
A research concept for mobility styles

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Conference paper

Moving through nets:

The physical and social dimensions of travel

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A research concept for mobility styles

The Institute for Social-Ecological Research (Institut für sozial-ökologische Forschung - ISOE) in Frankfurt conducts research on the interface between sociological and ecological questions. For eight years now, traffic and mobility has been one of our research areas.

We focus on the following questions:

- What is the motivational background behind traffic behaviour?
- How can road users be adequately grouped in a sociological sense?
- How do these groups tie in with empirical observations of traffic behaviour?

In order to answer these questions, we developed the concept of 'Mobility Styles'.

The theoretical background comprises a three-dimensional definition of mobility.

According to this, mobility is:

- the manoeuvrability of individuals and objects within a physical geographical space,
- the availability of transportation for the fulfilment of daily social needs: (places to eat, sleep, work, undergo training, enjoy life, etc.)
- But mobility is also always about positioning within symbolic space: where and how one moves is also always a sign of social positioning.

In practical research terms, this means that methods used in attitudinal and lifestyle research are coupled with methods of researching traffic behaviour.

The motivational and symbolic dimension therefore becomes part of causal traffic research (for ex. images of different modes of transportation)

Characteristic values of traffic behaviour are calculated according to specific types.

Only recently – based on computation by the Öko-Institut – we started to include ecological indicators, so that now environmental effects such as Co2 emissions can be calculated according to specific Mobility Styles.

Main findings:

In those projects where motivations and orientations are included in the research and related to traffic behaviour, one finds a stable picture of recurring interactions. It was possible to derive two important correlations from this:

- Very strong correlations between mobility orientations and traffic behaviour

Correlations between lifestyle orientations and certain characteristic values of traffic behaviour which weren't quite as strong, but nevertheless highly significant.

Mobility orientations and traffic behaviour

First, I will give a brief description of the mobility styles in the German city of Freiburg – the cluster analysis was based on different attitudes towards modes of transportation – including lifestyle orientations as descriptive variables.

The Traditional Domestic

Group, which is oriented towards family and security and mainly characterised by the fact that it does not hold pointed views

The Reckless Car Fans

People in this cluster are oriented towards career and achievement and are characterised by a very strong affinity to the car

The Status-oriented Automobilists

A type of person oriented towards prestige, with an affinity to the car, and which is also characterised by a strong sense of insecurity concerning non-automobile forms of locomotion.

The Traditional Nature Lovers

Basically traditional orientations; preservation of nature is top priority; members of this group enjoy going places on foot and do so frequently; the tram is the favoured form of transport.

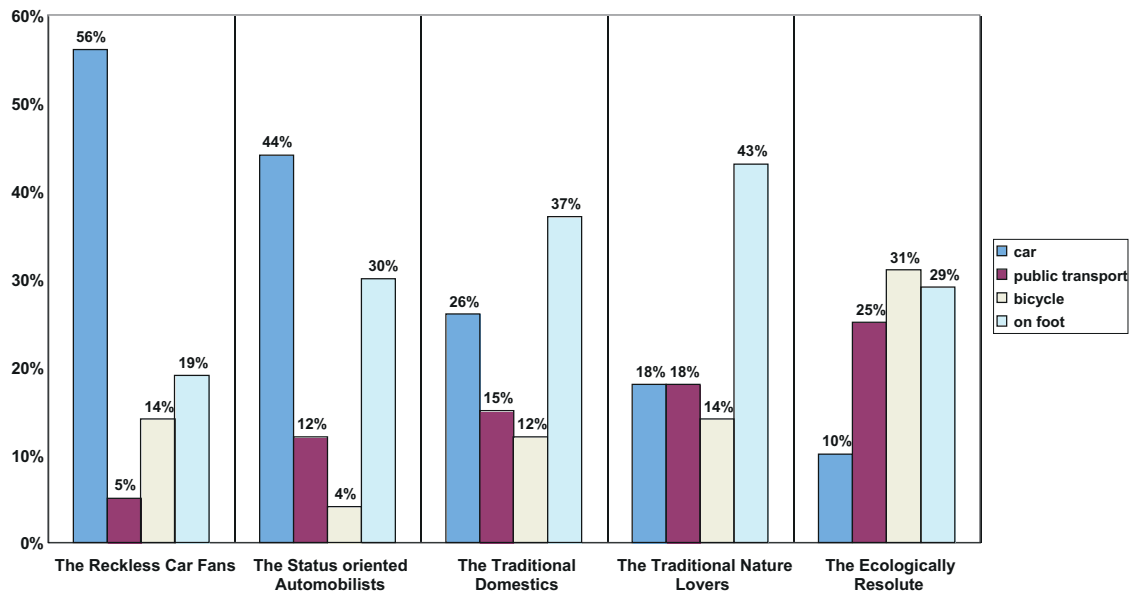
The Ecologically Resolute

A rather young and technically minded group; rejects the car for ecological reasons; the main and most popular mode of transportation is the bicycle

ISOE



The Mobility Styles in Freiburg
– Choice of means of transport: car/public transport/bicycle/on foot –



Traffic behaviour of the types:

The data for traffic behaviour was evaluated once the typology was fixed. This meant, we had a test for the hypotheses of a relationship between mobility orientations and traffic behaviour.

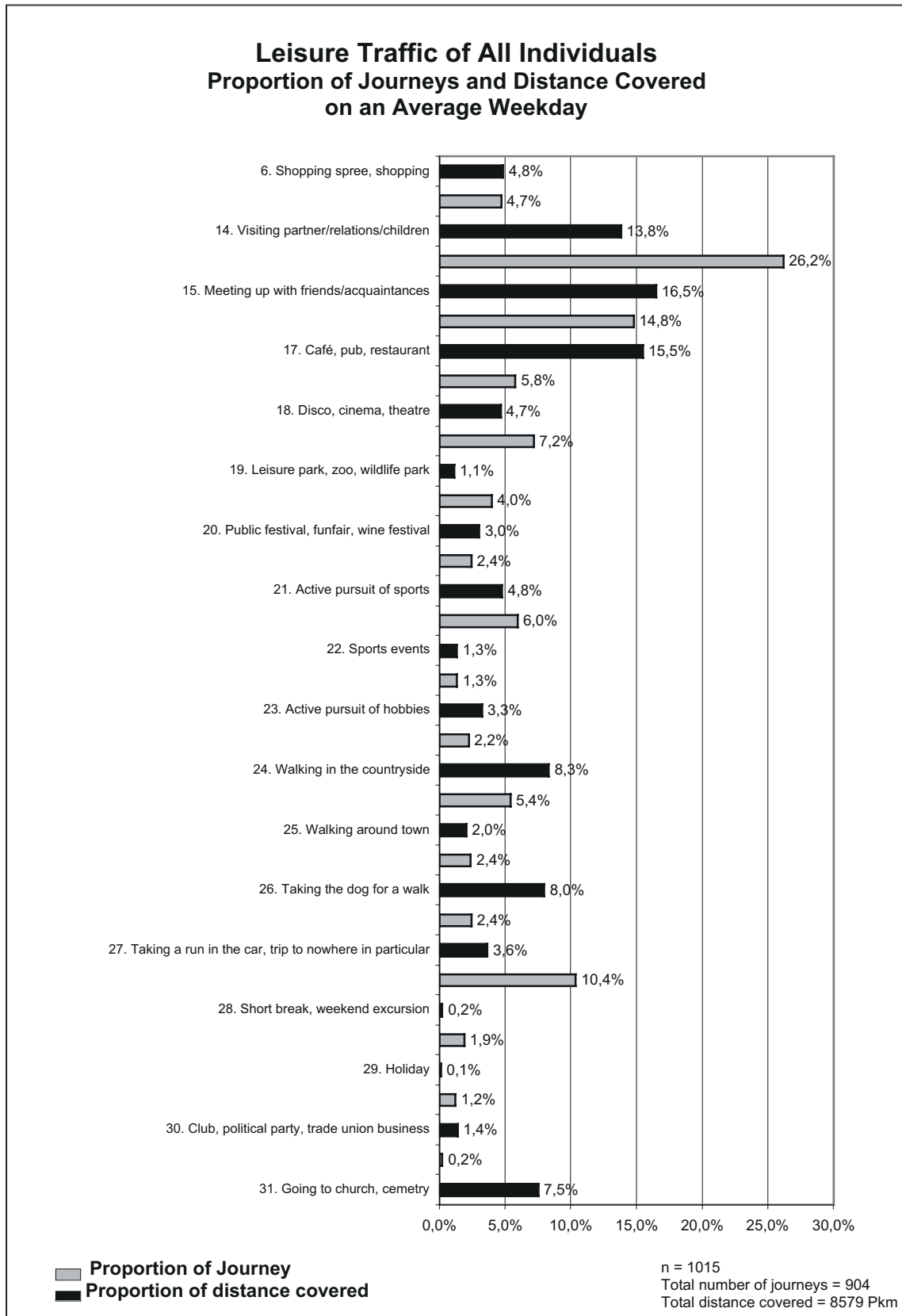
The differences in modal split are remarkable.

The Reckless Car Fans in Freiburg cover 56% of all trips by car. In contrast to this, The Ecologically Resolute use the car for only 10% of all trips.

Lifestyles and traffic behaviour in leisure time

In another project on leisure traffic the ISOE (Steffi Schubert and Konrad Goetz) cooperated with the Öko-Institut - Institute for Applied Ecology (Willi Loose and Martin Schmied).

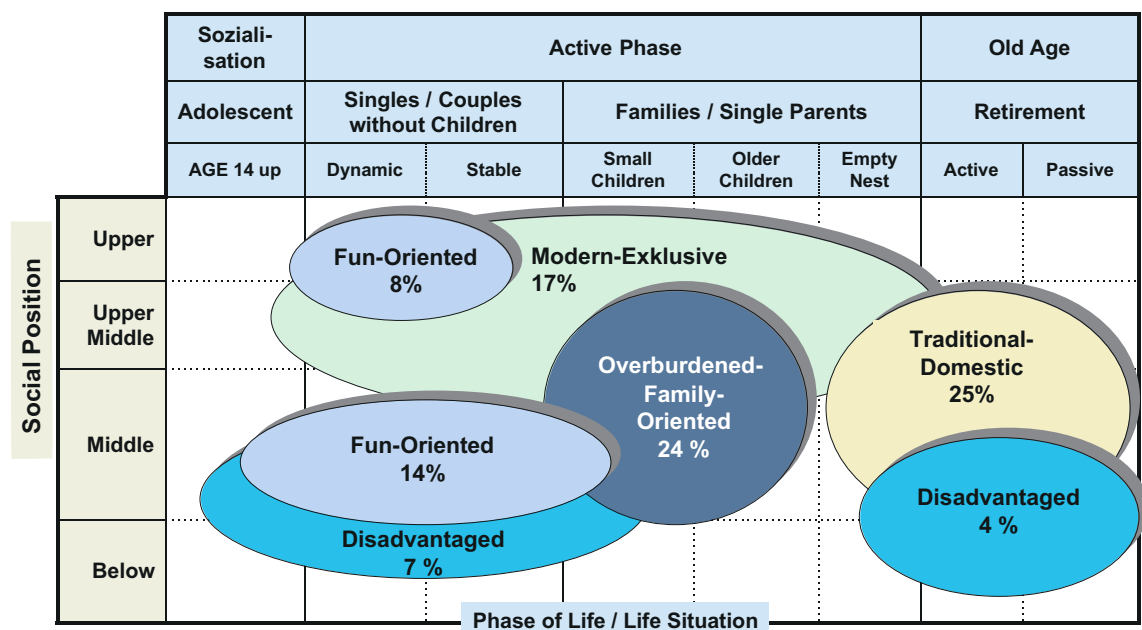
It was possible to develop a list containing 33 activities, of which 16 are leisure activities.



In this case the typology was compiled strictly on the basis of lifestyle orientations: After qualitative and quantitative research, we are able to distinguish 5 lifestyle-groups:



**ISOE Model of Social-Positioning:
Leisure Time Mobility Styles**



THE DISADVANTAGED ONES (DIS)

THE MODERN-EXCLUSIVE ONES (MOD-EX)

THE OVERBURDENED FAMILY-ORIENTED ONES (OVER-FAM)

THE FUN-ORIENTEDS ONES (FUN)

Constituent orientations

Representatives of this group enjoy individualistic fun, experience, and have risk orientations and a very strong affinity to modern technology.

They are characterised by a strong reference to (peer) groups and an aversion to commitments to family and neighbour affairs. They stress their

'egocentricity' and have an instrumental work orientation; as there are many school and college students in the group, this probably often means casual jobs in the pre-vocational phase. Younger people are clearly over-represented;

this group contains the highest proportion of people in the education system, but also self-employed people. The group has the highest educational qualifications (26% with a college degree as opposed to 12% overall), and the highest proportion of singles.

Let's compare another cluster that we have named

THE TRADITIONAL-DOMESTIC ONES (TRAD)

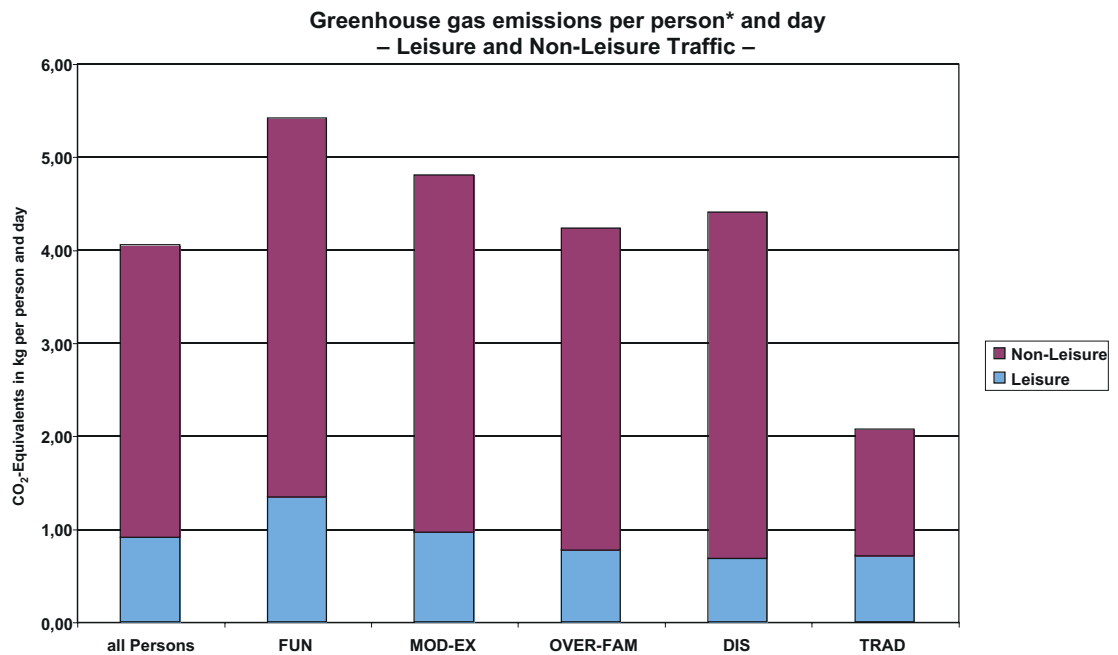
Constituent orientations

In this group, the need for security and the avoidance of any risk are pronounced to an above average degree. In terms of consumption, there is a preference for durability and proximity to Nature. This group emphasises traditional values and virtues and has severe reservations concerning modern information and communication technology.

ECOLOGICAL DATA

In this project we cooperated with Willi Loose and Martin Schmied who are Scientists at the Öko-Institut (Institute for Applied Ecology), Freiburg/Berlin. In this cooperation it was possible to couple environmental indicators with the data on traffic behaviour of the lifestyle groups.

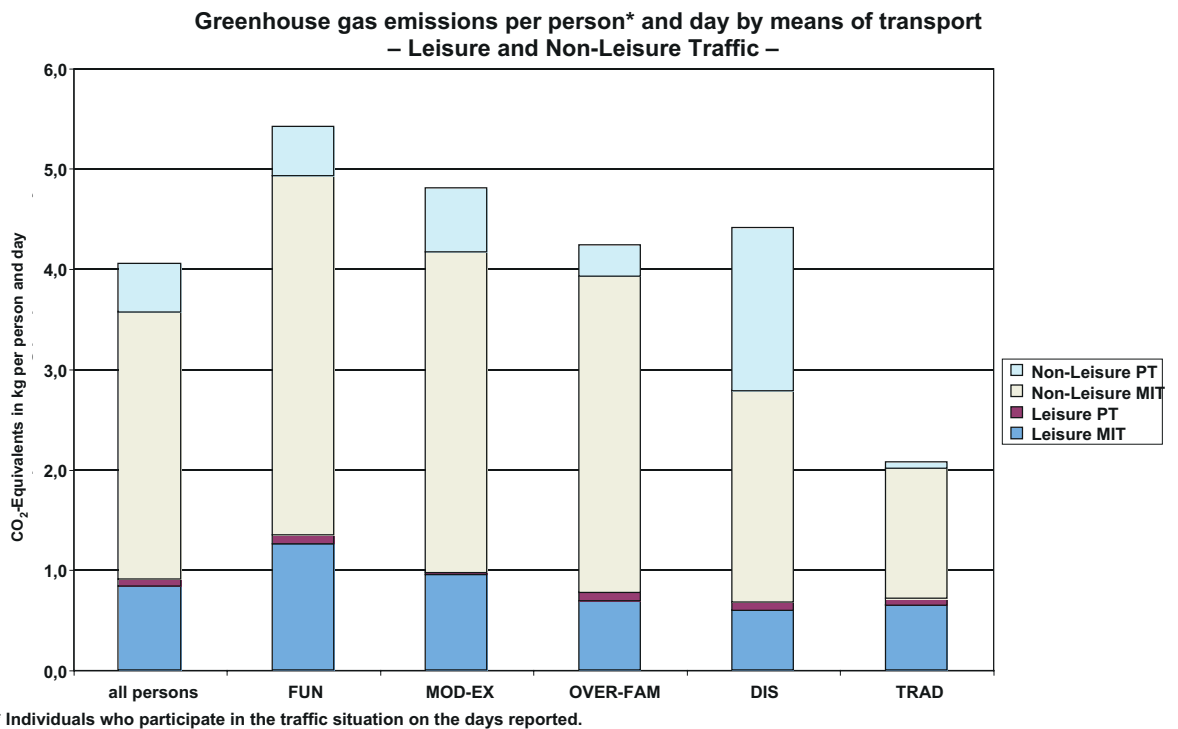
Here you see the result:



In this calculation we took into account the trips per day, the miles travelled, the modal split referring to the life-style groups and we found the following differences.

The Fun Oriented show more than twice the amount of CO2 Emissions comparing to the Traditional-Domestic Ones.

What you see is a typical result of Social-Ecological Research: In one measured value there are integrated three Types of results as well as three sciences: Sociologist life style research, travel-behaviour and environmental sciences.



Conclusions

What we are able to show:

Attitudinal, motivational and lifestyle dimensions can make an additional contribution towards clarifying variance in traffic behaviour.

These so-called soft factors should be taken into account to find target group specific measures for influencing travel behaviour in the direction of sustainability.