(AUTO)MOBILITIES AND SOCIAL IDENTITIES IN PORTUGAL

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Abstract   Mobility is an expression of modernity, and is considered by some an analytical paradigm of contemporary western society (Sheller and Urry, 2006). Stratification, on the other hand, is a classic sociological dilemma. In this article we propose to look at mobility patterns from the point of view of the social composition of their actors in the Portuguese context. Based on the results of PhD research on Portuguese metropolitan mobility patterns, we explore the relationship between mobility and social classes, with particular emphasis on the choice of automobility. We identify different mobility profiles, mainly according to the means of transport and the socio-professional identity of the studied population.

Keywords   mobility, automobility, middle class, metropolis.

Resumo   A mobilidade geográfica é considerada por alguns autores um paradigma analítico da sociedade ocidental contemporânea (Sheller e Urry, 2006), o qual ilustra diversos problemas sociais marcantes. Por outro lado, a estratificação social é um dilema clássico cujo estudo permanece central no pensamento sociológico. Neste artigo debruçamo-nos sobre os padrões de mobilidade nas metrópoles portuguesas da perspectiva dos seus atores. Com base nos resultados de uma pesquisa de doutoramento exploramos a relação entre mobilidade geográfica e classes sociais, com particular ênfase na utilização do automóvel particular. Identificámos diferentes perfis de mobilidade de acordo com o meio de transporte e a identidade socioprofissional da população estudada.

Palavras-chave   mobilidade, automobilidade, classe média, metrópoles.

Resumé   La mobilité est une expression de la modernité, et elle est considérée comme un paradigme d'analyse de la société contemporaine occidentale (Sheller et Urry, 2006). En outre, la stratification est un dilemme sociologique. Dans cet article, nous vous proposons de regarder des modèles de mobilité du point de vue de la composition sociale de ses acteurs dans le contexte portugais. Sur la base des résultats d'une thèse de doctorat, nous explorons la relation entre les classes de mobilité et les classes sociales, avec un accent particulier sur le choix de l'auto-mobilité. Nous avons identifié différents profils de mobilité en fonction principalement des moyens de transport et de l'identité socio-professionnelle de la population étudiée.

Mots-clés   mobilité, auto-mobilité, classe moyenne, métropoles.

Resumen   La movilidad es una expresión de la modernidad, y es considerada un paradigma analítico de la sociedad occidental contemporánea (Sheller y Urry, 2006). Por otro lado la estratificación es uno de los dilemas clásicos de la sociología. En este artículo nos proponemos estudiar los patrones de movilidad desde el punto de vista de la composición social de sus actores.

Con base en los resultados de una investigación doctoral sobre los patrones de movilidad metropolitana en Portugal, se explora la relación entre la movilidad y las clases sociales, con especial énfasis en la elección de automóvil. Logramos identificar diferentes perfiles de movilidad principalmente según el medio de transporte y la identidad socio-profesional de la población estudiada.

<u>Palabras clave</u>   movilidad, auto-movilidad, clase media, metrópolis.

The mobility paradigm

Geographical mobility has long been known to be a feature of human groups, but its expression in contemporary society takes on unexpected features that strongly impact social structure. "The concept of mobilities encompasses both the large-scale movements of people, objects, capital and information across the world, as well as the more local processes of daily transportation, movement through public space and the travel of material things within everyday life" (Hannam, Sheller and Urry, 2006: 1). Focusing on the issue of the movement of people, we can say that while it is a mass phenomenon that involves social issues, it is also a sociological problem that entails fundamental concepts like time and space and representations about motion. Mobility is not just displacement and transaction; it also involves awareness of the ability to move and ultimately the will to do so. By developing technology, modern societies facilitate an enlargement of the range of possible ways in which to move, and mobility has therefore increased and should be seen as possessing a broader scope. Mobility involves such different aspects of the individual and the social world that some authors have proposed as an analytical paradigm that one should use the term 'mobilities' instead of 'mobility' (Sheller and Urry, 2006).

International research on mobility has greatly increased in recent years and there are now research centers and networks that are fully dedicated to this theme, such as the Centre for Mobilities Research at Lancaster University, the Mobilities Research and Policy Center at Drexel University, and the Cosmobilities network. In Portugal, however, this is a recent debate and still closely linked to urban issues. Data on Portuguese mobility characteristics are scarce, but there is evidence of important changes in recent years. Portuguese society has changed quite quickly over the last few decades. One such change has been the growth in private automobile ownership. The population census reveals that between the 1990s and the beginning of the current decade, there was a modal inversion from collective to individual transport, mainly the car (26% in 1991 — 54% in 2011, (Statistics Portugal, 2002; 2012() in the two metropolitan areas (Lisbon and Porto, which together concentrate 42% of the national population). Portuguese social and historical specificities mean our society is still promoting the use of the car. At a time when several European

capitals are already green cities, mobility is not yet a social and sociological concern in this country.

Thinking automobility

Dominant in western metropolises since mobility became part of everyday lifestyles, the automobile offers the best conditions for moving from one place to another from an individual perspective, but negatively impacts the collective. Ferrão (2004) points out that since the Second World War we have changed from a "walking city" to an "automobile city". The individual advantages of using cars are such that the number of drivers has not stopped growing, thus supporting the development of a better network of services and routes (Dupuy, 2004).

The use of private cars is a major factor for mobility growth and a wide range of reasons have contributed to its increase in Portugal (Oliveira and Cruz, 2008). The automobile allows people to more efficiently manage their time and deal with unforeseen events. The perception of comfort and security are not negligible factors, but speed is one of the main reasons for its adoption by commuters (Oliveira, 2011).

The car is now part of the urban landscape and is a growing presence in the countryside. The popularization of the automobile means that its use significantly influences that of space, including the creation of new spaces and with a major effect on urban management and planning. The United States of America played a key role in the development of a distinctive automobile culture by providing experiences, pictures and literature that have become icons for the car. Building freeways has become a metaphor of progress in the US (Urry, 2004), and other countries (Portugal is one) have imported these social representations. The car plays a central role in the history of the contemporary world at various levels of analysis, and has always represented much more than an object whose pure definition simply permits motion in space while reducing the time spent travelling.

The automobile as a symbol of status

The car combines two independent features: flexibility and compulsivity. Fundamental to undertaking many urban social activities, it permits high levels of sociability. At the same time the automobile imposes constraints. It has: enlarged commuting movements; increased distances to local places of supply and leisure activities; separated groups; and coerced individuals into unpleasant and unhealthy environments, such as traffic jams. Instead of promoting individual flexibility it has generated great stress that has in turn led to major changes in the experience and perception of time (Araújo, 2004). Contrary to the established social representation, mobility does not automatically generate accessibility; instead it creates an illusion of accessibility through large-scale movements across great distances. This combination of factors makes the car central to an active reconfiguration of the modes of metropolitan sociability that is so striking it creates a group of

"car-excluded" people. In an automobile society, what place is left for the outsiders — children, teenagers, the elderly, the disabled and non-drivers? Not to mention the pedestrian — a role that every individual (even drivers) plays every day, but in which, like the image of a rider without a horse, the individual is ultimately perceived as an obstacle to the perfect traffic flow. All these elements result in an invisible car culture that is prevalent in large urban centers, where people who do not drive, either permanently or temporarily, are excluded. In this sense, mobility and automobility are important components of the process of social exclusion and inclusion.

The automobile is associated with a wide range of symbolic references, such as freedom, speed, home, family, security, desire, professional success, masculinity and strength. After the habitat, the car is the main commodity that provides individual *status* (Sheller, 2004). Mobility has increasingly shaped urban space worldwide, although there are important social and cultural differences between countries that are a determinant factor in the ways of life in different urban environments (Hass-Klau, 1990). In this sense mobility incorporates national and regional lifestyles and reflects cultures. Generally speaking, western societies are automotive societies, characterized by an automotive time and space that is commonly reflected in daily routines in which car use is associated with concepts of *good life* and the pursuit of an active and participatory citizenship, and is perceived more as a necessity than a negative practice, despite efforts made by environmental movements to promote car-free urban spaces.

The car is also one of the protagonists in the game of social identities. Ultimately one of the products on which modern economics are based, it simultaneously has a major impact on both the production and introduction of new values and their reproduction and dissemination. A key indicator of the improvement in Portuguese living conditions in recent decades and before the current crisis was the renewal of the automobile park: more recently, the decline in car sales has been an important sign of the global economic crisis.

Portuguese society: social structure and social mobility

Portuguese social structure is shaped by a peculiar intersection of lines that combine advanced features with remnants of tradition (Viegas and Costa, 2000). Where birth rates, fertility and aging, the importance of the urban middle classes and the high rate of female employment (one of the highest in Europe) are concerned, Portugal is close to European society standards. The differences appear in levels of education and training, which are far below the EU average, and a high level of social exclusion, with an extensive "new poverty", composed of individuals who subsist below the minimum standard of living (Capucha, 2000). Structural changes in economic sectors of activity have resulted in a considerable rearrangement of the Portuguese class structure over the last forty years. Speaking to this subject, in the 1980s Ferrão (1985: 568, author's translation) said that:

the evolution of the Portuguese social structure over the past two decades allows us to highlight several lines of continuity: a decline of classes and fractions of classes related to agriculture, relative stagnation in the industrial sector, outsourcing, female employment, urbanization and concentration of more than 70% of the population along the coast are some of the most commonly mentioned aspects. Moreover, the magnitude of the changes that have occurred since 1974, with the outbreak of the April revolution, the development of the international crisis and, as a consequence, the redesign of Portugal's place in the international division of labor, may help hide possible lines of continuity that have survived throughout the 1970s.

A study of attitudinal class profiles in Portugal has shown great differences between Portuguese social classes. For example:

> the value assigned to professional fulfillment […] in the upper classes […] is far greater […] than that attached to remuneration, especially among the employed new bourgeoisie / newly employed bourgeoisie (63% vs 32%). The author also found empirical evidence in this study that "new bourgeoisie employed symbolically continues to devalue the money" in this class and the value more internalized the "duty" (43%), followed by "ambition" (30%). In the opposite sense, the "need to make a living" prevails among all other classes according to the order they occupy in the stratification scheme adopted, exceeding 50% among manual workers. (Cabral, 1998: 403, author's translation)

The author believes that the basis for some of these differences is the role the weight of educational capital plays in defining the kind of class positions that can be identified in Portuguese society. Also of interest are the differences in class attitudes towards social success: while the upper classes tend to explain professional success by work and study, the lower classes tend to attribute success to luck and social influence.

One important debate in contemporary Sociology is the extent to which it is still meaningful to talk about class relations and class divisions within the context of the changes in social structure in recent decades (Costa et al., 2000). As we discuss below, these days it is difficult to operationalize the concept of social class based only on traditional items linked to property and income. However, the more Weberian interpretations of the concept have long pointed out how complex it is. From our perspective, the concept of social class is still important to understanding and characterizing social reality.

The (new) middle class(es)

It is difficult nowadays to speak of one middle class, in that this social composition includes so many varieties of occupation and different levels of income and education. We can hardly consider that a secretary who receives little more than the minimum national wage and a computer consultant who is paid at worst three or four times as much belong to the same social class. Yet they can effectively both be

situated in the middle class, given that some researchers identify similarities in lifestyles, values and aspirations between people at quite different economic and educational levels. Estanque (2003) distinguishes a real from a virtual middle class, joined together in their practices by what he calls a "middle class effect", which is the symbolic referential of living standards of the middle class pursued by individuals who objectively do not fit within it.

The notion of reflexive condition (Lash, 1994) is also of interest in understanding this effect, inasmuch as while some groups and classes have lost their class consciousness, their sense of belonging may have become more diffuse.

Portuguese social structure is characterized by the substantial increase in professionals and technical workers since the 1990s. As we can see from the last population census (Statistics Portugal, 2012), this characteristic is now one of the most striking features of the class structure in Portugal, despite the recent economic and social crisis. The growth of this new middle class is taking place in parallel with other processes such as the progression of university education, the modernization of the economic system, the rise of the tertiary sector and urbanization. The symbolic role played by this group of professional technicians in the production and dissemination of new lifestyles and cultural values within the wider middle class is remarkable.

Empirical study

Methodology

We studied daily mobilities in the two Portuguese metropolitan areas (Lisbon and Porto) from the perspective of the everyday uses of time and space by their citizens. We use the term "mobilities" rather than "mobility", because our application of the concept included both the physical movements and the virtual connectivity (Sheller and Urry, 2006) of inhabitants and users of the two metropolitan areas. Physical mobilities were measured by extent (within and outside municipalities, and by distance) and duration. Virtual mobilities were approached through actors' uses of technology for connectivity, plasticity and simultaneities in the daily construction of their social life (Flamm and Kaufmann, 2006).

The data presented in this paper are the partial results of a PhD research project. We adopted a methodological approach that involved combining quantitative and qualitative techniques: a survey, and in-depth interviews. We argue that complementarity is essential to the study of Portuguese mobility patterns, as this object of study is simultaneously vast and full of subjectivity. There is little national data about Portuguese mobility, so it was important to obtain extensive information that allowed us to frame the problem better. At the same time we assumed that mobilities are deeply connected with options, lifestyles and representations and that an intensive approach was therefore valuable.

In this paper we analyze part of the data collected by means of an online survey, which we applied to active inhabitants and/or users of one of the two

metropolitan areas, and from 31 in-depth interviews. The survey included 1968 valid cases, and although not fully representative of the Lisbon and Porto metropolitan areas, the sample is a large one and was broadly disseminated among both businesses and households. The data from the survey were analyzed using univariate, bivariate and multivariate analysis with the support of the SPSS computer tool (version 17). We used correspondence analysis (Anacor) for bivariate crosstabs. For the multivariate analysis we employed both a multiple correspondence analysis (ACM) and a cluster analysis.

Results

The average age of the survey sample was 39 years, the median 37 and the mode 32. The standard deviation is 8.5. The younger (18 to 25 years) and older (over 55 years) groups are poorly represented. There is an almost equal representation of both sexes (50.4% male and 49.6% female).

The respondents were mostly located in the 29% minority of the national population with higher qualifications identified in the most recent population census (Statistics Portugal, 2012), and this sample is therefore not representative of the national population in terms of education. Almost half the sample had completed higher-level studies: 38% were graduates and about 18% had completed postgraduate studies. Additionally, 22% of our sample were workers who were also currently studying, which represents a major investment in lifelong skills and training. Of these, 62% were university students.

The variable 'occupation' was coded following the collection of data according to level 2 of the National Classification of Occupations — CNP.[1] This allows more accurate classification than level 1, which only corresponds to 10 major areas. Level 2 permits a correspondence to common-sense designations like teacher, manager and engineer. The dominant group is composed of experts in intellectual and scientific occupations (55%), primarily managers, engineers, system analysts, quality technicians and teachers.[2] The dominant sector was the tertiary (99%). This is a highly qualified tertiary identifiable with the concept of symbolic analysts (Reich, 1993), notwithstanding the still significant presence of a more traditional tertiary (about 10%) made up of office workers, retail workers and secretaries.

This distribution is quite different from data for the country as a whole (Statistics Portugal, 2011), in which experts in intellectual and scientific occupations represented only 14% of the employed population, so this is a specific segment linked mostly to the pursuit of intellectual and scientific professions.

Nationally speaking, the Lisbon area has the largest concentration of professional and scientific intellectuals, who lead the construction of the knowledge

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1   We used the National Classification of Professions, for more information please access — *Classificação Internacional Tipo de Profissões de 2008* (CITP/2008).
2   The percentage of missing values in this variable (26%) is remarkable, and may have caused bias in the results, so they should be interpreted cautiously.

Table 1   Multivariate regression of factors connected to the transport modal choice

Multivariate regression		
Variables	Q2	Sig.
Age	6.87	0.009
Sex	3.70	0.054
Commuting time	54.60	0.000
Household	11.68	0.001
Income Level	12.70	0.000
Education	NS	NS

Source: PhD research.

economy (Cardoso, 2009), as well as the largest concentration of ICT professionals. Porto ranks second in both respects (Nunes, 2004).

Turning to income level, we are in the presence of a population that tends to earn above the national average. The minimum wage in Portugal was (at the time of our study) 485 Euros (before social security contributions) per month, and 57% of the population's monthly wage was in the 700-900 Euro range (Tese, 2010). A relatively high percentage (25%) of our sample earned more than 3,000 Euros/month, which corresponds to about 3 national minimum wages per person (almost 100% of the sample were double-income households). The group of people with 2,000/3,000 Euros/month represents 20% of the studied population.

The variables 'qualifications', 'occupation' and 'income', which were quite distant from the average for the Portuguese population, presented particular features that allowed us to link this sample to a new middle-class segment (Estanque, 2003).

After the first univariate statistical analysis, we analyzed the connections between variables and dimensions according to our analytical model. We used a multivariate regression to capture patterns of use of the different modes of transport.

This regression demonstrated a connection between several factors and the modal transport choice. Commuting time is positively related with the form of transport: public transportation users spend more time travelling than those using private transport.

There is also a positive relationship with gender; women use public transport more. On the other hand, older people, larger households and higher-income individuals are less likely to choose public transportation.

We then wanted to look for patterns of use and choice of transport and to confront the socio-professional dimensions with the mobility profile. Most of our variables were nominal, so we chose to apply an MCA (multiple correspondence analysis).

MCA is a descriptive or exploratory technique constructed to analyze the extent of the correspondence between rows and columns of two or more variables. The results are similar to those of factorial analysis, but allow use of nominal variables in the analysis. Multiple correspondence analysis can be seen as a method for decomposing the total chi-square (chi-square = inertia / total N), identifying a

Table 2   Summary of the MCA model applied to the respondents of the survey

Model Summary			
Dimensions	Cronbach's alpha	Variance accounted for	
		Total (Eigenvalue)	Inertia
1	0.828	4.153	0.346
2	0.680	2.656	0.221
Total		6.809	0.567
Mean	0.770 *	3.404	0.284

Note: * — Mean Croanbach's Alpha is based on the Eigenvalue.

Source: PhD research.

Table 3   Discrimination Measurements of the MCA model

Discrimination measures			
Variables used	Dimension 1 Mobility patterns	Dimension 2 Socio-professional profile	Mean
Frequency of public transport usage	0.770	0.032	0.401
Transport used	0.925	0.104	0.515
Main reason for using the mode of transport	0.895	0.284	0.589
Reason for changing transport	0.161	0.050	0.105
Time spent commuting	0.187	0.010	0.098
Activities during travel	0.654	0.070	0.362
Occupation	0.046	0.230	0.138
Level of education completed	0.027	0.379	0.203
Level of household income	0.079	0.581	0.330
Number of elements of the household	0.062	0.267	0.164
Number of people who contribute to the income	0.050	0.372	0.211
My car is…	0.297	0.277	0.287
Total active	4.153	2.656	3.404

Source: PhD research.

smaller number of dimensions in which the deviations between observed and expected frequencies can still be represented. This is similar to the objective of factor analysis, in which total variance is decomposed until one reaches a smaller representation of the variables that permit a new rebuild based on the most relevant variables. As in factorial analysis, the dimensions are extracted according to their relevance to an explanation of the inertia. The maximum number of dimensions or auto-values that can be extracted from a two-way table is equal to the minimum number of columns. If one chooses the maximum number of dimensions that can be extracted, it will be possible to exactly reconstruct all the information contained in the table. There is a direct relationship between the distance between the points in two-dimensional space and their similarity in terms of distribution. The objective is that all points be well represented by the respective solution — i.e. that their distances to other points can be satisfactorily approximated.

After several trials we decided to retain the more discriminant MCA variables, which are presented in table 3.

Where consistency is concerned, we can see that dimension 1 is highly consistent, with a Cronbach's alpha of 0.82, while the consistency of dimension 2 is weaker, with just 0.68 explaining lower variance. Income is the main measure of discrimination in this dimension. We believe that a possible reason for the weaker consistency of dimension 2 may be the overall homogeneity of the sample, meaning that despite the differences in social characteristics this population has a single major mobility profile. The results of the univariate analysis of car usage are consistent with this interpretation.

The MCA indicated the existence of some convergence regarding the dimensions 'socio-professional profile' and 'mobility patterns'. It is possible to identify an initial dimension linked to the variables characterizing mobility patterns, such as transport choice, activities while commuting, and use of public transport; and a second one composed of variables involving social identity and ways of life — mainly income, education, size of the household, and occupation. The variable 'My car is…' discriminates in both dimensions, but we opted to retain it in dimension 2 because it is a social representation associated with automobility.

Turning to some of the MCA variables used in univariate and bivariate analyses, we see that more than half (57%) only use a "private car". Adding the 19% that use a mix of "public and private transport", we find that almost 80% of our population used a car for daily travel to work, as opposed to less than 20% using "exclusively public transport".

Representations of the car were addressed through one question in the survey — "My car is…" — in which several items were available and the respondents had to choose the one closest to their own representation of their car. The car is mainly represented as an instrument that is useful for family comfort and quality of life; and then as essential to mobility ("it is only with it that I go where I want, when I want") for 22% of the respondents; and as "essential for my job and career" for 14% of the sample.

In general, this is a very motorized population, with only 15% using a car less than once a week. The main reason for using a car that often was mobility needs, first with personal goals (15%), then due to a lifestyle that is incompatible with public transport usage (14%), and finally because of professional requirements (12%).

We decided to perform a k-means cluster to identify population groups according to their mobility profile and socio-professional characteristics. We chose k-means because the hierarchical analysis assumes the default listwise exclusion, which means that all cases with missing values are automatically excluded. In our sample that would mean retaining only 47% of cases for analysis. We obtained two clusters, defined primarily by the variables that characterize their mobility profile.

The variables that contribute most to differentiating the two clusters are the 'transport used', 'time spent', 'occupation', 'gender', 'age' and 'income level'. 'Level of education' and 'distance home-work' do not substantially differentiate the two groups.
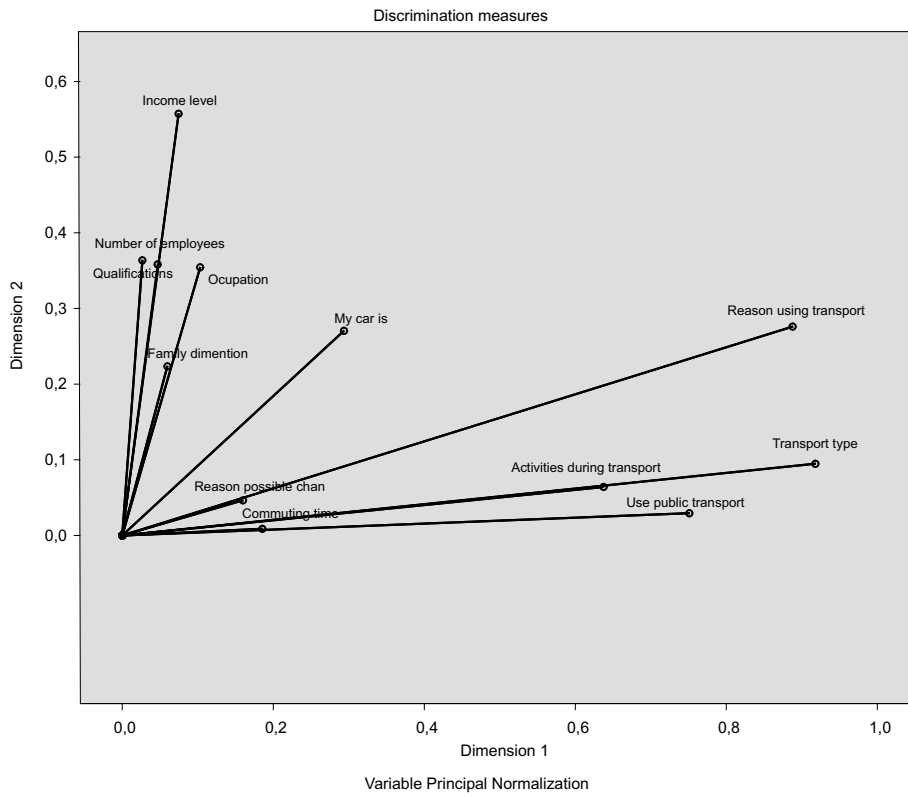
Figure 1   Discrimination Measurements of the MCA model

Source: PhD research.

Table 4   Transport used for commuting

Transport used for commuting		
Transport	Frequency	Percentage
Just car	1031	57.2
Just motorbike	20	1.1
Just public transports	330	18.3
Company bus	6	0.3
Public + private transport	340	18.8
On foot / by bike	77	4.3
Total	1804	100.0

Valid answers: 1804 — 91.5%
Missing answers: 167 - 8.5%

Source: PhD research

Cluster 1 is characterized by grouping the elements that take more time to travel from home to work, making more use of public transport and combined transport modes. This is why we call it the *driven cluster*. It is a younger cluster, with more women than men and a greater presence of people with lower incomes. In terms of occupation, this cluster contains higher percentages of technicians and administrative staff.

Cluster 2 groups the faster commuters, especially those that use motorized and private vehicles. It is the *drivers cluster*. This is an older cluster, with more men than women, higher incomes, and also a higher percentage of skilled intellectual and scientific occupations.

Discussion of results

This is a motorized population, strongly expressing the national trend towards increased use of private automobiles. However, it can still be grouped according to mobility profile, which is largely defined by the choices made in terms of mobility patterns.

We found a strong relationship between mobility profile and social identity. The use of public transport is feminized, in contrast to male choices in which there emerge a more critical attitude towards public transport and a higher valorization of the comfort and speed provided by a private car.

When one tries to more accurately characterize livelihoods according to mobility patterns, the profile that is more focused on the private car has the highest incomes and the more skilled occupations, which seems to indicate a positive relationship between social class and mobility patterns. In other words, a higher social position appears to correspond to a mobility strategy focused on the use of private transport.

We also have found evidence of a relationship between social position and relevant geographical mobility patterns. In this respect, a higher degree of physical mobility seems to be related to a specific differentiated social positioning within the so-called new middle classes.

The inflexibility of public transport vis-à-vis the versatility of the car is not only concretely experienced but also socially conveyed in a complex scenario of micro-coordination of tasks and time management (Castells et al., 2006), which contrasts individual mobility needs with the mobility options offered by public transport.

There is a notable differentiation between mobility models that express the latent tension between collective and individual in contemporary society, but as far as we could see this tension exists more in terms of dichotomies like frugality/consumerism and immobile/mobile than as a real representation of collective values and social representations opposed to any individualism. This became obvious from the way that car was represented — much more as a fundamental element of a good family life than as a personal artifact.

There is a positive association between class and mobility, in the sense that higher social positions (which can be decomposed into higher incomes and more prestigious occupations) match greater mobility.

There can be no doubt that today the potential for individual mobility in the sense employed by Kaufmann[3] is far superior to the past, but this is not happening in the same way for everyone. Moreover, our results point to a possible intersection between issues such as social and symbolic capital (and even power mechanisms) in the sense used by Bourdieu, and mobility in terms of both profiles and choices.[4]

Automobility appears as a characteristic of mid-high social position — i.e. mobility emerges as an axis that defines the upper middle class. In retrospect, we can say that during the process of the social homogenization of the Portuguese population — the process of growth and expansion of the middle classes through intergenerational social mobility (Viegas and Costa, 2000) — there has also been a motorization process. Mobility can thus be an important element in a more fruitful interpretation of the social composition of Portuguese metropolitan areas and a deeper understanding of the processes of social exclusion and inclusion.

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3 The operationalization of the concept of individual potential mobility (Flamm and Kaufmann, 2006) can, in our view, be enriched if one takes the influence of the position of the individual in terms of social stratification into account in order to typify attitudes towards mobility and use of technology.

4 The relationship between power and mobility is studied by Mimi Sheller.

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