Mobility Time Style: For an Integrated View of Time and Mobility in Societies with a Future

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Abstract. This paper aims (i) to demonstrate the relevance of deepening the study of time usage from the individual and family perspectives and (ii) to put in dialog perceptions and uses of time with daily mobility patterns. It is increasingly imperative to consider mobility and the uses of time as central axes of lifestyles, highlighting the weight of several variables in the definition of lifestyle choices, namely transportation options. This reflection is based on an empirical study carried out in Portugal through interviews in the metropolitan areas of Lisbon and Porto. The analysis leads to the conclusion that, in addition to physical distances people have to cover, the choice of specific means of transportation is strongly dependent on the perceptions and uses of time. It is also evident that time is simultaneously dependent on the way technologies are absorbed into daily life and that time remains a matter of constraint and social opportunity.

Keywords: Mobility · Time · Styles · Lifestyle

1 Introduction

An increasing number of studies have given attention to the notion of quality of life [1] – especially wellbeing – when discussing mobility and travel within the context of modern cities [2, 3]. Most of these state that mobility practices and expectations have a strong impact on individuals and families' decisions and choices throughout their lives [2] conditioning the ways they use time and thereby being a component of people's lifestyles [4]. Authors [4] have claimed that the location of work activities is central in mobility as this strongly influences time use possibilities both in individual and collective terms and determines transportation means (type and forms of use). In this sense, several approaches to the city' spaces and times have fundamentally showed the effects of rationalization of both these dimensions. Later, in the context of globalization, migration and digitization of work further transformations in the form of organization and the spatial functioning of work emerge (each day increasingly more mobile and flexible) creating rather unpredictable configurations of uses of time and transportation.

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In Portugal, 42% of the national population lives in Lisbon and Porto metropolitan areas [5]. The development of these areas is intrinsically related to the process of urbanization: fuelled by the historic exodus from the inner country in the sixties of the last century, these cities are currently also experiencing a great wave of touristic influx. Presently, Lisbon hosts two million and eighty thousand active employees - about 27% of the national population [5]. Demographic changes happened in various locations around Lisbon over recent years. These are the cases of cities like Mafra, and Sesimbra which have grown exponentially. The growth in these places is an effect, among others, of the increasing use of private transport and the implementation of public infrastructures such as the river Tejo bridges [6]. This massive growth has gradually triggered the development of an urban continuum between Lisbon, Cascais, Sintra, Loures and Vila Franca de Xira on the north bank, and Sesimbra and Setúbal, on the south. Porto also shows a growth towards more distant places such as Póvoa de Varzim (north) and São João da Madeira (south) [7, 8].

This population growth into further places away from the cities is leading to increasing needs for transport, as the population needs to cover longer distances to access work, services, and other goods. Moreover, the lack of or the weakness of collective and public means of transportation, some of them reaching a rupture point (as happens with the boasts crossing the River Tejo) is leading to increasing use of private cars, which causes problems of traffic and congestion which negatively impact quality of life.

The questions of mobility are therefore complex insofar as poor political intervention concerning transportation solutions and living costs, together with increasing capitalist pressures over certain cities have consequences over people's individual lifestyles, impacting on quality of life. An integrated politics of space and time in the cities, perhaps by improving the technological facilities, would be a way of making cities available to all. An increasing number of studies have been giving attention to quality of life [5, 6] - especially wellbeing – when discussing mobility and travel relationship within the context of modern cities. Most of them state that mobility practices and expectations have a strong impact on individuals and families' decisions and choices throughout their lives [5, 6], the conditioning of the ways they use time thereby being a component of people's lifestyles.

This text explores the concepts of mobility and time within lifestyles, proposing the notion that increasingly, the analysis and the interventions on space – be they physical or digital – must include citizens' perceptions, values and uses of time. In fact, societies are increasingly digitally oriented, as more and more daily activities are accomplished digitally and have become, overall, ever more accelerated. However, citizens must individually deal with a multitude of different time constraints that are sociologically relevant, as they reveal unequal patterns of mobilities, as well as dissimilar accesses to means of mobility and technological trends. This, in course, leads to different uses of kinds of time or time styles (according to gender, age, social classes, and type of job), as well as different lifestyles, and mobility profiles.

2 The Importance of Mobility

There are manifold issues related to mobility and sustainability, particularly in the face of the problem of climate change and the development of adaptation and mitigation strategies that imply deepening the social processes of enormous relevance.

Mobility is a core issue for modern societies. Life choices are related to mobility behaviours and decisions, as each life choice seems to be linked to a specific set of mobility demands. As an example, decisions about work and home taken in a person's early twenties might not be desirable or feasible ten or twenty years later, when responding to family growth [9] or to the process of ageing. In a way, these decisions should all converge into a good life choice. In other words, if mobility has long been known as a feature of human groups, its expression in contemporary society takes on unexpected features that strongly impact society in different realms [10, 11]. International research on mobility has greatly increased in recent years.

Sheller and Urry came to the conclusion that mobility involves such different aspects of the individual and the social world that it actually can be understood as an analytical paradigm; the authors have clearly demonstrated its multidimensionality, thus taking into account the role of technology, cultural expressions and social expectations among other dimensions [12]. Eurostat reports indicate that in Portugal (alongside Norway) car usage is higher than that of the European average, representing 89.8% of the passenger transport [13–15]. The data and Eurostat [15] indicate that transport is one of the main sources of energy consumption in Europe and, as a result, private consumption reaches values close to consumption in industry. The transition roadmap for a competitive low-carbon economy in 2050 [15] stipulates a set of objectives to be achieved over the next 30 years regarding decarbonization, innovation and the adoption of green energy. But the data [16] also indicates that transport costs continue to increase, while the consumption of renewable energies in transport remains low [9]. These results match with the demonstrations of the IEA-International Energy Agency – according to which the consumption of biofuel in road transport will only increase by 1% in these 7 years (2015–2020)

Briefly, all this information helps to support the idea that, alongside any technical and/or scientific changes that involve mobility, displacement and the use of time, are variables and processes of cultural and social character that should be considered, either from the point of view of the positive effects they may cause, or looking to the consequences societies will have to deal with, in the near future, in order to build democratic access to mobility and transportation.

3 Mobilities, Lifestyles and Time Uses

The relation between lifestyles and mobility has been recently explored by Cohen et al. who propose that "lifestyles and forms of mobility increasingly co-mingle in ways that can be crucial to the lives of those who are privileged enough to access them" [4]. At its core, lifestyle is an intricate result of choices that encompasses space and time uses [17]. The connection between lifestyles and mobility supposes free choice and in that sense the concepts of mobilities, lifestyles, and hypermobility [4] are close to the concept

of migration lifestyle. Lifestyle conceptualization implies considering the following elements/dimensions: job, housing, and family. It is true that jobs are no longer lifelong and moving (whether actually or virtually) is a main driving force in people's lives. However, the weight of these transformations introduces ever more variations on the patterns of the course of life [18] Therefore, these three usual milestones - work, housing and family - remain as structuring variables, even if only in a mid-term perspective.

Flamm and Kaufmann [19] have proposed that within a world which is becoming increasingly mobile, whilst some people have largely increased their potential for mobility or motility, other are strongly deprived of this ability that negatively affects their quality of life [20] with respect to this, the recent contribution of the concept of mobility justice is of interest. In sum, mobility and travel options cannot be disconnected from the complex web of choices and constraints that a life path is made of [18], being an integrant component of lifestyles. Additionally, behaviours concerning mobilities are initially linked to choices and constraints concerning patterns of using and experiencing time. Mobility requires discussions on time as it is a core element of a lifestyle [17, 21]. Time has been analysed in different scientific areas both as social object, as a resource and a source of meaning. Specifically, in sociology, besides the studies that addressed the connections between time and space [22, 23] researchers from different historical and sociological contexts state the relevance of time usage on people's lives. The assumption that working time is the dominant time that determines the feeling of fulfilment in other times of life, is a core topic of research, alongside increasing social acceleration and the ways it affects people's options and chances, impacting on all life spheres, including on mental and subjective wellbeing. More recently the sphere of work trends - increasing digitisation and automation, flexible working times, globalization and dislocation - have been responsible for the emergence of several new time orders and uses which affect, and in some cases collide with, family time, personal time, or leisure time. These changes have led to alterations in mobility patterns, including the means of transportations used. In fact, one of the reasons families often use the car and other private means of transportation is due to the accumulation of activities they must accomplish during the day, part of them with children and the need to accomplish these as fast as possible [24]. These changes have led to alterations in mobility patterns, including the means of transportations which are being used, and which are increasingly required to be more personalized and flexible. Extensive literature has analysed the expansion of the mobile society. Therefore, one of the pivotal reasons why families keep using the car is the accumulation of activities they must accomplish almost simultaneously along the day. This come to be especially acute in the cases when families must live far from workplaces, schools and health services, in response to the increase in housing prices.

For a general comprehension of the existing studies on mobility, we present the following Table 1:

Table 1. Some themes in the mobility studies and time uses [25]

Traditional themes	Emerging themes	Associated dilemmas and emerging issues
Transport network, timetables, routes and prices	Flexible collective transport Technological adaptation and transport use	Safety of children in parks, public spaces and dwellings
Network accessibility, timetables and circuits, population covered and excluded	Access and use of transport, and new social discriminations and exclusions	Noise pollution in housing areas, mental illnesses and school performance
Quality of services, stops and parking spaces	Speed, increased consumption and reduced rest time	Deadly and incapacitating road accidents
Security and accountability	Forced mobility, speed and fragmentation of family and personal times	Transportation of children, traffic intensity and security
Adequacy of infrastructures and signage adjusted to Mobilities, Lifestyles and choice of transports	Tourism, transport and circulation	Speed, transport and new social, gender and age exclusions
The value and consumption of cars	Energy transition, transport and social values	Transportation, lifestyles and aspirations (school choices and children's extracurricular activities)
Circulation, infrastructure and convenience	Safety and road coexistence Space-time representations and cognitions	Mental illness in children and young people, panic and time pressure
	Virtual time space and driving styles	Accessibility to transport and social exclusion
	Security and social inequality	"Green" energy and social inequality in Access
	Sustainability, gender, climate change and energy	Energy transition, low carbon economy and new inequalities
		Flexibility in the transport network, notably as regards stops and socio-demographic profile of the public.

3.1 Bringing Together Mobility and Time to Understand Mobility Time Styles

In accordance with the above explanation, we can say that the concept of mobility time lifestyles involves three types of elements: present settlements and places of activity (house, work, leisure, family activities); time and duration of (in)activity (day/week/years; morning/afternoon/evening; working day/weekend/vacations, etc.);

and the motivations underlying these activities (inscribed in social and economic constraints and/or emerging from an individual decision). The concept allows overcoming the usual binary readings dealing with how these times and spaces interweave with each other in a certain configuration, while keeping flexibility and diversity in mind. To operationalize the concept, it is necessary to study two main dimensions: (i) the elements concerning what people do and how they do it with regards to time, space and mobility as well as what value - material and symbolic - they attribute to it (linked to subjective and objective class indicators); and (ii) the elements related to people's disposition to face decisions concerning time, space and mobility and its management (mostly linked to subjective class indicators, also inscribed in professional cultures) incorporating the dynamism or mobility of these decisions. Therefore, it is possible to consider that mobility and time lifestyles are result of the intercrossing between three main dimensions: (i) the degree of time-space standardization, (ii) the degree of time-space stability, and (iii) the degree of time-space (self-) coordination.

Each of those dimensions reflect a joint imbricated result between values and practices which imply time, space, and mobility issues.

This paper provides an analysis of two main kinds of mobility time, or "time styles" according to data collected from the study done in the cities of Lisbon and Porto, in Portugal.

4 Method

This research involved 31 in-depth interviews with people who live and work inside of the two Portuguese metropolitan areas of Lisbon and Porto. A purposive sample was employed, choosing people with different family profiles, and distinct working time regimes. The interviews were made throughout one year using an interview grid, which integrated questions intersecting time, space, mobility and lifestyles topics. The interviews were used to collect information about many dimensions concerning mobility and time uses. In this paper the objective is to use the information to stress the strength of argument calling for better understanding of the sociological and comprehensive aspects of time and space appropriations.

Therefore, information was analysed according to the aforesaid themes currently studied: (i) the degree of time-space standardization, (ii) the degree of time-space stability, and (iii) the degree of time-space (self-) coordination. Data about the interviewees socioeconomic profile, gender, age and other information is displayed in the annex.

5 Findings and Reflections

5.1 Profile 1: Liminal and Adjusted Mobility Time Lifestyle

The most relevant and shared feature of this profile emerging across interviews, is the way people mobilize strategies to cope with demands without having to break social rules or give up specific roles/desires. This profile therefore combines high levels of standardization with high levels of desire for stability, and in turn, lower levels of self-coordination of time and space. This style prevails among those interviewees with small

children and other dependents, those who undertake more rigid routines. Here, routines play a fundamental role, as it becomes mandatory to have rigidly observed daily plans, linked to the schedules and mobility needs of other family members (children, spouse, etc.). For this section of the population, diaries and calendars are central, so that daily routines can be defined in advance. Therefore, the people exhibiting this profile type seek to control time and travel, and to manage these in a stable way. Whether using public or private transportation, this section of the population needs to have control over space and time (and distance) to ascertain their lives. The following quote is an account by an interviewee relating how predictability allows her to conciliate work and family spheres:

"Compared with the past, when I was always arriving home after 10pm, my current life is better, less stressed. I was [working] in the commercial business back then. [Now] I feel [I have] a shortage of time but that's no big deal, it's normal, everyone would like to have more things done. Now, with this [current] job, I have a stable routine, and I find this is very good and necessary when one has children. I was lucky to have always had a good support network." (Dianna, 38, mother of one, economist)

The following excerpt highlights how daily time is deeply dependent on children's mobility and time needs, in a rigid manner:

"I synchronize my time with that of my two children, 18 and 21 years old [boys], who study Law and History in Lisbon. We always come to and from the station together; sometimes we need to pick the eldest one up at 9pm from the station since there is no decent public transportation to take him home. Our household spends three [daily] hours in transit. I sleep very little." (Kate, 42, mother of two, lawyer)

This prevalent idea about the need to interconnect different mobility needs in a stable way within the same negotiations with time inside the family sphere appears to have a correspondence with individual and family needs at certain moments of their lives as well as with the way people look to their future needs.

For this group, having a car is central as it ensures the possibility of being mobile and arriving at required destinations rapidly. In almost all cases, anxiety and feelings of time pressure come associated with mobility needs. At first sight, this mobility time style can be associated with a low level of individual time-space coordination and a high level of stability, in the sense that people tend to search for steadiness, trying hard to have and maintain a life with a certain degree of stability. They tend to apply space-time discipline also to biographical paths, as they decide whether to undertake, anticipate, or postpone events, considering, in their decisions, the very nature of family members' mobility needs and prospects. In so doing, they also prioritize needs and desires on the scale of their lifetime. The next excerpt provides evidence of the high degree of importance that a time-space-mobility routine may have, thereby reinforce how crucial it can be to structure mobility time styles:

"For sixteen years now that we spend vacations in the same place, at the same time, in August. This year will be the same. I like it very much." (Kevin, 58, father of one, rail infrastructure manager).

5.2 Profile 2: Liminal and Extempore Mobility Time Lifestyle

This profile differs from the previous one as it combines high levels of self-coordination of time and space with elevated levels of stability, even when the individual is faced with high levels of unpredictability. This profile refers to individuals and families that reveal a great need to introduce levels of unexpected activities during the day, without being strict about the need to respect a certain time guideline. There are moments of time/space that can be interchanged in all spheres of life including domestic chores. What distinguishes those who match this style is the wiliness to develop actions without a focus in their planning. In some cases, there is some level of disorganization, while in others it is mainly a matter of flexibility and adaptability. This profile reflects the predominance of flexible working hours with a need to be mobile and often to adapt time demands. Nevertheless, there were also people with flexible working hours within the previous profile, however what differs is their attitude towards this flexibility. Below is a quote of one of the interviewees who shares this mobility time style:

"There is no consistency in my time, although there is a seasonal pattern at work, but there is [consistency] in [some of] my daily activities. I have breakfast relatively early at home, I make calls while I'm in route, I have lunch at the same place [every day], etc. I do not have a regular weekly schedule; I work more frequently during weekends. The concept of free time is something that I do not use because my professional and private lives are very mixed; I am always trying to enjoy holidays [while] combining business and social relationships [which] are in the same group." (David, 58, businessman)

Interestingly, people within this profile share one same distinctive feature: they work in arears that demand flexible time-space arrangements. Much more than those who belong to the previous group, these people also relate difficulties in planning their lives, and their work is consequently thought to be potentially less stable. Thus, they also show less availability to plan or anticipate future choices concerning their mobility prospect. One should note, however, that although some of these interviewees advocate time-space mobility, which is secured by the intense use of cars, they express the willingness to have the possibility to better anticipate their life choices and to be able to plan such choices in a medium time range. In other words, much of the interviewees in this profile would strongly appreciate having more ability to think and plan the future, even though they have different degrees of autonomy to coordinate and master time and space movements. Here, it is relevant to point out that most interviewees are conscientious of the degree of precariousness as well as uncertainty that permeate their lives' choices (mostly those working in the private sector, without working contracts, divorced, and/or with dependent small children).

6 Discussion

The two profiles differ with regards to sociodemographic characteristics.

The first group is composed mainly of married people with small children, employed in dependent work and using both public transportation and private cars.

The second is mainly composed of married people without dependents, working in areas that demand greater flexibility of time. Compared to the former group, these individuals use private cars more intensively.

There are two important ideas to retain: First, mobility as expectancy is mainly ascribed to the second group, as these persons combine mobility needs with professional demands and leisure activities, perceiving cars as the taken for granted means of private transportation. In the case of the first profile, this includes individuals who understand mobility mostly as a determined and defined time-space. For them, most of the actions involving mobility must be prepared according to other schedules, especially if using public transportation.

Additionally, this paper can conclude that the greater distinction between the two groups is not connected to professional activity and its degree of flexibility, but rather with the stage in which individuals are in terms of the position within their life cycle as well as with the existence of small children in the family (who need to be cared for).

We can therefore state that a mobility time style is a complex web of time-space arrangements, which are sculpted according to a set of subjective and objective variables. Such variables also encompass a complex combination of objectivized behaviours (such as car usage, the amount of time allocated to each activity or the distance travelled) and implicit and subjective behaviours that may vary along a life trajectory (plans, projects, dreams, among others). The way people think time and relate to it – in a more or less flexible manner – is crucial to understand to what extent they are also able to alter their mobility habits.

7 Concluding Remarks

This paper has presented some of the motives for which mobility diagnosis is increasingly important to understand the inner difficulties that characterize people's lives concerning decisions of where to live, and how to move to have access to all desired/required the services and goods. In societies such as the Portuguese one, where the consumption of cars is increasingly higher, studies about mobility and time use patterns are ever more needed, to rethink transportation, as well as several other spheres of life, such as work, schools, hospital and health services, culture and consumption in shops [10].

In order to conclude this brief contribution, it is important to remind ourselves of the need for local authorities to involve themselves systematically and directly in the collection and processing of information about people's mobilities, associated with time uses and constraints. The construction of contemporary information databases on mobility flows, motivations and difficulties of the population, implying contact with diverse sources, in addition to individuals or families, thus constitutes a point of great importance, serving as an instrument to support future decision-making.

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Annex

See Tables 2 and 3

Table 2. Socio-demographic profile of people inserted in a liminal adjusted mobility time style

Age	Place of residence	Gender	Means of transportation	Occupation	Family	Work place
32	Montijo	W	Bus	Telecommunications technician	Couple with a baby	Lisbon
34	Setúbal	W	Train	Human Resources assistant	Isolated	Lisbon
29	Setúbal	W	Train	Roaming technician	Couple with a young child	Lisbon
42	Azeitão	W	Car and train	Solicitor (private company)	Divorced couple with two grown-up children	Lisbon
38	Palmela	W	Car and train	Economist	Couple with a teenage daughter	Lisbon
33	Sesimbra	W	Car	Administrative assistant and PhD student	Couple with a daughter of school age	Lisbon
36	Moita	M	underground, ferry and train	Secretary	Couple with a son of school age	Lisbon
56	Oeiras	M	Underground and train	Rail infrastructure manager	Couple with an adult son	Lisbon
30	Cascais	W	Car	Product Manager	Couple, expecting a child (six months of pregnancy)	Lisbon
32	Alverca	W	Train	Secretary	Couple with a baby and a young child	Lisbon

(*continued*)

Table 2. (*continued*)

Age	Place of residence	Gender	Means of transportation	Occupation	Family	Work place
24	Almada	W	Train	Call Center Operator	Isolated and pregnant (2 months of pregnancy)	Lisbon
34	Amadora	M	Car	Human Resources Assistant	Couple with two sons of school age	Lisbon
31	Sintra	W	Train	Commercial Assistant	Couple with no kids	Lisbon
48	Sintra	W	Car	Teacher	Couple with two adult sons	Loures
40	Loures	W	Car and train	Health and Safety technician	Couple	Lisbon
31	Mafra	M	Car	Computer technician	Couple with a small baby and a daughter of school age	Lisbon
36	Barreiro	W	Train or ferry	University lecturer	Couple with a son of school age	Lisbon
29	Alcochete	W	Car	Product Manager	Couple with two young children	Lisbon
35	Lisbon	F	Car	Product Manager	Couple with two children of school age	Lisbon
36	VF Xira	F	Train	Secretary	Couple with a son of school age and a baby daughter	Lisbon

(*continued*)

Table 2. (*continued*)

Age	Place of residence	Gender	Means of transportation	Occupation	Family	Work place
36	Entroncamento	M	Train	Portuguese Railway Company employee	Couple with a daughter of school age	Lisbon
38	Póvoa Varzim	W	Car	Accountant	Couple with a daughter of school age	Porto

Table 3. Socio-demographic profile of people inserted in a liminal extempore oriented mobility time style

Age	Place of residence	Gender	Means of transportation	Occupation	Family	Work place
31	Odivelas	M	Car	Salesperson	Divorced	AML
32	Póvoa Varzim	M	Car	Medical doctor	Isolated (his girlfriend lives in Lisbon)	Porto
32	Lisbon	W	Car	Human resources director	Isolated	Loures
42	VN Gaia	W	Car	Teacher	Couple	VN Gaia
26	Póvoa Varzim	W	Car	Call center operator	Unmarried couple	Porto
58	Azeitão	M	Car	Businessman	Couple	Setúbal
43	Maia	M	Car	Salesperson	Couple	Porto
39	Seixal	W	Car	Driver and Managing Partner of a transportation company	Divorced with a daughter of school age	Seixal
38	Lisbon	M	Car	Marketing Director	Couple with son of school age and a baby	Lisbon

References

1. Schwanen, T., Wang, D.: Well-being, context and everyday activities in space and time. Ann. Assoc. Am. Geogr. **104**(4), 833–851 (2014)
2. De Vos, J., Schwanen, T., Van Acker, V., Witlox, F.: Travel and subjective well-being: a focus on findings, methods and future research needs. Transp. Rev. **33**(4), 421–442 (2013)
3. Wang, D., He, S. (eds.): Mobility, Sociability and Well-being of Urban Living. Springer, Heidelberg (2016). https://doi.org/10.1007/978-3-662-48184-4
4. Cohen, S.A., Duncan, T., Thulemark, M.: Lifestyle mobilities: the crossroads of travel, leisure and migration. Mobilities **10**(1), 155–172 (2015)
5. Pordata: Base de Dados Portugal Contemporâneo. https://www.pordata.pt/. Accessed 01 July 2019
6. Melo, C., Vala, F.: Movimentos pendulares e organização do território metropolitano: distâncias e proximidades nos sistemas metropolitanos de Lisboa e Porto. Revista Portuguesa de Estudos Regionais **5**, 5–34 (2004)
7. Portas, N., et al.: Políticas Urbanas II: transformações, regulação e projectos. FCG, Lisboa (2013)
8. Instituto Nacional de Estatística Proporção de utilização do automóvel nas deslocações (%) por local de residência (2011). https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0007135&contexto=bd&selTab=tab2. Access 01 July 2019
9. Cresswell, T.: Towards a politics of mobility. Environ. Plann. Soc. Space **28**(1), 17–31 (2010)
10. Zhang, J.: Revisiting residential self-selection issues: a life-oriented approach. J. Transp. Land Use **7**(3), 29–45 (2014)
11. Montulet, B., Hubert, M., Huynen, P.: Etre Mobile. Vécus du temps et usages des modes de transport à Bruxelles. FUSL, Bruxelles (2007)
12. Sheller, M., Urry, J.: The new mobilities paradigm. Environ. Plann. A **38**(2), 207–226 (2006)
13. Eurostat: Estatísticas sobre o Transporte de Passageiros. http://ec.europa.eu/eurostat/statistics-explained/index.php/Passenger_transport_statistics/pt. Accessed 01 July 2019
14. Comissão Europeia: Roteiro de Transição para uma Economia Hipocarbónica Competitiva em 2050.:http://eur-lex.europa.eu/legal-content/PT/TXT/HTML/?uri=CELEX:52011DC0112&from=EN. Accessed 01 July 2019
15. Eurostat: Consumption of Energy. http://eur-lex.europa.eu/legal-content/PT/TXT/HTML/?uri=CELEX:52011DC0112&from=EN. Accessed July 2019
16. Eurostat: Renewable Energy Statistics. http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics. Accessed 01 July 2019
17. Jensen, M.: Defining Lifestyle. Environ. Sci. **4**(2), 63–73 (2007)
18. Zhang, J.: The life-oriented approach and travel behavior research. In: 14th International Conference on Travel Behaviour Research, Windsor, UK, 19–23 July (2015)
19. Flamm, M., Kaufmann, V.: Operationalising the concept of motility: a qualitative study. Mobilities **1**(2), 167–189 (2006)
20. Lucas, K., Jones, P.: Social impacts and equity issues in transport: an introduction. J. Transp. Geogr. **21**, 1–3 (2012)
21. Cockerham, W., Rutten, A., Abel, T.: Conceptualizing contemporary health lifestyles: moving Beyond Weber. Sociol. Q. **38**(2), 321–342 (1997)
22. Hagerstrand, T.: Dynamic Allocation of Urban Space. Saxon House, Farnborough (1975)
23. Harvey, D.: The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change. Blackwell, Oxford (1989)
24. Oliveira, C.S.: Mobilidades em português: paradigma, cultura e potencialidades. In: Araújo, E., Ribeiro, R., Andrade, P., Costa, R. (eds.) Viver emla mobilidade: rumo a novas culturas de tempo, espaço e distância, pp. 10–21. CECS, Braga (2018)

25. Araújo, E.: Questões de mobilidade, tempo e sustentabilidade. In: Araújo, E., Ribeiro, R., Andrade, R. Costa, R. (eds.) Viver em |a mobilidade: rumo a novas culturas de tempo, espaço e distância, pp. 146–160. Centro de Estudos de Comunicação e Sociedade, Braga (2018)