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Mobility segregation throughout the lifetime of highly segregated lower social profile inhabitants in Warsaw – case study

Abstract: The aim of the article is to define the concept of mobility segregation during lifetime and to distinguish mobility segregation scope among two Warsaw (Poland) inhabitants characterised by lower social profile, who lived in homogeneous social environment. Mobility has become a new dimension of social inequality that should be taken into account in research on social segregation in increasingly polarised cities. It can be studied by qualitative methods that can contribute to quantitative-dominant research on segregation. In this paper, mobility segregation aspects are analysed through biographic interviews, using reconstructive-interpretative approach. It gives a novel method to study segregation during lifetime in a holistic approach and to give evidence of experienced segregation of individual inhabitants. The study revealed that mobility segregation may change throughout the lifetime. There were indicated “windows of change” when forms and ranges of mobility change resulting in the change of places regularly visited and social profile of people met there. However these relations are complex.

Key words: social inequalities, social segregation, mobility justice, mobility segregation, biography, qualitative research

Introduction

Mobility has become a new dimension of social inequality that should be taken into account in research on the social differentiation of cities, and in particular on social segregation, understood as uneven distribution of social groups within a specific space. Social segregation is a complex concept and research on segregation is divided into several approaches (Grzegorzcyk et al. 2019). Currently, there is a need for a new approach to research on social segregation, i.e. the mobility segregation proposed in this study. Mobility segregation is the “social bubble” in which people live wherever they are, moving on both long and short distances. A high level of mobility segregation therefore means meeting people with similar social characteristics to the characteristics of a given person, in every

place, throughout life. Hence mobility segregation is not simply characterised by the means of transport, which is only one of its features. Mobility segregation is mainly characterised by interactions with people met in every place.

The aim of the article is to define the concept of mobility segregation during lifetime and to distinguish mobility segregation scopes among lower social profile and highly segregated inhabitants. The first aim is achieved by reference to relevant concepts¹ and the second aim is achieved by analysis of two case studies of Warsaw inhabitants. To the second aim three research questions were asked:

1. Does the mobility segregation change over the lifetime?
2. How does this change occur, i.e. at what stages of life the mobility segregation decreases or increases and which places, people encountered there and which forms of mobility contribute to this change?
3. Which events can be considered as “windows of change”?

Contemporary mainstream research on social segregation in European cities is inspired mainly by global city thesis, a relation to a welfare state and contextual approaches and has a macro level perspective, using quantitative, index-based analysis (Maloutas, Fujita 2012, Marcińczak et al. 2015, Tammaru et al. 2016, Musterd et al. 2017). In Warsaw context, recent research on segregation is analysed on a macro level scale with analysis of particular social groups distribution across districts or statistical units between last censuses (Smętkowski 2009, Marcińczak et al. 2011, Górczyńska 2014, Grzegorzczuk, Jaczewska 2018, Grzegorzczuk, Jaczewska 2019). However all of these studies are in fact static, marked by Hannam et al. (2006) as a “sedentary” precept of 20th century social sciences, and focused on residential segregation.

Studies on social segregation in a dynamic approach are also present in the literature. The quantitative analyses refer to different levels of social segregation of different social groups at home and at work (Dannemann et al. 2018, Sarraiva, Barros 2018, Hall et al. 2019) or between day and night (Le Roux et al. 2017) or depending on the type of work performed (Lee, Kwan 2011). The second group of studies, using qualitative methods, concerns specific social groups, for example residents of gated communities (Atkinson, Flint 2004) or poverty enclaves (Warzywoda-Kruszyńska 2011) and are more sociological than geographical in nature. The third group of studies is related to the unequal mobility of residents (McQuoid, Dijst 2012, Giroud 2016) at a specific moment in life. All of these studies either treat segregation in a fragmentary way, referring to the moment of life or not taking into account the actual experience of segregation, or segregation is not a main issue analysed there. Hence the need for qualitative research on social segregation in dynamic perspective is needed, where experienced segregation throughout lifetime is studied.

¹ The concept was described for the first time in Polish in the article: Grzegorzczuk (2023, p. 307–325).

Mobility segregation concept

The interesting understanding of social segregation is introduced by activity-space segregation research (for example: Lee, Kwan 2011, Wong, Shaw 2011, Palmer 2013). The term introduced by Wong, Shaw (2011) refers to a separation between groups of people based on systematic differences in the locations, with which they have direct contact. A research allows for understanding systematic differences in the spaces people move through as they go about their daily activities. It uses the activity space concept i.e. a set of locations with which a person has direct contact during day-to-day activities (Golledge, Stimson 1997). This approach proposes an incorporation of the concept of space-time prisms used in time geography (Hägerstrand 1970), to static measures of social segregation (Massey, Denton 1988) with mobile phone tracing techniques. Thus it is a quantitative approach, which has some important limitations, e.g. activity-space segregation is measured in spatial and not in temporal terms (for example change during a lifetime). Furthermore, as a quantitative method it can bring description and understanding into segregation issues however true meanings of the concept to individual persons stay unrevealed.

Mobility segregation concept should also be referred to geobiography approach. Geobiography is defined as both a research object and as a method (Kaczmarek 2005). According to the former meaning, geobiography is a spatial life path of an individual person, drawn by the set of residential places in their historical and social environments. Hence *homo biographicus*, a person who creates his own history, is essential in geobiography studies and can be contextualised in a sense of rational decision-making (*homo economicus*), involved in history (*homo historicus*), spatial environment (*homo geographicus*) and subjective and emotional feeling of time and space. According to the latter meaning, geobiography is a method of social geography used in a purpose to understand human life in different activity spaces with a special focus on residential places. In this perspective, a life is seen as a path and wandering between places, therefore each biography needs to be localised and passage of time is not enough to understand human life. This perspective gives an important theoretical empowerment to biographical studies in geography, crucial for mobility studies. However, it focuses on residential move reducing its analytical effectiveness in the context of the current project.

The most important perspective to the proposed research is a new mobilities paradigm (Urry 2002, Hannam et al. 2006, Sheller, Urry 2006), as it corresponds more to postmodern societies in a constant move, for which mobility is a way of life, where mobility introduces a new dimension of social inequality. Spatial mobility is defined as both long-distance and local, everyday movement of people, objects, capital and information. The developed concept of mobility justice (Sheller 2018) and the related terms of unequal mobility, motility (ability to move) and immobility are then starting points for this study. Mobility has become an indicator of social status, and the lack of mobility has become a new way of social exclusion (Urry 2002). Thus, contrary to Hägerstrand's neutral understanding

of the phenomenon of movement, mobility has a multidimensional and affective meaning.

Mobility segregation concept should be defined therefore as unequal distribution of routine mobility practices in terms of their character and meaning between definite places and relations during lifetime. As a consequence of an unequal access to resources and an unequal distribution of cultural and social capitals it creates a multidimensional separation between groups of people during their lifespan, different character and meaning of daily activities in relation to social networks and places visited.

The role of mobility segregation and its significance for the lives of individuals should be determined by assessing the social mobility of the analysed inhabitants. Social mobility (not to confuse with spatial mobility, being the subject of research of geographers and defined in the article under new mobility paradigm) is most often the subject of research of sociologists. It is defined by them as a change in the place of individuals and groups in the system of social differentiation, understood as a hierarchical arrangement of positions. The most general types of social mobility are intergenerational and intragenerational mobility. For both of them, we can distinguish vertical mobility, i.e. social advancement or degradation (The Global Social Mobility Report... 2020). Hence, in the article the relation between spatial mobility expressed in the mobility segregation concept and social mobility is analysed (Fig. 1).

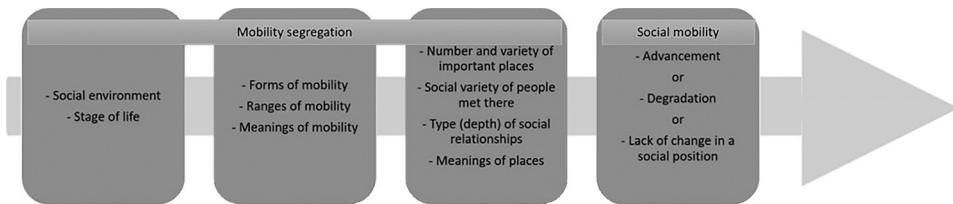


Fig. 1. Mobility segregation concept

Methodology of research

Spatial mobility biographies research (MBR) established by Lanzendorf (2003) and used by Sattlegger and Rau (2016) was used in this study. It is based on traditional narrative-biographical interviews, with the use of semi-structured interviews and a timeline, as well as a reconstructive-interpretative biographical research². In this approach, mobility is recognized as a part of everyday life and a habit, but is interrupted by events that are windows of change (Müggenburg et al. 2015). It can measure impacts of life events and life course on mobility behaviour or linkages between mobility, biography and social and cultural meanings, which are central to the concept of mobility segregation.

² In the article, the three-step, not four-step data interpretation is used, as the aim of the article is to reveal not to identify opportunities for reducing mobility segregation.

The biographical material was collected during field research in June 2021–February 2022 period. The fieldwork was divided into three stages: (1) pre-task: diaries and photo reports of previously recruited narrators, (2) main biographical interview with an additional questionnaire, and (3) in-depth interview. There were 15 narrators of a lower social profile, distinguished by their low income (less than PLN 2500/EUR 520 gross per person in a household) and performing a simple profession (low-level employees)³. The sample is not representative in the statistical sense of the word, but the inclusion of narrators with different socio-demographic characteristics (gender, age, familial situation, district of residence in Warsaw, level of education) allows research based on theoretical sampling that prioritises variety over representativeness and according to the theory-guided approach to qualitative sampling, each case is treated as a generalizable expression of social reality (Miles, Huberman 2000, Sattlegger, Rau 2016). Interviews gathered on 610 pages and 435 photos with their descriptions and 35 films were analysed using Maxqda Plus Programme, where they were encoded by over 8100 codes.

Firstly, based on analytical reading of biographies, initial concepts and preliminary categories of cases were identified and selected for deeper analysis. They were categorized into 6 types of biographies. Secondly, hermeneutic-inductive reading of biographies allowed identification of mobility practices, segregation patterns and their conditions. Thirdly, based on reconstruction and interpretation of mobility practices and segregation patterns the extent and change of mobility segregation was identified, using biographical axes of mobility segregation and quotations from interviews. The article presents a case study analysis on the basis of two biographies selected from the group of 15 narrators.

Typology of narrators' biographies

Firstly, a typology of life histories was made and 6 types were distinguished according to two criteria. The first criterion was the level of mobility segregation. Hence, the biographies were divided into two groups, those showing a high level of mobility segregation throughout life, with narrators who met other residents with a similar social status to their own in all places they visited, and those showing a low level of mobility segregation, including narrators who regularly met people of different social status. The second typology criterion was to determine the social mobility of the narrators. Both highly and lower segregated groups were therefore divided into three types, with narrators who achieved social advancement, social degradation, or did not experience a change in social position in relation to the social position of their parents (intergenerational mobility) and during their lives up to the stage of the research (intragenerational mobility). Social mobility was assessed by: place of residence, including its ownership and location, level of education and professional position. All of the types of biographies are listed below (number of interlocutors included in a given type is given in brackets):

³ All of the narrators were economically active.

- Type 1 – homogeneous environment, social advancement (1),
- Type 2 – homogeneous environment, no change of social position (5),
- Type 3 – homogeneous environment, social degradation (3),
- Type 4 – heterogeneous environment, social advancement (3),
- Type 5 – heterogeneous environment, no change of social position (2),
- Type 6 – heterogeneous environment, social degradation (1).

The typology revealed that there is no simple relation between level of mobility segregation and social mobility. Hence, people experiencing high levels of mobility segregation can achieve social advancement and people living in heterogeneous social environment (low levels of mobility segregation) can experience social degradation and both of these situations, even though the least numerous in the typology (individual cases), are contrary to expectations. It was assumed that heterogeneous social environment through for example neighbourhood effect would cause social advancement and high levels of mobility segregation through social isolation – social degradation or no change in social position, however it does not occur always so.

In order to reveal if there is a change of mobility segregation throughout lifetime, how does it occur, what are the events that can contribute to its change, two case studies were analysed, the biography of a man living in a homogeneous social environment who experienced social advancement and of a woman also living in a homogeneous environment but who experienced social degradation.

High mobility segregation and social advancement

Mobility segregation of individuals is analysed by reconstructive-interpretative biographical research approach and using biographical axes of mobility segregation supported by quotations from the interviews with narrators.

The first narrator, Adam was born in 1984 in a village near Płońsk (22 thousand inhabitants, mazowieckie voivodship). His father was a welder and his mother was a seamstress. Parents divorced when Adam was 6 years old and then mother and children returned to her family home, to a nearby village. Family relations were weak and Adam does not have the skills to build them. The family was characterized by poverty.

In the childhood he visited places that he could only reach on foot (Fig. 2). Hence, he grew up in a homogenous environment of boys from the village, who played together in the yard, went to primary school, and later to vocational and technical schools in Płońsk. They were hooligans. In this closed and small group of people he encountered pathological behaviour.

“ (...) the guy showed me, it’s a shame to say, dog fights at such an amateur level, he had money, these dogs were not happy to bite, but almost [they were bitten to death]. I consciously watched a few of them and they didn’t seem to scare me. (...) What I’m saying is that it was a variety of people [in the village], wasn’t it?” (IDI11_Adam, Poz. 134).

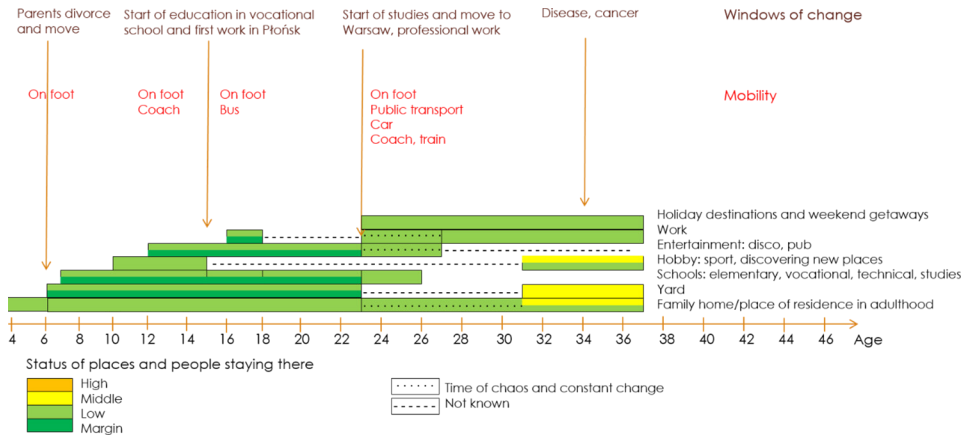


Fig. 2. Biographical axis of Adam's mobility segregation

The environment of the school also turned out to be pathological and destructive. The school and teachers, who, according to the system's assumptions, should equalize educational and professional opportunities and motivate to acquire knowledge and skills, smothered students, mocked them, called by names, did not teach and deliberately prevented them from taking their exams to "better" schools. As a result, Adam went to a vocational school. In primary school, he met PE teacher, who was the only involved person and who organised a sports club there. Sport training resulted in the only trips Adam experienced out of his neighbourhood, to training gatherings in various places in Poland. He also admitted that they were the only alternative to the hooligan behaviour of him and his colleagues.

N: I didn't go to summer camps, but I did go to sports gatherings that lasted several days. This opening of the eyes to something other than what was, there are other people, there are other places, different above all, with different people. So that's why it was nice to go to Białystok, see how people live there, how they behave. To be later in Poznań, in the largest sports centre in Poland, at a given moment, i.e. in Spała, and I don't know, to be where the greatest Polish sportsmen happen to be. Well, for such a small man, I think...

R: Exactly, how did you feel?

N: Well, honoured. I felt very good, because even if there was no result, I was coming back with some last places, I was coming back, it's nice to come back home, it's nice" (IDI11_Adam, Poz. 84–88).

A tutor in a vocational school was the second positive teacher. He was the only person who said it was worth studying. Because of his advice Adam later chose a technical school, where he passed his matura exam and what enabled and inspired him to study.

As he was growing up, he started to use new forms of mobility and consequently the number and range of regularly visited places increased. Going to a vocational school and, as a continuation, to a technical school in Płońsk was the breakthrough event. Then he started traveling by bus regularly, to school but also to discos in nearby villages. At the same time, he started his first job also in Płońsk, which broadened his worldview and aroused interest in otherness. It was a continuation of his first fascination of unknown places, which appeared during trips to sports gatherings. The KFC restaurant by the petrol station and the national road was a place where “worlds” met.

“Just at number seven [national road number] and at two stations, between one station and another, right? (...) I just think that 98% or 99% of customers were not from there at all, right? There was already a window to the world here, wasn't it? So there was going on and there was going on. That's where they came with laptops, man, they only drank coffee, didn't they? Wow. Guy, instead of coming to eat, boy. Or he paid for coffee, now I shoot, I don't know, it probably didn't cost that much, I'm thinking now, 10 zlotys. (...) Well, after all, for me it was a kind of leap in general, wasn't it?” (IDI11_Adam, Poz. 172).

Moving to Warsaw was the biggest change in Adam's life, taking up studies and starting work in the “big city”. He took advantage of the Warsaw labour market, he marked different people on studies from those he had met earlier. At that time, the number of forms of mobility increased, as well as the range of travel. Then he made the only foreign trip in his life to Greece with Student Travel organisation, by coach. However, simultaneously, the time of studies and first jobs was a time of chaos, drunken games, casual acquaintances and wasting money.

He is a mobile person, he has a driving license and his own car, he uses various means of transport, he likes public transport, which he associates with traveling, he visits cities in Poland by train, but he travels in a limited network of places. In the places visited, he makes few contacts with people of a low social profile, so the level of mobility segregation observed throughout his life is high, and the colours on the biographical axis are not diverse (Fig. 2). A decrease in the level of segregation, i.e. the emergence of contacts with people with a higher profile, appeared during studies and thanks to relations with colleagues at work in Warsaw. The interactions were rather shallow and people met were still low-income and with low cultural capital.

However, Adam experienced social advancement living in a homogeneous social environment. The first factor was a very low level of his life starting point, the lowest in the analysed group, so the possibility of improving it was relatively easy after moving to Warsaw. The second important factor was visiting places that fascinated him in his youth regularly (the sports gatherings and the first job in KFC restaurant) and meeting three important people during his life: two teachers and a cousin who advised him field of studies (Occupational Health and Safety). Although he does not work in the profession, he moved to Warsaw thanks to this studies. He experienced residential, professional and cognitive advancement. Af-

ter renting rooms in different locations in Warsaw, now he lives in his girlfriend's flat in Kabaty, which is considered to be a prestigious district in Warsaw. He works as a department manager in a construction store, which is beyond his competences, is associated with stress and making mistakes. These two achievements are uncertain and he is aware of it. He also developed a new interest, visiting unknown places in Warsaw neighbourhood but also traveling to a few places in Poland. It is a real passion, which also clearly contrasts with the way of spending free time during his youth in the vicinity of Płońsk and after moving to Warsaw. His second passion, from childhood, which he rediscovers, is sport and jogging. Thanks to it, while living in Kabaty, he meets the district's inhabitants, however he does not have relations with them. He does not identify with his place of origin and he talks about it negatively. The narrator did not want to talk about an episode related to the severe disease, which could temporarily affect the level of mobility segregation, but in the long run it did not change anything.

Different forms of mobility enabled reaching new places and people but simultaneously were a consequence of his social advancement, so in this case a positive feedback effect of increasing spatial mobility is seen.

High mobility segregation and social degradation

The second narrator analysed in the article, Ania was born in Ostrowiec Świętokrzyski (67 thousand inhabitants, świętokrzyskie voivodship), in her father's place of origin, in 1973. Her father graduated in Warsaw, worked in the customs service at the airport and in the 1990s he founded his own customs agency, which ensured a good standard of living for the family. Mother was born in Gołdap (14 thousand inhabitants, warmińsko-mazurskie voivodship), did not study and initially did not work professionally. When the children went to school, she took a job in a Polish company that produced components to television sets, in nearby town Piaseczno. The family, after wandering around temporary apartments in Warsaw, got an apartment in Ursynów, in a newly built housing estate. Ania then went to primary school there and lived with her parents in this apartment until she was 19, when she graduated from secondary school.

In childhood, Ania mainly walked on foot, but with her family they travelled also by public transport and by car and with other children they were transported to school by school bus (Fig. 3). She lived in a homogeneous social environment of newcomers to Warsaw. Although Ursynów is considered as an estate of highly-educated inhabitants, Ania did not notice this. The family had a lot of relations, but only among people socially similar to each other. They also did not look for new, interesting places although they potentially had such an opportunity. Ania mainly spent her childhood in the estate's yard having relations with other children, with whom she attended primary school. Due to the lack of schools in the new district, children were transported by school bus to the primary schools in different districts, but there she attended classes only for children from Ursynów.

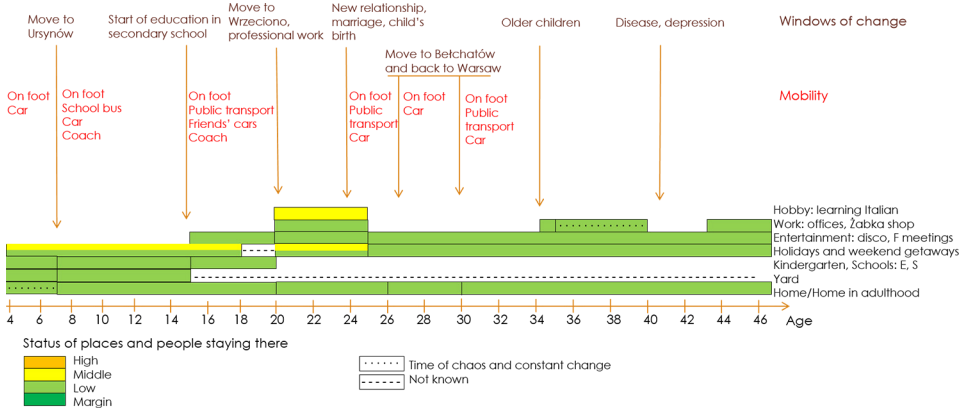


Fig. 3. Biographical axis of Ania’s mobility segregation

“They were different children [in Ursynów]. (...) for example, the daughters of the driver who drove our unfortunate school bus, I was also friends with them and later this “uncle” took us to this cabin, we could ride with him, because we were just acquaintances. (...) But I think it was also a gathering of people who came to Warsaw to work or study and have already stayed” (IDI2_Ania, Poz. 83).

On holidays she went with a family by car to spend entire holidays time in Gołdap with her grandmother. There, Ania had contact with people of a higher social profile, belonging to her family. The family experienced social degradation related to World War II and the later years of the socialist rules in Poland. Grandmother, coming from an aristocratic family, as a result of the difficult war fate, lost her social position and depreciated her origin. After the war, she took over the lifestyle of her second husband, a worker in a sugar factory in Gołdap. Painting remained a trace of her former life (she graduated from the Academy of Fine Arts in Warsaw before the war). Ania had a very good contact with her.

“My grandmother was a countess, so I guess she had no profession. (...) Oh, she naturally worked later, because they got a house in this Gołdap such that they had cows and pigs there, and you had to live somehow” (IDI2_Ania, Poz. 77–79).

In the second conversation, it turned out that Ania’s grandmother interested her in family stories, of which she knows a lot, painting, maybe also travel and learning foreign languages, so other sphere than the everyday topics. It is the sphere deeply hidden in her life and, as she admits, supplanted by everydayness. The relationship with her grandmother did not translate into life choices for Ania, who had no ambitions, was reluctant to learn and only simple peer relations were important to her. When choosing a secondary school, the narrator’s goal was to continue acquaintances with her friends and the parents’ goal was to get her daughter any profession, although the family’s financial situation did not require the children to become professionally independent quickly. The family

depreciated the role of education. In this aspect, the intergenerational social degradation in terms of cherished values is present.

“Mom used to say: »Where did you submit these papers, go to some technical school there, you will have some profession«, something, something. And yet, at the last minute, I decided that I would go to the gardening [technical] school because I like to draw, (...) [at last] I came up with something” (IDI2_Ania, Poz. 177).

This event was an important window of change. Then new forms of mobility appeared and she became independent in terms of moving around the city. Consequently, the network of visited places in and around Warsaw expanded with new social relations. She mainly used public transport, which had already happened before, but as technical school’s student she used it for longer distances, which was related to apprenticeships, as well as visiting new friends coming from the vicinity of Warsaw. She also travelled by cars of her friends, who at that time were doing their driving licenses and who were more affluent. On holidays she travelled to Gołdap on her own by coach.

An important event was also the move after graduating from technical school to an independent apartment on the north of Warsaw (Bielany district), purchased by her parents, and the related start of work. However, it did not result in any change in the forms of mobility or in any change of the network of friends. They all presented a similar social profile and spent their free time in a similar way – at house parties, to a limited extent visiting other places in Warsaw. She did not attach any importance to work, the only goal was to earn money quickly.

After being asked, during the second conversation, the narrator’s interests appeared: getting to know new places abroad, learning Italian, a scholarship in Calabria, which did not happen due to the preparation of the wedding. In fact, the period of the first years of independent earning resulted in visiting new places abroad and traveling on longer distances by car and by coach. Getting married and the birth of children stopped developing these interests.

Starting a new relationship with her future husband, doing driving licence and buying a car together resulted in a change of the main form of transport she used. Although he was the car main user, Ania was also driving, what she enjoyed a lot. Having a dynamic personality she has a great need for moving around and a car enables it. When their children were born, they began to choose closer holiday destinations and weekend outings, in Poland at the seaside or at the parent’s recreation home near Warsaw. Husband’s work (professional volleyball player) was an important factor in the change of visited places. It resulted in the move to Bełchatów (56 thousand inhabitants, łódzkie voivodship in central Poland, 162 km from Warsaw) for a few years and a new circle of friends of sportsmen’s families, who lived in different cities in Poland and visited each other. Then, the car had an important role in keeping in touch with her family and old and new friends.

“Well, I lived for 3 or 4 years in Bełchatów, my husband got a contract there, and we had to move out. For me, the fact that I have a driving license was great, because

he was going away for two days to matches or something, I was packing the kids in the car and going to my parents. It took me even less time to drive from Bełchatów to Ursynów than sometimes from Bielany in traffic jams. I was able to get there for dinner. That was great for me too" (IDI2_Ania, Poz. 281).

When children grew up she returned to professional work. She went there by bus, by suburban train or by car, when it was not used by her husband, dependent on the work location. However, looking for new jobs contrary to her predispositions, ended in depression. Her mobility then significantly decreased, and the places and people she visited became confined. It lasted two years. Then she started working in a shop. The work caused a decrease in her social status, which she is aware of as she sometimes experiences bad treatment from customers, but simultaneously the work gives her also satisfaction.

The analysis presents a high level of mobility segregation of Ania's biography (Fig. 3). Different forms of mobility enabled reaching new places and people but in all the places visited, she had relations with people of a similar social profile, although she probably had contact with wealthier and more educated people in Ursynów. The only exception was relation with her extended family during holidays. Thus, the biographical axis is largely monochromatic.

The factors that led to a slow social degradation were: the family surrounding themselves with people with a low social profile, family low ambitions, narrator's personality (low ambitions, hesitancy), disease and greater hardship of living and social polarisation after transformation period. She is a mobile person however it did not result in extending her social network to people of different social profile or regular visiting of diverse places.

Discussion

Both of presented narrators are mobile, use different forms of transport that allow them unlimited access to different places in Poland and limited abroad. However low cultural capital prevents them from discovering new places. They search for relations with people of similar social profile. Adam descends from very poor environment, Ania from a more affluent one and the status of the family was more difficult to maintain by her in transition period in Poland. Ania's degradation is also associated with a gender issue as she withdrew from her interests (travelling abroad and learning foreign language) because of focusing on marriage and later having children. Her husband's work required living in fixed places and she followed him, they did not have also possibility to travel further with smaller children, which was more difficult for them. Although Adam received less help from his family (Ania received her own flat, contrary to Adam receiving advice of one person), he managed to make an social upward movement in terms of housing, profession and also interests that resulted in visiting different places, mostly in Poland. Both of them experienced severe disease however only in Ania's case it resulted in social downward movement.

In the literature, different social segregation levels were already indicated at home and at work or during day and night – in general, at work during day lower segregation levels than at home at night because of being in shared spaces where stay people of different social status (Le Roux et al. 2017, Hall et al. 2019), what is also supported by this research. Adam's contact with a colleague and their common interests or Ania's contacts at work. However, the study revealed also, these were mostly surface-level interactions, which brought some profit only to Adam (development of a new interest and a girlfriend). Hence, simple co-presence at workplace of representatives of different social status was not enough to influence individual's fate. Therefore we can assume that the experienced level of segregation is much higher than that revealed by statistical analysis in the literature (further on a co-presence concept using data from mobile phones in: Toomet et al. 2012). Additionally, even though Adam noticed students of higher cultural capital during studies in Warsaw to his backyard friends, these contacts were also surface-level and had limited influence on his life decisions (he learnt too late about the need of apprenticeships and as a consequence he could not work in a learnt profession). These shallow contacts were probably related to the time of chaos in his life then. Furthermore, co-presence of representatives of higher social status was not noticed by Ania in her neighbourhood and primary school, in Ursynów. Although in quantitative analysis Ursynów is characterised as a district with high presence of well-educated people, a comparison of particular neighbourhoods showed relatively high segregation levels, which means there were population concentrations of distinct social characteristics (Jaczewska, Grzegorzczak 2017). Either Ania lived in such an enclave and, despite many social relations, her social network was narrowed to people from this enclave, or she and the family restricted their contacts to people of a similar social characteristic on purpose.

There are no studies on changing social segregation during lifetime however, research on mobility presented key events that change spatial behaviour and mobility patterns, which are similar to windows of change of mobility segregation revealed in this study (Müggenburg et al. 2015, Sattlegger, Rau 2016). These are: change of place of residence either in a childhood or in adulthood, start of secondary school education, start of professional work and its later change, new relationship or marriage, birth of a child, disease. This study indicated a high importance of starting secondary education as a considerable personal life event, when high levels of mobility segregation associated with childhood decrease. It is characterized by appearance of new forms of mobility, greater independence in moving around the city and expansion of social networks and places visited outside the district of residence. Starting studies is a second important key event however, among people of lower social profile happens rarely. Secondary education and professional work are associated with mobility key event that is acquiring driving license and moving by car. Nonetheless a gender issue is here an important factor – Ania obtained a driving license after entering into a relationship with her future husband, with whom they bought a car. It supports results of a research on households mobility practices that a car has an impor-

tant we-identity meaning for young couples and security meaning when a child appears and both of them result in shared mobility patterns (Rau, Sattlegger 2018). Birth of a child and even more a disease had a counter effect on mobility segregation level – Ania’s forms of mobility and visited places sharply decreased then. Lastly, it is worth to mention that although change of mobility patterns according to assumptions can bring change of segregation levels, it appeared not always true. Adam’s case supports this assumption, as increased mobility after entering secondary education had influence on mobility segregation (the same peer environment, but meeting a teacher in vocational school and higher profile clients in a workplace), similarly to starting studies and professional work in Warsaw (higher profile students, colleagues and girlfriend in comparison to backyard friends). However his social environment was still lower profile. Ania’s case does not support the assumption, as her social environment (people she had relation with) stayed unchanged after changing mobility practices.

Conclusions

The aim of the research was to define the concept of mobility segregation during lifetime and to distinguish mobility segregation scopes among inhabitants characterised by lower social profile, who lived in a homogeneous social environment. Mobility segregation concept refers to mobility practices and social relations in places visited and unequal distribution of routine mobility practices in different social environments resulting in multidimensional separation between groups of people during their lifespan. The concept was analysed using mobility biography interviews and the reconstructive-interpretative approach allowed identification of commonalities and differences in biographies.

Firstly, this research revealed that during a lifetime, there is a change in the mobility segregation, even though among narrators living in a homogeneous environment throughout their life, it is modest. The first analysed case indicated decrease in mobility segregation, from very high level while living in a poor social environment in a village, where the narrator experienced social exclusion due to few mobility practices, to lower levels observed in Warsaw. The second analysed case revealed slight fluctuating changes in the level of mobility segregation throughout lifetime. Secondly, the early stages of life were characterized by the highest level of mobility segregation: limited number of forms of mobility, places visited and greater social homogeneity of people narrators had relation with. During life course mobility practices were increasing and diversifying but mobility segregation decreased in a restrained way among narrators, dependent on different factors. Hence, unequal mobility is observed during different phases of life and between different inhabitants. Even though physical ability to move appeared it was restricted by soft factors e.g. low cultural or financial capital. Thirdly, there were identified windows of change, i.e. life events that changed habitual mobility practices and as a consequence mobility segregation patterns however, for inhabitants living in a homogeneous social environment mobility

segregation change was modest and in two directions e.g. lower segregation level after entering secondary school, studies or workplace and higher segregation with immobility period during disease.

Lastly, the qualitative approach contributed to the quantitative analysis of activity-space segregation giving evidence that experienced mobility segregation may be higher than measured one. Quantitative measuring co-presence of people does not give information whether interaction between them occurs and whether it has an impact on people's life. Qualitative approach may give answer to the question whether meaningful change of segregation patterns occurs, what factors are responsible for it and what it means to people. In this context, a further study of narrators, also who lived in a heterogeneous environment seems promising. An important aspect of this paper is also the turn towards the geography of everyday life, a field of socio-economic geography that is basically absent in the research. This field of study gives the opportunity to analyse the immediate environment of human, his everyday behaviour and needs.

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Segregacja mobilności w ciągu życia mieszkańców Warszawy o niskim profilu społecznym i wysokiej segregacji – studium przypadku

Zarys treści: Celem artykułu jest zdefiniowanie pojęcia segregacji mobilności w ciągu życia oraz określenie zakresu segregacji mobilności dwóch mieszkańców Warszawy charakteryzujących się niższym profilem społecznym, żyjących w homogenicznym środowisku społecznym. Mobilność stała się nowym wymiarem nierówności społecznych, który należy uwzględnić w badaniach nad segregacją społeczną w coraz bardziej spolaryzowanych miastach. Można ją badać metodami jakościowymi, które są komplementarne do ilościowych badań nad segregacją. W artykule segregacja mobilności analizowana jest na podstawie wywiadów biograficznych, z wykorzystaniem podejścia rekonstrukcyjno-interpretatywnego. Ta nowa metoda pozwala na badanie segregacji w ciągu życia w ujęciu holistycznym i na określenie doświadczenia segregacji poszczególnych mieszkańców. Badanie wykazało, że segregacja mobilności może zmieniać się w trakcie życia. Wskazano „okna zmiany”, kiedy zmieniają się formy i zakresy mobilności, co skutkuje zmianą miejsc regularnie odwiedzanych i profilu społecznego spotykanych w nich osób. Jednakże relacje te są złożone.

Słowa kluczowe: nierówności społeczne, segregacja społeczna, sprawiedliwa mobilność, segregacja mobilności, biografia, badania jakościowe