his master craftsman qualification. He then moved to Leipzig, where he has been working since 2018 as a self-employed luthier, guitar teacher, and lecturer at a university of applied sciences. Ansgar's biography is shaped by more than 8 relocations across municipal borders, all relocations (also international) had either educational or mainly work-related reasons.

4.1.3. Family-Oriented Movers

The next type includes family movers, i.e. people who often justify their change of residence with family events (e.g. family relocation, marriage, birth of children, caring for relatives). Hermann (age: 55–64) exemplifies the *Type 6* (Fig. 3). He grew up in Lower Saxony and lived with his parents until he completed his apprenticeship as a bookseller. For his studies, he moved to Cologne, where he met his wife. At the time, finding a job was challenging, so his wife began working in a municipality in Bavaria while he started in a municipality in North-Rhine Westphalia. Initially, they maintained separate apartments in their respective work locations, but later they moved into a shared apartment in Oberhausen, which was strategically located between his working place and Essen, where his wife had started a new job, and where their daughter was born. Following the passing of Hermann's mother-in-law, who had managed a family-run hotel in Lower Bavaria, he and his wife took over the business and relocated to a municipality in Bavaria. As his wife pursued further training in her original profession and it became clear that their daughter would not take over the hotel, she began applying for jobs nationwide. The family eventually moved to Frankfurt, where Hermann's wife secured a position in Offenbach, while he found employment in Wiesbaden. Since his wife's retirement, the family owns a house in a municipality in Bavaria. However, Hermann maintains an

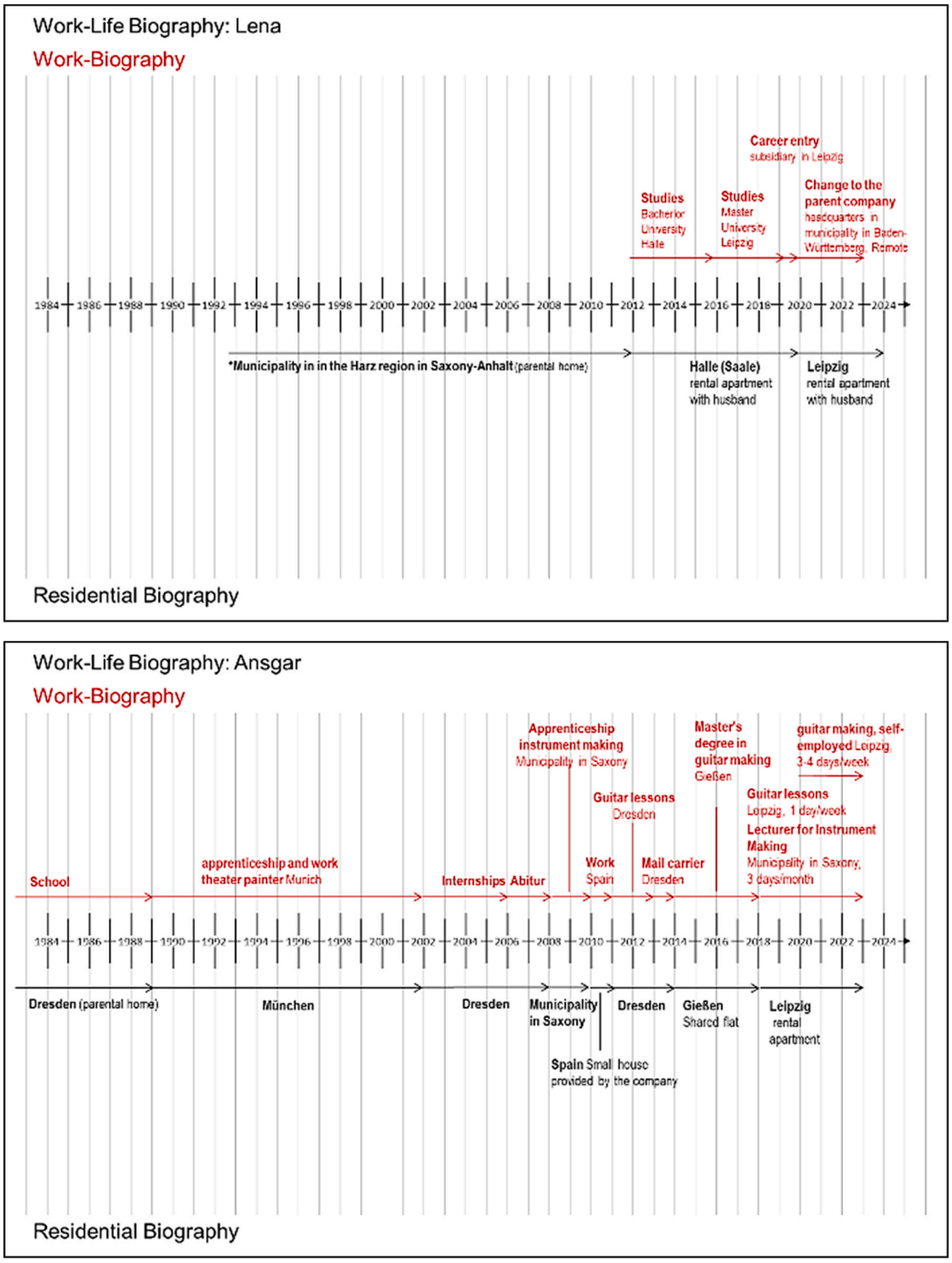

Fig. 2. A,b: Type 4: Local Career Driven Movers (Example Lena, left), Type 5: (Internat.) Career Driven Movers (Example Ansgar, right). The hand-filled timeline was digitized, and employer names and residential locations were anonymized. The names of municipalities with less than 100,000 inhabitants are replaced by the term "municipality".

apartment in Frankfurt for his part-time position in a specialist office for public libraries in Wiesbaden. Hermann biography is characterized by more than 6 relocations over wide distances, the majority of which can be attributed to his partner, family circumstances, negotiation processes, and compromises within his household.

Through a detailed description of typical residential and occupational biographies based on qualitative data, specific patterns for the respective types can be identified. This is followed by a systematic characterization of the types using quantitative data to illustrate the sociodemographic and structural characteristics associated with these

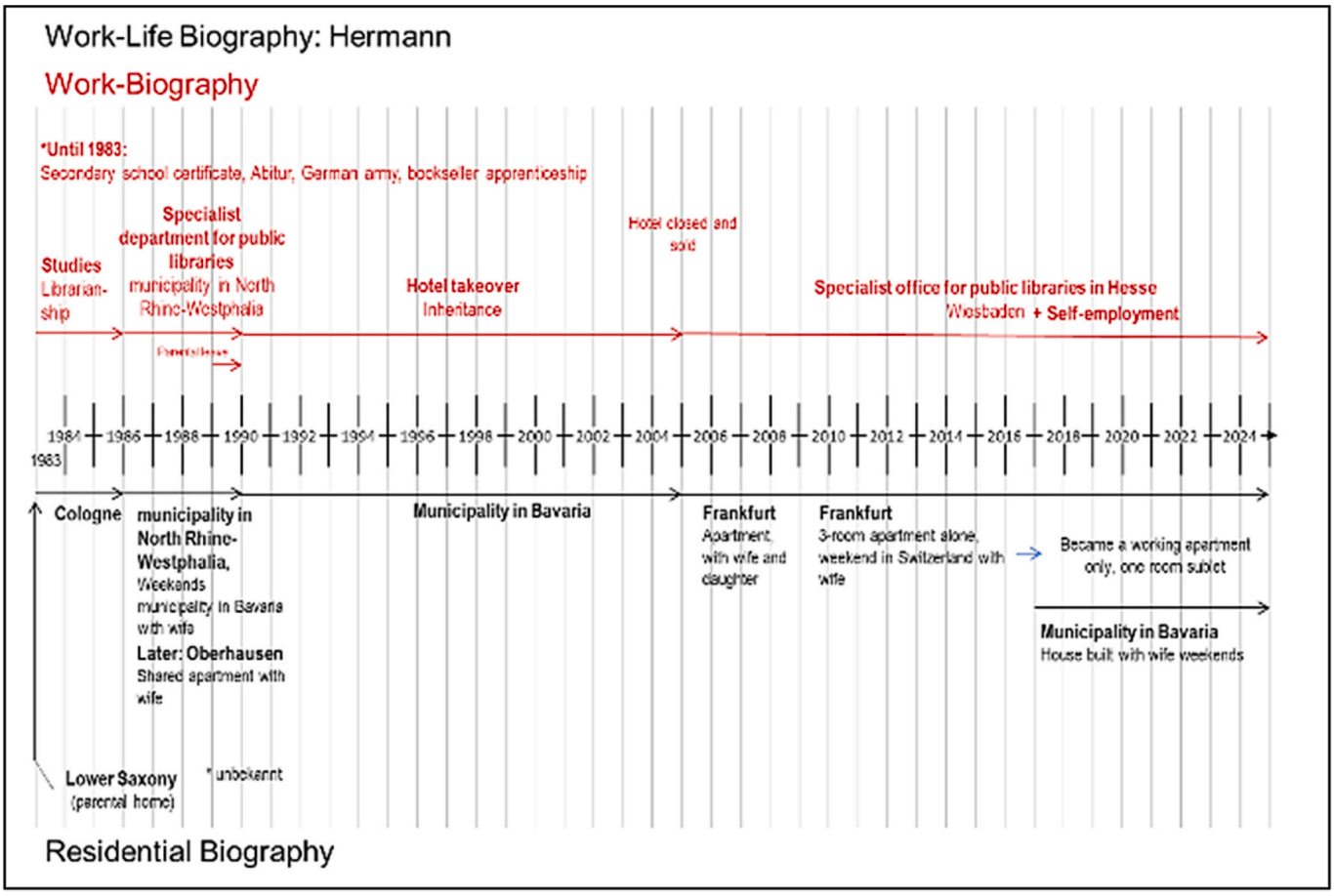

Fig. 3. Type 6: Family-Oriented Movers (Herman) The hand-filled timeline was digitized, and employer names and residential locations were anonymized. The names of municipalities with less than 100,000 inhabitants are replaced by the term "municipality".

identified types.

4.2. Characterisation of Life-Course-Based Housing Types

The Life-Course-Based Housing Types are characterized below in

Table 2
Sociodemographic Characterisation of the Life-Course-Based housing Types.

Variable	Features	Type 1: Settled	Type 2: Selective Education-Related Movers	Type 3: Diverse Education-Related Movers	Type 4: Local Career Driven Movers	Type 5: (Internat.) Career Driven Movers	Type 6: Family-Oriented Movers	Total Sample
Gender	female	54%	54%	68%	59%	48%	73%	54%
	male	46%	46%	32%	41%	52%	27%	46%
Age	over 65 years	33%	10%	7%	40%	18%	31%	23%
	45 – 64 years	34%	38%	11%	34%	45%	33%	34%
	30 – 44 years	18%	27%	52%	26%	31%	25%	27%
	18 – 29 years	15%	25%	30%	0%	6%	11%	16%
Vocational education	no professional qualification	10%	2%	9%	0%	2%	11%	8%
	professional qualification	48%	24%	4%	34%	45%	56%	41%
	higher education institution	42%	74%	87%	66%	53%	33%	51%
Household	Alone	24%	28%	15%	21%	21%	8%	21%
	Partner/Spouse	39%	46%	35%	54%	40%	45%	42%
	Family members	32%	22%	31%	23%	34%	43%	32%
	Other	5%	4%	19%	2%	5%	4%	5%
Spatial Distribution	urban	47%	57%	76%	31%	44%	51%	48%
	suburban	53%	43%	23%	69%	56%	49%	52%
Temporality	perceive themselves as temporary residents	12%	37%	50%	26%	42%	29%	24%
All Cases (621)		267 (43%)	51 (8%)	55 (9%)	70 (11%)	103 (17%)	75 (12%)	1589 (100%)

terms of their sociodemographic features (gender, age and education) and their spatial distribution (urban/suburban), as requested in the first research question of this paper. Additionally, Table 2 presents the proportion of individuals who describe themselves as temporarily residing. These characteristics will later be used to explain the differences in the likelihood of self-perception as temporarily residing among the Life-Course-Based Housing Types.

Type 1, the settled type, reflects the overall distribution of binary genders in the entire sample, indicating no specific deviation in terms of gender. However, the distribution of age groups differs significantly; 33% of individuals are over 65, which is notably higher than in the other types, while younger age groups are proportionally underrepresented. Furthermore, this type has a higher proportion (10%) of individuals without completed vocational training. A slightly higher percentage of this type resides in suburban areas, although the overall spatial distribution remains comparable to that of the entire sample. Despite their sedentary status, 12% of individuals in this type describe themselves as temporarily residing.

For Type 2 (Selective Education-Related Movers), the distribution of binary genders is similar to that of Type 1 and the overall sample, preventing any type-specific conclusions about gender distribution. The age distribution indicates that individuals under 45 years account for over 50% of this group, characterizing it as relatively young. Additionally, there is a very high level of education within this type, with 74% holding a university degree. The proportion of those living in urban areas is slightly higher at 57%. Overall, 37% of individuals in this type report that they are temporarily residing.

For Type 3 (*Diverse Education-Related Movers)*, a significantly higher proportion of females is observed, at 68%. The age distribution reveals an even larger share of younger individuals, with 30% being under 30 years old. In terms of education, Type 3 surpasses Type 2, as over 80% hold a university degree. Moreover, more than half of the individuals in this type describe themselves as temporarily residing.

Type 4 (*Local Career Driven Movers)* also has a higher proportion of females, at 59%. The age distribution indicates an older age structure, with 40% being over 65 and no individuals under 30. Additionally, there are no individuals without vocational training, and this type features a high proportion of individuals with a university degree (66%). Furthermore, Type 4 has the highest share of individuals living in suburban areas, at 69%. Overall, 26% of individuals in this type describe themselves as temporarily residing.

Type 5 (*(Internat.) Career Driven Movers)* is the only type where the proportion of males exceeds that of females. Considering the overall gender distribution in the sample, the 52% male representation in this type is somewhat higher than expected. Over 80% of individuals in this type belong to the middle age groups, while both the youngest and oldest categories are underrepresented. Furthermore, a relatively high proportion of individuals in this type (45%) have vocational training, whereas only a moderate proportion (53%) possess a university degree compared to the other types. The majority of individuals in this type also live in suburban areas. Overall, 42% of individuals in this type self-identify as temporarily residing.

Type 6 (*Family-Oriented Movers)* exhibits the most pronounced gender difference, with 73% being female. The age distribution suggests a somewhat older structure, with over 60% belonging to the two highest age categories. Additionally, this type shows the highest proportion of individuals with an intermediate education level at 56%, as well as the highest proportion of individuals without vocational training at 11%. In terms of spatial distribution, there is almost no differentiation. Overall, 29% of individuals in this type describe themselves as temporarily residing.

4.3. Association between Life-Course-Based Housing Types and Self-Perception as Temporary Resident

Below are the results of the logistic regression modeling addressing our second research question: whether the Life-Course-Based Housing Types differ in the probability of self-perceiving as temporarily residing. This analysis also aims to statistically demonstrate the role that the number of residences plays in this probability. In the first model, Type 1 serves as the reference category against which the other types are compared. The complete statistical analysis results are provided in Table 3.

The findings indicate that individuals classified as Type 3 (*Diverse Education-Related Movers*; OR = 7.14) have the highest probability of self-perceiving as temporary, they are more than seven times as likely to do so compared with individuals in Type 1. Individuals in Type 5 (*(Internat.) Career Driven Movers*; OR = 5.07, 42%) have a fivefold higher probability of self-perceiving as temporary than those in Type 1. Similarly, individuals in Type 2 (*Selective Education-Related Movers*; OR = 4.04) are four times as likely to perceive themselves as temporary relative to Type 1. Next, individuals in Type 6 (*Family-Oriented Movers*; OR = 3.01) have a threefold higher probability of self-perception as temporary compared with those in Type 1. The smallest difference is observed with Type 4 (*Local Career Driven Movers*; OR = 2.47), indicating a 2.47-fold higher probability of self-perception as temporary relative to Type 1.

The results of the second logistic regression reveal an odds ratio of 1.28, meaning that with each additional residence, the probability of self-identifying as temporarily residing increases by 28%. This demonstrates a positive association between the number of residences and the perception of temporality. It is important to note that, theoretically, the odds can continue to increase with a growing number of residences without the probability of temporary residence reaching 100%. Instead, the probability of temporary residence approaches a maximum asymptotically without ever exceeding it (Agresti, 2018).

4.4. Biographic Narratives behind the Life Circumstances and Self-Perception as Temporary Resident

In addition to the respondents' self-assessments in the quantitative survey regarding whether they view their housing arrangements as temporary, our third research question aimed to explore the life realities and circumstances underlying these self-perceptions. This examination is facilitated by a qualitative approach that considers the narratives behind the timelines and quantitative distributions.

Finn, previously cited as an example of the second type of Life-Course-Based Housing Types, explains that from the very beginning, it was clear he was moving to the city solely for his studies, with his stay anticipated to be temporary. This is also evident in the furnishings of his accommodation. He describes having "stumbled into" this housing arrangement, initially arriving at the furnished apartment with only a backpack containing towels and clothes, while everything else fell into place afterward. In the early phase, he frequently returned to his parents' home in his hometown, although this occurrence has since diminished. Despite the perceived temporality, he increasingly feels at home and comfortable in his student city, Frankfurt, remarking that it "became a home" rather than simply being a place "to study." In contrast, Julian (aged 18–24), also classified as a Type 2 (*Selective Education-Related Mover*), has a very different experience. He moved from Saarland to Frankfurt for his dual studies, deliberately chose to stay in the city, and started a job there. He does not view himself as temporary; instead, he intends to continue living in Frankfurt, as he is very satisfied with the city. Similarly, several older interview participants also moved for education or studies and remained in their new locations. These divergent findings reveal a heterogeneous picture among Education-Related Movers, a complexity that was already evident in the quantitative data.

Almost all of the interviewed participants classified as Type 3 (*Diverse Education-Related Movers*) perceive themselves as temporary residents. Yannik states, "My professional commitment in Berlin ends at the end of May. And then the cards will be reshuffled; honestly, I don't

Table 3
Ordinal Regression Analysis: Self-Perception of Temporality.

Binary logistic regression	Predictor	Estimated regression coefficient (β)[a]	Wald (χ^2)	p-value	Exp (β)	95% Confidence Interval[b]
1.	Type 1: Settled[c]	–	–	–	–	–
	Type 2: Selective Education-Related Movers	1.396 (0.347)	16.199	< 0.001	4.04	[2.05, 7.97]
	Type 3: Diverse Education-Related Movers	1.965 (0.331)	35.347	< 0.001	7.14	[3.73, 13.64]
	Type 4: Local Career Driven Movers	0.905 (0.340)	7.105	0.008	2.47	[1.27, 4.81]
	Type 5: (Internat.) Career Driven Movers	1.623 (0.275)	34.735	< 0.001	5.07	[2.95, 8.7]
	Type 6: Family-Oriented Movers	1.100 (0.316	12.126	< 0.001	3.01	[1.62, 5.58]
2.	Residential biography: Number past residences	0.247 (0.039)	41.036	< 0.001	1.28	[1.19, 1.38]

Note:
[a] Standard error in parentheses.
[b] [minimum value, maximum value].
[c] Reference Category.

yet know where I'm going. I definitely want to get out of Berlin". This clearly illustrates his temporary lifestyle, characterized by numerous residential moves over long distances and extended stays abroad, a pattern he continues to follow. Although he expresses a willingness to make further moves for his education or career, when asked whether he would prefer more regularity or stability, such as memberships in clubs, he responds, "Interesting question. Recently, I think for the first time in my life, I thought that it might be nice to be in one place for a longer period, to have regular appointments there, because I really haven't done that in years. But it's not something I feel is missing at the moment. I can imagine that at some point, if I were to settle down somewhere, I would do that. But that is not a factor influencing my decisions".

In contrast, interviews with individuals assigned to Type 4 (*Local Career Driven Movers*) reveal that a significant portion do not view themselves as temporary residents and instead intend to settle permanently in the future. Lena, already presented as an example of this type, describes her emotional adjustment to Leipzig after moving from the nearby city of Halle as a "process": "It was really a process. At the beginning, shortly after we moved to Leipzig, my sense of home was still Halle. Well, I had lived there for eight years. The city is cozy, and you can get everywhere super easily, and my friends were there. But now, I feel at home here". She explains how she settled in and now has friends in Leipzig whom she met through an online platform. Furthermore, she and her husband are currently looking for an apartment to buy in Leipzig, underscoring their desire to establish permanence in the city.

Type 5 *(International Career Driven Movers)* shows a clear tendency in the quantitative analysis for individuals to perceive themselves as temporary residents. In interviews, respondents of this type frequently describe their living situations as temporary. Ansgar explains that although he would like to stay in the city, his decision depends on various factors. On one hand, his self-employment is not performing well, which could lead to a professional reorientation; on the other hand, developments in the rental market also play a determining role. In contrast, other individuals in this type who work in high-paying sectors exhibit a different pattern. Management consultant Stefan (age 45–54) states, "I always have (lived temporarily). That's exactly my way of life (…) There are now quite a lot of people who live like that. But of course, it's easy for me, no family, no children, so of course you have maximum flexibility". For Yasmin (age 25–34), who holds a doctorate in the medical field, temporality is a lifestyle model. She has moved several times due to her job but does not view this negatively. She describes her background: "I'm originally from Syria, my mum is French, and my father is half Russian. We are minorities, and my family lived abroad in several countries. My father traveled a lot for his job. So, whenever my company said to move to Berlin, it wasn't a huge issue; just a new city. As they said go to Frankfurt: It's a big city. As long as I know how the metros work and where the good and bad parts are, I'm fine. I've lived in a lot of countries.".

The interviewees of Type 6 *(Family-Oriented Movers)* primarily move for family-related reasons and describe familial motivations as decisive for future housing decisions. For Hermann, it is clear that he will eventually relinquish his apartment in Frankfurt, which he currently maintains solely for work purposes, because this arrangement is temporary for him. However, he has no attachment to the municipality in Bavaria where the jointly owned house is located; he lives there for the sake of his wife and remarks that one must make compromises in a relationship. This housing arrangement, therefore, is not temporary for him. He states, "I can actually feel comfortable anywhere". Similarly, Christiane (age: 35–44), who is also assigned to Type 6, has moved 11 times in her life. Since entering into a relationship with her husband, and even more so since the birth of their children, she has attributed her previous residential moves to family-related aspects, such as proximity to grandparents, the school system, or the availability of Franco-German offerings, which are important for a Franco-German family. Although she no longer perceives Leipzig as temporary and emotionally regards the city as home, there are still plans to move to France in the future. These examples demonstrate that even if family-related reasons might suggest a housing situation is not temporary, various other factors can nonetheless lead to a perception of temporality.

5. Discussion & Conclusion: Integrating Findings through the Life Course Cube Perspective

The breadth and complexity of our findings indicate the need for an approach like the Life Course Cube, which captures the interdependence and temporal ordering of life events in a flexible and dynamic way, providing a nuanced understanding of residential biographies. Integrating insights from the mobilities paradigm, our study highlights subjective experiences of temporality and mobility. However, we note that the ability to move may itself be a form of privilege, shaping opportunities, agency, and social integration within the residential trajectory (Sheller, 2018). Housing biographies, shaped by increasing flexibility and individualization (Beck, 2008; Schneider et al., 2002), are becoming increasingly fragmented and correspond to "patchwork biographies" (Hilti, 2013). The shift from traditional lifestyles, characterized by only a few residential moves over short distances, to biographies marked by numerous relocations for various reasons is already evident in the quantitative data, where only 43% of the sample can be classified as "settled". All other Life-Course-Based Housing Types involve more than three residential moves across different life stages.

To avoid rigid and predetermined allocations to life stages, this paper employed an exploratory typology using a qualitative agglomerative

approach (Mattissek et al., 2013). This typology enables the classification of individuals based on their residential moves, independent of fixed "events". The visual tool of the timeline facilitated the collection of detailed data during the qualitative interviews, while the verbal discussions enriched the biographies with the participants' own interpretations, evaluations, and perceptions. Consequently, the results can be interpreted in the context of the Life Course Cube by Bernardi et al. (2019).

The core "time" axis of the Life Course Cube focuses on how past experiences and resources shape the current life situation, and how current decisions and behaviors influence the future course of life (Bernardi et al. 2019). This axis is particularly significant regarding contemporary housing arrangements, which are characterized by increasing residential mobility, relocations, and temporary phases in the life course. In the qualitative interviews, it became especially evident among Type 5 (International Career Driven Movers) that previous residential moves and temporary phases, including international experiences enhance the willingness to continue living temporarily, a lifestyle model that is actively embraced. Another study involving individuals with job-related migration experiences also demonstrated that biographies are complex and mobility patterns extend beyond traditional home and host country trajectories. These extended mobility patterns, in turn, foster competencies and influence future life paths (Mittmasser, 2022). Similar to what is known for high-skilled migrants (Kõu & Bailey, 2014), relocations serve as a strategic tool for both international and domestic career advancement.

The quantitative data were used to test how previous housing experiences, methodologically represented by the Life-Course-Based Housing Types, influence individuals' assessment of their own temporality, specifically their perception of being "temporarily residing." Whether a residence is perceived as temporary is relevant for both future life and housing decisions, as well as for establishing a sense of home at the residential location (Wächter, 2024a,b; Willecke, 2024). This analysis is preceded by a sociodemographic characterization of the Life-Course-Based Housing Types, which elucidates the heterogeneous age structure, gender distribution, and education levels. These sociodemographic differences form the basis for the subsequent discussion of the central time-related concepts, Path Dependence, Anticipation, and Turning Points, that constitute the "time" core axis of the Life Course Cube (Bernardi et al., 2019).

Path Dependence refers to the influence of earlier decisions and experiences on the subsequent course of life. It is evident that Type 3 (*Diverse Education-Related Movers*) more frequently exhibits a higher level of education while simultaneously having a relatively high proportion of females. This combination may indicate that earlier decisions to pursue (international) studies or educational experiences lead to a greater openness to residential moves in the long term. Positively connoted periods of education or training abroad seem to encourage further (international) moves. A similar pattern is observed in Type 5 (*(Internat.) Career Driven Movers)*, which also has a high proportion of individuals with higher education degrees. The concept of path dependence is further illustrated in the interview with Yasmin; her educational level has led to earlier career decisions that require high mobility, a pattern she intends to continue.

Anticipation is understood as individuals making current decisions with regard to future consequences. This mechanism is particularly evident in Type 5 (*(Internat.) Career Driven Movers)*: this group is relatively young and predominantly lives in urban areas. Furthermore, 42% of respondents in this type indicate that they perceive themselves as temporary residents, suggesting plans for further career moves in the future that would entail repeated relocations. This aspect is also highlighted by Type 2 (*Selective Education-Related Movers*) and Type 3 (*Diverse Education-Related Movers*): specific educational aspirations or targeted further qualifications lead to the deliberate planning of future work concepts that are linked to flexible housing arrangements. For example, Yannik has not yet seriously considered settling down in the future, which aligns with the concept of anticipation in relation to his decision for a currently temporary housing arrangement.

Turning points refer to significant events or decisions that lead to marked changes in one's life course. This concept is exemplified in qualitative interviews with Type 6 (*Family-Oriented Movers*), where family-related events – such as the birth of a child or the care of relatives –typically trigger changes in housing arrangements. The data shows that this type has a high proportion of middle-aged individuals residing in suburban areas. A common turning point is the transition from a career-focused phase to one that is more family-centered. This shift can also be interpreted through the lens of socio-emotional selectivity theory (Carstensen et al., 1999), which suggests that individuals' perception of limited time increases the prioritization of emotionally meaningful goals, such as family cohesion, when making residential decisions. For example, in Hermann's case, he plans to relinquish his secondary residence at his workplace upon retiring and shift his primary residence back to the family home, reflecting both family-oriented priorities and the influence of time perspective. In contrast, for Finn (Type 2; *Selective Education-Related Movers*), the beginning and end of his studies represent turning points in his residential biography.

The core "domains" axis also clarifies, based on the results of this study, that the demands and goals in various life areas, such as work, family, or education, significantly shape residential biographies. The quantitative analyses reveal that all types have a significantly higher likelihood of perceiving themselves as temporary compared to the sedentary type. This underscores how a focus on specific life domains, whether education, career, or family, substantially influences the probability of engaging in temporary housing arrangements. Furthermore, these patterns correspond with the biographies reconstructed in the qualitative interviews, where these very domains (e.g., international career options or family obligations) are identified as primary motives for flexible and recurrent residential moves.

Many respondents in the qualitative interviews strive to balance different fields of activity to meet both professional and family obligations. This leads to complex housing arrangements, such as multi-local living, exemplified by Hermann, a representative of Type 6 *(Family-Oriented Movers)*. Particularly in Hermann's case and his future plans, it becomes evident that his residential biography results from weighing various life domains, which must be continuously realigned throughout the life course.

Within the core "levels" axis, different analytical levels are considered to examine the influence of both structural and personal factors on life courses. At the supra-individual level, institutional frameworks, economic developments, and labor market dynamics (Hagestad & Dykstra, 2016; Leisering, 2003), together with broader forces such as globalisation and structural power asymmetries, are considered external influences that significantly shape individual life course possibilities. Ansgar's case, highlighted in the qualitative interviews, clearly illustrates that his more than eight job-related moves are not merely expressions of individual career decisions but also reflect structural changes and opportunities within the labor market. The COVID-19 pandemic also represents a supra-individual event that has influenced housing preferences and residential mobility, for example by reshaping the perceived function of the home and location choices (e.g., Wolday & Böcker, 2023). Furthermore, the analyses reveal gender-specific differences linked to these structural conditions. For example, Type 5 (*(Internat.) Career Driven Movers)* has a significantly higher proportion of males, while Type 3 (*Diverse Education-Related Movers*) and Type 6 (*Family-Oriented Movers*) show considerably higher proportions of females. These findings further imply that men are more likely to engage in international and career-driven mobility, while women appear to adopt multi-local living as a temporary solution to balance family and professional responsibilities, consistent with previous research (Willecke & Wächter, 2024).

When interpreting the different odds ratios of the Life-Course-Based Housing Types regarding self-perception of temporary residence,

interdependent processes across various analytical levels become apparent. For instance, Type 3 (*Diverse Education-Related Movers*), with an odds ratio (OR) of 7.14, suggests that dynamic educational and career trajectories contribute to a pronounced perception of temporary housing situations. In contrast, the more moderate OR values for Type 4 (*Local Career Driven Movers;* 2.47) and Type 6 (*Family-Oriented Movers*; 3.01) imply that stable, structuring factors, such as family bonds and local labor market conditions, lead to a significantly lower likelihood of perceiving oneself as temporarily residing. These results illustrate that the subjective perception of temporality in one's housing arrangement is the product of complex interactions among personal, individual, and societal influencing factors.

Some specific limitations inherent in the methodological approach can be identified. The assessment of self-perception as temporary relies on subjective self-reports, which may be biased due to varying interpretations of the term "temporary". Increasing the sample size and conducting the study across multiple locations would likely enhance the results. Additionally, important sociocultural, economic, and institutional factors that influence residential biographies were not captured in the models. Furthermore, our sample and recruitment methods likely selected participants who opted into the study, which may have further emphasized voluntary mobility. Research from other geographic contexts shows that individuals experiencing forced migration perceive temporality differently and face additional emotional challenges and insecurity (Dobrusskin & Helbrecht, 2021; Vaquera et al., 2017). Despite these limitations, the study is considered valid due to its robust methodological design, the interdisciplinary integration of quantitative and qualitative approaches, and its solid theoretical grounding in the Life Course Cube model (Bernardi et al., 2019).

In conclusion, the implications of the results highlight the added value of this study. The finding that current structural conditions, requiring a mobile and flexible lifestyle, are associated with a significantly higher likelihood of self-identifying as temporarily residing provides important insights for the housing market, urban planning, and social policy. Specifically, it points to a growing demand for flexible and adaptable housing arrangements, such as short-term rentals, small and furnished apartments or co-living models, that accommodate dynamic and non-linear residential biographies. For urban planning, the results underline the importance of developing multifunctional neighbourhoods that provide the necessary infrastructure to combine housing, work, and social life, enabling residents to meet diverse and shifting needs.

Such approaches are necessary to better address the evolving requirements of different population groups, including students, young professionals, and multi-local family arrangements. While these groups differ in their housing demands, they share a need for flexibility, accessibility, and reliable connectivity. Students and young professionals, for instance, often depend on affordable housing solutions with strong connections to educational institutions and labour markets, reflecting their education- and career-driven mobility patterns. Individuals in multi-local living arrangements, in contrast, tend to prioritise functional, often higher-cost housing and proximity to transport hubs in order to manage everyday life across multiple locations. If these differentiated needs are not adequately addressed, mismatches between housing systems and life course dynamics are likely to persist, with consequences for housing security, social cohesion, and the long-term integration of individuals in increasingly temporary housing situations.

6. Declaration of generative AI

During the preparation of this work, the author(s) used DeepL, ChatGPT and editGPT in order to address language and expression issues. After using this tool/service, the author(s) reviewed and edited the content as needed and take (s) full responsibility for the content of the publication.

CRediT authorship contribution statement

Leonie Wächter: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Maya Willecke:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability

The data that has been used is confidential.

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