

**BREAKING THE HABIT OF A LIFESTYLE:
Scenarios for less car use.**

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"The car can please a few people all of the time, or many people some of the time, but it can never please all people all of the time."

With apologies to Abraham Lincoln

INTRODUCTION

This paper takes as its starting point the need to reduce car traffic, although there are as yet few signs of official policy directed at meeting this objective. The author has argued elsewhere the need to reduce traffic to serve a range of economic, social and environmental objectives (See for example Pharoah 1992, 1992a).

Most transport planning has been concerned with the problems of providing sufficient capacity (traffic models, evaluation techniques, development plans, traffic management), in other words it has been supply-oriented. Transport problems as a result have tended to be regarded as technical problems. A switch to demand management - necessary if traffic is to be reduced - is gradually taking place, as shown by the increasing interest in road pricing, parking restraint, park and ride, and other schemes. The perspective of transport planning, however, has changed very little, with supply considerations still in the foreground, and factors influencing demand very much in the background.

We are now in a stalemate, and examples of "trend breach" are very few and far between. "Carrots" can be offered to tempt people to use alternatives to the car (such as better rail services), or "sticks" can be used to actively discourage car use (such as higher parking charges, or reduced road capacity). In general, however, the offering of carrots is not sufficient to bring about any significant change in travel behaviour, and the use of sticks is politically unpopular. Neither carrots nor sticks will be used unless people vote for them, and people will not vote for them unless they can see the advantages of changing their individual behaviour. Thus the problem has an important dimension of personal and social attitudes, and it is necessary to explore this dimension if the stalemate is to be broken.

It is suggested that one reason why little progress has been made in demand management is that the personal or social dimensions of the problem have tended to be over-simplified or misunderstood. In particular, the widely supported goal of "free choice" has consistently been linked to the car without reference to its special characteristics. The habitual use of cars, for example, has more to do with the distortions brought about by the way cars are paid for, than with expressions of free choice.

Reducing car travel will require present and future car users not using the car habitually and automatically for all journeys, but choosing different modes for different purposes. To bring about such a change in behaviour and aspiration will require attention to be paid to the personal, household and social dimension of transport. It will be necessary to disaggregate people's motives and choices, and to be more specific about the relative qualities of lifestyles based on the car and lifestyles involving less reliance on the car.

A DANGEROUS HABIT?

The car may be likened to an addictive drug ¹. It initially gives the user a feeling of excitement or well-being. Initially it is used out of free choice. Sooner or later, the user becomes dependent on the drug, the choice of not using it has gone, the quality of the "hit" is diminished, and the only way out is to endure painful withdrawal symptoms. Let us consider how people

¹ Black's Medical Dictionary (A & C Black Ltd, 37th Edition, 1992) refers to "Psychological dependence (which) occurs when the drug user craves the drug's desirable effects. Physical dependence occurs when the user has to continue taking the drug to avoid distressing withdrawal or abstinence symptoms."

have come to be dependent on the car. Three phases can be identified.

Phase 1 The car as a luxury.

In the early days of motoring, the car was a luxury providing stylish mobility for an elite minority of wealthy people. In the 1950s, although car ownership spread to more middle-income people, it retained its luxury status. For example, many people kept a car solely summer use, and kept it in the garage for six or nine months of the year. Such selective use of the car was only possible because all regular needs could be met conveniently on foot, cycle or by public transport.

Phase 2 The car as an additional means of transport.

While road and parking space is available, many people, though not a majority, can enjoy tremendous convenience from car use, without causing major upheaval in the urban structure. The car becomes firmly embedded in both personal and business lifestyle, but users are still choosers; they can still opt if they wish *not* to own or use a car. They may be attracted on the "high" which car use can give, but they are not physically dependent: life can continue without the car, because many facilities still lie within walking distance, and reasonable public transport exists to serve longer distances. This phase can still be observed in some low car-ownership areas and parts of the bigger cities.

Phase 3 The car as the only means of travel.

Traditional urban structures can absorb only a limited amount of individual motorised travel. As more people gain access to cars, alternatives become less attractive: urban activities disperse, relocate and otherwise change in order to be easily accessible by car, while the other modes of travel, increasingly bereft of customers, become unsafe (walking and cycling), or unreliable and expensive (public transport), and irrelevant to the activity patterns that have been created. Ultimately, there is no longer any choice but to use the car for all purposes, and people at this stage are physically car-dependent. Those without access to cars suffer social and maybe economic deprivation; they are the "transport poor". This phase has been reached in many rural areas, parts of the Home Counties, and in wealthy suburban areas.

Thus we can see how the car, which started as a means of expanding opportunities, ends up by destroying choice for users and non-users alike. At the same time, the quality of experience of car use declines steadily as its use extends. It is thus quite wrong to infer from the behaviour of individuals in a car-dependent

society that they are exercising free choice, when in reality no reasonable choice exists.

We have referred above to psychological dependence and physical dependence. Whilst psychological dependence precedes the stage of physical dependence, it cannot be assumed that it continues once people have become physically dependent. If a car-dependent lifestyle is unsatisfactory, people may be psychologically ready to choose an alternative. The problem is that their physical dependence precludes such a choice; they are trapped.

PSYCHOLOGICAL DEPENDENCE

Psychological dependence embraces concepts of both emotional attachment to cars, and perceived dependence on a car-based lifestyle. Some evidence which throws light on the extent of such dependence is discussed below.

It is frequently believed that people are attached to cars in ways that have little or nothing to do with transport or access needs. Marsh and Collett (1986) conclude that "the car has long since vacated (the role)...of simply transporting people from one place to another". Reser (1980) points out that "while exorbitant and ultimately untenable (the costs) have done little to dissuade motorists from paying the price.. This would suggest that the private car is serving other than utilitarian needs." Reser then goes on to identify these other needs as perceived freedom, identification and self-expression, privacy, security, and individual environmental control. While acknowledging the lack of any substantive data on how important people perceive these needs to be, Reser concludes that "It would be a serious mistake to underestimate the importance of the psychological relationship which has formed between people and cars."

The perception of car users themselves as to how dependent they are, is important since it is perception rather than objective facts that determines behaviour. A survey for the RAC (MORI, 1990) showed that motorists considered the car essential for about half of the driving they do, and difficult to give up for a further quarter. Unfortunately, the survey did not specify whether "driving" meant miles or trips. In Leicester City Council's "no car week" in 1992 many people declined to take part saying they were completely dependent on their cars! (LTT 1993)

If the emotional attachment to cars is strong and shared by everyone, then any attempt to curb its ownership and use will meet

strong resistance in an otherwise "free" society. However, it cannot be assumed that all people will resist curbs on car ownership, nor that car owners will always resist curbs on driving regardless of circumstance. Where there are benefits to be gained, people will often welcome collective restraints. Well known examples are residents' parking schemes and parking meters, exclusion of cars from beauty spots and historic centres.

A survey undertaken by the author (Pharoah, 1987) aimed to quantify the strength of emotional attachment to cars. The survey included 595 drivers, of whom 452 (76%) had exclusive use of a car. The sample was drawn from 10 local areas representing different location and socio-economic characteristics in a cross section of Greater London. The results from the survey (amongst other things) revealed that just over half of drivers viewed the car simply as a means of transport, without any acknowledged or revealed emotional attachment to the vehicle. The proportion of such "utilitarian" car users varied from 45% to 58% between the different survey areas. The type of location was not significant in explaining this variation, but socio-economic status appeared to play a part. The lower-income, public housing tenants were more likely to express "pride" in their car, and less likely to take a utilitarian view, than middle or upper income groups in owner-occupied housing. To a measurable extent, there was an inverse correlation between the value of the car owned, and the degree of pride taken in it.

We may conclude from this that claims of "emotional attachment" to cars need not impede substantial progress with measures to restrain their ownership or use.

HABITUAL CAR USE

People with exclusive use of a car may habitually rely on it to an extent greater than can be explained by their locational or lifestyle circumstances. The RAC survey quoted earlier, for example, reported that 57% of drivers agreed with the statement that "many of the short journeys I currently make by car I could just as well walk". The car can thus be used habitually for all or most journeys, regardless of other possibilities. This reflects the habit-forming qualities of the car, five of which are:

1. The close link, created by the pricing system, between car ownership and car use.
2. Where supply of parking and roadspace is ample and free at

- the point of use, other modes cannot compete on criteria of time and convenience.
3. Regular use of car reduces knowledge of alternative modes, thus further reducing their perceived relative merits.
 4. Car availability encourages personal, household and business activity schedules which are achievable only by car.
 5. In the longer term, car-orientation of facilities and attractions reduces the ability to reach them by other modes. This converts the habit into physical dependence.

PHYSICAL DEPENDENCE

Total physical dependence on the car probably describes no more than a fifth of the population. No more than 40% of people in Britain have exclusive use of a car, of whom, say, half live in areas which offer reasonable access by other modes.

To assess the degree of car dependence it is necessary to consider both the availability of cars and the circumstances which compel their use. This relationship is summarised in Figure 1 which shows the range from total non-dependence, to total dependence, including the intermediate psychological and habitual variations already discussed. The degree of car availability is relatively straightforward. The degree of need², however, is complex, and results from a combination of factors:

Personal circumstances.

This includes age, or at least circumstances which are linked with age, such as school, employment status (full or part time, unemployed, retired), income, dependants (children, other relatives, etc), and even free time pursuits (golf, theatre, stamp collecting for example produce widely varying travel needs, respectively to out-of-town, centre of town, stay at home).

Locational circumstances.

The proximity and layout of employment, shopping and other facilities in relation to each other and to the home, produces widely varying travel opportunities and needs.

Transport characteristics.

The existence and quality of different transport facilities helps to determine the travel choice available, and hence the degree of

² "Need" is referred to in the loose sense of things required given the present set of circumstances. This is distinguished from "absolute need" such as food, water and shelter.

reliance upon the car.

Social characteristics.

The organisation of society, and patterns of social behaviour also can influence the "need" for a car. For example, hours of employment, or shop opening, school hours, the existence of pre-school nurseries, female activity rates, the prevalence of single-parent households, the "image" of company representatives, company provision of cars, the degree of collective and individual leisure pursuits. All of these (and many more) are social factors which help determine activity patterns, and the role of the car in meeting them. (Discussion of these factors in relation to personal time budgets can be found in Holzapfel, 1986.)

Here is Fig 1 showing matrix of dependence

KICKING THE HABIT

The debate about reducing car use can be improved if the role of the car in people's lifestyle is specified more precisely. Aspirations can be matched more precisely against the quality attributes of different modes of travel.

The much-vaunted wish of people to use cars, is really a simplification of many separate wishes (or quality attributes).

"I want to use my car", is really shorthand for:

I want freedom to go where and when I please,
I want to be able to carry home heavy and bulky goods,
I want to stay dry and warm,
I want to travel by myself,
I want to arrive reliably and safely,
and so on.

There are, however, many quality attributes that cause people not to choose the car, and these can be positively promoted:

I don't want the hassle of trying to park,
I don't want to arrive tired and stressed,
I want to be able to have a drink with friends,
I want to be able to stop and linger,
I want to get exercise as well as get there,
I want to be in the open air,
I like meeting people when I'm out,
and so on.

We can see from this that the car does not offer universal advantages over other modes. There are qualities to alternative means of travel, and these can be encouraged and promoted, in order to encourage car owners to be more selective in their use of cars.

Of course, it is important also to recognise that many people (whether out of choice or no choice) live without cars, or make infrequent use of them. The challenge in this respect is to ensure that such people are encouraged and helped not to seek car use as a means of enhancing their lives. Unfortunately the continued decline of non-car travel-styles is still pushing more and more people towards car dependence (see Pharoah, 1992).

Two schemes are described here which derive from recognition of

the importance of intervention at the level of personal choice, and which are designed to break car dependence, and habitual car use. Both schemes, although very different, are designed to present people with a choice of life-style (or travel-style) which is not dependent upon the car, and to demonstrate the qualities of such alternatives. Other initiatives with similar aims are listed in Table 1.

THE BREMEN EXPERIMENT: "FOUR WEEKS WITHOUT A CAR"

An experiment carried out by the University of Bremen in 1990 involved six families voluntarily living without their car for a four week period (Kramer-Badoni, 1991). The aim was to measure the reactions of family members, and to evaluate how the absence of the car affected their daily lives. It was originally intended as a pilot for a much larger demonstration project of the Federal Government, but this has not yet been carried out.

The results were rather surprising. Firstly, the families involved managed to continue their lives without major disruption, though a period of a week or two was necessary to adjust to the new situation. This adjustment included finding out about public transport services, finding suitable routes for cycling, learning to dress for changeable weather conditions, and so on; essentially learning about how to use non-car modes of travel. The bicycle was generally preferred to public transport as the alternative which offered spontaneity and freedom similar to that offered by the car.

Secondly, at the end of the four week period, four of the six households sold their car, while a further household continued with less car use for the journey to work. Moreover, two households not involved in the experiment sold their cars after talking with participating households.

Thirdly, appreciation of different qualities offered by other modes. The switch to bicycle or public transport was found to be enjoyable. People enjoyed being exposed to the weather and being in closer touch with their surroundings and other people. They also felt better for the exercise.

Fourthly, making do without the car meant re-scheduling activities. The participants became more selective and thoughtful about the frequency, sequence and combination of activities undertaken during the day. The removal of the temptation to "jump

into the car" for last minute or forgotten errands was on the whole seen as a positive improvement to the lifestyle. Some activities were found to be simpler without the car, for example stopping at local shops on the way home to buy some food or a magazine was found to be much easier with a bicycle or on foot than with a car.

These experiences, though in no way representative of the car owning population as a whole, serve to illustrate that the positive qualities of a car-free lifestyle have for many people been forgotten, or in the case of younger people brought up with the car perhaps never experienced. The experiment also brought into sharper focus the negative aspects of a car-dependent lifestyle, and the inferior level of service now offered by the car compared to when it was first chosen by the family.

The study identified, from the experiences recorded in the participants' travel diaries, a number of obstacles which prevent car-owners from choosing to live without the car. Recommendations were made for action by public planning or publicly-supported private initiatives to remove these obstacles, namely:

- Transport of heavy or bulky shopping
- Inflexible working hours
- Insufficient public transport, specifically at weekends into the surrounding countryside,
- Insufficient clarity of public transport timetables and tariff systems
- Technical equipping of bicycles
- Number, condition and safety of cycle tracks
- Environmental quality of cycle routes
- Availability of cars without ownership

These findings may have more general applicability, despite their specific outcome from six families in a single city. The last item of the list above is the subject of various initiatives and projects in several countries, and is discussed below.

NEIGHBOURHOOD "STREET FLEETS"

A major factor in car habit-forming (whereby car owners choose to use the car for most if not all their journeys) is the pricing regime of the car compared to other modes. Fixed costs (purchase, depreciation, tax, insurance etc) account for around two-thirds of total car costs. This leads to a direct financial incentive to make as much use of the car as possible, in order to reduce per-

mile costs. Conversely, reducing car mileage does not enable the car owner to make sufficient cost savings to fund the use of public transport alternatives.

The aim of Neighbourhood Street Fleets (or local shared car fleets) is to make cars available on a pay-as-you-drive basis, and to reduce the redundant time spent by vehicles in individual car ownership. There are now many schemes which have been set up in various countries. The earlier initiatives have been reviewed by the author elsewhere (Pharoah, 1987a). More recently, schemes have been mushrooming particularly in Germany and Switzerland.

Although there are many variations in detail, all schemes set out to make cars available without ownership. In this respect they are car rental schemes, but are distinguished from conventional rental by exclusivity of membership within a particular street or locality.

One of the best known schemes is Stattauto in Berlin, which now operates from several sites in inner Berlin, with about 10 cars serving every hundred members (400 members in 1992). The scheme operates commercially, and with manual 24 hour booking.

Despite the rather slow and patchy progress of Street Fleet initiatives, growing problems of the car are generating new interest in the concept. For example, a recent CBI report (CBI, 1992) included Street Fleets in its proposals for reducing car dependency:

"24 hour Street Fleets run by commercial hire companies .. would allow the customer to have access to a car on a selective but highly accessible basis. Parked in reserved spaces in residential streets.... the customer would hire the car electronically and be charged on a time/distance basis."

There are both personal and community advantages from Street Fleets. The personal advantages include freedom from the administrative and other burdens of vehicle ownership, and the occasional availability of cars for people who cannot afford, or otherwise choose not to own a car. Community benefits result from more sparing us of the car, and a reduction of the total stock of cars parked in the locality.

In short, Street Fleets change the relationship between car ownership and car use, reducing the problems of both without reducing the benefits of either.

CONCLUSIONS

This paper has attempted to explore traffic reduction from the perspective of the individual, and how this might require modification of the approach taken to demand management by the transport or land use planner. It has highlighted the need for a shift towards more selective use of the car if total car traffic is to be reduced, and argued that this will involve the use of measures which directly address the problem of habitual car use.

New evidence has been produced which suggests that emotional attachment to the car, and people's desire to use cars as an expression of free choice has been overstated, and will not impede progress towards less car dependence.

Concepts and initiatives which are consistent with the suggested approach have been briefly discussed, and contrasted with more conventional approaches to traffic reduction.

Finally, the author makes no claim to have fully specified the parameters of the new approach. The paper is aimed at encouraging debate, and at stimulating some initiatives which will help to further the objective of reducing car dependence.

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The author would be glad to hear from delegates or readers about any other schemes not listed in Table 1. Please send to:

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TABLE 1 MEASURES TO HELP PEOPLE KICK THE CAR HABIT

Measures which could achieve one or more of the following: *

- Encourage more selective use of the car
 - Demonstrate the positive qualities of alternative modes
 - Promote car(e)-free lifestyles, travelstyles
 - Provide financial or other incentives to use cars less
 - Avoid car habit-forming amongst present non car-owners.
1. Neighbourhood street fleets or local car rental (see text).
 2. Schemes/incentives to sell car (See Bremen scheme in text)
 - Public transport operators could offer services to car owners on approval, with a free travelcard . Cars bought from owners and stored for approval period (1 month/3 month) with buy-back option.
 3. Cash-out of company car for employees
 - Companies offer cash alternative to company or lease car perk. Such offers could be made statutory.
 4. Cash-out of free parking for employees
 - From January 1st 1993, Companies in Southern California are required by law to offer employees the choice of cash rather than a free parking place (Shoup, 1993).
 5. Free and discounted travel cards for pupils and students
 - engender habit of public transport use (cf. bank promotion, creation of brand loyalty).
 - Scheme in Netherlands (see PTRC SAM 93 session H21)
 - Rhein-Ruhr: Students can buy discounted travelcard.
 6. Travelcards compulsorily included in student semester fees.
 - Tübingen University, Germany.
 7. Two-part public transport tariffs
 - Emulates car pricing regime, with lump sum payments followed by lower marginal prices.
 - Student railcard, senior passes, Network card, family railcards are British examples.
 8. Travelcards integrated with car parking charges.
 - Proposed but not implemented in Stockholm.
 9. Employee discounts on travelcards
 - Verkehrsverbund Rhein-Ruhr sells "Ticket 2000" travelcard to employers at discount prices.
 10. Employer journey to work plans, such as car pooling.
 - Schemes and incentives in (eg) Netherlands, California.
 11. Company bikes and generous bike-user allowances
 - Body Shop UK; various local authorities.
 12. Home deliveries.
 - Mobile shops, libraries, milk (UK) etc.
 - Deliveries from furniture and other stores.

- Marks & Spencer (Kingston) delivers from foodstore.
 - Teleshopping, phone shopping, mail order shopping.
13. Ultimate Integrated Ticket
- CBI proposal for electronic ticket enabling purchase of car rental (and Street Fleets), public transport, home deliveries and taxis. (CBI, 1992)
14. Odd-even number plates city access on odd-even days
- Athens. Car users have knowledge of alternative modes.
15. Public transport tickets free/discounted for special events.
- City of Dusseldorf: free pass to conference delegates.
 - Crystal Palace football games: Youngs Beer provision of bus tickets.
16. Promote different attitudes to car ownership and use.
- Public information films, Government promotions.
 - Non-user public transport promotion (eg. British Rail publicity household distribution).
17. Transport awareness events.
- Leicester City Council "No-car Week" May 1992.
 - Hampshire "Transport Awareness Year" 1994
18. Flexible working patterns
- Homeworking, teleworking, mixed working, flexitime.

* Note: The measures listed in this Table are distinguished from system-oriented traffic reduction techniques such as public transport improvements, park and ride, land use planning, improvements in the walking and cycling environment.

REFERENCES

Confederation of British Industry, London Region, "London Transport Task Force: Interim Report", CBI, 1992.

Department of the Environment, "Planning Policy Guidance: Transport", PPG13 (Draft), April 1993.

Holzapfel H, "Trip Relationships in Urban Areas", Gower, 1986.

Kramer-Badoni T, "Four Weeks Without Cars", paper to conference on Car-Free towns, ILS, Dortmund, October 1991.

Local Transport Today, 4/2/93.

MORI, "Green Drivers", for the RAC, Market & Opinion Research International, 1990.

Pharoah T, (1987) "Report on a Survey of Views on Cars and Driving", South Bank Polytechnic, Nuffield Foundation, 1987.

Pharoah T, (1987a) "Shared cars: key to reducing traffic", in Town & Country Planning, September 1987.

Pharoah T, (1992) "Less Traffic Better Towns", Friends of the Earth, 1992.

Pharoah T, (1992a) "Traffic Growth or Limitation: Filling the Policy Vacuum", PTRC Summer Annual Meeting, September 14-18th 1992.

Shoup D, "Cashing Out Employer Paid Parking", paper to OECD/ECMT conference on Travel in the City, Dusseldorf, 7-9 June 1993.