

Summary:

Travel Activities in Everyday Life

An analysis of women's and men's daily travel activities in Oslo

Part I. Issues, data and methods

Introduction

The issue of this report is travel activities in everyday life for women and men respectively.

During an average day a person older than 13 years of age has accomplished a little more than three journeys related to work, education, shopping, bringing children to and from kindergarten etc. Altogether the different journeys come to approximately 35 kilometres. Most of the journeys are made by motorised transport means, and people spend about one hour a day on travelling. Everyday travelling shows how significant activities in daily life are organised in time and space. The journeys link the activities together and express the different conditions and travel needs in organisation of everyday life for men and women respectively.

The everyday journeys reflect both the different types of activities, for various kinds of groups in the population, and relations between different social groups. Some of the journeys will be closely related and others will not. The implication of this fact is that for some social groups the organisation of travelling in time and space will be affected by the travel behaviour of other groups. The journeys also reflect the social distribution of different transport means. They become the tools for "compression" of time and space.

Space, time and transport means are important dimensions for everyday journeys, and will be the most significant conceptions in this report. The purpose of the report is dual and can be addressed in two questions:

1. *Do space, time and different transport means have gender-related aspects that are important for the understanding of everyday travelling?*

This part of the report consists mainly of a theoretical discussion. The purpose is to increase the knowledge about the relation between gender and the three dimensions mentioned, and to develop useful concepts for the empirical analyses of the everyday travel activities.

2. *What are the differences between women's and men's everyday travel activities related to space, time and use of transport means?*

This part of the report consists of empirical analyses of men's and women's travel activities based on data from the Oslo area.

Data and methods

The empirical analyses are based on different data sources. The most important are three travel behaviour surveys from Oslo/Akershus for the years 1977, 1984/84 and 1990/91, and a before-after survey carried out in connection with the implementation of the toll cordon in Oslo in 1990. Data from a survey in 1993 about attitudes to car use and public transport will also be used, and results from an in-depth study of the importance of the car in the organisation of everyday life, in which qualitative and quantitative data are combined. Some results from the national travel behaviour survey from 1991/92 will be used as standard of reference.

As a research method travel behaviour surveys have the same tradition as the consumption surveys and time use surveys. In travel behaviour studies the number of journeys on the day before the interview is registered; where they start and end, length, time use, the purpose of the journey and mode of transport. Specific questions about the journey to work for the respondent and spouse are asked, and relatively detailed information about the interviewee and the household are obtained.

This type of data has advantages and disadvantages. The strength of quantitative data is that they give a representative view of a well-defined segment of reality. They give a broad representation of general patterns of relations. Quantitative data do not usually give a good basis for understanding of dynamic relations, of what happens over time.

Qualitative data usually give insight in the issue rather than a broad view. An advantage is the possibility to see dynamic relations, processes and patterns of interactions. This means that they are more suitable for the development of theories and hypotheses than quantitative data are. The disadvantage is the limitation it has in regard to the possibilities to generalise to bigger groups, relations or areas.

Part II. Theoretical approach

The City - the spatial context of the journey

The extremes in sociological urban theories are the apprehensions of the city as either a creative power in itself or the city as a result of social processes. The theorists presented give in different ways a basis for the analyses of the spatial aspects of everyday journeys.

In Simmel's analyses of the city he emphasises the division of labour, distribution, communication, the money economy, punctuality and commodity exchange as characteristics of a modern city. The long distances in the city result in unacceptable time loss if waiting is necessary. For that reason businesses and various relations between institutions have to be adjusted into a common time scheme. The city becomes the most important place for the division of work, communication and consumption, and as a consequence the need for daily travel is established.

Simmel, The Chicago school and Wirth show how the city both fragments and segments social life. The size of the city, division of labour and distances create

needs for punctuality, co-ordination of time schemes and mobility to realise the urban forms of life. The composition and number of everyday journeys are results of the cultural form of the city and of urbanism as a way of life.

The Marxist theorists perceive the city as a product of social processes, where production, consumption and circulation are the main elements. Because transport, of both passengers and goods, is so important for the urban society, the state or the municipal authorities have to secure conditions to organise for the collective consumption of transport (the construction of transport infrastructure and public transport). Both Castells and Scott underline this fact. The question is how the collective consumption means are spatially organised and distributed. The material structures, both the physical organisation of the city and the transport systems, mediate power, even if it is not intentional or openly exercised. It is embedded in the social context and is first of all experienced as powerlessness, for instance when transport is not accessible when and where it is needed.

To conceptualise the material structures of things, which are the background for social relations and processes, Østerberg uses Sartre's term the practical inert field. The inert entities, as for instance roads, cars or other transport means act as mediators between people. The practical inert field can make different acts possible or difficult to carry out. Especially in the last case the significance of the material structures will be clear for the acting person. Differences in access to transport, private or public, produce dissimilarity in conditions for acting in urban space.

The traditional urban theories are described as *male-stream*. In the great theories of urban development in modern society the gender dimension has been non-existent. Women exist as background figures rather than acting subjects in the community tradition, according to Lyn Lofland.

To understand the space as a background for women's and men's daily journeys, the ambiguity and the diversity of the urban space have to be emphasised. The three levels of socio-spatial relations developed by Henri Lefebvre help to understand this ambiguity. According to him the social space is expressed through the practise of everyday life, through production and reproduction. It is also communicated through different forms of abstract spaces symbolised and made concrete by the dominating interests in the society. The social space is also expressed through the impressions, the fantasies or the perception of the space. These three aspects of space indicate the relational character of social space. It is developed in the interaction between processes on the level of society and in everyday life.

Relating the concepts accessibility/distanciation, acquirement/use, control and production to the three aspects of social space of Lefebvre, Harvey has laid the basis for characterising different types of spatial practises.

Some of them are used in this report to illustrate gender aspects of the urban spatial structure.

In the functionally divided urban area, production and reproduction have been associated with male and female characteristics respectively. Terms like masculine cities and feminine suburbs have been used. The dividing of the city is related both to the social practice and perception of the space. Because the connection between production and reproduction for women is nearer than for men, the division creates differences in access to various areas for men and women.

In a divided city the possibilities for action for women are conditioned both by time restrictions and lack of transport recourses. The possibilities to use the city are also connected to conventions and apprehensions about the city and special areas of the city.

Access to transport and time are important conditions by which different areas can be accessible for men and women. Time as a resource component is important in a spatial context where the distance between the productive and the reproductive spheres is long and where different social relations and institutions are regulated by a common time scheme.

Different concepts of time. Experience of travelling time

Time is a significant dimension of the journey. Departure and arrival, frequency, speed, waiting time, walking time, driving time, and the perception of the different time aspects are all features of the time dimension. The aspects of time have to be discussed in a social context. There is a plurality of times; both physical, biological, psychological and sociocultural, which all have their special function and reference system. They exist side by side, and there are relations between them.

The perception of time has been related to different time order systems in various societies and to differences within the spheres of production and reproduction. Natural time and cyclical time order systems are associated with agricultural society, but also to reproductive work, collective values and female dominated workplaces in the health and care field. The linear time order system is associated with planning, rationality, individuality and production. Because women more often are linked to the first of these two systems and men to the last one, it is said that the perception of time will be different for men and women. Time control in a work situation will influence the perception of time as an individual good, which might be saved or sold.

This is reflected by the differences between men and women in attitudes towards different time aspects of the transport means and the willingness to accept longer travel time by changing from car to public transport.

The time aspects of a journey have various time qualities, which can be linked to different perception of time. The perception of waiting time is a good example. Waiting time gives mainly negative associations. A person who must wait has often a lower status than a person who doesn't have to wait has. Waiting time is more often associated with public transport than with a car. The analyses show that men are more negative towards public transport than women. An explanation might be that the linear time order system is more characterised by demand for efficiency and that the time control is more serious in men's working situation than it is in women's.

The analyses show that there are great diversities in the perception of time and time use connected to the transport means. The measures used in the analyses are rather simple and combine both time and transport mode, so the time dimension is not "pure". Some of the variations in the perception of time could be related to the real differences between car and tram, bus, train, etc. However, some of the variations could possibly be related to differences in time cultures, to values and norms and differences in everyday life and how paid and unpaid work is organised. The more positive attitude towards public transport among women than among men is an

indication of this and, in addition, their greater willingness to accept longer travel time if one has to use public transport instead of the car, points in the same direction.

The characteristics, symbol values and use of the transport means

The car and the public transport are both tools and carriers of social meaning related to purpose and the user. Besides having a value of use, they also have a cultural meaning and a symbol value. Associations related to the car as a masculine project, freedom to choose independent of time and space, high social status and income, are reflected in the use of the car compared with public transport.

The apprehension of the characteristics and the symbol values related to the two types of transport means are different among men and women. In general, women have a more positive opinion of the use of public transport than men have. They more often than men think that the public transport system gives them the possibility to travel when and where they like, and they are more concerned about the safety aspect of the journey than men are. For women the negative aspect connected to public transport is the experience of insecurity while waiting at the station or at the bus stop and when they walk to and from these places. Men do not see this as a problem. For women this is related to the experience of not being able to control the public space, which might restrict the possibilities for activities.

Men like to keep and repair their cars. The car is an object of mastering, which is related to the masculine domain. It is an object for creativity, which to a certain extent can be compared with what the home means for women. For some men the look of the car is important. They admit to enjoy having a car they can be proud of. For women these factors are of less importance and significance. One of the reasons is perhaps that in households with both a man and a woman, the car belongs to him and it is his responsibility. Women more often have an instrumental relation to the car. For them the car is first of all a means of transport.

Part III. Everyday journeys in the Oslo area

Modernisation of Oslo – the conditions for activities and travel

Oslo and partly Akershus (for analyses of the journey to work in chapters 8 and 9) are the social and spatial context for the empirical analyses presented in this report. Oslo represents the material structure and the space of action, which the everyday journeys are to be interpreted against and related to.

Location of industries, various service supplies and housing, how different areas are linked together by transport lines, and the development over time are the important material conditions for the urban social life. The master plans express both implicit and explicit purposes on how the social life is to be organised in relation to production and reproduction. The transport system is the basis for some of the collective consumption. The development of this system results in different possibilities for combinations of work and housing for different social groups.

The modern urban development has resulted in a reduction of the population in the inner parts of the city and an increase in the outer parts. Before the expansion of the city in 1948, Oslo, which at that time consisted of the existing inner zones of the

city, had a little more than 300,000 inhabitants. Forty years later the number of inhabitants was reduced to about a third, while the outer parts of the city had a little more than 300,000 inhabitants. In the same period the number of inhabitants in Akershus was doubled. The growth was strongest in the municipalities near Oslo. The urban population has been dispersed over a wider area than before. From 1986 on there has been a new growth in the population in Oslo.

Simplified, the housing in the outer parts of Oslo is newer in the east and the south than in north and west. A greater amount of houses are built by the housing co-operation and therefore more multihousehold buildings are concentrated to the east and south. This has implications also for the social composition of the city.

Different types of workplaces are concentrated to special areas. Heavy industries are located in the east, while office, commerce and service industries are mostly concentrated to the centre and in western part of the city. The southern part of the city has had a greater loss of work places than other parts of the city. From 1970 to 1986 there has been a reduction in the number of work places in the inner parts from approximately 212,000 to 205,000. In the same period the number of work places in the outer parts of the city increased from approximately 80,000 to 110,000, and in Akershus from 85,000 to 135,000. The increase in Akershus has been especially strong in the western part of the county. The decrease in the inner zones and the increase in the outer parts have resulted in a dispersion of the work places, which means that it is difficult to reach all by public transport. Car use becomes more or less a necessity.

The public transport supply varies between the different parts of the city. Among the outer parts, the southern has in average the longest travel time to other parts of the city. Together with the outer western part the population in these areas have the highest numbers of transfers between transport means. It is both easier and faster to travel from the eastern parts of the city, from the areas that have an underground transport system, than from other parts of the city. In general, inhabitants in the inner parts of the city have the best access to the other parts of the city by public transport. The reason for this is first of all that a great deal of the public transport lines goes through the centre.

Over a period of about 30-40 years the urban development has been characterised by dispersion. To a certain extent this has been planned. But it is also a result of better access to transport, both private and public. The central parts of the urban area are no longer an important for housing and work.

The journey in everyday life

The daily journeys reflect the division and fragmentation of everyday life, which both Giddens and Lefebvre are preoccupied by in their analyses. The division between housing and working, between working time and leisure time are the basis for modern urban everyday life. For that reason production and reproduction are important concepts for analysing everyday travel.

A combination of Lefebvre's concepts contractual time, compulsive time and free time with production and reproduction are useful to classify everyday journeys. This classification gives three main groups of journeys – with about one third in each. The first is a combination of contractual time and production (for example

journey to work), the second is a combination of compulsive time and reproduction (for instance bringing children to school or kindergarten) and the third group, which is a combination of reproduction and free time (for example journeys connected to one's own leisure activities).

The everyday travel patterns vary between men and women. Women have more journeys connected to the combination of reproduction and compulsive time than men have. The greater part of men's journeys belongs to the combination of contractual time and production. Women's activity patterns are more complex than men's are. While the activity patterns of men are dominated by paid work, women's more often are a combination of production and reproduction.

The most complex patterns are found among young women in skilled occupations and with children, the least complex among older male workers. The activity patterns in everyday life are more complex among younger people and people with high social status than among older and people with lower social status.

The time aspects of women's journeys are characterised by high periodicity and a combination of the linear and the cyclical time order systems. Instead of direct travelling to and from work, more women than men combine the journey to work with other errands. First of all this is shopping and bringing children to and from school or kindergarten, compulsive time use related to reproduction. These kinds of journeys are strongly restricted both in time and space.

Use of the urban area, the spatial dimension, is classified into three categories, local orientation (most of the activities are done within the local area), centre orientation (most of the activities are done in the central parts of the city) and outer orientation (most of the activities take place in the outer parts of the city or in the neighbourhood municipalities).

There are significant gender differences in the spatial practice. Women are more locally and centre oriented than men, while men are more outer oriented. One of the reasons for this is that women have less access to private transport and have to rely on local supplies and on public transport.

The place of living within the urban area is also important for the kind of orientation people have. People who live in the central parts of the city is significantly more locally orientated than those who live in other parts. In the central parts there are working places, cultural institutions, and a multitude of service supplies, which make this area more "complete" than other parts of the city. The urban development, which has resulted in housing areas with restricted choice of paid work, leisure activities and various necessary service supplies, reduce the local orientation. In the southern and south-eastern parts of the city this phenomenon is most significant.

The analysis of the spatial practice shows gender distinctions, which demonstrate differences in access to the urban area as a whole. The outer suburban areas can still be described as feminine, even if the women who live there are not restricted to these areas in their activities as in earlier times. There are, however, significant gender differences when it comes to the use of the local area. Also in the central parts of the city men are more mobile than women are.

An increasing dispersion of work places throughout the urban area and a concentration on road building, result in both a stronger adjustment to and a need for the use of car. At the same time the public transport supply towards the city

centre is relatively good, especially from east. The linking of the eastern and western underground systems has also increased the possibilities to travel by public transport. Yet, nearly half the population uses the car for all purposes through the day. The use varies between men and women. Men are more often mono-users of a car than women are, also when the effects of occupational status, area of living, age and family situation are controlled for.

Even if the everyday journeys may be routines, the experience of them differs. One half of the population perceives them as a positive element in their everyday life.

The journeys of everyday life are some sort of a confirmation of a societal activity level. Through their ritual patterns they give an "evidence" of societal belonging. The journeys can be experienced as burdensome or something one does not reflect much about in the most active phase of life. Older people and people with low income like the everyday journeys more than young people and people with a high income. Women and younger people perceive them more often as burdensome than others do. This may be connected to complex travel patterns and time pressure.

The analyses show how important the journeys are to carry out the daily activities and as an activity in itself. For many, the daily travel patterns are simple and uncomplicated. As shown, there is no relation between the complexity of the travel pattern and the use of a car. Foremost the car is used not of necessity but because it is accessible.

Simplified one can talk about a male and a female travel and activity pattern. The female pattern is characterised by local and centre orientation with a great dependence on public transport, while the male activity pattern is more geographically dispersed, characterised by mono-use of the car and of relatively little dependence on public transport.

Development of journeys to work in Oslo and Akershus from 1977 to 1990 with an emphasis on change in car use

Journeys to work of men and women are, among other things, a result of decisions on the housing- and labour markets. In surveys on migration motives the length of the journey to work very seldom is stated as a reason for changing house or place to live. Still, I find that women in general have shorter work trips than men have, both in 1977 and in 1990. This difference is found in most of the countries where travel surveys have been carried out.

Women's adjustments to the labour market have changed significantly between 1977 and 1990, and so have their journeys to work. There has been an increase in paid work among women, and a greater share is engaged in full-time work. In this period both work places and housing are dispersed. Even if the work places are more dispersed in the urban area the length of the work trip has not been reduced. A smaller share works in the inner parts of the city, among both men and women. The analyses show that women in a less degree than men utilise the urban area when they apply for paid work. They have shorter work trips and they more often work in the area or the municipality where they live. This limitation in choice may reflect a geographical segmentation of the labour market. According to Harvey, less access and restricted use of the urban area will result in a social practice, which also gives fewer possibilities in other areas.

The analyses are mostly concentrated on the use of a car on work trips, and the development of car use over time. In 1977, 20 per cent of the women drove a car to work, in 1990 the amount had increased to 40 per cent. Still men's car use level is higher, 60 per cent.

Men have more often fringe benefits related to car use than women have. This phenomenon has not changed in the period between 1977 and 1990. During this period the price increase has been lower for petrol than for public transport.

Women have more household-related errands connected to the work trips than men have. They bring children to and from school and kindergarten and do the daily shopping. In this period the same distribution of errands is found in the end as in the beginning. For women, pre-school children in the family is an important variable to explain the use of a car on work trips. For men, having children in the family is of no importance for their car use.

Women's use of a car is partly due to other factors than men's use. In addition to care of small children, the work trip length is more important for women than for men. As a conclusion men do not need any legitimacy of their car use, while women still do.

The consequence of the gender differences in the use of transport means is that measures both connected to public transport and car policy have distributive gender effects.

Adjustment and allocation of time use and work trips for married couples

Which factors do married couples take into consideration when they choose home and work places? Do they try to find localisation that reduce time spent on the work trip and increase the possibility for the use of public transport or soft modes? Do they try to allocate time use in such a way that if one of them has long working hours or travelling time, does the other have short working hour or travelling time?

The results of the analyses show that the time use in families is not distributed in this way. The husband's working hours or travel time is independent of those of his wife's. The working hours of husbands with wives working full-time are just as long as the working hours of men who have wives with part-time work. Men have longer work trips than their wives irrespective of their work trip length.

The most typical situation is that women adjust their working hours and travel time to the present phase in their life cycle. In families with pre-school children it is common for the mothers to have short working hours and short work trips. The results show that children in the family are more important than occupational status for women's working conditions.

Economy is an important factor in this adjustment. In average, men have higher income than women have, and thus his income is most important. The adjustments are done in relation to this fact. The combination of long working hours for the husband with short working hours for the wife is more frequent with increasing income of the husband. The aspects of time and space of married women's adjustments to the labour market of are reflected both in shorter work trips and shorter working hours. Women's considerations such as care of children, lack of transport resources, both car availability, fringe benefits related to car use, and a

relatively bad public transport supply in outer parts, restrict their choices on the labour market in the urban area.

The distribution of the transport resources of the family usually follows the traditional gender roles. In families with one car, the man uses the car most of the time. In families with pre-school children the woman's car use is at the same level as his. The interpretation of this is that bringing children to different activities legitimate car use for women, whereas men do not need this legitimacy. Men use a car almost irrespective of the context, especially in the age group between 35 and 45 years. For women the length of the work trip is of importance for her car use. Distance is of no significance for men's car use. This means that women without access to a car have fewer choices on the labour market than women with a car. This is also reflected in the analyses of factors explaining use of public transport. The quality of the public transport supply is not significant for women's use, but for men it is. This means that women use public transport because they have no alternative, men because they have chosen this means of transport.

Part IV Conclusion

Trends

In today's society women's transport modes are more environmentally friendly than men's are. They more often travel by public transport and walk and cycle more than men do. A question is if this is a desired situation for women. If they get better access to cars than they have today, it is most probable that they in a much greater degree will choose the car instead of other modes. Still there is a gap between the genders in car use. If women in the urban region reach the car use level of men, 35.000 more will use the car to work.

Today, women both have less access to a car and fewer fringe benefits related to car use than men have. An urban development based on car use will therefore have different impacts for men and women. A further dispersion of the urban area will result in even greater need for transport. Simultaneous opening hours (for instance kindergartens) and working hours create an increasing time pressure for those who have to co-ordinate these time schemes. Like the situation is today, this kind of urban development will be less favourable for women than for men.

The urban sprawl, which also characterised the 80's, seems to have changed in the 90's. In many Norwegian big and middle-sized towns and cities the population growth in the periphery and the neighbourhoods is decreased or stabilised. The most noteworthy is a significant increase of inhabitants in the old centres. The trend seems to have turned from a suburbanisation to a start of a reurbanisation. It can be interpreted as a change in preferences related to housing and place of living. The direction of the migration suggests an increased interest in living in central parts of cities and towns, for more urban life styles and ways of life. This is part of an international trend.

Regarding women's choices in daily life, more compact urban structures are favourable. The need for long journeys will be reduced because work, housing and different services are located closer.

Information and communication technology increases the time-space compression. In relation to transport policy and environmental problems one hopes that some of the everyday journeys could be substituted by such technology.

Over a few years, information- and communication technology has come into general use. About 40 per cent have a computer and 10 per cent have a net linkage at home. Information and communication technology in people's home can give a great flexibility in organising and carrying out different everyday activities, but it could also create new limitations. It may imply that the traditional gender divided work tasks can be amplified or changed. If women work on distance with the home as a base, it can easily happen that they take more responsibility for household tasks than men will do in the same situation. On the other hand men who work on distance can get a «bigger room» in the reproductive sphere, and take over more of the household tasks than they do today. Which consequences this technology could have for men's and women's daily travel activities are therefore difficult to say.

Further research

The results in this report show differences in women's and men's everyday life as reflected in the daily travel activities, both travel purposes and length, and transport modes. I also find gender differences in the attitudes towards the transport means and in attitudes towards the time aspects of travelling, but there are also similarities, which tell about changes. The results show for instance that the differences between younger men and women are small.

Further knowledge about different aspects of everyday travel activities is needed. My concentration on gender has shown that traditions, division of labour, both paid and unpaid, and structural conditions have impact on the development of travel patterns for men and women. I have emphasised the study of differences and similarities *between* men and women, but some of the analyses exhibit a picture with more details. There are differences between groups of women (and groups of men) which are related to resources, age, life-cycle, attitudes and possibilities for choice. To study the change in travel activities these factors are important to take into consideration.

Still there is a lack of knowledge about how dependent various groups in the population are on the car in their everyday life. The analyses in this report indicate that the journeys made by car can be reduced. Some of the journeys are very short (people can walk or cycle instead), for other journeys it is easy to use public transport or other modes, and some trips can be substituted by other forms of communication technology. An important aspect of these possible changes is to understand people's perception of and attitudes towards different modes of transport.

The analyses of the meaning and perception of the everyday journeys provide an understanding of the various aspects of a journey, both as a means and as an activity in itself. Because this issue has gained very little attention, the analyses in this report are a modest start. In the discussion on the possibilities of reducing travel activities to improve the environmental situation, it is important to get more knowledge about the significance of everyday journeys for various groups of the population. If travelling in itself has a value, reduction in one kind of trips, for instance the journeys to work, could result in an increase in other kinds of journeys.

To understand the use of the urban area and the choices different groups of the population do in relation to this, the spatial dimension of the journey is important. The analyses that I have presented show results of decisions already made by individuals and household, and tell nothing about the processes that proceed the decisions. Therefore, there is a lack of knowledge about the motives for and the reasons why individuals and households choose housing and places for various activities the way they do.