The journey of words

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Or the words of journeys. It is sometimes interesting to reflect on what we call things and on the identity of concepts which we take for granted, which we use so often that they seem obvious to us. Bearing in mind the extent to which we are conditioned and bound by words, often unwittingly, it is a good idea to stand back and reconsider them from time to time.

This is not an easy task. Each word articulated by our thoughts leads us to one or several concepts that characterise and explain it. Each word contains a history of our collective thought that evolves with use and with the variation in its context of use.

Following the journey of a word from its origin to its current provisional destination gives us a better knowledge of the way in which it conditions our thoughts and therefore our actions. Words are not neutral in political action—they contain ideology and are inscribed with ideas.

In this article I wish to make a modest exploration of three terms that we often use in the field of mobility, but I warn the reader that it will be a fairly unscholarly journey with little historical and etymological rigour. My only excuse is that the first historical dictionary of the Spanish Royal Academy, a gargantuan task involving research into the mutations of 150,000 words of the Spanish language, will be completed at the earliest fifteen years from now.

The brief exploration that I propose may help to understand the changes that are taking place in the landscape of mobility and in our approach to problems of mobility, and to identify the words that facilitate or hinder the transformation of this human activity, which is currently in crisis.

Mobility: More than traffic

The first stop on the journey is the concept of "mobility". The *Diccionario de la Real Academia de la Lengua Española* defines the word as "the quality of being mobile", and the *Diccionario del uso del español* actual defines it as the "ability to move".[1]

The brevity of these academic definitions contrasts with the wide range of uses and meanings given to the word. From labour mobility, which affects the changes in the location of jobs, to mobility as a system of journeys, the word travels quickly to a new semantic status.

Experts in transport and urbanism have used the concept of mobility in Spain for over thirty years, particularly in the field of urban planning,[2] but its meaning or its relation to other words such as *transport*, *traffic* and *circulation* have seldom been specified. Some of the seeds of its current use were sown in the

development of the household surveys of point of departure-destination, which were initially "transport surveys" but were later given the name "mobility surveys".[3]

However, in the last few years the concept has gone beyond the technical sphere and has begun to be incorporated in the vocabulary of the social and economic actors, and even in daily practice, as an extension of the concepts of *traffic*, *circulation* and *transport* that were used previously. The traffic or circulation departments of some town councils and the transport departments of some authorities are now called mobility departments and there is even a Mobility Law, in the economic sphere.[4]

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[1] *Clave. Diccionario de uso del español actual*. Madrid: Ediciones SM, 1997.

[2] In 1972 the Official College of Architects of Catalonia and the Balearic Islands published a collection of articles in Barcelona under the title *Movilidad urbana*.

[3] In the first household surveys of point of departure-destination carried out in Spain, those of Barcelona and Madrid in 1974, the term "mobility" did not appear, but it was used in the second survey carried out in Madrid in 1981, whose main results were published under the expressive title *Movilidad metropolitana* (Comisión de Planeamento y Coordinación del Área Metropolitana de Madrid. Ministerio de Obras Públicas y Urbanismo. Madrid, 1982).

[4] Law 9/2003 of 13 June, on Mobility. Generalitat of Catalonia.

Of course, in many cases this involves a mere change of name that does not yet indicate the substantial transformation of the approaches, methods and organisational structure of the public administration that must be carried out in order to meet the environmental and social challenges arising from the journeys of persons, vehicles and goods. However, it does facilitate this transformation and, as I now wish to demonstrate, the change from traffic to mobility has a profound technical, social and political content whose results will be seen above all in the medium and long term.

The essential differentiation between traffic and mobility is that the latter extends the object of study of the former. The object of study of traffic was basically the circulation of motor vehicles; mobility, on the other hand, deals with the movement of persons and goods without the implicit hierarchy of the motor. Therefore, the needs of pedestrians, users of collective transport and cyclists occupy a stronger place in the analysis and proposals.

A mobility engineer and a mobility councillor do not have to orient their work in the same way as traffic engineers or traffic councillors had to. They no longer have to "solve" the problems of vehicle traffic—instead they must guarantee suitable conditions of mobility of persons and goods, in accordance with the environmental, social and economic criteria that are established.

In addition to the change in the object of study, mobility also brings about a radical change in the subject of study. Vehicle drivers are still included, but the differentiated needs of a multitude of mobility subjects are also revealed. Age, sex, social class, ethnic group and physical and mental condition involve a diversity of problems and solutions that were previously hidden under the mobility pattern of a standard, or supposedly standard, driver.

The view through the windscreen that characterised traffic analysis is transformed into a multiple and diversified view. The incorporation of the perspective of gender in the analysis of journeys, which is still met with discomfort and resistance by some, restores normality to the obvious fact that women and men have a different pattern of mobility.

The incorporation of the view of children is also revolutionary in methodological and propositional terms. Meeting the needs of autonomous journeys of children involves reforming all the assumptions on which traditional traffic engineering is based. This transformation will have as many repercussions as, or more than, the emergence of persons with disabilities in the public arena a few decades ago.

Women, children, elderly people, people with disabilities, ethnic groups, car passengers, etc. form a far wider and more diverse universe of study and demands for mobility than was traditionally taken into account in traffic studies.

The evolution of the discipline that is required is not limited to defining a new object and a new subject of study, but also involves extending the methods of analysis. Clearly, if the object and subject have changed, new instruments of analysis and data gathering will also be necessary. For example, child mobility cannot be analysed exclusively through the journeys made by children: the perceptions of danger and risk of both children and their parents or guardians is also a determining factor, and methods must be found to analyse these perceptions.

The new instruments and indicators often come up against the conceptual apparatus of traffic and transport planning because—unfortunately for some—they do not correspond to metaphors of physics, as do the theories of traffic flow, but rather to "looser" disciplines such as psychology and sociology.

Finally, the change from traffic to mobility also requires a modification of the procedures of intervention, i.e. the tools used by citizens, technicians and politicians to establish mobility policies. Whereas the traffic approach was limited to seeking solutions based on new infrastructures and the offer of more and better services, the mobility approach extends its range of measures above all to the field of demand management, i.e. towards the consideration that the number and characteristics of journeys are also the result of planning, regulation, attitudes and the management of scarcity.

The Company Transport Plans and School Route Programmes, which explore alternative solutions to daily journeys, are examples of this new approach to mobility problems. Another more general example of this is provided by the Urban Mobility Plans, whose methodology should extend the measures and policies adopted by the public authorities in comparison with those stemming from traditional traffic studies.

Forced Mobility: A term that Must be dismissed

This reflection on the structure that is required in order to introduce the concept of mobility is useful for understanding the landscape of the second stop on this terminological journey: the concept of "forced mobility". This concept referring to the set of journeys to work and education within a city or any other area has been common in the professional jargon of transport since the 1990s. It might be argued that it is a useful term for describing particular phenomena and problems of mobility, and that it involves no problems or disadvantages, but it is neither neutral nor innocent in the way it is used. It shows little coherence with its own semantic content and, as we will see below, gives priority to a set of daily journeys made by a minority of users.

The journeys that we make to our place of work or study are as "forced" as those that we make to go shopping, visit the doctor or take the children to school. Furthermore, if the aim is to indicate that they are recurring journeys, which are made systematically every weekday, the universe reflected statistically by the journeys to work and education is not unequivocal: not all journeys to work and education are in the rush hour or recurring, and not all other types of journeys are sporadic and outside the rush hour.

In order to show the true importance of journeys to work and education, one must first state that the methods for gathering data generally tend to favour these journeys. There are still classes of passengers: it seems that some are first class passengers whereas others are stowaways that do not figure in the statistical records. In fact, in the methodological diagram of many studies and surveys of mobility there are journeys that are not recognised and travellers who do not exist.

For example, children under certain —arbitrarily set—ages are not included in the figures of many surveys.[5] This means that there is a lack of comparative coherence between the surveys, and a very rich source of information is lost. To give an idea of the importance of this, the results of a household survey carried out in Menorca in 2004 showed that children under the age of 12, who had been excluded from the survey in 2000, made up over 13% of the total number of daily journeys on the island. Furthermore, their number of journeys per person per day is even higher than the average for all age groups.[6]

A knowledge of the qualitative aspects of these journeys also reinforces the importance of not excluding them. The same survey of Menorca showed that 45% of the journeys of children under the age of 12 were as car passengers, which describes a dramatic situation of double dependence or crossdependence between children and the adults who take them by car.

In recent years this tendency to exclude children has begun to be corrected in other countries too. For example, the national survey of the United States in 2001 included for the first time the journeys of citizens of 0 to 4 years of age.[7] Also for the first time, the journeys on foot were recorded precisely and in detail.

Many surveys exclude not only children's journeys but also many journeys on foot, for the arbitrary reasons that they last less than five or ten minutes and that their aim is not to travel to the place of work or study.[8] This exclusion removes from the overview of mobility a very considerable proportion of the journeys, precisely those that generate the local vitality of the neighbourhoods and set the pulse of the public space.

To gain an idea of what this exclusion involves we can recall that a person walking at a normal speed of 4.5 kph has a radius of action of 750 metres in ten minutes, i.e. they can reach any point of the their neighbourhood and its boundaries in this period. It has been estimated that two thirds of the journeys on foot in Spain have this duration.[9]

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[5] The age limit is five in the French surveys according to the model standardised by the CERTU.

[6] They make on average 3.81 journeys per day, compared with 3.63 journeys for the whole population. *Mobilitat a Menorca: dades per a la reflexió. Explotació primària de les dades de l'Enquesta de Mobilitat Menorca 2004*. Menorca: OBSAM, Institut Menorquí d'Estudis, 2005.

[7] See P.S. Hue, T.R. Reuscher. *Summary of Travel Trends. 2001 National Household Travel Survey*. Federal Highway Administration. US Department of Transportation, 2004.

[8] The only national survey carried out in Spain excludes journeys on foot of less than ten minutes. *Encuesta de Movilidad de las Personas Residentes en España. MOVILIA 2000*. Madrid: Dirección General de Programación Económica. Ministerio de Fomento, 2004.

[9] See the article by A. Sanz "Pasos adelante. Ideas para recuperar el protagonismo del peatón en la movilidad" in *Ingeniería y Territorio. Revista del Colegio de Ingenieros de Caminos, Canales y Puertos*, no. 69. Barcelona, 2004.

All these methodological biases reinforce the dominance of one type of journey to the detriment of a wider view of mobility. Sometimes only journeys of one type are visible, as in the population and housing censuses of the National Statistics Institute, which only record journeys to work and education by persons over the age of 16.[10]

Nevertheless, as stated above, if one makes an exhaustive count of daily journeys,the proportions of journeys to work and education vary between 25and 40% according to factors such as the occupation and age structure of the population.[11]

It can be argued that the longest and most disturbing journeys are generally made in private cars or generate the worst rush hours. However, placing everyone in the same bag is lacking in rigour, because the journeys to work and education are not homogeneous in the length of the journey, the form of transport or the time of day.

Indeed, using the term *forced mobility* as an analytical category involves losing the virtues of the concept of *mobility* that we have described above and returning to the narrow view of "traffic": it reduces the object of study, neglects certain subjects of mobility, applies methods of analysis that overestimate some journeys and prepares solutions aimed exclusively at certain users or forms of transport.

Sustainable mobility: A fashionable concept that can still be useful

The last stop on this journey, the term "sustainable mobility", may serve to round off this terminological exploration. It is a station that has aged rapidly because it has become a politically correct concept to which all the social, economic and political actors and institutions pay lip service, and it is difficult to specify its meaning.

Car manufacturers, petrol companies, ecologist organisations, experts and politicians use the term to a great variety of ends.

For some people, sustainable mobility means that the traffic of persons and goods will increase indefinitely, but full use will be made of the energy resources and materials and the impacts will be reduced. For others, it represents the need to reflect on the limits of our mobility, on the limits of the demand for the movement of persons and goods from one place to another, from one point of the planet to another or from one point of the city to another.

As I explained above in relation to the change from "traffic" to "mobility", the adjective "sustainable" should also lead to changes in the structure of the discipline. Sustainability now forces the experts to reformulate the object of study, the subject of study, the methods of analysis and the procedures of intervention. With regard to the object of study, sustainability widens the angle of vision of the problems of mobility, and places emphasis on relating journeys to their environmental consequences, whether local (air pollution, noise, occupation of fertile land, fragmentation of land, etc.) or general (climate change, biodiversity, exhaustion of resources, etc.). However, as we know, sustainability is not only environmental but also social and one must therefore also consider the **s**ocial consequences of the pattern of journeys: health, co-habitation, the autonomy of social groups, etc.

Having accepted this extension of the concerns related to mobility, we obviously need new methods for integrating environmental and social information within the information on journeys. Rather than adding new sections with environmental and social data and analysis to embellish the conventional traffic plans, we must develop methodologies that facilitate our understanding of the environmental and social

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[10] In the surveys of the Metropolitan Region of Barcelona the consideration of mobility is extended to journeys for work, shopping and leisure. Carme Miralles and Àngel Cebollada, "Mobilitat laboral, per compres i lleure". *Enquesta de la Regió de Barcelona 2000. Condicions de vida i hàbits de la població. Informe general*. Institut d'Estudis Regionals i Metropolitans de Barcelona.

[11] The lower figure is reflected in the British national surveys, in which "compulsory trips" (work, business and education) represent a quarter of the total, as stated on page 24 of *Focus on personal travel. 2005 Edition* (United Kingdom, Department of Transport, 2005). In the surveys of the French agglomerations, the journeys to work and education vary between 30 and 40%: 31.6% in Bordeaux, 38.9% in Toulouse (Source: *Quelle est la mobilité quotidienne des personnes dans les agglomérations?* Lyon: CERTU, 2004). In the household survey of Menorca, the sum of journeys to the place of work (26.60%) and study (13.65%) is approximately 40% of the total (Source: *Mobilitat a Menorca: dades per a la reflexió. Explotació primària de les dades de i Enquesta de Mobilitat Menorca 2004*

phenomenon of mobility. The sustainable mobility plans must therefore be conceived from a radically new perspective.

Furthermore, sustainable mobility involves an innovative requirement with relation to the subject of study. It is not sufficient to record the needs of the general population—processes of social participation must be incorporated in which everyone's voice can be heard, including those that are not normally represented in public opinion such as children and elderly persons.

This participation in the sustainable mobility plans should not be an added requirement, but rather an element that modifies the procedures and stages of work. The same can be said of the measures that arise from the proposals, which can only be implemented through the corresponding mechanisms for informing society and raising awareness.

In conclusion, as is happening with the new culture concerning water, we need a new culture of mobility that is able to meet the new social and environmental challenges. In this new culture, concepts and terms have a important role to play. They must be used to foster change rather than to disguise a policy of continuity.