THE CONTRIBUTION OF THE SOCIAL SCIENCES TO TRANSPORT RESEARCH IN FRANCE

by

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ABSTRACT

A literature search and series of interviews with researchers in social aspects of transport was conducted in France during late 1979 and early 1980. In all, 58 research projects were examined and 21 researchers interviewed about their work. The general context within which research is funded and undertaken was also examined, to assess whether experience in France was applicable to transport research in Britain. The report summarises current or recent social research in transport in terms of the research methods and explanatory concepts employed, as well as the policy issues addressed. It also provides an annotated bibliography and an index for sub-groups and transport modes. The research examined covers institutional factors in transport supply and the relationship of transport to economic and social development, as well as studies of individual mobility. So far, its application to the planning and implementation of particular projects has been limited, and it has been used chiefly to provide a background context for policy.

1. INTRODUCTION

Over the decade 1970–80, transport planning and policy research in the western world has been characterised by a developing concern with the social and economic impacts of transport systems. During this period, the social sciences have come to be regarded as offering potential insights and, possibly, techniques for transport research.

As new disciplines come to be applied to a subject area, it is inevitable that research method and output will appear fragmentary and will vary from country to country. This arises both from a necessary selectivity in face of the variety of conceptual frameworks which may be applicable, and from the range of policy questions which may be addressed. At such a stage in the development of a subject, communication between researchers can be particularly enriching. While there is a considerable exchange of ideas and findings among those engaged in transport research whose main language is English, communication remains poor and there is a lack of mutual awareness between the English-speaking and non-English-speaking.

This report represents a preliminary attempt to remove some of this lack of awareness which may exist in England concerning French transport research, and constitutes one-third of an international research exchange. In this exchange the author studied French research work, while members of the Institut de Recherche des Transports studied German work, and members of Battelle Institute (Frankfurt) examined work conducted in the United Kingdom. The substantive content of the report is a review and index of current and recent research being undertaken in the field of transport by French social scientists. However, since all research work must be seen as the product of a particular economic, social, political and institutional environment, an attempt has been made here to sketch in what are seen as the key elements of that research environment.

In using the term 'social science', the review has, by definition, focussed on those disciplines (in particular, sociology, social psychology and social geography) whose concern is with social systems and social interaction. The dominant interest of researchers has been in the relationship between transport and other dimensions of social
organisation, and there is thus little reference here to subject areas such as vehicle engineering, infrastructure design, traffic management, safety or driver behaviour which have little social content.

The report is the result of a programme of interviews and literature searches conducted in France by the author during four separate one week visits in 1979–80. The Institut de Recherche des Transports at Arcueil, Paris, was used as a base and offered library facilities for this activity.

2. THE CONTEXT OF FRENCH TRANSPORT RESEARCH

2.1 Issues and policy questions

One cannot comprehend the development of the transport system and the emergence of key transport issues in France without recognising the major structural changes which have characterised the last three decades. In 1939, France had a relatively closed economy, an ageing population and a large number of small-scale low-technology industries (30 per cent of the workforce were still employed in agriculture). This situation began to change during the 1950s, and by 1975 France had become a major urban-industrial economy. An examination of consumption patterns can be used, among many other indicators, to demonstrate this change. Thus, while 30.4 per cent of households owned cars in 1960, 63 per cent owned them in 1975. For television sets, the figures are 12.6 per cent of households owning them in 1960 compared to 82.6 per cent in 1975. Alternatively stated, while food constituted 44.3 per cent of average household expenditure in 1949, this fell to 22.4 per cent by 1979.

Such changes have been guided by a national planning exercise launched in 1945, through which a series of five-year plans have steered investment into priority areas. These plans have, successively, built up the public sector, integrated the French economy with the EEC, and developed the automobile, electronic and petrochemical industries in particular. The result of this planned restructuring has been a very obvious rural-urban migration with growth concentrated in the larger towns (see Table 1). This spatial change has been accompanied by social change on an unprecedented scale as new employment and residence patterns have emerged.

TABLE 1

Percentage distribution of population in France according to settlement size in various years

<table>
<thead>
<tr>
<th>Settlement size</th>
<th>Year</th>
<th>1954</th>
<th>1968</th>
<th>1973</th>
<th>1985 (Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural areas</td>
<td></td>
<td>27.1</td>
<td>21.1</td>
<td>19.3</td>
<td>15.8</td>
</tr>
<tr>
<td>Settlements with under 20 000 inhabitants</td>
<td></td>
<td>7.8</td>
<td>7.7</td>
<td>7.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Settlements with between 20 000 and 100 000 inhabitants</td>
<td></td>
<td>13.7</td>
<td>14.8</td>
<td>15.1</td>
<td>15.7</td>
</tr>
<tr>
<td>Settlements of over 100 000 inhabitants (except Paris)</td>
<td></td>
<td>34.3</td>
<td>37.8</td>
<td>38.7</td>
<td>40.7</td>
</tr>
<tr>
<td>Paris</td>
<td></td>
<td>17.1</td>
<td>18.6</td>
<td>19.2</td>
<td>20.4</td>
</tr>
<tr>
<td>Total population ('000)</td>
<td></td>
<td>42999</td>
<td>49723</td>
<td>51931</td>
<td>57349</td>
</tr>
</tbody>
</table>

Source: INSEE
The development of the national plan on a from-the-top-down approach gave an early emphasis to the need for systematic method in data collection, in forecasting and in monitoring activities, with a national institute, INSEE (Institut National de la Statistique et des Études Économiques), as a focal point for this activity. Some observers have noted that the task of data collection and processing associated with the plan may have delayed serious discussion of policy issues. By 1973, calls were being made for greater consideration of problems and issues. Certainly, during the 1970s the separate subject area policies have come under greater critical scrutiny and are more open to discussion. At the same time, the concept of the plan as a whole and the binding nature of its objectives has become more fuzzy.

The plans offer one way of tracing the development of issues in transport over the last two decades. In tracing them, however, it must be recognised that each plan will tend to reflect the issues of importance during the years of its preparation. Thus the fifth plan (1966–70) displays a Buchanan-like concern with the need to improve highways and to adapt towns to the car (in complement to this, increased automobile manufacture was a key objective of the fourth, fifth and sixth plans). At this stage, public transport was suffering severely from under-investment, but the public transport system was not seen officially as a suitable case for public investment or state intervention. Despite this, it is possible to show that from 1964 the first movements towards an acknowledgement of an increased role for public transport were emerging. For example, Paris and Marseilles had their first bus priority schemes in that year. By 1967 users and operators were pressing for government intervention to help operators to re-equip, after a long period of non-investment which was unlikely to be reversed by private funding.

An important and relevant development of this period was the emergence of a new local planning structure. The loi d'orientation foncière of 1967 provided for the agglomeration of adjoining local authorities for planning purposes, to provide ad hoc units for strategic planning. This, together with the creation in 1966 of the Ministère de l'Equipement (which deals with investment in public infrastructure at a local level) provided an institutional framework within which integrated strategic planning could take place at the local level; universal local transport plans were not, however, introduced until 1973.

By the time that the sixth plan (1971–75) was prepared, a change in outlook on passenger transport can be observed. There was now a concern to renew and revise the public transport network, and social objectives, rather than purely economic objectives, are cited. Transport was now talked of as a key determinant of the pattern of urban growth, and of the way in which people use urban areas. The need for locally-designed transport plans was acknowledged and investment priorities were designated for the major urban areas. At the national level, the need for experimentation with new modes and new technologies was given priority. During the period of this plan the local Dossier de Transport was introduced. These have a ten-year strategy statement with a programme for five years and a priced tactical programme (this has a per capita national ceiling). These are prepared for all towns over 80,000, but do not cover rural areas, which are subject to separate policy designs.

By the plan period for the seventh plan (1976–80) further development of a positive view of the role of public transport was in evidence. An overall objective was cited of increasing the number of trips made by urban public transport by 60 per cent outside the Paris region. By now, increases of 15 per cent in public transport use over the period of the previous plan were being registered by some authorities, Besançon more than doubling this figure. The reasons for this concentration on public transport were given as reduction of social inequalities, improvement in quality of life and energy savings. France imports more of her energy than any other EEC
country; for instance, in 1979 she imported 75 per cent of her energy sources, by value, compared to an EEC mean figure of 58 per cent.

Currently, the emphasis is on better management and use of existing infrastructures rather than on new technologies. State financing as an inducement to local authorities becomes the policy instrument to divert more people to the urban public transport system. Again, local initiative and organisation is seen as the preferred mechanism for change.

Thus, over the last two decades French transport policy has moved from an acceptance of growth of the private car alongside a deliberately anti-state-involvement approach to public transport, to an increased adoption of a strategic, technical and economic encouragement of the public transport system. The urban areas (agglomerations or groupings of neighbouring authorities of over 100,000) appear to have been the main beneficiaries, with Paris, Lyons and Marseilles being the first to benefit from these investment policies.

2.2 Research funding and organisation

The institutions within which social research in transport may take place can be considered in terms of three categories:

(i) Those institutions established and maintained by government to provide transport research;
(ii) Other individuals and research groups funded to undertake particular research projects;
(iii) Research units attached to major transport operators, such as RATP (Régie Autonome des Transports Parisiens).

The two government research institutions relevant to this project were both set up during the last decade. These are IRT (Institut de Recherche des Transports), established in 1970, and CETUR (Centre d'Études des Transports Urbains) established in 1976.

IRT was set up in order to provide a focus for the growing research and advisory role acquired by central government as transport planning and increased investment in local public transport systems developed from 1967 onwards. At this time research of a type not previously required was demanded to serve DTT (Direction des Transports Terrestres) and DCR (Direction des Routes et de la Circulation Routière), both departments of the transport ministry. The new institute was to carry out technical and social research in transport, the latter concentrated within the urban transport division. As central government policies throughout the 1970s gave public transport an increased role, local authorities and transport agencies found themselves calling for increased research assistance in the preparation of their local plans. In 1976, a new institution, CETUR, was established with the specific objective of developing planning methodology and to provide help to local authorities in analysing local patterns and designing policy. The centre is funded jointly by DTT and DCR, both within the ministry of transport, and by DAFU (Direction d'Aménagement Foncier et de l'Urbanisme) within the ministry of the environment. While there is some overlap of function between the two institutions, the general effect of the establishment of CETUR has been to make this the centre whose role is to give detailed advice on more immediate questions, leaving IRT freer to develop more fundamental research than its earlier fulfilment of part of CETUR's current role had allowed. Both institutions respond to research initiatives from a range of government agencies, but CETUR's internal research activity tends to be responsive to very directed policy questions. CETUR
is itself a sponsor for some of the research work conducted at IRT — for example, during 1979, IRT's urban transport division was engaged in two CETUR-sponsored projects (transport supply in the urban fringe and life cycle and mobility).

Outside the government's own research units, research is the responsibility of the DGRST (Direction Générale à la Recherche Scientifique et Technique). The main organ for the state funding of research is the ATP (Action Thématique Programmée) through which funds are channelled into subject areas according to a programme set up under each national plan. The number and subjects of ATPs vary under each plan, in a deliberate attempt to relate research activity to what are seen as national requirements. The programme of activity within an ATP is the result of deliberations between researchers, policy makers, planners and operators. Contracts are tendered for in response to a call for proposals issued for each national plan, and are conducted under the general control of the Mission de la Recherche within the subject ministries, who eventually publish research reports.

Within the general area of transport, there are four ATPs. Three of these are of a predominantly technical nature (safety, energy and transport technology) and are administered by IRT. The social aspects of transport are researched under an ATP on 'Socio-économies des Transports' (socio-economic aspects of transport) administered by the Mission de la Recherche at the ministry of transport. This ATP was set up in 1970 to operate under the sixth national plan. Its first call for proposals dates from 1973 and the first set of projects have now been published, with many of the second round nearing completion or publication. The first ATP had five sub-programmes, under the sixth national plan. These covered transport management and supply, transport and the economy, transport's impact on life style, transport and societal development, and planning and decision-making. The programme under the seventh national plan has covered: transport's role in social and economic life, the function and structure of the transport sector, personal mobility, transport and regional development and the transport professions. In addition to the transport ATPs, those in other areas, especially urbanism, may yield work on topics such as mobility, and there have been some joint fundings.

Additionally, some user research is carried out within certain transport supplying institutions. A major example of these is RATP where studies on individual mobility have been conducted in association with IRT and the Centre for Urban Research.

The diagram at Figure 1 summarises the main sources and funding of social research in transport in France.

2.3 Relevant intellectual traditions

The development of the intellectual traditions relevant to a research area is clearly a subject in its own right and cannot be dealt with briefly. Despite this caveat, it is relevant to this study to attempt to summarise some key influences on the way in which research questions and methods emerge.

One major difference between social science research in France and in the English speaking countries has been in the extent to which work is focused around formal mathematical models of transport systems. Despite the advanced work on models of the economy conducted at INSEE (Institut Nationale de la Statistique et des Etudes Economiques) as a background to the national plans, the extension of this approach to transport systems has not been overwhelming. The requirement for systematic studies for the 'dossier de transport' dates from 1973
and a few major urban studies for redevelopment projects date from the late 1960s. These dates are significant in two senses. Firstly, cutbacks in public expenditure after 1973 have placed a question mark over massive data collection and processing operations. Additionally, the French showed early doubts about the relevance of conventional large-scale models to the development of transport policy. A further explanation for this tendency may be seen in the way in which geography has developed in France. This has been a key disciplinary source for researchers in the UK and USA and has been characterised there by the emergence of a systems approach (the 'new' geography) since the early sixties. In France, there has been a very slow diffusion and relatively low level of acceptance of this change. For example, it was as late as 1971 that the major French geographical journal pledged more attention for the new geography and Haggett’s seminal work on the subject, published in English in 1963, was not translated into French until 1973. This difference in approach has been discussed by a number of English geographers.

Another, but possibly related, facet of transport research in France has been the extent to which non-technical research has been grounded in existing and substantive fields of sociology — for example, in urban sociology and industrial sociology. It is noteworthy that none of the research bureaux or institutes funded under the 'Socio-économies des Transports' ATP has a transport designation. Lacking the impetus of the background questioning and assumptions which have led many USA and UK researchers from mathematical and engineering backgrounds into econometric and attitudinal studies, many French researchers have extended their interests into a transport context from a background in other branches of the social sciences. This has had the effect of introducing a more consciously theorectico-conceptual orientation, in contrast to the modelling-problem-solving orientation of much English and American work. Rose has noted that the recent rapid social change in France has made sociology (with its 'irreducible task of explaining change'), a major discipline. A result of this has been that, within French intellectual life, sociology has been required to take on board the structure and style, as well as some of the functions, of philosophy.

As a corollary to this point, some of the studies covered by this investigation are influenced by ideological and methodological questions rarely raised in a transport context in the UK and USA. One prominent manifestation of this is the extent to which researchers adopt a particular perspective on the workings of the social system. A particular instance might be the question of how far an individual's behaviour should be seen as the product of small-scale cultural developments and how far it is confined by his position within the economic and power structure of his society. For example, Marxist perspectives developed in industrial and urban sociology by Lorkine and Castells have had an important influence on the perspectives adopted by some researchers (such as Campagnac). Others, including (notably) Haumont, see the regulation of behaviour more in terms of individual reference to a cultural model which is derived from more complex personal experiences.

In methodological terms it is also relevant to cite the question of scale in research work. Many of the techniques applied in French social research in transport derive from a research paradigm which is not heavily dependent on statistical methods of validation. Thus, intense focus on a relatively small number of individuals is a common data collection technique in these studies.

All of these tendencies appear to have pushed French social studies in transport away from the systems approach with its mathematical formulations and led to a greater dichotomy between technical studies and social studies within the field than is true in the UK and USA.
3. THE PROJECTS INVESTIGATED

The projects investigated during the course of the study are summarised in a matrix which displays each research topic together with the policy issues addressed, the explanatory concepts and the research method employed; this appears between pages 11 and 14 of this report. An annotated bibliography covering these and other subjects appears in Appendix 1. Appendix 2 lists the authors of various reports by topic headings, thereby providing a topic index to Appendix 1. The full names and the addresses of Institutions cited in this section are given in Appendix 3. In Table 2 projects which have not yet been reported are marked with an asterisk.

4. CONCLUDING DISCUSSION

While it is not possible to offer an integrated overview of so varied a set of topic areas as are covered in this report, this final section seeks to summarise some key points and impressions of that research, particularly in comparison to research conducted in the UK.

The first impression gained is that, in France, a wider range of social sciences have been considered relevant to transport research than is the case in the UK. While in the UK it is difficult to identify any researchers from certain of the social sciences (for example, political science) active in transport, the last decade has seen French researchers from psychology (for example, Fagnani, Fichelet, L'hoste), sociology (for example, Querouille, Tarrius, Campagnac), government/politics (for example, Benusiglio, Cherki, Nicolon), social anthropology (for example, Raymond, Regazzola) and geography (for example, Andin, Chaputot, Haumont) being engaged in policy-related transport research, through both the ATP system and in collaboration with government research establishments.

Secondly, transport research in general has less of an agreed focus in France than have studies conducted in the UK. This in part reflects a lower level of interest in the modelling and problem-solving paradigm which has tended to lend coherence to much UK work. Although there are research units within key organisations in France, such as RATP, concerned with similar questions to their counterparts in other countries, within both fundamental and applied research contexts it is considered legitimate in France to speculate on and attempt to test very broad questions on the relationship between transport systems and the broader societal system. These questions can be far ranging, from the emergence of new industries and employment patterns (Pinet, Couvert, Campagnac) to changes in the family and other social institutions (Haumont, Tarrius, Fagnani) or the integration of immigrant groups (Barbichon, Regazzola), to give but three examples.

The research work examined during the course of this project can be summarised in terms of three kinds of study:

(i) Studies of individual mobility and its determinants.
(ii) Studies of transport's role in economic and social development.
(iii) Studies of institutional behaviour, with particular reference to transport supply.
Among these, the studies of users and their behaviour have the most obvious parallels with work being conducted in the UK. In particular, the activity system is a common focus for mobility studies, as are the access and mobility problems of particular sub-groups. These themes are all evident in recent IRT publications. Where French research on individual mobility differs from UK work is in its concern with the social determinants of behaviour. Cultural models and symbols are seen as underlying regulators of individual activity which may be as relevant to behavioural outcomes as the external or visible constraints more traditionally taken into account in transport studies. This requires a consideration of and an attempt to identify the roles and norms, the cultural models to which people refer, and the social networks within which they operate. These concepts have been applied to such varied areas as the study of road accidents, the degree of integration of immigrants in urban areas and the extent to which an individual uses different parts of the urban area. Although much of this work has been theoretical and has only been empirically developed to a limited extent, there are strong signs that ATP-funded work is now feeding into the thinking of government research institutions and operators; for example, IRT has engaged Haumont to carry out a part of the monitoring research on a new public transport system at Saumur, and RATP is currently researching life style and mobility.

A second strand of social research in transport is concerned with the role of transport in social and economic development. Here questions are raised on the role of public transport systems in the emergence of new or redeveloping industrial areas. Research has demonstrated how the labour market can be given form by the pattern of public or works' transport provision in an area, as also are the patterns of access to employment when considered at the level of the individual. This work has been primarily ATP-funded, under transport and urbanisation departments. It again tends to be located at the theoreto-conceptual end of the research spectrum. It is much more difficult to see which agencies might act as the appliers and developers of this work, since the output relates to the planning of transport and land use at the strategic level. DATAR (Délégation à l'Aménagement du Territoire et à l'Action Régionale) are the chief government agency with the remit most likely to cover policy instruments and strategies of the kind for which some of this research might be prescriptive.

The third general social theme identifiable in transport research is concerned with the management and development of public transport systems and the way in which decisions are made and implemented. Again, the ATP on socio-economic aspects of transport has fostered such studies. As public investment in public transport has increased over the last decade, so too have the problems of co-ordination between the many agencies with an interest in or responsibility for transport planning. Comparative studies of the formal structures and of the roles of different actors within this process have been seen as a potential aid to more effective practice. Much of the research in this area has been conducted in research centres with a specialism in politics or in organisational behaviour.

For various reasons (outlined in Section 2), social research in transport is much more broadly based in France than in the UK. The last decade has seen a number of initiatives which have changed the structure and funding of transport research in favour of the social sciences. But, so far, little of the research output has been incorporated into a general system of knowledge which can be thought of as constituting 'transport research'. Rather, it has retained a strongly theoretical or inductive style whose relevance to decision-taking in policy or operations planning may not be very clear (a recent report on research cited a 'chronic malaise in transport research' 12).
This lack of focus may merely reflect the fact that this is a developing subject. What appears to be needed now is a period of synthesis, refinement and interpretation, during which people with an understanding of both the research process and the information needs of decision-takers apply the knowledge accumulated during the period reviewed. At the end of this process France will have fostered a view of the social impacts of transport which is more thoroughly developed than in the English-speaking research community.

5. ACKNOWLEDGEMENTS

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6. REFERENCES

3. THE ECONOMIST. The plan is dead, long live the plan (Le plan est mort, vive le plan), 23 February 1980, p75.


### TABLE 2
**Policy issues, explanatory concepts and research methods**

<table>
<thead>
<tr>
<th>Project title</th>
<th>Researcher(s) and Institution</th>
<th>Research/Policy issues</th>
<th>Explanatory concepts</th>
<th>Research methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment and mobility*</td>
<td>Andan, O. IRT Paris University</td>
<td>How people adapt to residence in a new location</td>
<td>Adaptation; learning process; spatial mobility</td>
<td>Longitudinal study of new inhabitants of a new town</td>
</tr>
<tr>
<td>Cycling as a mode — who cycles?</td>
<td>Averous, B. BETEREM</td>
<td>Whether more provision for cycling should be built into transport plans</td>
<td>Activity; access; social group</td>
<td>Extraction of data from general transport surveys; interviews</td>
</tr>
<tr>
<td>Migrants in the city</td>
<td>Barbichon, G. CRU</td>
<td>Planning and facilities provision for new employment areas</td>
<td>Rural migrants; urban migrants; network complexity; discretionary and non-discretionary migration</td>
<td>Household survey</td>
</tr>
<tr>
<td>(a) Exploratory study of the formal and functional structure involved in innovations in a public transport system</td>
<td>Benustiglio IDET – CEGOS</td>
<td>Managing changes in transport systems. The role of different agencies – what formal structures are conducive to effective development of systems</td>
<td>Roles; power; sources of authority; patterns of control; homogeneous and plural systems</td>
<td>Detailed examination of history of decisions and discussions with all agencies involved in 8 urban areas: Angers, Grenoble, Nice, Nimes, St Etienne, Toulon, Toulouse, Troyes</td>
</tr>
<tr>
<td>(b) Sources of expertise and division of powers in the development of public transport systems</td>
<td>Bourgin, C. Tarissin, A. IRT</td>
<td>The determinants of transport demand; thresholds in transport behaviour</td>
<td>Life cycle stage; transition phases in the life cycle; the individual as member of social institutions</td>
<td>Public transport user survey, follow-up, in-depth attitude survey; focus on change in mode use</td>
</tr>
<tr>
<td>Patterns of use of public transport in Rennes</td>
<td>Bourgin, C. Tarissin, A. IRT</td>
<td>The determinants of transport demand; thresholds in transport behaviour</td>
<td>Life cycle stage; transition phases in the life cycle; the individual as member of social institutions</td>
<td>Public transport user survey, follow-up, in-depth attitude survey; focus on change in mode use</td>
</tr>
<tr>
<td>Patterns of use of public transport in Besançon</td>
<td>Bourgin, C. Godard, X. IRT</td>
<td>The identification of target groups towards which to market the public transport system</td>
<td>Changes in status within social institutions; life cycle stage</td>
<td>Household travel survey; follow-up in-depth attitude survey</td>
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<tr>
<td>Women’s travel patterns</td>
<td>Chabaud, D. GETRAM</td>
<td>The influence of employment on the female population’s mobility</td>
<td>Membership of social institutions; role; activity</td>
<td>Interviews with 25 working and 25 non-working women of the same SEG; comparison of activity patterns and mobility</td>
</tr>
<tr>
<td>(a) Works transport and industrial recruitment</td>
<td>Campagnac, E. Coing, H. CRU</td>
<td>The impact of firms’ strategies of recruitment on the social structure of an area</td>
<td>‘Labour basin”; employee transport networks; way of life</td>
<td>Analysis of firms’ personnel records in 3 major enterprises and 60 unstructured interviews with workers and families</td>
</tr>
<tr>
<td>(b) Mobility and change in workers’ way of life</td>
<td>Chaputot, J.J. UER Grenoble</td>
<td>The problem of peak demand</td>
<td>The transport/land use interaction; mode shares</td>
<td>Analysis of role of public transport in Grenoble’s journey to work patterns</td>
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<td>The economic structure of urban transport</td>
<td>Chaputot, J.J. UER Grenoble</td>
<td>Public transport finance</td>
<td>Revenue; subsidy</td>
<td>Examination of secondary sources on the system of financing and on revenue problems</td>
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<td>Urban public transport undertakings</td>
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<td>Organisation and structure of public transport</td>
<td>Formal structures</td>
<td>Compilation of information on main institutions and their finances</td>
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<tr>
<td>Urban transport systems and the journey to work</td>
<td>Chaputot, J.J. and Gagnier, J. UER Grenoble</td>
<td>The role of a major employer in industrial renewal</td>
<td>Recruitment policies; labour markets; entry to employment markets</td>
<td>A survey of major firms and their recruitment policies</td>
</tr>
<tr>
<td>Environmental defence movements in the Paris region</td>
<td>Cherki, E. CEMS</td>
<td>Demands for greater public involvement in planning decisions</td>
<td>Rationalism/irrationalism; interest group; legitimacy</td>
<td>Analysis of membership, objectives and actions of movements in the Paris region in the period 1968–77</td>
</tr>
<tr>
<td>The textile industry at Roubaix-Tourcoing; the major employers at Dunkirk</td>
<td>Coing, H. Campagnac, E. CRU</td>
<td>The role of a major employer in industrial renewal</td>
<td>Recruitments; demand for labour markets; entry to employment markets</td>
<td>Analysis of membership, objectives and actions of movements in the Paris region in the period 1968–77</td>
</tr>
<tr>
<td>Industrial conversion – the automobile industry in Nord and Pas de Calais</td>
<td>Convert, B. Pinet, B. IN</td>
<td>As above</td>
<td>Chains of employment mobility; stable and unstable components of a labour market; transport system and labour market structure</td>
<td>Analysis of secondary data plus small survey of employees</td>
</tr>
<tr>
<td>Project title</td>
<td>Researcher(s) and Institution</td>
<td>Research/Policy issues</td>
<td>Explanatory concepts</td>
<td>Research methods</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>The development of public transport supply in the Paris region 1855–1939</td>
<td>Daumas, M. CNAM</td>
<td>Historical development of the metropolitan public transport system</td>
<td>Lack of co-ordination; land use/transport interaction</td>
<td>Analysis of historical data on commute size and population structure, land use, other transport infrastructures</td>
</tr>
<tr>
<td>Drivers' information needs*</td>
<td>David, Y. IRT</td>
<td>Signposting policy on the road system</td>
<td>Understanding communication techniques</td>
<td>3,000 interviews with drivers in 1978; current survey with foreign drivers; tests on novel communication systems</td>
</tr>
<tr>
<td>Municipal transport services in the urban periphery</td>
<td>Dekker, M.A. Poulenat, C. IRT</td>
<td>Appropriate public transport systems for areas with low demand</td>
<td>Patterns of provision</td>
<td>Review and assessment of current supply – examining supplier institutions in Nancy, Rheims and Toulon (a preliminary study)</td>
</tr>
<tr>
<td>The neighbourhood – movement on foot</td>
<td>Durand, J. Matalon, B. BETEREM</td>
<td>Environmental and personal determinants of the car/walk modal split; planning for pedestrian movement</td>
<td>'Psychological accessibility'; concept of neighbourhood – functional and symbolic</td>
<td>Interviews in three neighbourhoods in Marseilles; data collected on use of and attitude towards neighbourhoods</td>
</tr>
<tr>
<td>The mobility patterns of working women in the Paris region</td>
<td>Pagani, J. Schwartz, J. SMASH</td>
<td>Is the specific social situation of women a particular determinant of their mobility?</td>
<td>Role and social system. Strategies for activity 'choice' and timing; transport system as social divider or integrator</td>
<td>Literature review; assessment from secondary sources of women's use of the transport system; later phase of in-depth interviews with a small sample (18) to test hypotheses</td>
</tr>
<tr>
<td>The conceptualisation and the regulation of individual travel patterns (2 phases)</td>
<td>Fichelet, R. SERES</td>
<td>Traffic management – the relationship between hard and soft systems approaches</td>
<td>Drivers' image and perception; use of cues in the environment functional versus cultural (personal) significance of signing systems; disjunction between user and enforcing agency</td>
<td>Heavily theoretico-conceptual, synthesising material on perception from social psychology; interviews with drivers and traffic planners</td>
</tr>
<tr>
<td>Accessibility and mobility in the evaluation process</td>
<td>Foraste, M. IRT</td>
<td>Evaluation of public transport systems</td>
<td>Activity programme; accessibility to opportunities</td>
<td>Model construction and testing, using existing household data</td>
</tr>
<tr>
<td>Time budgets in certain French towns</td>
<td>Godard, X. IRT</td>
<td>Feasibility of applying time-budget analysis</td>
<td>Activity system; timing of trips; combination of trips</td>
<td>Analysis of existing data sets</td>
</tr>
<tr>
<td>Car use in urban areas. Activity patterns, accessibility and individual mobility (several overlapping projects)</td>
<td>Godard, X. Orfeuil, J.P. IRT</td>
<td>Methods of segmentation for trip generation and mode choice</td>
<td>Activity hierarchy; typologies of activity programmes; intra-household decision-making; life style; utilisation of urban area; professional status</td>
<td>Analysis of an extensive data set from Dijon, with comparison with other smaller or less complete sets</td>
</tr>
<tr>
<td>The organisation of car-pooling</td>
<td>Godard, X. Marotol, G. IRT</td>
<td>Feasibility and organisation of car pools</td>
<td>Groupings; motivation; trip purpose</td>
<td>Literature review and preliminary thinking only at this stage</td>
</tr>
<tr>
<td>Life style studies – mobility and use of space (2 phases of work)</td>
<td>Haumont, A. ISU</td>
<td>Social forecasting, population segmentation</td>
<td>Attitude to place; social meaning; cultural models as referents, norm</td>
<td>In-depth interviews on small samples in selected spatial contexts</td>
</tr>
<tr>
<td>Spatial mobility and the emergence of the wage-earning society</td>
<td>Haumont, A. ISU</td>
<td>Social and mobility responses to urban change and industrialisation</td>
<td>Gemeinschaft/Gesellschaft; thresholds in mobility patterns; social meaning of mobility</td>
<td>In-depth interview with small sample, selected in relation to a theoretical framework</td>
</tr>
<tr>
<td>The impact of a new public transport system at Saumur (pilot phase)</td>
<td>Haumont, A. ISU (with IRT)</td>
<td>Improvements in personal mobility associated with public transport investment; monitoring – target groups and measurement of effects</td>
<td>Activity programme; interpersonal decisions and constraints on mobility; activity space systems; household strategies on children's movements</td>
<td>Pilot phase of 20 interviews in-depth with mothers and older children; later work at planning stage</td>
</tr>
<tr>
<td>Policy instruments and regional public transport systems</td>
<td>Haumont, B. Savy, M. PA</td>
<td>Co-ordination of land use and transport planning at different levels – state, regional and local</td>
<td>Specialisation and spatial separation in the work force; territoriality</td>
<td>Historical analysis of structural effects of transport systems in Lorraine and the Rhine Mouth area</td>
</tr>
<tr>
<td>Project title</td>
<td>Researcher(s) and institution</td>
<td>Research/Policy issues</td>
<td>Explanatory concepts</td>
<td>Research methods</td>
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<tr>
<td>The impact of inter-urban routes on a rural area</td>
<td>Hanrot, P. Le Gall, M. SEDES</td>
<td>Regional and local significance of new through routes</td>
<td>Connectivity of urban and rural areas</td>
<td>Detailed study of household and regional response in two areas at different distances from Paris</td>
</tr>
<tr>
<td>The taxi service: policy and organisation (2 phases)</td>
<td>Laneyrie, P. CRESAL</td>
<td>How to integrate the taxi more thoroughly into the public transport system</td>
<td>Internal conflict; co-ordination; self-image; customer service</td>
<td>Review of extent structure and organisation of the taxi service; study of 3,600 taxi users in Lyons</td>
</tr>
<tr>
<td>The social image of accidents and accident prevention policies</td>
<td>L'Hôte, J. Barjonot, P. ONSER</td>
<td>Legitimisation and acceptance of legislation on speed, drinking, seat belts</td>
<td>Image; representation; labelling; models of causality; internalisation; acceptance</td>
<td>Contents analysis of accident reports; interviews with those involved in accidents</td>
</tr>
<tr>
<td>Walking as a transport mode</td>
<td>Maral, B. BETEREM</td>
<td>Forecasting modal split; planning for pedestrians</td>
<td>Attitudes to mobility; activity space</td>
<td>Pilot study – empirical investigation of walking vis-à-vis other modes</td>
</tr>
<tr>
<td>Use and accessibility of the neighbourhood</td>
<td>Maral, B. BETEREM</td>
<td>Planning for pedestrians</td>
<td>Meaning of neighbourhood; use and perception of neighbourhood</td>
<td>Study of use of local area in three Marseilles neighbourhoods</td>
</tr>
<tr>
<td>Mobility and the elderly</td>
<td>Maral, B. Averous, B. BETEREM</td>
<td>Transport policies for the elderly</td>
<td>Activity; mobility indices; life style</td>
<td>Survey of 400 people aged 55–75 in Marseilles</td>
</tr>
<tr>
<td>Contrasting forms of transport provision*</td>
<td>May, N. Ribell, G. IREP</td>
<td>Critique of transport policies</td>
<td>Structural effects; differential access to employment</td>
<td>Examination of journey to work patterns in 3 areas according to who provides transport</td>
</tr>
<tr>
<td>The development of new urban public transport systems</td>
<td>Nicolon, A. IREP</td>
<td>The management of innovation</td>
<td>Political processes; conflict- ing perspectives; co-ordination; role; actors</td>
<td>Historical review, plus detailed examination of key decisions in the implementation of VAL rapid transit system at Lille</td>
</tr>
<tr>
<td>Traffic plans and the neighbourhood*</td>
<td>Offner, J.M. IRT</td>
<td>Impact of traffic schemes on use of neighbourhood</td>
<td>Activity space; mental maps; meaning; behaviour; severance</td>
<td>Longitudinal study of neighbourhoods and pedestrian movement at Orleans, Angers, Strasbourg and Marseilles; photography and interview</td>
</tr>
<tr>
<td>Energy assessment of urban transport policies*</td>
<td>Orfeuil, M. IRT</td>
<td>Energy accounting and project evaluation</td>
<td>Energy costs</td>
<td>Not decided at this time this report was prepared</td>
</tr>
<tr>
<td>The determinants of mobility*</td>
<td>Palmade, J. ARIP</td>
<td>Casual explanation of destination and activity choice</td>
<td>Attitude to place; meaning of travel; life history; culture</td>
<td>In-depth interview of small sample; testing of variables related to localistic versus more distant cultures and choices</td>
</tr>
<tr>
<td>Bus users’ information needs</td>
<td>Pouletat-Abillé, C. Tarrius, A. IRT</td>
<td>Providing information about a public transport system</td>
<td>Learning process; information diffusion; role of media; ease of understanding</td>
<td>140 open interviews conducted in Le Mans and Nice on users and non-users</td>
</tr>
<tr>
<td>Mobility of the handicapped</td>
<td>Pouletat-Abillé, C. Tarrius, A. IRT</td>
<td>The relevance of transport policies to the welfare of the handicapped</td>
<td>Social integration and life history as determinants of present mobility; social and professional status</td>
<td>Detailed study (contents analysis) of depth interviews with 80 handicapped people in urban, rural and semi-rural areas</td>
</tr>
<tr>
<td>Mobility of the handicapped*</td>
<td>Pouletat-Abillé, C. IRT</td>
<td>Assessment of special services for the handicapped</td>
<td>Autonomy; activity; orientation; social status</td>
<td>Study of users of special services in two locations</td>
</tr>
<tr>
<td>A new demand-responsive system at Saumur (and follow-up)</td>
<td>Pouletat-Abillé, C. IRT</td>
<td>Segmentation of users and their demand profiles</td>
<td>Activity; frequency; strategies of use</td>
<td>User study in first phase (For follow-up see Haumont, A.)</td>
</tr>
<tr>
<td>Journey to work patterns in rural areas</td>
<td>Pouletat-Abillé, C. IRT</td>
<td>Demand for special works transport in rural areas</td>
<td>Mode choice; preference; availability; car pool</td>
<td>Research being planned during 1979; secondary data analysis in first phase</td>
</tr>
<tr>
<td>Project title</td>
<td>Researcher(s) and Institutions</td>
<td>Research/Policy issues</td>
<td>Explanatory concepts</td>
<td>Research methods</td>
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<tr>
<td>Road accidents and the preventative role of the state</td>
<td>Querouille, O. and Harmelle, C.</td>
<td>How to devise and present safety legislation which is acceptable and effective</td>
<td>Image and representation, perception, norms and rules</td>
<td>Literature and media survey; interviews with drivers; extensive theoretical content</td>
</tr>
<tr>
<td>Personal mobility and new life styles*</td>
<td>Querouille, O. and Harmelle, C.</td>
<td>The effects of car availability on social interaction</td>
<td>Technological versus social determinism; norms; expectation; 'deterritorialisation'</td>
<td>Ongoing research; theoretical frameworks in process of construction</td>
</tr>
<tr>
<td>Passengers’ use of the railway</td>
<td>Raymond, H. and LASSAU</td>
<td>The value and meaning of travel; more detailed significance of design</td>
<td>Cultural models; ritual; social meaning</td>
<td>'Ethnographic film studies'; film and follow-up interview, showing respondent film of his/her behaviour</td>
</tr>
<tr>
<td>How people see and use transport systems</td>
<td>Raymond, H. and LASSAU</td>
<td>Value of travel</td>
<td>Mental maps; attitude to place; perception of function; learning</td>
<td>As above; interview technique gives rise to form of contents analysis in which symbolism is explored</td>
</tr>
<tr>
<td>The role of public transport for immigrant groups</td>
<td>Regazzola, Th. and CSEP</td>
<td>Levels of integration of immigrant groups in urban life</td>
<td>Territory-network; home role; work role; transport system as place of transformatin between two roles</td>
<td>Analysis of home and work based social networks and journey to work patterns; use of film</td>
</tr>
<tr>
<td>Urban social organisations and spatial mobility</td>
<td>Tarrius, A. and IRT</td>
<td>Determinants of individual travel; segmentation of population</td>
<td>Activity programme; social organisations; structural complementarity; social integration</td>
<td>In-depth discussion about travel behaviour; testing of theories on secondary data</td>
</tr>
<tr>
<td>Mobility, life style, and use of the urban area (several linked studies)*</td>
<td>Tarrius, A. and IRT</td>
<td>As above</td>
<td>Membership of social institutions; institutional complementarity; stage of social development</td>
<td>Household travel survey at Lyons, Marseilles and Dijon. Attitude and perception studies</td>
</tr>
</tbody>
</table>
Fig. 1 A REPRESENTATION OF THE RELATIONSHIP BETWEEN THE MAIN AGENCIES ENGAGED IN TRANSPORT RESEARCH IN FRANCE

Note: Only transport ATPs are shown. There are also a number of other ATPs administered by the ministries shown here.
7. APPENDIX 1
An annotated bibliography


Outlines what is known of the increase in use of the bicycle from various transport surveys, and argues that more research needs to be undertaken on this mode.


An ATP project on who uses the bicycle and under what conditions.


Summary of conference paper on research findings for an ATP project. Shows how the immigrants’ network of activities within the city is developed.

BENUSIGLIO, D. The organisational determinants of the way in which decisions are made about public transport provision in provincial towns (Déterminants organisationnels des processus de décision concernant la production du transport collectif dans les agglomérations de province). Paris, 1978 (Ministère des Transports, Mission de la Recherche).

A summary and synthesis of a series of studies of different aspects of decision-making in a range of provincial towns.

BENUSIGLIO, D. The organisation and co-operation of agencies involved in the development of urban public transport systems (Localisation des capacités d'expertise et répartition des pouvoirs qui président à l'évolution des systèmes de transports collectifs urbains). Paris, 1977 (Ministère des Transports, Mission de la Recherche, 2 volumes).

A case study of the establishment of new urban public transport systems in major French towns, in which the relationship between central and local sources of power is examined. Sets up the conceptual framework and gives eight case studies.


Outlines on ongoing research project on 1100 households at Besançon which will extend research on the relevance of key changes in the life cycle of the individual to his use of public transport. Follows on from work conducted at Rennes.

This paper sets up the conceptual framework for the analysis of life cycle and changes in the life cycle and says how they were employed in a study at Rennes. (This is not the same as the paper published in English under the same title in the conference proceedings.)


Summarises ideas developed at IRT on transition moments in life cycles and their relation to changes in transport mode use.


Main report of work whose key concepts are given in English in the above entry.


Provides an account of the conceptual framework against which a current research project (ATP funded) on female mobility should be set. This work is an examination of the activity systems of 50 women, half working and half non-working. No publications on this project are yet available.


An ATP report on a study conducted at Dunkirk in which the journey to work patterns of 12,000 workers were examined in three major enterprises. This work was followed up by 60 in-depth interviews. Explains work recruitment patterns in structural terms.


An article based on part of the analysis of an ATP project. Shows how Usinor’s new iron and steel works at Dunkirk has tended to reinforce a pre-existing social structure through its selection of areas through which it operates works busses.


(All Ministère des Transports, Mission de la Recherche).

These reports relate to a series of ATP-funded studies. Looks at the local and central sources of finance and policy guidance for public transport and at the different forms of undertaking involved in public transport provision.


Looks at the relationship between urban structure and the journey to work, in particular at the functional relationship between employment zones and the residential neighbourhoods supplying their workforce.


Paper based on long-term research into the two areas, on ATP funding. Compares Grenoble and Lille in terms of the extent to which transport policies have been responsive to local wishes and suggests how policy values are derived.


Presents the conclusions formed during the course of a study conducted with ATP support. Looks at interest and pressure groups opposing the establishment of major transportation infrastructures over the period 1968—1977.


ATP report on the study mentioned above.

Reports one aspect of the work conducted with Campagnac under ATP funding. Shows how the declining coalfield area has become a reservoir of cheap labour for new industries, with the company transport system defining access to employment opportunities for the workforce.


Examines the employment hinterland created and maintained by major employers in a development area, and the mismatch which this creates with housing and urban management policies.


A paper summarising the findings of an ATP project of the same title (see below).


Report of an ATP project in which the structuring effect of the works transport system is established. Looks at the introduction of major new automobile works in the Nord-Pas-de-Calais region, and the emergence of the employment market for it. Underlines the distorting effect of transport provision on the market, and on the individual's freedom of choice of employment.

DAUMAS, M. An assessment of land use and public transport policies in the Paris region between the wars (Bilan d'une problématique incertaine de l'évolution de l'espace et le problème des transports en commun de la région parisienne entre les deux guerres). A Paper delivered to a colloquium on Transport Systems and Society at Royaumont, April 1978.

A critique of legislation and planning practice in the interwar period, in particular for suburban Paris, and of the failure to carry into practice ideas then current on co-ordination of land use and transport policy.

DEKKERS, M A and POULENAT-ABALLEA, C. The determinants of transport supply in low-demand peripheral areas (Desserte des zones périphériques à faible demande: les déterminants de l'offre de transport). A paper delivered to a colloquium on Transport Systems and Society held at Royaumont, April 1978.

Reports a study conducted on three towns – Nancy, Rheims and Toulon, in which the diversity of provision in suburban areas was explored. Based on an approach via supplier institutions rather than users.

Gives a brief exposition of the Lefebvrien school's views on architecture and planning. Provides a direct attack on functional approaches and outlines the case for a belief in the existence of different cultural models as referents for individual behaviour.


Reports an ATP research project conducted in Marseilles, in which use of and attitudes towards the neighbourhood are explored in three neighbourhoods.


Report of an ongoing research project which is on a joint Transport and Urban ATP funding in which in-depth interviews about professional and domestic activities and personal mobility are designed to yield a comparison between employed women with and without family responsibilities.


A methodological discussion in which the role of attitudinal research is critically assessed. Attacks the notion that attitude is itself explanatory of behaviour.


A theoretical and empirical examination of driver behaviour, route choice, and the choice process which addresses the question of how to develop policies of traffic (or rather movement) management.


Summarises the arguments presented at greater length in the reports cited above.


An early attempt to test the applicability of time budget analysis to existing data sets. Marks a preliminary phase in the thinking behind work subsequently conducted with Orfeuil.

Sets up the conceptual framework within which the analysis of a major survey at Dijon was later conducted. Key concepts and analytic themes are outlined, and the survey work described.


Examines car ownership and use in Dijon, attempting to develop a typology of activity combinations for which the car is used (reflecting household decisions on activity priorities). Pays particular attention to the effect of two-car ownership or availability.

GODARD, F and CASTELLS, M. Monopolville — the company, the state and urban life (Monopolville — l’entreprise, l’état, l’urbain). Paris, 1974 (Institut de Sociologie Urbaine).

Discusses the structuring effect of employment patterns on urban life.


This text, which appeared after much of Haumont’s work on housing but in the early stages of his involvement in transport research, sets up the philosophical and conceptual base for his later work on mobility.


Report of the first phase of a transport-ATP-funded project in which a set of respondents talk in depth about different activities that they undertake; their meaning and the transport patterns that they give rise to.


An examination of the spatial extent of individual travel patterns, interpreted in relation to life style.

HAUMONT, A. The impact of public transport innovations at Saumur (L’impact d’un réseau de transport collectif à Saumur) Paris, 1979 (Institut de Sociologie Urbaine, note d’activité, no 2).

Reports the research questions to be addressed in a follow-up study of the use of a demand-responsive bus system. The study will examine the role of the system in allowing changes in activity patterns to be achieved by certain sub-groups, particularly older children and their mothers.

Reports research findings on two affected regions at different distances from Paris. Finds that while locally adverse effects on agriculture can be identified, there is little other local impact.


Provides a summary of the discussions which took place at Transport Systems and Society Colloquium at Royaumont, April 1978.


An example of early work in a substantive field of sociology of the kind which later became a basis for mobility studies.


Two volumes reporting an ATP funded project. In volume 1, the author presents the general overview of taxi services in France, relevant legislation and the development of supply. In volume 2, the author reports a study of taxi users in Lyons and deals also with the profession’s attitudes towards the service that they provide.


A critical analysis of the presentation of safety legislation and of the portrayal of accident information. Discusses the applicability of different models of social control to driver and enforcement agency attitudes to the legislation.


Reports the ATP project listed above.

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Reports an analysis of secondary data on household expenditure. Spatial and social segmentation of households is used, in conjunction with trip information, to determine what transfers are effected by the current system of funding of public transport.


Report of an ATP project which examines the extent and range of walking as a transport mode, as evidenced in travel surveys, and sets up a framework for further study.

MATALON, B and DURAND, J. See Durand, 1979, above.


Reports an ATP funded investigation of the travel behaviour of 400 people aged 55 to 75 in Marseilles. Examines the use of the neighbourhood in comparison to more distant destinations.

MATALON, B. Do we travel for reasons other than getting to other places? (Ne nous déplaçons-nous que pour aller quelque part?). Paris, 1979 (Published in English in 'Mobility in Urban Life' conference proceedings, IRT).

A brief summary (in English) of the main concepts and key findings in Matalon's recent research.


Gives a Marxist critique of the system of public transport supply, employing the concept of alienation.


Reviews the history of transport planning in France from 1960 onwards, and the part played in the definition of policy by central government, local authorities, operators, vehicle construction firms, and users. Based on two detailed case studies.
POULENAT-ABALLEA, C and TARRIUS, A. Users' knowledge of the bus service: the information that they need and how they acquire it (Information des usagers des réseaux d'autobus: processus d'information et besoins de l'usager). Paris 1978 (IRT Rapport de Recherche 33, vol 1).

Report of a study of 140 users and non-users of bus services in two towns, which assesses how much the two groups know about existing services, and how easy to understand they find the information available.


A report of a survey which used in-depth interview techniques to investigate the mobility of the handicapped. Based on a small sample, structured to take account of different spatial contexts.


A study of handicapped persons in two areas with different policies for special transport provision, which should be seen as an application and development of ideas in Rapport de Recherche 40.


Presents an analysis of the way in which the car and road accidents have been presented in the media over the period 1955—1975. Argues that state intervention through road safety legislation during the 1970s marks an attempt to attribute accidents more substantially to human error (speeding, drinking) and to generate a positive belief in society's capacity to control them, in contrast to an earlier period.


The report on which the above paper is based. A theoretical-conceptual analysis of the way in which accidents are treated by the press, how individuals involved feel about accidents, and the way in which law enforcement agencies are seen by the driving public.
RAYMOND, H. A method of data extraction by content analysis for non-directed interview research (Une méthode de dépouillement et d'analyse de contenus appliquée avec entretiens non directifs). Paris, 1968 (Institut de Sociologie Urbaine).

Explains the way in which researchers from ISU, including Raymond and Haumont, carry out analysis on the in-depth interviews which are a key method in their work. Although it dates from a period when Raymond was working on housing, not transport, the report contains example material of the way in which the symbolic as well as the material content of a conversation is recorded and analysed.


Outlines the rationale for the author's use of film in a study of users at the St Germain station of the new RER line in suburban Paris.


Travel patterns, travel research and those who use research output: ways of presenting research findings (Usagers, recherche et utilisateurs: méthodologie et communications de résultats). Paris, 1979 (Ministère des Transports, Mission de la Recherche).

A report in which the author attempts to interpret earlier research findings on the material and symbolic significance of the railway station in terms of physical design characteristics.


Both of these reports are based on work conducted under an ATP funding in which the journey to work patterns of immigrant groups in greater Paris were examined. The author builds an explanatory structure based on the concept of territory. The roles and social networks at home and at work are seen as opposing poles in the individual's activity system. The journey to work thus constitutes a period of adjustment and legitimation of the new role set within a conflict model.


A paper setting out the theoretical context and findings of the work reported above.

Sets out the conceptual framework within which the author is conducting current research at IRT. The use of an area is seen as a function of the social institutions to which an individual belongs, since this defines for him the 'structural complementarity' of the different parts of an urban area.

THOENIG, J C. The era of the technocrats (an example from highway planning) (L'ère des technocrates: le cas des ponts et chaussées). Paris, 1973 (Editions d'organisations).

A classic text from French "Sociology of Organisations", in which the author traces the historical development of the training, skills, role and status of the highway planner from early road construction in the mid nineteenth century to urban redevelopment in the 1970s.
8. APPENDIX 2

Index of authors by topic

8.1 Sub-groups

Children and Young Adults:
  Bourgin, C, Haumont, A

The Elderly or Handicapped:
  Bourgin, C, Durand, J and Matalon, B, Offner, J M, Poulenat, C.

Migrants:
  Barbichon, G, Regazzola, Th

Women:
  Bourgin, C, Chabaud, D, Fagnani, J, Godard, X, Haumont, A

The Workforce:
  Campagnac, E, Chaputot, J J, Coing, H, Convert, B, Haumont, A, Poulenat, C, Raymond, H

8.2 Transport modes

Bus:
  Benusiglio, D, Bourgin, C, Daumas, M, Haumont, A, Madre, J L and Picard, P, Nicolon, A, Poulenat, C, Tarrius, A

Car:
  Duclos, D, Fichelet, R, Godard, X, Laneyrie, P, L’hoste, J, Querouille, O

Cycling:
  Averous, B

Taxi:
  Dekkers, M A and Poulenat, C, Laneyrie, P

Train:
  Raymond, H

Walking:
  Durand, J and Matalon, B, Matalon, B, Palmade, J, Tarrius, A

Works Transport:
  Campagnac, E, Chaputot, J J, Coing, H, Convert, B

8.3 Spatial context

Large Towns/Metropolitan Area:
Smaller and Freestanding Towns:
   Barbichon, G, Haumont, A, Poulénat, C

Neighbourhood/locality:
   Haumont, A, Matalon, B, Palmade, J, Offner, J M, Querouille, O, Raymond, H, Tarrius, A

Rural areas:
   Barbichon, G, Dekkers, M A and Poulénat, C, Poulénat, C
9. APPENDIX 3
A glossary of institutions appearing in the text

ARIP: Association pour la Recherche et l'Intervention Psychosociologique
- 4 rue Bacheaumont, 75001 PARIS

BETEREM: Bureau d'Etude pour l'Urbanisme et l'Equipement de la Région Méditerranée
- 17 allée Cervantes, Parc du Roy d'Espagne, 13009 MARSEILLE

CEMS: Centre d'Etudes des Mouvements Sociaux
- Maison des Sciences de l'Homme, 54 Boulevard Raspail, 75006 PARIS

CERFI: Centre de Recherche et de Formation Institutionnelle
- 9 rue Pleyel, 75012 PARIS

CETUR: Centre d'Etudes des Transports Urbains
- 46 avenue Aristide Briand, 92220 BAGNEUX

CGP: Commissariat Général au Plan
- 18 rue Martignac, 75007 PARIS

CNAM: Conservatoire Nationale des Arts et Métiers
- 292 rue Saint-Martin, 75003 PARIS

CREDOC: Centre de Recherche et de Documentation sur la Consommation
- 140 rue du Chevaleret, 75013 PARIS

CRESAL: Centre de Recherches et d'Etudes Sociologiques Appliquées de la Loire
- 6 place de l'Hôtel de Ville, 42000 SAINT-ETIENNE

CRU: Centre de Recherche Urbaine
- 74 rue de la Fédération, 75739 PARIS

CSEP: Centre de Sociologie Economique et Politique
- 14 rue du Faubourg St Denis, PARIS

CSU: Centre de Sociologie Urbaine
- 118 rue de la Tombe-Issoire, 75014 PARIS

DAFU: Direction de l'Aménagement Foncier et de l'Urbanisme
- 2 bis, avenue du Parc du Passy, 75775 PARIS

DATAR: Délégation à l'Aménagement du Territoire et à l'Action Régionale
- 1 avenue Charles Floquet, 75007 PARIS

DRCR: Direction des Routes et de la Circulation Routière
- Ministère des Transports, 244 Boulevard Saint-Germain, 75007 PARIS

DTT: Direction des Transports Terrestres
- Ministère des Transports, 244 Boulevard Saint-Germain, 75007 PARIS

GETRAM: Groupe pour les Etudes en Transports et l'Aménagement
- 20 avenue du Moulin de Soquet, 99400 VITRY-SUR-SEINE

GRETU: Groupe de Réflexion sur l'Economie des Transports Urbains
- Ministère des Transports, 244 Boulevard Saint-Germain, 75007 PARIS
IDET-CEGOS: Institut pour le Développement Economique et Technique — Commission Générale de l’Organisation Scientifique
— 33 quai Galliéni, 92150 SURESNES

IIN: Institut Industriel du Nord
— 59650 VILLENEUVE-D’ASCQ

INSEE: Institut National de la Statistique et des Études Économiques
— 12 rue Boullitte, 75014 PARIS

IREP: Institut de Recherches Économiques et de Planification
— Université des Sciences Sociales de Grenoble 11,
Domaine Universitaire de Saint-Martin d’Hères et Gieres,
BP 47 X, 38040 GRENOBLE, Cedex

IRT: Institut de Recherche des Transports
— 2 avenue du Général Malleret-Joinville, BP 28-94114 ARCUEIL, Cedex

ISU: Institut de Sociologie Urbaine
— 7 rue Saint-Marc, 75002 PARIS

LASSAU: Laboratoire de Sciences Sociales Appliquées à l’Urbanité
— 6 rue Mail, 75002 PARIS

ONSER: Organisme National de Sécurité Routière
— 244 Boulevard Saint-Germain, 75007 PARIS

PA: Prospective et Aménagement
— 87 avenue Denfert-Rochereau, 75014 PARIS

RATP: Régie Autonome des Transports Parisiens
— 53 quai des Grands Augustins, BP 70-06, 75271 PARIS, Cedex 06

SEDES: Société d’Études pour le Développement Économique et Social
— 67 rue de Lille, 75007 PARIS

SERES: Société d’Études et de Recherche Économiques et Sociales
— 10-12 rue Richer, 75009 PARIS

SETRA: Service d’Études Techniques des Routes et Autoroutes
— 46 avenue Aristide Briand, 9220 BAGNEUX

SMASH: Société de Mathématiques Appliquées et des Sciences Humaines
— 142 rue du Chevaleret, 75013 PARIS

UER: Unité d’Enseignement et de Recherche à Grenoble
— 2 rue François Raoult, 38000 GRENOBLE
ABSTRACT

THE CONTRIBUTION OF THE SOCIAL SCIENCES TO TRANSPORT RESEARCH IN FRANCE: Mary Benwell (Centre for Transport Studies, Cranfield Institute of Technology): Department of the Environment Department of Transport, TRRL Supplementary Report 637: Crowthorne, 1980 (Transport and Road Research Laboratory).

A literature search and series of interviews with researchers in social aspects of transport was conducted in France during late 1979 and early 1980. In all, 58 research projects were examined and 21 researchers interviewed about their work. The general context within which research is funded and undertaken was also examined, to assess whether experience in France was applicable to transport research in Britain. The report summarises current or recent social research in transport in terms of the research methods and explanatory concepts employed, as well as the policy issues addressed. It also provides an annotated bibliography and an index for sub-groups and transport modes. The research examined covers institutional factors in transport supply and the relationship of transport to economic and social development, as well as studies of individual mobility. So far, its application to the planning and implementation of particular projects has been limited, and it has been used chiefly to provide a background context for policy.

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