

Continuity and contestation.

Structural and cultural background of transportation preferences in Poland

Dawid Krysiński

Instytut Socjologii, Uniwersytet Wrocławski

ul. Koszarowa 3, 52-007 Wrocław, Poland

dawid.krysinski@uwr.edu.pl

Jacek Szczepański

Instytut Socjologii, Uniwersytet Wrocławski

ul. Koszarowa 3, 52-007 Wrocław, Poland

jacek.szczepanski94@o2.pl

Abstract

The main goal of this paper is to understand the interconnections between cultural and functional aspects of car exploitation. It is argued that these two aspects should be considered as different sides of the same automobility phenomenon, which has a great impact on the transportation preferences of citizens. In order to explain how the interconnections would influence each other and shape the preferences, the analysis results are considered within the framework of a biographical approach, with particular attention to the adulthood transition. The paper provides evidence that the mobility orientation of many local inhabitants changes as a result of obtaining a job. At this biographical stage, the growing importance of the dominating strategy of “being a driver” could be observed, mainly due to different socially constructed requirements, e.g. the demonstration of buyer power, flexibility and multi-functional existence. Finally, it is also emphasized that the interconnections strengthening the role of private cars should not be considered in terms of what does not change, since they trigger opposition discourses which criticise automobility domination.

Key words: urban transport, mobility culture, transportation preferences.

1. Introduction

During the last few decades, automobility phenomenon has become a critical issue in the debate about capitalism, cultural individualisation and environmental consequences of technology development. The reason is that the automobility is often seen as an extraordinarily powerful *complex* with strong connections to the dominating culture and urban ideologies, capital accumulation, manufacturing systems, individual consumption and personal identity (Wenzel, Yaeger, 2017). John Urry defines automobility as a system “constituted through technical and social interlinkages with other industries, car parts and accessories; petrol refining and distribution; road-building and maintenance; hotels, roadside service areas and motels; car sales and repair workshops; suburban house building; retailing and leisure complexes; advertising and marketing; urban design and planning; and various oil-rich nations” (Urry 2000).

Domination of the automobility culture and the rapidly increasing number of cars across the world with its all negative consequences for social inequalities, transportation exclusion, pollution and problems with traffic coordination on urban areas, began to be a subject of many scientific analyses (Burns, Novelli, 2008). Stephan Bohm, Campbell Jones, Chris Land and Matthew Peterson describe the automobility complex as a disciplinary regime that is characterised by core antagonisms. As they argue, “the pursuit of individual mobility becomes collective immobility” due to “traffic jams, the dependency on non-renewable resources, the ecological devastation [...] as well as the prevalence of accidents” (Bohm et al., 2006). These issues triggered global debate about the future of automobility and potential changes in socio-economic life that would result from the replacement of car by other mobility solutions.

Cars significantly transformed the socio-economic landscape of the current world, from urban form and suburbanisation (Hirt 2007), through the structure of labour market and perception of time, up to socially constructed mobility culture and imaginations about private vehicles. It means that particular drivers are not out of this complex system, since cars became “integral to the privatization, individualization and emotionalization of consumer society as a whole” (Gilroy 2001). Private vehicles rede-

defined not only movement and sensory experience, but also the structure as well as coordination of daily routines and activities, including work and childcare. In other words, the automobility system is intertwined with all aspects of modern existence due to personal experience, socialisation and intense efforts of the car industry supported by the advertising business. Thus, while significant reductions in car using are needed to limit the negative impact of automobility on the natural environment and social life, many people are against the potential changes, because they treat their private cars as an integral part of self-making practices and autobiography. The strong social resistance not only generates conflicts between proponents and opponents of sustainable transport policy (with a leading role of alternatives to private cars) but also raises a question of whether any consensus around changes in urban transport systems could be achieved.

In this paper, it is argued that fossil fuel dependence and the personal attitude towards the automobility cannot be radically re-planned and reimagined without an understanding of deep interconnections between cultural and functional aspects of the car exploitation. In Section One, the history of the automobility complex is analysed in order to show that both cultural and functional motivations have got the same background resulting from path dependency and historical changes that strengthened the functional and symbolic significance of private cars. Section Two is based on the Social Diagnosis of Wrocław 2017 project, held in one of the largest Polish cities, which is struggling with significant transportation problems and transforms its transport policy towards the more sustainable approach. In order to explain how the interconnections between functional and cultural aspects would influence each other, the analysis results are considered within the framework of a biographical approach with particular attention to the adulthood transition. It is also argued that the social role of the automobility, including its functional aspects and approval for its domination, are shaped by collectively produced social discourses and expectations. Taking this into account, it is emphasized that the process of planning the sustainable transport policy, communicating its main assumptions and creating new mobility discourses, should not ignore the interconnections between the automobile symbolism and functionality. Finally, the paper

provides evidence that the interconnections strengthening the role of private cars should not be considered as what does not change, since they trigger opposition discourses which criticise automobility domination.

2. “Locked-in” cultural and functional interconnections

Concept of the automobility system well reflects directions in which the debate about automobility goes. Many authors point to the role of private cars in the daily life of individuals, emphasizing that the automobility is an “object of consumption, carrying meanings and identities”, which transforms social routines and practices (Beckmann 2001). However, to understand why private vehicles are crucial for many people, macrostructural context should be especially outlined. Since the beginning of the 20th century, the automobility has begun the transformation of national economies, with particular attention to the USA economy and the Fordist approach to production. It was a low-cost, high-quality Ford T model which transformed cars into “the quintessential manufactured object produced by the leading industrial sectors and the iconic firms within twentieth-century capitalism” (Urry 2006). H. Ford, as the first automobile manufacturer, was able to drastically reduce the production time along with the equally steep decrease in production costs. Due to this fact, cars not only became available for many members of the emerging American middle-class but also perfectly corresponded with the needs caused by fluctuations in the capitalist system. David Harvey (1985) suggests that rapid growth of suburbia in American cities was a direct answer of capitalists to the economic downturns which resulted in massive “capital switching from the primary circuit of manufacturing production to the secondary circuit centred on the built environment”, reducing the negative consequences of the downturns increased the popularity of economic practices in which the state began to support the urbanisation process actively. Therefore American suburbs – “a middle-class residential enclave strongly connected with relocation of the population from the centre to the suburbs” – became a safe harbour for capital surplus that could not achieve profits from the traditional industrial production (Shen, Wu, 2016).

The capital accumulation in the urban areas, well known since the beginning of the industrial revolution, would not be developed so extensively without achievements in the car manufacturing system. Extensive urbanism with the conquest of more and more suburban land was possible only due to the growing availability of private cars for the middle class. As a result, there is nothing more distinctive for the American suburbia than private vehicle meeting all transportation needs of the suburbanites. Two birds with one stone were killed: not only the adverse effects of the economic downturns were mitigated, but also new market opportunities for the car industry emerged.

Indeed, the Fordist approach in car production, which was accompanied by the Keynesian economic model, launched a long-term process that strengthened the primary role of the automobility in both the global economy and daily routines of people. There are too many economic actors involved in car-oriented industries to reduce the role of private cars in social life, and there are too many changes in the socio-spatial organisation of social practices to resign from the automobility. It is not surprising, then, that the system is seen as “path-dependent pattern laid down from the end of the nineteenth century” (Urry 2004: 27). The main result of this process was that “economies and societies were ‘locked in’ to the steel-and-petroleum car”, which generated “huge increasing returns resulted for those producing and selling the car and its associated infrastructure, products and services” (ibidem: 27).

Due to the strong connections between the car industry and other economic sectors, there is no doubt that vitality of the automobile culture became crucial to maintain economic stability in many countries. This effect would be impossible without strong support from the advertising and marketing sector, which has been a key driver of the twentieth-century consumer culture as a whole. That is the reason why the automobility phenomenon could be treated “as the dominant *culture* that sustains major discourses of what constitutes the good life, what is necessary for appropriate citizenship of mobility and which provides potent literary and artistic images and symbols” (Urry 2004: 26). One expressive form of the advertising discourse is an SUV sub-segment that gained significant market share primarily in the USA. As Stephen Graham emphasizes, “SUVs

can be understood as mobile 'capsular' technologies, designed to offer autonomous neoliberal subjects the fantasy of complete individual control and total libertarian secession from the social and public spaces of city life – spaces which, because they exist beyond the cocoon of the interior, become residualized". For S. Graham, SUVs became "an icon of neoliberal subjecthood" which "helps reconfigure urban life as an interlinked series of mobile built capsules, withdrawn from the wider social environment, whilst selective connectivity is maintained through new control and surveillance technologies" (Graham 2011: 310).

This extreme example is evidence of the profound cultural transformation of almost all economically developed societies (including Poland), in which car use has come to dominate the mobility system. As M. Sheller noted, the automobility and discourse about automobiles impact "not only on local public spaces and opportunities for coming together but also on the formation of gendered subjectivities, familial and social networks, spatially segregated urban neighbourhoods, national images and aspirations to modernity" (Sheller 2006: 209). In particular, the familial and social networks create new sociable settings and discourses about functional and non-functional mobility behaviours due to which private car becomes an essential part of "patterns of sociability and extraordinary moment of consumption". Collective imaginations have a significant impact on „how feelings for, of, and within cars come to be socially and culturally embedded in embodied sensibilities, in familial and sociable practices of car use", including its functional role (Sheller 2004: 223).

In this way, car consumption is "never simply about rational economic choices, but is as much about aesthetic, emotional and sensory responses to driving, as well as patterns of kinship, sociability, habitation and work" (Sheller 2004: 223). There is an evidence that technical parameters of cars are appreciated by public discourse in many ways, which makes the private vehicles attractive for users. David Gartman emphasizes that private automobile is the major item of *individual consumption* carrying meanings and identities, "marking out differences between classes" and, finally, "expressing the different identities of lifestyle groups in a levelled and pluralized consumer culture"

(Gartman 2004: 174). For many authors, the most interesting aspects of the dominating mobility culture is the gender issue. In this context, M. Sheller emphasizes that “whether phallic or feminised, the car materialises personality and takes part in the ego-formation of the owner or driver as competent, powerful, able, and sexually desirable” (Sheller 2006: 213). The gender aspect belongs to the reasons of the high attractiveness also because of “risk-laden car culture, which emphasizes masculine powers and excludes women”, and seems to be “attractive to working-class youth marginalized by mainstream schooling” (Walker 2000: 153). In the different ways, car “provides status to its owner/user, through its sign-values (for instance speed, home, safety, sexual desire, career success, freedom, family, masculinity, genetic breeding)” and through “being easily anthropomorphised by being given names, having rebellious features, seen to age and so on” (Urry 2004: 27). Private vehicle is often sexualized “as ‘wife’ or lover”, which “suggests a kind of libidinal economy around the car”. As a result, “particular models become objects of desire to be collected and cosseted, washed and worshipped” (Sheller 2004: 225).

Such various relationships between car and its user, strengthened by the dominating social discourse, make the car a basic tool for communicating socio-economic status and meeting different emotional needs (Sheller 2004), viz. willingness to demonstrate individual purchasing power, feeling of strength, control, speed, safety and comfort, being fashionable, and so on. As Linda Steg emphasizes, “the way people talk about their cars, and the ways cars are advertised make clear that the car fulfils many of such symbolic and affective functions”, including feelings of sensation, superiority and arousal. There are also many studies focused on “mappable connotations” that are related to freedom and independence, “right to be alone” and “distinction between private and public that exists in the realm of utterances [...] of property, of space, as in the distinction between public and private spaces” (Steg 2005: 148). In this sense, private automobile provides the driver not only with “freedom to” travel but also with “freedom from” scrutiny of the public and feeling of threat (Halden 2013). Therefore private cars are often seen as a “steel cage” ensuring security, but also emphasizing the social distance between driver and people who are not able to use a car (Cauter 2004). Many au-

thors mention that the car-based culture “helps reconfigure urban life as an interlinked series of mobile built capsules, withdrawn from the wider social environment” (Graham 2011: 310), like urban spaces dominated by ethnic minorities as well as real or imaginary criminals.

Undoubtedly, the macroeconomic context, with all its linkages to the capitalism evolution and mass media communication, has had a great impact on the notions about the car and its role in daily life. However, the impact of the macrostructural circumstances should not be limited to the cultural aspects, including positive emotions, psychological stimulus or relationship between car and personal identity of its user (Greco 2008). It should also take into account the fact that all the cultural changes have occurred along with functional reconfigurations strengthening the leading role of private cars. The suburbanisation, modern approach to urban planning (with spatially separated socio-economic activities) and new jobs based on spatial mobility are only a few examples of “objective” requirements leading many people to unremitting car exploitation and significant changes in the order of daily routines and practices. As Craig Morton et al. (2016) suggest, the automobility “compressed time and space, offered their drivers unbridled flexibility in their movement flexibilities and produced a form of spatial organisation which seemingly necessitates the use of cars” (ibidem: 500). Mimi Sheller emphasizes that private car not only increases opportunities for mothers of young children to take a paid job but also enables “the complex orchestration of [...] schedules [...] and comes to support feelings associated with taking care of one’s family” (Sheller 2004: 235). Apart from that, “mobility and control over mobility both reflect and reinforce power” (Sheller 2014: 796). The access to mobility services is not equal for all (Skeggs 2004) due to intentional exclusion of different social categories from access to the transportation services, neoliberal transportation policy which results in a withdrawal of many public transport connections (Kajdanek 2012), and pricing policy that often makes the transport very expensive for individuals.

It is worth noting that there is no clear division between the functional and cultural aspects of the automobility due to its hybrid character. The mobility issues are of

great importance for households organising different spatially dispersed activities every single day. This process does not remain without an impact on the emotional sphere of drivers, since using a car reconfigures perception of time and space, accessibility and comfortability. Private vehicles are deeply embedded in ways of life networks of friendship, sociality and imaginations on comfortable, enjoyable and exciting existence, with particular attention to the daily routines and practices. It means that the functional and cultural (emotional) aspects are often combined into one single decision process. Therefore, there is no room for analysis of automobility in terms of a black box with separated and self-contained aspects, in particular commuting, leisure, or business, time, comfort or price (Sheller 2006). All these aspects should be considered as different sides of the same automobility phenomenon due to which social life has become not only “locked into the modes of mobility that automobility generates and presupposes” (Featherstone 2004: 2), but also significantly reconfigured. That is the reason why the automobility is a “complex sensuous relationality between the means of travel and the traveller that provides different experiences, performances and affordances” (Sheller 2006: 216) while travelling from one place to another as quickly as possible (Featherstone 2004).

Interconnections between functional and cultural aspects of the automobility are a big challenge for studies on transportation issues, since the scientists often tend to separate different aspects of mobility and to treat time, comfort, symbolic status, costs or accessibility as non-correlated factors that could be quantitatively measured and controlled (cf. Sierpiński 2012). It is often expected that the quantifiable improvements in one particular aspect would lead to measurable changes in demand for particular transport services. However, as it was presented above, neither functional nor cultural aspects of automobility could be analysed without close attention to their interconnections. Only holistic perspective allows to understand how cultural determinants of using the car become the background for discourse regarding the functional role of the automobiles; and, in return, how functional requirements affect ideology related to the emotional feelings, stratification, class distinction or gender aspects. For example, time should not be considered only as a measurable factor which is fully rationally taken into

account by travelling people. This factor is also strongly related to the feeling of effectiveness, flexibility and ability to be in time. In this way, each driver could be seen as a person who can coordinate different activities, meet social requirements and feel the pleasure of driving vehicle which is privatised and offers access to different personalised services.

It means that the automobility creates “locked-in” system not only because of relationships between different car-related industries, spatial planning and advertising industry. Its “locked-in” specificity also comes from strong integration between functional and cultural aspects of the individual motivations, imaginations, expectations and needs that are collectively (re)produced. This complexity not only influences transportation preferences and spatial practices of people but also has a great impact on the social acceptance for changes in urban transport policy (including limitations for cars and promotion of riding bikes, walking and using public transport). To illustrate this important point, different types of mobility habits were analysed along with various motivations expressed by the participants of Social Diagnosis of Wrocław 2017 (Kajdanek, Pluta, 2017). It is preceded by a short introduction to the methodological aspects of both the Diagnosis and the presented study.

3. Methodology

The data used in this article was collected within the framework of the Social Diagnosis of Wrocław that was held in September 2017. The survey was conducted among 2001 inhabitants of the city who were between 15 and 80 years of age and had lived in Wrocław for at least six months before the survey. All respondents were recruited basing on the random route procedure that began from randomly selected points in 29 Wrocław neighbourhoods. The calculations presented herein were made with the use of the statistical package IBM SPSS Statistics.

The first step of the presented analysis was to identify which mean of transport is the most important for each respondent. To this end, the participants were asked how they usually travel to work, school, other public institutions, entertainment venues and

places in which they undertake after-school activities. They could have matched each destination with only one transportation mean, choosing from a car, taxi, rail, other public transport (bus or tram), bicycle or walking. For each respondent, the most often indicated mean of transport was identified. If any respondent selected more than one mean of transport the same number of times, (s)he was categorised as a person with “undefined” transportation preferences. In this paper, three different types of respondents are taken into account: car users (41% of the Wrocław inhabitants participating in the survey), public transport passengers (31% of the respondents) and cyclists (6%).

The second step was to conduct logistic regression allowing to identify factors of transportation preferences of car users, public transport passengers and cyclists. Basing on the data collected for the Social Diagnosis of Wrocław 2017, two groups of predictors were selected. The first group refers to the structural determinants of transportation preferences and includes factors regarding economic activities, age, number of children and income of the household. It is assumed that these predictors may reflect objective barriers to access to selected means of transportation (e.g. economic condition of household, exams and age allowing people to get the driver license) or functional requirements influencing the people’s choices and allowing to consider the research issue discussed in this paper (e.g. the type of professional occupation, number of children under care of their parents and participation in activities spread across the city).

Contrary to the structural point of view, the second group of factors indicates the cultural background that shapes transportation preferences. In this case, there is no objective limitation for using different means of transportation, and the final choice seems to be the result of the individual value system and preferences. Thus, these factors refer to lifestyle determinants, viz. education level, attitude towards social projects and preferences regarding leisure and free-time activities. According to literature, it is also assumed that transportation choices are often connected with the self-identity expression or demonstration of economic status. Due to this fact, the group of cultural factors includes additional predictors related to the social status which is measured by subjective assessment of the respondent’s position in the social hierarchy.

It should be noted, however, that the assignment of particular predictors to the groups mentioned above is only conventional. For example, one can imagine that the economic activity or having children lead to use a car not because of functional pressure (lack of alternative), but due to the dominating cultural models or self-perceived comfort. Thus, the cultural or structural (functional) role of each predictor is specified beneath, where the results of the regression analysis are presented. Thanks to that, each predictor could be interpreted in the context of other predictors, which is necessary to identify the interconnections between functional and symbolic (cultural) determinants of the transportation preferences.

In order to identify final determinants of the preferences, three independent regression models have been developed, separately for each evaluated mean of transport (car, public transport and bicycle). All predictors were used in its original form, except for the factors regarding attitude towards the leisure free-time activities. Since this component was measured in the Social Diagnosis of Wrocław 2017 by 23 variables, factor analysis (PCA) was applied in order to reduce the number of dimensions. According to the results achieved in the analysis, 23 variables were grouped into six principal components, presented in Table 1. The PCA procedure created a set of additional standardised variables which estimate the popularity of the identified factors on a case by case basis (for each respondent separately). The variables were used in the regression analysis as six quantitative predictors. The PCA model explains 44% of the variance, while the value of the Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy is .747.

Table 1. The main attitudes towards leisure and free-time activities

Variables	Factor					
	1	2	3	4	5	6
Running	.771	.034	-.026	.055	-.014	-.006
Practising high-risk sports	.706	.026	-.058	.016	.123	.025
Going to the gym, swimming pool etc.	.686	.131	.058	-.056	-.178	.112
Cycling, rollerblading	.601	-.001	.108	.145	.023	.000
Beauty treatments	.533	.077	.064	-.070	.088	.193
Internet surfing	.311	.228	.059	-.163	-.225	.201
Going to live music concerts, participating in sport events	.078	.672	.057	.233	-.008	-.025
Going to cinema	.097	.646	.120	.166	-.063	.009
Meetings with friends in pubs and restaurants	.164	.617	.108	.030	-.136	-.014
Participating in events at shopping malls	-.055	.544	-.013	-.093	.157	.090
Going out of the city	.044	.016	.621	.166	.022	.040
Going to the zoo	.039	.021	.617	-.020	.200	.018
Going to theatre, museums and galleries	.102	.184	.610	.005	.130	-.004
Walking in the parks	-.064	.045	.483	-.112	-.067	.157
Hobby (philately etc.)	.028	.090	-.025	.736	.070	.128
Participating in the art activities	-.002	.315	.029	.613	.039	.097
Sitting at home (watching TV)	-.136	.245	-.198	-.449	.198	.398
Cultivating a garden	.039	-.090	.073	.143	.691	.082
Going to church (except Sunday)	.057	.085	.251	-.074	.684	.005
Meeting family	.175	-.070	.118	.059	.156	.551
Meeting friends at home	.250	.077	.229	.006	-.212	.551
Walking around home	-.088	.063	-.113	.316	.139	.484
Reading books, listening to the music	.168	.018	.310	.036	-.330	.440

Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Convergence was achieved after 10 iterations

Source: Own calculations based on the Social Diagnosis of Wrocław 2017

The first attitude towards leisure and free-time activities indicates important role of sport activities and body care. There is also an additional factor, playing computer games, which is, however, not coherent with other types of activities included in the “sportive” dimension. The second attitude is strongly connected with the participation in mass events and informal social activities, e.g. visits the cinema, participation in music events, meeting friends in pubs, etc. The third dimension, on the contrary, refers to high-culture events and open-air activities. The fourth attitude includes participation in the art and hobby activities, while the fifth one represents traditional activities, e.g. going to church or cultivating the garden. Finally, the sixth factor includes all respondents who prefer spending their free time at home or with family. As it was mentioned above, all the identified components were used to conduct the logistic regression analysis, the results of which are presented in Section Four.

4. Results

The first regression model describes the determinants of *private car use* and explains 15% of the variance (Table 2). According to the regression model presented below, one of the essential factors enhancing the role played by car in daily life is the professional occupation. As the collected data suggest, economic activity increases the likelihood of using a car by almost three times, as compared with people who are not involved in economic activities.

Taking up a job tends to “privatise” spatial mobility, which begins to be based on private cars. Not surprisingly, then, the car users also better evaluate their economic condition, since the professional occupation often provides employees with income that is not achievable for the unemployed and other respondents who have not initiated their

professional careers yet. Their “not privatised” spatial practices are often correlated with their low level of education (only those who have completed primary school are not familiar with using the private car) or being out of the labour market. This is the reason why only students and people who do not have enough economic resources are forced to resign from using a car.

Although economic condition and professional occupation could be seen as structural factors with clear functional implications in case of the professional activity, using a private car seems to be the result of the cultural pattern with a biographical background. Considering the results of the first regression model, it is possible to identify biographical stage which makes people drivers. This issue could be considered in terms of a transition to adulthood, during which people try to obtain stable work and material autonomy. In this context, the private car seems to be an attribute confirming economic success and independence. Becoming an adult person, a crucial stage in human biography, makes the private vehicles integral part of daily life not only because of functional requirements but also due to the symbolic value. This way, the private car becomes an external symbol of the ability to meet social requirements: car users feel and communicate they can earn money and get the driver licence, so there is no reason to treat them as socially excluded.

Although subjectively evaluated social status was not statistically significant predictor of using a car, undoubtedly car-based mobility might be treated as a part of strategies aimed at gaining social acceptance from others. The reason is that becoming a car driver, along with beginning a professional activity, is a rite of passage into adulthood and corresponds with the life course perspective, which „involves age norms for important life events and role transitions” (Mayer 2002: 471-472). As Pierluca Birindelli noted, the transition into adulthood is strongly connected with “milestones, stages that have to be passed through in order to become established in the social positions that distinguish the adult and differentiate him/her from the adolescent” (Birindelli 2018: 22). At the same time, different rituals “becomes the catalyst of the transmission of values of a community to which the members belong ethically, emotionally and conatively, and

not merely instrumentally” (ibidem: 32). Taking this into account, one can note that the ability to purchase and drive a car could be considered as a rite of passage confirming “adherence to a common sphere of values” (ibidem: 32) of modern societies.

Thus, using a private car is based on mixed motivation, in which cultural pattern and functional requirements related to the spatial mobility strengthen each other. As a result, the creation of the sustainable transport policy, with high priority to the public transport, bicycles and walkers, might be a big challenge for local governments due to solid ground of the current drivers’ preferences. Although majority of the drivers participating in the survey (79%) is ready to use the public means of transportation more often than now, their support for the priority of public transport in the streets is significantly lower than among people for whom a car is not the most important mean of transportation in daily life (23.8% compared to 37.3%; $\phi = .143$, $p < .001$). Moreover, the regression model also shows that perhaps significant political mobilisation from the car drivers’ side could be expected in case of radical changes in urban transport policy, even if the car users do not tend to participate in local votes e.g. the Wrocław Citizens’ Budget (WBO). It is likely due to the involvement of drivers in the creation of WBO projects and active cooperation with the neighbourhood council. Thus, there might be not a room for implementing the sustainable transport policy with non-car based mobility solutions and regulations.

The second regression model, which is focused on the determinants of using *public transport*, seems to be the mirror image of the first model and explains 11% of the variance (Table 3). As the achieved results suggest, using public transport is characteristic rather of the people who are not economically active and have a primary level of education. Perhaps the professional inactivity is also an important reason why they use public transport, which is available to all, contrary to the car with its all financial and legal requirements.

Table 2. Determinants of the private car use

Predictors	Wald	df	Statistical significance	Exp(B)	95% confidence interval for Exp(B)	
					Lower limit	Higher limit
Age: 15-24	3.829	3	.281			
Age: 25-44	.327	1	.568	1.174	.677	2.037
Age: 45-64	.718	1	.397	1.283	.721	2.285
Age: 65-80	.345	1	.557	.791	.361	1.732
Education: primary	13.400	5	.020			
Education: lower secondary	8.530	1	.003	3.641	1.530	8.666
Education: technical secondary	5.717	1	.017	2.815	1.205	6.574
Education: general secondary	4.767	1	.029	2.578	1.102	6.030
Education: bachelor degree	7.407	1	.006	3.447	1.414	8.404
Education: master degree	8.249	1	.004	3.458	1.483	8.065
Social status: lower	1.858	2	.395			
Social status: medium	.033	1	.856	.966	.669	1.396
Social status: higher	.861	1	.354	.823	.546	1.241
Economic situation of the household: bad	10.831	2	.004			
Economic situation of the household: average	2.638	1	.104	1.447	.926	2.259
Economic situation of the household: good	7.593	1	.006	1.916	1.206	3.041
Being a scholar	5.212	1	.022	.517	.293	.911
Looking for a job	2.050	1	.152	.641	.349	1.178
Being a pensioner	.458	1	.499	1.212	.695	2.113
Being an employee	16.313	1	.000	1.830	1.365	2.453
Attitude I: sport and body care	.000	1	.985	1.000	.974	1.027

Attitude II: mass events and informal social activities	1.481	1	.224	1.024	.986	1.064
Attitude III: high-culture events and open-air activities	4.184	1	.041	1.039	1.002	1.077
Attitude IV: art and hobby activities	1.795	1	.180	.967	.921	1.016
Attitude V: traditional activities	3.285	1	.070	1.052	.996	1.112
Attitude VI: home	.417	1	.519	.986	.947	1.028
Number of children: 0	4.467	3	.215			
Number of children: 1	.113	1	.737	1.044	.812	1.342
Number of children: 2	.048	1	.826	1.027	.808	1.305
Number of children: 3	3.676	1	.055	.623	.384	1.011
Submitting project proposals to WBO	10.776	1	.001	2.202	1.374	3.527
Cooperating with the neighbourhood council	4.996	1	.025	2.299	1.108	4.771
Voting in WBO	30.358	1	.000	.330	.222	.489
Constant	21.429	1	.000	.049		

Source: Own calculations based on the Social Diagnosis of Wrocław 2017

According to this model, using the public transport seems to be the result of the structural factors, e.g. the economic constraints. In this context, the public transport is rather a source of symbolic and functional exclusion, which not only confirms the adverse position of many passengers on the labour market but also limits the access to different places, goods and services. For instance, being a passenger of the public transport is not connected with the attitude towards spending this time out of the city, where public transport connections are far from meeting the needs and expectations of potential passengers.

Therefore, the public transport seems to be the unintentional choice of many passengers and one could expect they will change their transportation attitude when becoming employees. In other words, preferences of many public transport passengers

might change along with the appearance of new opportunities to overcome barriers to the access to the car, e.g. stable income or even functional requirements regarding daily mobility. It means that the structural motivation of the public transport users would result in the reproduction of the cultural pattern based on car domination. Thus, even if the regression models indicate that socio-economic characteristics of the car users and the public transport passengers are different, their attitude to the spatial mobility might be rather similar and gives a primary position to the private cars and their symbolic force.

It is not to say, however, that the public transport passengers are not integrated in terms of common interest. As the collected data suggest, the support for the priority given to the public transport in local streets is significantly greater among the public transport users than in case of people for whom buses and trams are not the most important mean of transport in daily life (39% compared to 30.1%; $\phi = .084$, $p < .001$). Nevertheless, even though public transport passengers express their common interest, there is no clear evidence they would like to actively take part in political actions aimed at putting pressure on the local government. The reason is that the public transport users do not actively participate in local initiatives, viz. cooperation with the local council and the creation of WBO projects. The only thing they do is the adaptation of different new technologies, including non-traditional digitalised voting systems that do not require active involvement in the life of the local community. As a result, social activity of the public transport users is limited to the participation in WBO voting, which is a rather passive type of citizenship. In this context, structural factors matching the public transport with the subjective or objective marginalisation is also strengthened by culturally determined social inactivity. Therefore, the public transport passengers are not clearly and strongly emerged pressure group, contrary to the car users. This is due to the exclusion of the public transport users from the labour market and their cultural attitude towards the low involvement in social activities.

Table 3. Determinants of public transport use

Predictors	Wald	df	Statistical significance	Exp(B)	95% confidence inter- val for Exp(B)	
					Lower limit	Higher limit
Age: 15-24	1.830	3	.608			
Age: 25-44	1.737	1	.188	.691	.399	1.197
Age: 45-64	1.617	1	.204	.684	.381	1.228
Age: 65-80	1.096	1	.295	.644	.282	1.468
Education: primary	23.294	5	.000			
Education: lower secondary	19.602	1	.000	.233	.122	.444
Education: technical secondary	18.970	1	.000	.260	.142	.477
Education: general secondary	17.018	1	.000	.283	.155	.516
Education: bachelor degree	18.268	1	.000	.225	.113	.446
Education: master degree	20.959	1	.000	.240	.131	.443
Social status: lower	.271	2	.873			
Social status: medium	.064	1	.801	.952	.649	1.396
Social status: higher	.224	1	.636	.901	.585	1.387
Economic situation of the house- hold: bad	1.650	2	.438			
Economic situation of the house- hold: average	1.449	1	.229	.770	.503	1.178
Economic situation of the house- hold: good	1.593	1	.207	.750	.480	1.173
Being a scholar	.013	1	.908	.967	.551	1.699
Looking for a job	10.332	1	.001	2.243	1.371	3.671
Being a pensioner	.309	1	.578	.841	.458	1.547

Being an employee	26.518	1	.000	.477	.359	.632
Attitude I: sport and body care	2.938	1	.087	.974	.945	1.004
Attitude II: mass and informal social activities	.034	1	.853	1.004	.963	1.046
Attitude III: high-culture events and open-air activities	6.787	1	.009	.948	.911	.987
Attitude IV: art and hobby activities	2.235	1	.135	1.040	.988	1.095
Attitude V: traditional activities	.206	1	.650	.986	.930	1.046
Attitude VI: home	.848	1	.357	1.021	.977	1.067
Number of children: 0	4.032	3	.258			
Number of children: 1	.845	1	.358	1.136	.865	1.493
Number of children: 2	.004	1	.950	1.009	.773	1.316
Number of children: 3	3.326	1	.068	1.544	.968	2.463
Submitting project proposals to WBO	1.699	1	.192	.687	.390	1.209
Cooperating with the neighbourhood council	.756	1	.385	.675	.279	1.636
Voting in WBO	33.749	1	.000	2.632	1.899	3.648
Constant	8.749	1	.003	5.522		

Source: Own calculations based on the Social Diagnosis of Wrocław 2017

Despite the domination of automobility and high popularity of privatised transport among the inhabitants of Wrocław, the leading role of car should not be seen as what does not change, since the emergence of opposition discourses, which criticise automobility domination can be observed. It is well reflected in the third regression model (Table 3) which explains 12% of the variance and refers to *cyclists* who are of particular interest in current Polish sociological literature (cf. Kajdanek, Pluta, 2016). The growing popularity of the bicycle as a mean of transportation is observed in Polish cities

during the last decade, and many sociologists emphasize this shift reflects significant changes in urban culture, which becomes more similar to the culture of Western European cities. It was the rapid and robust integration with the Western world which, on the one hand, resulted in a fascination with consumerist culture and, on the other, led to a growing influx of ideas that are critical towards the over-consumption. While the first answer to the integration was the domination of the car-based culture, recent few years strengthened the second trend, which is the post-consumerism cultural transition with a strong emphasis on the sustainable urban policy (Kubicki 2011).

The emergence of the approach which is, in its nature, against of the intensive penetration of privacy by the automobility culture, is not surprising. The cornerstone for the criticism of the modern urban planning was laid in the 1960s by Jane Jacobs, when she “assembled neighbours and public opinion to stop Robert Moses’ urban plans leading to large-scale destruction of Manhattan existing features and remaking New York with expressways” (Paletta 2016). David Harvey (2012) suggests that the Jacobs’ involvement in fight with New York establishment was, along with France’s 1968 riots, beginning of modern urban social movements which began to contest urban policy promoting both capitalists interests and modern spatial planning (these aspects were, in fact, strongly connected, which was already explained in the Section Three).

Paweł Kubicki (2011) argues that the turning point which allowed the emergence of urban social movements in Polish context was the integration of Poland with the European Union – the episode opening up the borders and leading to the creation of favourable conditions for the growth of creative class following the West European social trends. This process laid the foundations for the popularisation of new cultural habits, which were unknown in Poland before the economic transformation of 1989. All these processes, P. Kubicki argues, have created a new generation of the bourgeoisie who not only pay close attention to ecology and quality of life but also tend to modify their mobility practices and intensively use the urban infrastructure allowing them to spend their free time actively. This new lifestyle, similar to the habits well known in Western Europe, modifies mobility practices and creates particular requests regarding the struc-

ture of the city space (Kubicki 2011). As was emphasized in literature, the growing popularity of bicycles, emergence of social movements and the pressure put on local governments in order to reduce the role of cars in cities belong to the primary expressions representing this new approach (Kajdanek, Pluta, 2016).

Interestingly, however, this significant shift in urban culture is not well reflected in data collected for the Social Diagnosis of Wrocław 2017, since the local cyclists are not characterised by a particular age, education or orientation towards the leisure and free-time activities. There is also no significant differences in terms of social as well as economic status; the professional activity and job searching do not stand out the cyclists either. It suggests, then, that the new generation of the bourgeoisie is not the primary source from which the bikers are recruited.

Nonetheless, there is an evidence that using a bicycle has a distinctive cultural background, especially when comparing the cyclists with the users of other means of transportation. Firstly, this mobility orientation is not characteristic of people without children, while it is often assumed that having a child increases spatial mobility and leads to the intensive use of a car. It suggests that the functional justifications that legitimate using a private car (and allow people to coordinate different daily activities, compress time and space and increase flexibility) are culturally specific. In other words, the provided example shows very well how different functional requirements are interwoven with the cultural background, which creates the “culture of giving children a lift” everywhere and every time. In this context, the mobility orientation towards using a bicycle could be interpreted as a radical discussion with the dominating cultural pattern, which embeds private car in the daily life of families with children.

Secondly, the involvement of the cyclists in the creation of the WBO projects is significantly higher than among the car users. Being a cyclist increases the likelihood of social engagement by almost five times, as compared with the two times among respondents using a car. It is also worth noting that the cyclists are the strongest advocates of the priority given to public transport in local streets. According to the collected data, 50% of cyclists support the priority, which is significantly more than among people for

whom the bicycle is not the most important mean of transport in daily life (50% compared with 31.6%; $\phi = .086$, $p < .001$). The same conclusion could be made in respect of the comparison of cyclists, car users and public transport passengers. Neither the car users, nor the public transport passengers support the priority as much as the cyclists.

Table 4. Determinants of the bike use

Predictors	Wald	df	Statistical significance	Exp(B)	95% confidence interval for Exp(B)	
					Lower limit	Higher limit
Age: 15-24	2.625	3	.453			
Age: 25-44	.810	1	.368	1.737	.522	5.784
Age: 45-64	1.935	1	.164	2.495	.688	9.049
Age: 65-80	1.150	1	.284	2.531	.464	13.817
Education: primary	11.459	5	.043			
Education: lower secondary	.882	1	.348	2.784	.329	23.583
Education: technical secondary	2.056	1	.152	4.604	.571	37.109
Education: general secondary	3.469	1	.063	7.230	.902	57.973
Education: bachelor degree	.639	1	.424	2.506	.263	23.833
Education: master degree	1.459	1	.227	3.643	.447	29.690
Social status: lower	4.014	2	.134			
Social status: medium	1.200	1	.273	1.731	.648	4.622
Social status: higher	2.998	1	.083	2.475	.887	6.905
Economic situation of the household: bad	5.673	2	.059			
Economic situation of the household: average	.008	1	.929	1.046	.388	2.818

Economic situation of the household: good	1.216	1	.270	.551	.191	1.590
Being a scholar	3.428	1	.064	3.024	.937	9.755
Looking for a job	1.826	1	.177	1.976	.736	5.307
Being a pensioner	1.191	1	.275	1.898	.600	6.001
Being an employee	.522	1	.470	1.247	.685	2.268
Attitude I: sport and body care	2.653	1	.103	1.048	.990	1.110
Attitude II: mass and informal social ac- tivities	3.025	1	.082	.927	.850	1.010
Attitude III: high-culture events and open-air activities	.987	1	.320	.961	.887	1.040
Attitude IV: art and hobby activities	.006	1	.938	.996	.895	1.108
Attitude V: traditional activities	1.404	1	.236	.926	.816	1.051
Attitude VI: home	.035	1	.852	.992	.908	1.083
Number of children: 0	19.953	3	.000			
Number of children: 1	.447	1	.504	1.239	.661	2.323
Number of children: 2	16.330	1	.000	2.992	1.758	5.092
Number of children: 3	2.012	1	.156	2.102	.753	5.865
Submitting project proposals to WBO	19.272	1	.000	4.961	2.427	10.143
Cooperating with the neighbourhood council	.241	1	.623	.586	.069	4.946
Voting in WBO	5.274	1	.022	.243	.073	.813
Constant	13.108	1	.000	.003		

Source: Own calculations based on the Social Diagnosis of Wrocław 2017

Although the socio-economic profile of the cyclists is different from the initial expectations regarding the new generation of bourgeoisie, it is clear that people using bicycles represents a new urban culture, with a strong emphasis on sustainability and so-

cial activity. The bike users seem to be a small but well-integrated and visible group of interest which is ready to articulate its expectations through the active creation of projects that would be funded from WBO and similar local initiatives.

Their clear orientation towards sustainable mobility, with high relevance of the priority for the public transport, leaves no doubt that this might be the reason for potential conflict between the car and bike users, even if a relatively small number of people represents the cyclists. They represent two categories that are not interested in WBO voting but may wish to influence the structure of the urban space. The reason is that the cyclists and drivers both actively articulate their expectations, take part in different participation projects and put a pressure on the local government in order to maintain a status quo or – in case of the bike users – radically change the local transportation policy.

5. Conclusions

Undoubtedly transportation preferences and expectations regarding the transport policy result not only from the structural reasons, e.g. functional requirements of daily activities or limits in access to a private car. Such a structural background is accompanied by the creation of the cultural attitude, which does not remain without an impact on the value orientation and expectations regarding the future structure of the urban transport system. The traditional cultural orientation with the leading role of a private car, which is an integral part of daily practices or the goal sought to be attained, is a visible illustration of this.

As the regression models suggest, the mobility orientation of many local inhabitants changes as a result of obtaining a job, which is usually correlated with improvements in education and personal budget capacity. At this biographical stage, many people begins to follow a dominating strategy of “being a driver” that enables them to meet many organisational requirements and demonstrate buyer power as well as the ability to use a mechanical vehicle.

Taking up a professional job goes hand in hand not only with the privatisation of spatial mobility but also with the marginalisation of the role played by the public transport. As a result, buses and trams become a symbol of social exclusion and marginalisation; mainly those who cannot get a driver licence or access to a private car, uphold the mobility orientation, which is strongly integrated with the public transport. This conclusion is well reflected in the socio-economic characteristic of the public transport passengers, with the leading role of people who are inactive on the labour market. It is also worth noting that, although the public transport passengers are able to identify their interests regarding the priority for buses and trams in the streets, they are not as strong supporters of the priority as it would be expected when assuming that their attitude towards the support depends on the way of travelling across the city. Moreover, they are not active players either in terms of social activity and putting the pressure on the local government, which is an additional factor of their secondary role in the discussion about the local transport policy.

In parallel with car domination, the emergence of contradicting cultural attitude with a radically different overview of the urban transport policy was also identified in the analysis. In that case, there is no relationship between the transport preferences and economic status of respondents, because the mobility choices are not determined by the feeling of material or symbolic deficits. They rather result from an alternative vision of the reality, which is rooted in a new type of urban culture. In such an attitude, mobility is not a carrier of information about the symbolic and economic position in social structure, but often expresses ecological orientation with the expectation of radically changed urban policy that pays close attention to clean and pedestrian-friendly space. This sustainable orientation is well reflected in practices of cyclists for whom riding a bicycle is not an uncomfortable activity even if they have to carry their children. The expectations of bike users, when compared with the cultural orientation internalised by the public transport passengers, support these conclusions as well. Even though the cyclists do not tend to use buses and trams in their daily mobility routines, they seem to be enthusiastic

supporters of solutions limiting the role of private cars and giving priority to the public transport.

In this context, discussion about local transport policy might become a reason for social conflict due to the different preferences expressed by car users and cyclists. There is clear evidence that any efforts taken by the local government in order to limit the role of the private car might be against the traditional orientation expressed by people using cars. Contrary to this, such a new opening would meet expectations of the cyclists who follow the approach launched by Jane Jacobs fifty years ago.

However – taking into account the presented biographical approach that explains interconnections between cultural as well as functional aspects and shows how they influence each other – one can note that efforts aimed at the changing transportation preferences and building social acceptance for particular solutions in urban transport policy are not only the technical matter. The discussed issue is also of a sociological and psychological nature, with its all implications for decision-making procedures that should take into account collectively created imaginations and complex preferences. The urban mobility culture would be “locked-out” only if transportation preferences are not considered from a strictly quantifiable perspective which is not able to grasp their hidden determinants. Only the holistic and culturally-oriented approach would allow for effective managing conflicts around urban space and its distribution between all users. Primarily, a deep understanding of the interconnections between functional and cultural aspects is needed to build social consensus around urban mobility, change transportation habits and promote alternative means of transportation – a bicycle or the public transport. As with the automobility advertising industry, the proposed new approach should take into account emotional feelings, create new ones and effectively communicate things that are strongly connected with socially and psychologically produced imaginations and emotions. Otherwise, none mobility policy based on incentives will be effective, and none significant changes in the mobility culture will occur.

6. References

- Beckmann J., 2001: *Automobility – a Social Problem and Theoretical Concept*. "Environment and Planning D: Society and Space", 19, 5, 593-607.
- Birindelli P., 2018: *Rites of Passage towards Adulthood and Global Citizenship: Transitions and Liminalities*. "Beyond – Studies in International Education", 1, 15-45.
- Burns P. M., Novelli M., 2008: *Tourism and Mobilities: Local-Global Connections*. Wallingford: CABI.
- Cauter L. de, 2004: *The Capsular Civilisation: On the City in the Age of Fear*. Rotterdam: Nai010.
- Featherstone M., 2004: *Automobilities: an Introduction*. "Theory Culture & Society", 21, 1-24.
- Gartman D., 2004: *Three ages of Automobility: The Cultural Logics of The Car*. "Theory Culture & Society", 21, 169-195.
- Gilroy P., 2001: *Driving While Black*. "Car Cultures", 81-104.
- Graham S., 2011: *Cities Under Siege: The New Military Urbanism*. London, New York: Verso.
- Greco M., 2008: *Emotions: A Social Science Reader*. London: Routledge.
- Halden P., 2013: *Fundamental but not eternal: The public-private distinction, from normative projects to cognitive grid in Western political thought*. "Small Wars & Insurgencies", 24, 211-223.
- Harvey D., 1985: *The Urbanisation of Capital*. Oxford: Blackwell.
- Harvey D., 2012: *Rebel Cities. From the Right to the City to the Urban Revolution*. London, New York: Verso.
- Hirt S., 2007: *Suburbanizing Sofia: Characteristics of post-Socialist Peri-urban change*. "Urban Geography", 28, 8, 755-780.
- Jennifer Wenzel J., Yaeger P., 2017: *Fueling Culture: 101 Words for Energy and Environment*. New York: Fordham University Press.
- Kajdanek K., 2012: *Suburbanizacja po polsku*. Kraków: Nomos.

- Kajdanek K., Pluta J., 2016: *Emergence of the Cycling Movement in the Urban Public Sphere*; in: K. Kajdanek, I. Pietraszewski, J. Pluta (eds): *City and Power – Postmodern Urban Spaces in Contemporary Poland*. Bern: Peter Lang; 79-98.
- Kajdanek K., Pluta J., 2017 (eds): *Social Diagnosis of Wrocław 2017. Report on social research with participation of the inhabitants of the city*. Wrocław: Local Municipality.
- Kubicki P., 2011: *Nowi mieszczenie – nowi aktorzy na miejskiej scenie*, "Przegląd Socjologiczny", 60, 203-227.
- Mayer K. U., 2002: *The sociology of the life course and life span psychology - diverging or converging pathways?*; https://www.mpibbelin.mpg.de/volltexte/institut/dok/full/Mayer/sociolog/Sociology_of_Life_Course.pdf.
- Miller D., 1997: *Modernity, An Ethnographic Approach: Dualism and Mass Consumption in Trinidad*. Oxford and New York: Berg.
- Morton C., Budd T., Harrison G., Mattioli G., 2017: *Exploring the expectations of transport professionals concerning the future automobility system: Visions, challenges, and transitions*. "International Journal of Sustainable Transportation", 11, 493-506.
- Paletta A., 2016: *Story of cities #32: Jane Jacobs v Robert Moses, battle of New York's urban titans*, "The Guardian".
- Sheller M., 2004: *Automotive Emotions: Feeling the Car*. "Theory Culture & Society", 21, 4-5, 221-242.
- Sheller M., 2014: *The New mobilities paradigm for a live sociology*. "Current Sociology", 62, 6, 789-811.
- Sheller M., Urry J., 2000: *The City and The Car*. "International Journal of Urban and Regional Research", 24, 737-757.
- Sheller M., Urry J., 2006: *The New Mobilities Paradigm*. "Environment and Planning A", 38, 2, 207-226.
- Shen J., Wu F., 2016: *The Suburb as a Space of Capital Accumulation: The Development of New Towns in Shanghai, China: The Suburbs as a Space of Capital Accumulation*, "Antipode", 49, 761-780.
- Skeggs B., 2004: *Class, Self, Culture*. London: Routledge.

- Sovacool B. K., Axsen J., 2018: *Functional, symbolic and societal frames for automobility: Implications for sustainability transitions*. "Transportation Research Part A: Policy and Practice", 118, 730-746.
- Böhm S., Campbell J., Land Ch., Peterson M., 2006: *Introduction: Impossibilities of Automobility*. "Sociological Review", 54, 3-16.
- Sierpiński G., 2012: *Zachowania komunikacyjne osób podróżujących a wybór środka transportu w mieście*, "Zeszyty Naukowe Politechniki Warszawskiej", 84, 93-106.
- Steg L., 2005: *Car use: lust and must. Instrumental, symbolic and affective motives for car use*. "Transportation Research", 39, 2-3, 147-162.
- Urry J., 2004: *The "System" of Automobility*. "Theory Culture & Society", 21, 25-39.
- Urry J., 2000: *Sociology Beyond Societies: Mobilities for the Twenty-First Century*. London: Routledge.
- Walker L., Butland D., 2000: *Boys on the Road: Masculinities, Car Culture and Road Safety Education*. "The Journal of Men's Studies", 8, 153-169.

Wpłynęło/received 15.12.2019; poprawiono/revised 12.02.2020