

CHAPTER 14
WOMEN, TRANSPORT, CITIES SUSTAINABILITY, AND SOCIAL PARTICIPATION

MERCEDES PARDO

Public University of Navarra
Department of Sociology
Campus de Arrasodia
31006-Pamplona
Spain

Summary

Cities are currently one of the main producers of environmental problems, some as serious as climate change. Among urban activities, transport, and particularly automobile transport, is one of the most important causes of environmental impact. Public transport is encouraged as one of the priorities of cities' environmental policies. As mobility increases, transport accessibility is particularly relevant. Women both use the city intensively and present a mobility pattern different to men. The main users of public transport are women, the elderly and children. Even so, the bus transport system is designed according to a male mobility pattern. Gender perspective provides an important improvement to the transport sector that goes in favour of more sustainable cities. This chapter presents the results of an Action-Research project carried out in the city of Pamplona, Spain, aimed to improve the city public transport system from women's perspective.

Mobility: a prerequisite to social participation in modern societies

People's mobility is an important issue to research in the context of the increasing concern over city planning and management, and particularly with regard to sustainable cities. People's capacity to move from place to place, that is to say to travel, is a prerequisite to participating in urban modern societies. Life in contemporary modern societies means to carry out multiple activities related to work, family, leisure, sociability and education to mention some. The other characteristic of modern societies is that these activities are usually located in different places, which requires people to move.

Mobility varies according to societies. In modern societies, mobility can be understood as a reflection of social structure, where groups characterized as being less mobile are placed in lower social positions. Moreover, mobility provides a sense of freedom, as it is an aspect of life that people tend to think they can make choices about. However, this 'freedom' of mobility is in fact influenced by social factors, for example, "going somewhere" is a necessity or a socially imposed necessity linked to some specific ways of life. Mobility decisions are based on social criteria. Transport and mobility problems must be understood in such terms: they are social constructs, that is, products of a certain type of society.

The most important aspect of mobility has to do with daily activities, many of which are repetitive or routinized, often done at certain times and in disseminated or distant locations. Daily activities require punctuality, some level of rapidity, and coordination over all.

That is why time, space, and transport means the critical dimensions of travel. The time people use to travel depends itself on three factors:

- the available time of each passenger,
- the accessibility of public transport, and
- the number of services he or she has to take to get to the desired destination.

Most journeys use specific means of transportation. We are dependent on both the vehicle and its management. The sociological perspective emphasizes the importance of those means as facilitators of social life, and of sociability. However, many urban transport studies pay more attention to social agent's mobility, but little to accessibility. Accessibility means the ease with which people can use transport (public and private) to access their destinations, which allows for increasing mobility options and/or reduces the time required.

The spatial dimension of a journey could be defined as a distance, which varies according to time, urban planning, and transport means. But the trip characteristics (when it departs and finishes; where it starts and ends) depend on how work, leisure, services and time are organized in a particular society and how the members of a particular home divide up their schedule and responsibilities.

These three dimensions, time, space, and transport means (vehicle and coordination) contribute to the structure of our daily life. The amount of time not compromised or shared with others, and our access to transport means, condition our opportunities to move and to use and "control" space. Our free time and access to transport means govern our mobility, our capacity, in this case, to move around the city space.

Time and transport means are both resources to be used in the physical space, and conform to the capacity of a person to travel. However, space has a temporal dimension as well: it has a present, but a past and a future as well. Current city spaces are strongly affected by their history, how urban and transport structures were organized in the past (buildings, infrastructures), and how those structures are being planned for the future. In summary, the departure and arrival places in any journey have an historical dimension, imbedded in the organization of the inherited urban structure. There are three relevant characteristics of urban transport in western modern societies:

- 1) The importance of mobility over accessibility,
- 2) The exaggerated value of car transportation, and
- 3) The experts' primary focus on journeys from home to work, neglecting other mobility patterns.

Moreover, today, environmental problems associated with transport are important and need to be taken into account. Transportation is one of the main sources of environmental problems in the form of air, water, soil, noise pollution, and others. These problems exist not only on a local scale (pollution, land degradation, and urban landscape deterioration), but also on a global one (global warming). In such a context, encouraging collective transport is a priority in the management of many cities, and particularly in Europe where active policies on that issue are being developed.

Urban planning is a key issue. There is an alternative way of planning urban mobility based on the importance of accessibility: designing spaces that bring households and workplaces nearer together. In order to achieve that, an urbanism based on a multi-functional area concept must replace the dominant functional segregated space characteristic of the Athens Charter for the Restoration of Historic Monuments, adopted at the First International Congress of Architects and Technicians held in Athens in 1993.

Women mobility in cities

Despite the importance of mobility issues for managing cities for sustainable development, a great deal of mobility research presents a methodological bias: it has been done based on aggregated population characteristics, without distinguishing among social groups. As a result, the research has assumed a common pattern for the whole population, namely that of the male-adult-worker.

The sociological perspective, on the other hand, emphasizes abandoning a uniform conception of citizens. Gender, age, social class, and other qualities condition people's experiences, perceptions and spatial behaviors. Not all people

present the same mobility patterns for reasons of temporal, physical, economic, and functional limitations. Above all, however, gender differences are particularly significant.

Gender differences are relevant for transport planning, and particularly for public transport. In many places, and this is the case in Pamplona where this research has been done, transport planning is based on a pendulum mobility pattern: from home to work, and from work to home. And it is based over all on the mobility of the male-adult-worker.

In the context of Spanish culture, female mobility – adult, mother or worker, young student or elderly – presents a very different mobility pattern. Thus, the daily mobility of many female-adult-workers would be similar to the following: to leave home – to take children to school – to go to work – to finish work – to go groceries shopping – to pick children up from school – and, in some cases, to visit or take care of elderly parents. Such a pattern does not correspond to the pendulum model of the transport planning at all. On the contrary, women's pattern is more circular, based on life cycle, and the triple function of many women in our socio-economic system: productive function toward the market; reproductive function toward home; assistance function toward the elderly parents. Elder women present different mobility patterns to male in the same social condition and age as well.

When research has been done with a differentiating methodology, gender has often been the most significant variable explaining mobility pattern differences in urban space. The reason for that is mainly the traditional gender role division in the family: men social ascription to market oriented activities, and women to family reproductive ones. The differences are mainly based on frequency, motive and means of transport.

Globally, interurban women's mobility is more spatially restricted than men one. So thus, regarding daily travelling regularity out the neighbourhood, men and women patterns differ. Women do less frequent daily travelling, as a great deal of daily activities are those connected to their reproductive role – daily shopping, to take children to school – and carried out within a relative reduced location. The travel frequency has also to do with women age and the socio-economic condition. This type of mobility is mainly based on walking, so thus pedestrian urban design is an important factor to cities sustainable development.

Research in travelling distribution reveals the general model of gender role division, characteristic of our cultural context. Globally considered, the majority of women displacement is due to activities related to home maintenance and the family (shopping, health services...), which differs from the majority of men one that is distributed among work and leisure out home.

Travel distribution according to transport means reveals important differences. Most differences appear to be in the use of either public or private transport, the first one used mainly by women, and the second one by men.

The fact that women use mainly public transport (which is not designed according to women's mobility patterns) and walk has important consequences affecting limitations on women's mobility, mainly when trying to coordinate home maintenance and other activities out of the home, either work in the market, leisure, education, and others.

Women's time - which it is always rigidly structured by their responsibility for attending to other members of the family - suffers particularly from the lack of functionality of their displacing mode. Research on women's daily use of time (different in many instances from that of men) is also adding important elements to city planning and management, and particularly, to public transport. General rules present some differences in women's mobility according to socio-demographic characteristic.

First of all, the groups presenting the most contrast in term of their spatial behaviour are those located in the extremes of the socio-demographic scale. Age is an important factor in displacement frequency, frequency that progressively decreases for elderly women. In addition, the degree of formal education is significant in explaining mobility differences. Low socio-economic status women move less often to different parts of a city where they live on a daily basis than those of a higher status.

There are generational differences in women's activity patterns, which influence their main motives for travelling. Mobility due to family maintenance activities mainly corresponds to middle and older age groups, while recreational activities decrease progressively in importance according to the age, except for visits with family and friends.

Travel for work reasons has a strong relation to greater incorporation in the workforce of middle and high-class women.

Shopping travel has a strong correlation to social class as well. Even the results from different studies is controversial on this particular issue: higher-class women might relate the different mobility patterns based on liberation from certain home maintenance tasks.

Globally, the percentage of both walking and public transport trips is high among women. Age is a relevant factor in explaining the use of private automobiles, with use at its highest percentage in the interval of 25-40 years old.

The relationship between the use of public and private transport presents a high presence of low-class women using urban buses. When comparing the results for women and men in the same category of social class, the lower the social class the more sexual discrimination in automobile use.

Older and low-class women are the most disadvantaged groups. They are doubly discriminated against for their being female and belonging to groups with reduced mobility in both genders.

A general conclusion on the inadequacy of collective transport (routes, connections, frequencies, timetables, etc.) to women's specific necessities is that women spend more monetary resources (double in some cases) and more time (triple in some cases) than men on travelling.

Women proposals for public transport

Starting from the urban mobility characteristics analyzed above, a social participation process was organized with women in the city of Pamplona, in order to elaborate proposals to improve the city transport planning that was under debate at that moment.

A relevant number of proposals were defined through a qualitative methodology¹, some of which have been included in the City Transport Planning. The women that were interviewed in our project figured out proposals both focusing on their own problems but to other social groups interests as well. On the contrary, men concerned lacked mention women or children issues. Some women general proposals like those regarding new bus, safety in the streets, or accessibility issues to carry children finally will benefit to everybody. Following, it is indicated some of the women proposals, and their acceptance and implications by the City Transport Planning.

- Improving the connections between some of the outlying districts, as to move from one area to other (not very far indeed), a person had to get first to the city center to take another bus.

Women gave specific information to improve the connections not only between outlying districts and the city center, but between the outlying districts too. These proposals were based on the development of new bus routes and the extension of old routes. The City Council accepted one of these new routes and the extension of some others.

¹ Brain storming, group deliberation, in-depth interviews.

- The increase of bus timetable was other women proposal. The women that shed more concern on this issue were the younger and the older. During the week, the last bus runs too early in the evening, and this fact was a drawback to do some activities (go to the theater, cinema, etc.). As a result, old women were prevented to attend those cultural activities, as they were dependent from family automobile drivers to pick them up. Young women were concerned on the issue because there were no buses to ride to go back home on weekend nights.

Concretely, the proposal was to run the bus daily till midnight, and till four a.m. during the weekend. In addition, new night routes during the weekend have been implemented.

- Another approved proposal was to implement a single ticket for bus transfer and to enlarge the time allowed transferring.
- The improvement of the city bus stops was an important issue for the women. Some of their proposals were to develop well-designed infrastructures for rain protection, to provide more and better information about timetables and routes in every stop. Women detected the confusing information at bus stops and its misleading display. They proposed different color and letters size among other improvements. The City Transport Planning accepted the proposal and committed to personalize the information in every bus stop.

An additional problem was the confusion about changes in bus routes, because of the lackness of information related to it or the difficulty to get it.

- Another important set of proposals was those related to the functional design of the urban buses. Though women are the main users of buses, its design is not adapted to their needs. Concretely, the bar fixed in the bus ceiling to hold during the travel is too high to most of women. Old women experience great difficulties to reach to some seats because of the existence of architectonic barriers like steps. In addition, they proposed to improve the information within the bus: an informative board about what to do in the case of an accident and about the route bus stops.

The committee in charge of the City Transport Planning resolved to take these proposals into account when new buses had to be brought and to correct the present problems as much as possible.

Likewise, a conclusion was drawn from the insights of these women, that a fast alternative bus should be provided in some routes in rush hours. The City Transport Planning have included this proposal in a specific bus line.

Women proposals on pedestrian mobility

Most of the women daily mobility related to reproductive and assistance tasks is accomplished in nearby spaces, like the neighborhood itself. Women use more the public transport system because of a) their multifunctional mobility through the city; b) their displacement around the neighborhood is carried out mostly on foot; c) their specific city's cognitive map, for their space experience and knowledge.

Besides, women are the main transports of the cities: they carry trolleys, bags when they go shopping, children, and old people...(Women Urbanism Group, 1999). Nevertheless, the city urban design does not always attend these specific needs. On the contrary, too often, it does not help women to co-ordinate the daily tasks they have to face.

A sustainable city must take seriously the development of an urban and transport system that allows and encourages mobility on foot. Nowadays, in most cities, car mobility takes priority over the pedestrians.

The women who have joined this project stated the best way to do that is by planning very well the car mobility including issues like where are cars allowed to drive, their speed rate, or monitoring parking areas to avoid cars invading pedestrian spaces. Likewise, this is compulsory to design pedestrian routes in a comprehensive way in order to get quiet, safe, enjoyable streets that link such spaces like markets or parks.

Their proposals were to remove architectonic obstacles to enable disabled people displacing freely across the city, and to pay special attention to the design of sidewalk pavement in order to prevent from slipping. The traditional urban design considers sidewalks as a residue, as the space left from car use. Good locations and orientations of benches can also improve sidewalks, and by so, foot mobility.

The preservation of the city collective memory is also a relevant issue in a sustainable city, and women participating in this project claimed theirs. The importance of women identification with the city collective memory is well pointed by the philosopher Hannah Arendt: "The city is an organized memory... women are the great forgotten in History". An example of this collective memory lay in the street names. A study (IPES, 1997) carried out in Pamplona shows that only a few streets names are after women. Moreover, most of all those women names belong to saints and queens, lacking the memory of many distinguished women in other fields.

Another key point in a sustainable city is women safety in public spaces. Space is not a neutral concept. There is a direct relation between women violence and urban design. Although violence against women have a deeper, a structural basis (Pardo, 2000), the design of parks, bus stops, parking, foyers, etc., can prevent insecurity in women everyday life, improving their quality of life.

Women are preferential targets for urban violence for different reasons: their smaller body constitution compared to men, the traditional conceptualization of women as a sexual object, and their daily use of the city. That is why women perceive urban safety in a different way than men do. A safe city for women would mean a safer city for other social groups too. In that sense, women paid a special attention to the design and location of playgrounds, to make them safer for either women or children. Safety in the city must be an important issue in the development of a sustainable city.

Women participation in the development of sustainable cities

Women are very often being missed out in all spheres related to urban planning and development (e.g. in professions related to these issues, like urban planners that are outnumbered by men; in political representation; in planning departments and agencies). As a result, women often face in their everyday:

- 1) Obstructions coming from an inadequate urban design
- 2) Solutions that do not fit their needs and problems, and
- 3) Lackness of knowledge and understanding among professionals relating to how women use the urban space.

Certainly, there are differences among women and their urban experiences because of different mobility factors, economical inputs, age, etc. Nevertheless, an approach that takes into consideration women global and particular needs is needed.

The latest theoretical tendencies on women and transport (where authors like Pickup in United Kingdom, Coutras in France or Massolo in Italy stand out), focus attention on the fact that women's discrimination in urban spaces will not be solved only by the development of new policies. The reason is the social complexity of the problem, although these policies are useful and necessary. It seems to be that theoretical tendencies on urban mobility and transport in the third millennium are going to pay more attention to the environmental sustainability of urban planning and to work harder on public participation processes and on the public policies' decentralization.

This action-research project in the field of women and transport analyzed in this paper made clear the importance of women participation in the development of

sustainable cities. Throughout a participation process based on a qualitative and democratic methodology, women of very different cultural levels figured out a set of relevant proposals to improve the public urban transport and mobility on foot in the city. That is why they considered very important to achieve an equal access to participation channels in order to develop a city not only for the citizens, but also with the citizens. Correct citizen participation requests permanent channels and democratic methods to assure the right representation of the whole urban community, including women, in a fruitful way.

Related to this point, women proposals were about a greater women participation in the decisions of the city on three basic dimensions: citizenship, technical issues and policies. Concretely, women demanded participation channels in public projects (Planning, Programs and Projects), not only before but after their implementation (evaluation and control) as well.

References

- Burgos, R. (1998), The Politics of Gender in the Los Angeles Bus Riders' Union. *Capitalism, Nature, Socialism*, 9, 3 (35):75-82.
- Carlsson-Kanyama, A., A. Lindén, A. Thelander. (1997), Gender Differences in Environmental Impacts from Patterns of Transportation: A Case Study from Sweden. *Society and Natural Resources*, 12: 355-369.
- Cavanagh, S. (1998), Women and the urban environment. *Introducing urban design* (c. Greed y M. Roberts, eds.). Harlow: Addison Wesley Longman Limited.
- CE (Comisión Europea). (1992), Libro Blanco. El curso futuro de la política común de transportes: un enfoque global para la elaboración de una movilidad sostenible. Bruselas: CE.
- Coutras, J. (1987). *Des villes traditionnelles aux nouvelles banlieues: l'espace public auditoria féminin*. Paris: SEDES.
- Despres, C., D. Piche. (1992), Revisiting Knowledge and Practice: Women's Voices in Architecture and Urban Planning. *Journal of Architectural and Planning Research*, 9, (2): 91-94.
- Díaz Muñoz, M. (1989), Movilidad femenina en la ciudad: notas a partir de un caso. *Documents D'analisi Geografica* 14: 219-239.
- Droogleever Fortuijn, J. (1995), Les dones en entorns urbans i suburbans. *Documents D'analisi Geografica*. 26: 83- 95.

- Fox, M. (1983). Working women and travel: The access of women to work and commuting facilities. *Journal of the American Planning Association*. 49 (2): 165-183.
- Greater London Council. (1984-7), *Women on the Move*. London: London Strategic Policy Unit.
- Greed, C. (1997), Planning and gender considerations: the same or different? (ed. Capmany, Fundació M. Aurelia). *Proceedings del Foro internacional de planificación del territorio desde una perspectiva de género*. Barcelona: Capmany, Fundació M. Aurelia.
- Hjorthol, R. (1994), The Gendered City? An Analysis of some Aspects of Everyday Life for Men and Women in Oslo. Paper presented at *The XIII World Congress of Sociology*.
- Lynch, G. y Atkins S. (1988), The influence of personal security fears on women's travel patterns. *Transportation* 15: 257-77.
- Massolo, A. (1994). Introducción. *Mujeres y ciudades: participación social, vivienda y vida cotidiana* (compil. Alejandra Massolo) 7-39. México DF: El Colegio de México.
- Minaca, M. (1998), La carta europea de las mujeres en la ciudad. Por un derecho de ciudadanía de las mujeres. <http://habitat.Aq.upm.es/boletin/n7ammin.html>
- Miralles Guasch, C. (1998), La movilidad de las mujeres en la ciudad. Un análisis desde la Ecología Urbana. *Ecología Política* 15: 123-130.
- Northumberland Women & Children Ctre. (1998), Mujeres y accesibilidad en centros urbanos: el proyecto "Ábrete Sésamo" (Reino Unido); <http://habitat.aq.upm.es/boletin/n7>
- Pardo, M. (1998), *La perspectiva de las mujeres al plan de transporte*. Pamplona: report unpublished, for the City Council of Pamplona.
- Pickup, L. (1988), Hard to Get Around: A Study of Women's Travel Movility. *Women in Cities: Gender and the Urban Environment* (ed. Jo Little, Linda Peake y Pat Richardson). London: MacMillan Education.
- Saegert, S. (1980), Masculine Cities and Feminine Suburbs: Polarized Ideas, Contradictory Realities. *Signs: Journal of Women and Culture and Society* 5 nº 3: 96-111.

Vaiou, D. (1992), Gender Divisions in Urban Space: Beyond the Rigidity of Dualistic Classifications. *Antipode*, 24, 4: 247-262.