

Pedestrians are second class citizens

Ralf Risser & Doris Wunsch

FACTUM OHG
Danhausergasse 6/4
1040 Wien
Austria
Tel.: +43 1 504 15 46; Fax: +43 1 504 15 48
e-mail: ralf.risser@factum.at

Introduction

The headline refers to the title of a book published in German, called "Gut zu Fuß. Fußgänger sind Verkehrsteilnehmer zweiter Klasse" (Risser 2003). This book took its starting point with the results of a project in the 4th Framework Programme of the European Union. This project was called WALCYNG – Walking and Cycling instead of short car trips. The aim of this project was to develop ideas on what could help to reduce short car trips in Europe and to replace them by other modes of transport, especially the non-motorised ones.

Two conclusions derived from this project had a strong influence on the development of the book that will be presented here:

1. 15 to 20 % of all car trips in Europe are shorter than 1 km, corresponding to a 10 to 15 minutes walking distance
2. A road user-oriented approach is needed in order to understand what makes people stick to the car in spite of strong arguments and good opportunities to change, and what keeps them from walking, especially

Technical solutions have the theoretical potential to facilitate walking as well as making the use of a car less easy. But decision makers always have problems in accepting especially the latter condition: Before such steps to make the use of the car less easy are taken and money is spent on such measures it has to be made sure that these measures will be successful. This is a difficult task to do a priori. From a psychological point of view, one can predict that people will make use of new things and possibilities if they consider them useful and/or perceive them as useful – accept not to use the car and use another mode, instead. But how could you plan this? How could you know that people will accept such "innovations"? And how many people will accept new solutions? One thing can certainly be expected: Habitual car drivers will definitely have a more negative attitude towards measures that impair car use than people who walk – because they like to or because they have no other possibility. At the same time, in urban areas it is difficult to imagine improvements for pedestrians without doing something to car traffic. There will be conflicts of interests. Psychological and sociological concepts will have to be put into the centre of one's reflections in order to solve such problems.

One important barrier to walking that road users in several European countries mentioned in the frame of WALCYNG was the perception that as a pedestrian one feels like a second class road user, or even a second class citizen.

The book that is presented here deals with this perception. It consists of three main parts that have been elaborated in the frame of a series of seminars at the Sociological Institute of the University of Vienna:

- A theoretical preparation of the subject, based on expert heuristics (students and lecturer together) and a state of the art
- The view of experts and politicians, containing a portion of introspection, when answering psychological questions such as "do pedestrians have a reason to feel like second class citizens?"
- Road side interviews with pedestrians and car drivers

Ad 1) Theoretical background

There are several definitions of walking. One point is, however that walking is a **transport mode** only when you do it in the public space, where you have to interact with other people as a road user.

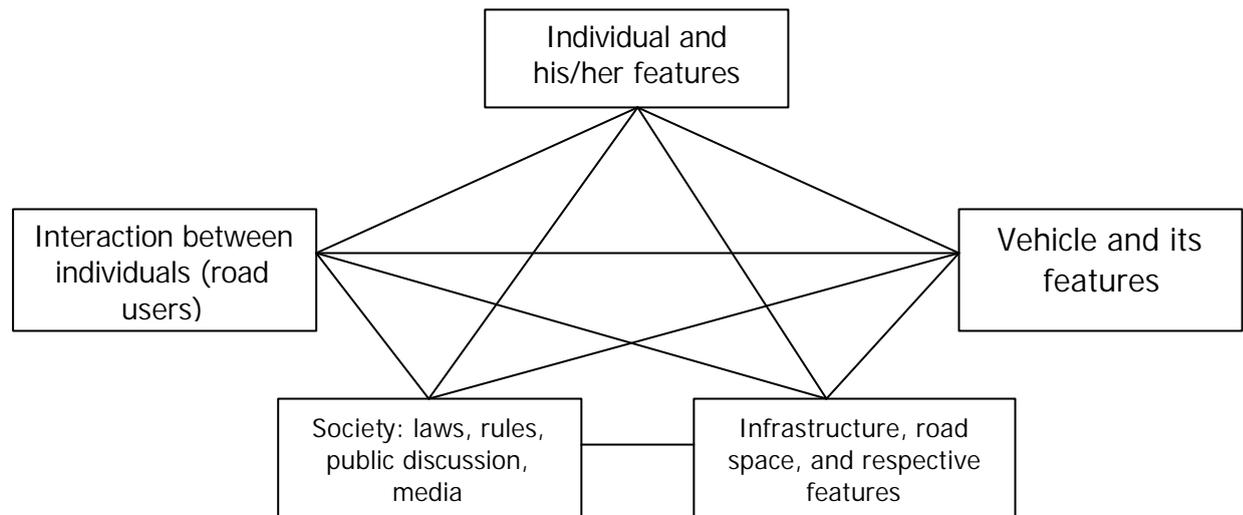
The longer certain trips are the more people try to use other ways of transportation than walking. Who can afford it (it almost seems) avoids walking and uses the car instead, even for very short distances. This is a pity, because walking has the potential to solve some traffic problems that are connected to the concept of sustainability in densely inhabited areas. Just consider the fact that every sixth car trip in Europe is shorter than 1 km and that this is corresponding to a walk of max. 10 to 15 minutes (Hydèn et al 1998).

So it would be desirable that people are walking much more frequently than using their cars. The advantages are manifold: You open up possibilities to even increase mobility without any (or without too many) negative environmental effects, you serve health issues directly, you reduce societal costs - less pollution, fewer accidents, lower health costs, etc.

But obviously walking is not supported or enhanced adequately by the official institutions: The fact that many pedestrians feel as second class road users reflects the notion that conditions for walking are not satisfying. Therefore, many of those people who have the choice prefer to use their car. But what can those members of the population do who have no choice (no licence, no car)? They simply *have no other choice than to cope* with all those disadvantages that together produce the feeling of being a second class road user. In order to be mobile, they are forced to deal with this somewhat inferior mode of transport. Sociologists are talking about the four „A“s (in German): The poor (Arme), the aged (Alte), children/ youngsters/“apprentices“ (Auszubildende) and immigrants (Ausländer). Maybe there exists a connection between these conditions and the partly low contribution from the public authorities to improve preconditions for walking.

Supporting or enhancing walking would mean to set the scene more according to the needs and interests of the affected citizens or road users. The scene consist of the following elements:

Graph 1: The traffic system



When one wants to analyse satisfaction with these elements especially one methodological aspect has to be considered, though: It is not enough to just to ask for the view of the concerned persons, in order to find out what they want. Most of all, the implications of Festinger's dissonance theory have to be taken care of: This theory says that people do not complain too much, or for too long time, about an undesirable state of their own life or situation that they cannot change. The reason is that this does not help and on the contrary only makes them suffer continuously (by being reminded, by losing fights with authorities or other road users, etc.). The result is that, when asked short and direct questions, no or only few critical remarks have to be expected from those road users who have no choice but to walk. Only in the frame of a more elaborated communication (in-depth interviews etc.) will one get a clearer picture of those people's satisfaction with mobility preconditions.

Another aspect that is more relevant for people who have a choice concerns those types of reinforcement that are directly linked to certain types of behaviour. Such directly linked reinforcement is called „contingent“ and it affects our habits and activities much more than middle- or long term reinforcement: If I have a direct advantage when using my car (comfort, feeling of independence, etc.), more abstract or distant advantages (e.g., clean environment) step back. E.g., to take the car that stands outside the door is easily done and it gives immediate comfort, whereas walking or using public transport, instead, may need more preparation, more personal energy, may take more time, etc.. Generally, we often know that something is not healthy but we are doing it nevertheless, and ratio often plays a subordinate role: The smoking physician is a good example to demonstrate this. When interviewing people, we have to be aware of the fact that they know the theoretical advantages of a change in their behaviour. But in practice often more easy and comfortable solutions win the game.

The consequence of these two mentioned aspects – dissonance and strength of contingent re-inforcement - , is that we have to adapt our respective methods that are based on verbal data (interviews, questionnaires). This is a relevant point, because one has to know the wishes of the different groups of road users in order to be able to modify the characteristics of the transport system according to the needs and interest of those groups that have to be addressed: Those who already are walking, and among them those who are dependent on walking (sometimes called „captive pedestrians“), and those who do not walk much, yet, but theoretically are prepared to walk more instead of using the car.

The question what kind of people and groups are walking can be answered in the way that we are all walking and so we are all concerned more or less. But of course one can discern different groups of walkers more thoroughly. Among others, the three following groups can be mentioned:

- Walking becomes more important for older people: The population gets older and the older people become, the higher the portion of those who use no other transport mode than walking.
- Children often go to school alone, sometimes combined with the use of public transports.
- In the last years in Europe walking and hiking in the leisure time has become more important.

Still, it is difficult to get a proper perspective on the role of walking as a transport mode, with respect to frequency, trip length, functions, etc. Many statistical analyses are inaccurate and do not contain detailed combinations of walking with the use of other transport modes. Relevant differences between road user groups are not reflected adequately by the data: E.g., the differences between men and women – concerning shopping, bringing children, etc. That all leads to an underestimation or an erroneous estimation of the importance of walking. The consequence of this is that the urgency of improving the preconditions for walking is not made transparent in a convincing.

Classical traffic safety research provides data about the so-called „objective safety aspects“, in many people’s mind based on accident data only. On the macro-level, the number of accidents in relation to covered distances (quotient accidents/10ⁿkm) attributes higher safety to using the car than to walking. This argument is often used *against walking*. Walking is considered unsafe, which has severe consequences in several respects. E.g., in connection with the trip to school: Children are brought by car, because letting them walk alone is considered too dangerous (and at least in German speaking counties it seems that the anxiety of criminal acts towards the children is subordinate compared to the uneasiness produced by the children being exposed to traffic risks). To give a more correct impression of the risks combined to walking, it would be better to indicate the accidents per time on the street or per trip.

But of course walking is dangerous in a strict sense because as a pedestrian one is endangered by others: If pedestrians are severely injured or killed, this is almost always the consequence of a collision with motor vehicles – and hardly ever are motor-vehicle drivers or passengers killed or severely injured at such occasions. This calls for serious attempts to provide a clear view on the communication processes on the micro-level, in order to improve the situation. And there, one will not look on accidents, primarily, but on all kinds of interaction processes that have the potential to result in accidents. However, analyses that allow an empirical clarification of what is happening are hardly ever financed (conflict observations, analyses with the help of video equipment, etc.).

At the same time, pedestrian single accidents (tumbings) are often not treated as traffic accidents, and no feedback into the traffic system is given. They mostly do not end fatally but often lead to injuries (femoral fractures in the group of the seniors). These accidents also contain a reference to faults and failures of the infrastructure and its maintenance: irregularities in the floor coats, unexpected differences in height, dirt, construction zones which demand acrobatic skills and so on.

All these preconditions are reducing the attractivity of walking and influence subjective feelings of safety, which has clear negative consequences. As has been said already, you do not send your children to school on foot or by bike or even do not walk yourself – even on

very short trips - if the impression is that it is not safe, if you feel threatened by the motor vehicles and disturbed by short comings in the infrastructure and its maintenance.

As a summary and completion of what has been said above, here are the most important arguments why politicians, decision makers and practitioners should try to get more specialised knowledge about walking and about pedestrians, and to implement this knowledge:

- 50% of the population are not able to or have no possibility to drive a car.
- When involved in an accident, pedestrians are killed much more often than other road users.
- Injuries of pedestrians, especially fatal ones, result in almost 100% of the cases from other road users – most often motor vehicles.
- In urban environments at least 50% of the killed people are pedestrians and between 50% - 60% of the killed pedestrians are older than 65 years. Many of them are not anymore allowed, or able to go by car .
- The number of traffic accidents and especially fatal accidents is decreasing in many countries, but not the number of injured and killed pedestrians. There tends to be even an increase.
- Pedestrians have to live with broken taboos, the most important one being that they are systematically unsafe even when the traffic signs indicate that they should be safe, namely with green traffic lights at cross roads where left and right turning cars have green, as well. (A peculiar detail from this perspectives is that pedestrians are fined when they cross the road against red).

Coming back to the argument above that contingent reinforcement does influence our behaviour more than medium- or long-term reinforcement, in the discussed book the issue is taken up, what spontaneous motivation – which to follow gives contingent reinforcement - makes that there is often a difference between attitudes (e.g. environmental protection) and behaviour (e.g., use of car in spite of environmental awareness): Even people who explicitly express the opinion that walking instead of short car trips is of great advantage, very often do not act accordingly. What is the reason?

Praschl et al. have worked out 15 so called "phenomena", based on about 250 interviews with Viennese car drivers that should help explaining the discrepancy between attitudes and behaviour (Praschl et al. 1993). For example, there are „extra motives“ (Sauli Häkinen¹) that are not directly connected to mere transport. For example, many people name fun, comfort, independence etc. as important motives for the choice of the car as their favourite mode of transportation. Other mentioned motives are one's habits („it requires energy to change habits“), the feeling that one's own contribution has no affect on the system as a whole, that one is reluctant to do what one is told, that there is a lack of knowledge and of feedback about negative consequences, and others. In the following overview, the 15 phenomena that reflect why the car is used in spite of attitudes that would suggest to use other modes in certain cases (e.g., walking shorter distances instead of using the car):

¹ The concept of extra motives has been produced by the Finnish traffic researcher Sauli Häkinen in the Fifties and refers to all needs and interests that are satisfied by driving a car, but that are not (directly) related to the transport function of the car

Overview: 15 phenomena that reflect discrepancies between verbal and overt behaviour

1	Identification	"That is me, I do it my way, I always do like that"
2	Extra motives	"It is fun to drive a car, alternatives are of no use"
3	Suppression	"I do not want to hear the word pollution any more"
4	Habit	"Habits are like steel ropes"
5	Individual effect 0	"My contribution to pollution is so small"
6	No feedback	"I do not feel any positive effect not using the car"
7	Rationalisation	"I have no other possibility than to use the car"
8	Comfort	"Nothing is so comfortable than the car"
9	Social pressure	"What would the others say if I came by bike"
10	Reactance	"I do not need anybody to tell me what to do"
11	Delegation	" 'They' should deliver data to show ..."
12	Lack of information	"I did not know to what degree the car pollutes"
13	Prisoner's dilemma	"If I renounce in driving I just make place for others"
14	Inconsiderateness	"One cannot always be reasonable"
15	Negative feedback	"I never experience any negative effects"

These phenomena reflect the fact that, at least in Vienna, there is a potential to agree that the car should be used less. However, there are many reasons inside and outside the person, represented by facts and feelings, why this potential is not made use of in practice.

The diagram in the beginning of this contribution ("The diamond") shows the areas that interact within the traffic system. The 15 phenomena above can also be interpreted in such a way that motives for a certain behaviour in one area are counteracted by contradictory motives deriving from an other area. An example: "Personally, I would like to walk much more than I do today, but the infrastructure provided by the responsible is extremely uncomfortable". (Phenomenon 8, Individual vs. infrastructure segment of the diamond).

To change the balance between the factors that influence behaviour, communication models should be made use of, the most important of which being the marketing model, that is applied in connection with almost all business-oriented communication between persons who have something to offer, and potential consumers of what they have to offer. Many colleagues in the transport area who deal with attempts to change road-user behaviour agree that the marketing-model should also be applied in connection with the product "modified mode choice".

Marketing

The main aim of marketing techniques is to design and to present things in a way to raise the interest of the target groups and to convince them of a product or of an idea. However, one important problem with convincing people to try something new – e.g., a changed mode-choice behaviour – is the fact that they do not know how it feels to "use the new product". So they first have to try and to make experiences with it. In supermarkets new products are often offered for free, so that people can try them and form their own opinion about the product. This is called "to give an incentive". It is more difficult, but certainly not impossible, to provide incentives in connection with mode choice. Especially within clearly

defined groups of people, e.g. at the working place, incentives in order to enhance walking could be given quite easily. An example in Austria was that of a company, where every month a lottery including all employees was carried out at a randomly chosen date. If the employee whose name came out from the lottery (i.e., the winner) had come to work without car on this day, he would win something, for instance one extra holiday day, or the like. If not, the bonus would go into a jackpot. Carrying out a lottery as has been described belongs to the incentive-policy area of the marketing model. The other steps of the model – product policy, communication, distribution – are not taken up, here. If one wants to engage in mode-choice shaping, it is necessary to deal extensively with them, though (e.g., see Kotler et al. 2000).

Ad 2) The views of politicians

One reason why pedestrians feel like second-class road users is that many obvious measures to the advantage of pedestrians are not implemented, or not implemented consistently. A possible explanation for this could be, that many reasonable results of research do not reach the politicians and decision makers: They do not know these results, or they do not consider them as being relevant. An explanation for the latter fact is that there often still exists the opinion that the researchers have to keep away from the field of implementation, or from practice – "what do they know about practice". But if results of research are not made use of in practice, this has the consequence that down-to-earth evaluation of research in practice is not possible. "The cake is never eaten", thus.

In the frame of the series of seminars at the University of Vienna that provide the basis for the book discussed here, the opinions of politicians and scientific experts have been dealt with, by carrying out interviews. The results of the interviews showed different views between politicians and scientists.

Politicians

Ironically enough, the politicians expressed their opinion that walking should be supported, and they named problems connected to car use such as traffic jams and environmental problems. It was also stated that the insurance-fees for cars are very expensive and that car driving is more stressful in comparison to other transportation modes – i.e., these could be reasons to use the car less (if insurance fees were depending on the amount of kilometers driven). Some interviewees also underline that walking is healthier than driving a car, and that the economic advantage of walking is that "shopping is done by pedestrians". Moreover walking is considered positive for socialising. The main disadvantage of walking, according to their opinion, is that pedestrians are most vulnerable, while the car driver is well guarded in his car and does often feel safe in a quite erroneous way. Another disadvantage of car use that is mentioned is the assumed psychological effect that the safer a car is (ABS, side impact protection, etc.) the higher speeds are driven because the driver feels safe. The attribute "ironical" at the beginning of this paragraph comes from the fact that politicians, after all the long supporting arguments for walking, summarisingly state that, however, already by now enough is done for supporting walking, and that the problem rather is that people do not want to change from car use to something else. Thus, politicians at least orally do not take the responsibility in connection with mode choice. They blame the pre-conditions (for which they or their colleagues are responsible, however): They mention the image problems of certain ways of transportation, and also the fact that there is no or only a weak lobby for the pedestrians, in contrast to the strong lobby that is active with the goal to enhance car use even more strongly than today.

When the interviewers insisted that maybe one still could try harder to support walking (even if "enough is done" already), some arguments were given, how one could encourage people to walk more:

- Awareness raising with the help of information: about the real costs of cars and about "real" time losses connected to car use (traffic jams, searching for parking places, total loss of time while driving).
- Underlining and advertising the advantages connected to a change of one's own habits, thereby not only stressing societal advantages, but also talking about individual advantages (e.g., less stress, better fitness).
- Enhancing behaviour imitation: It should be shown to the public that important or influential people walk in public. (It seems as if the interviewed politicians suggest that other politicians should walk more in order to provide a good model).
- Making walking more attractive with the help of special programmes, e.g., by combining it with current trends (power walking, Nordic walking, etc.).

Scientific experts

Scientific experts do not at all consider that enough is done to enhance walking. Quite generally, they consider marketing for walking as non-existent and they thus express the opinion that this field should be dealt with professionally by the responsible people (i.e. those who set the scene for transportation): All elements of the diamond (see graph in the beginning of this presentation) should be improved in order to meet the needs of the road users who (should) walk.

Additionally, the following steps have been suggested by the experts in the interviews conducted with them (regardless of possibilities to finance or realise them):

- Incentives for those employees who do not use the car for going to work should be given at working places (longer holidays, money bonus, etc.)
- More projects in tourist areas² should be carried out: car-free city centres, maps with the walking-path network, information about infrastructure in the vicinity of hotels that can be reached by foot
- The attractiveness of public transport is considered a precondition for more walking, because walking is often combined to the use of public transport: Thus, attractiveness has to be increased, e.g., via co-operation on higher level (regional, national) with respect to pricing, ticketing, interchange management and frequency adaptation, etc.
- It is also considered necessary to offer alternative transportation such as subsidised taxi-systems or similar transportation modes.

Summarisingly, one can say that the politicians recommendations refer mostly to communication measures (politicians seem to like campaigns), while the experts' recommendations are much more of a structural character – preconditions in society have to be changed actively, according to them, and changes should not be strived for only with the help of words and communication.

² The relevance of this becomes more transparent if one is aware of the fact that tourism is income-source number one in Austria

Ad 3) Survey of road users

Based on the results of the interviews with politicians and scientific experts, a standardised questionnaire was developed. In total, 99 people were interviewed in the frame of road side interviews; 58 women and 41 men. The resulting data contained some interesting and even surprising aspects, e.g., as far as barriers to walking viz. disturbances connected to walking are concerned:

Table: Disturbances for pedestrians

Ranking	This is a reason for annoyance	never & rarely	sometimes & neutral	Often & always
1	dog excrements	11	7	80
2	air pollution	16	22	62
3	cars parking on the pavement	30	14	56
4	Motorcar noise	34	30	35
5	Barriers on the pavement	42	18	41
6	car drivers	34	33	32
7	Narrow pavements	45	26	29
8	Inline-skates, Scooters	48	22	30
9	Waiting time at traffic lights	50	22	28
10	Cyclists	56	23	21
11	high kerbstones	82	5	13

RP = ranking according to degree of annoyance

An amazing result was that in Vienna excrements of dogs on the pavements are the annoyance number one for pedestrians. People who (have to) walk also complain about air pollution (caused by cars), about cars parking on the pavement, about car drivers in general who are dominating and endangering pedestrians in the direct communication process due to their greater physical strength, and about barriers on pavements which often are considered as being too narrow.

According to the opinion of the road users themselves, walking is healthy, flexible, relaxing and stress-reducing. On the other hand, walking has the potential to be experienced as strenuous and often as uncomfortable, with a tendency of being boring, mostly due to the prevailing preconditions. As an "objective" problem, being dependent on the weather is mentioned. Not least, experienced short comings in safety are mentioned.

In order to improve the preconditions for walking, especially with respect to the last aspect, it is recommended to avoid or to improve areas where conflicts could happen, i.e., where pedestrians have to share space with other road users. Moreover, the pavements should be lay-outed in a more attractive way, and the limits for emissions and for noise should be monitored more effectively. But the odds for the implementation of this last point are rated as very bad. Furthermore, suggestions such as further increasing the price of car use in the cities, and the provision of better walking paths are made.

As a second class citizen you predominantly feel because a difference in strength and power between the car drivers and the pedestrians is felt and/or perceived. It should be specified which part thereof is related to direct communication – for example at intersections - and which part is due to activities on the structural level, i.e., that it becomes clearly visible that people who want to use the car get their needs and wishes fulfilled, to the disadvantage of others. Long waiting times at traffic lights for pedestrians, narrow pavements, etc., contribute to this feeling of being second class. The most interesting thing is that people with a drivers license and people who are not used to walking express much more irritation

about all the disadvantages of walking discussed above than people without license. Thus, the function of the mentioned short-comings as barriers to a change of mode choice becomes clearly visible.

Conclusions

The working group that produced the material for the book that is discussed here, summarised what could be concluded from the gathered materials in the following way:

- Efficient steps are needed to balance the mismatch of power between pedestrians and car drivers, to adapt the infrastructure to the pedestrians` needs in a better way, and to distribute public space in urban areas more fairly, even considering future goals: If one wants that people should walk more it is not enough to provide more space to those who already walk, but an increase in the number of pedestrians has to be envisaged
- Clearly, something has to be done against dogs` excrements – this can be seen as a symbolic demand that would be valid everywhere: Areas for walking should be kept clean and tidy.
- Additionally, cars should be efficiently prevented from parking on the pavement, which could easily be done with the help of infrastructure and law enforcement measures combined. Generally, all types of barriers on the pavements should be avoided.
- Pedestrians and bicyclists should not be put together on narrow space – if they have to use the same pavement, both have to be given enough space that in such cases has to be taken from the car drivers.
- Pedestrians are most sensitive for distances. Those, walking facilities should be lay-outed in such a way that they are perceived as being as short and efficient as is possible. Waiting periods at traffic lights that are longer than those of car drivers should also be avoided – because this is the most direct way to demonstrate equity between the two modes.
- The compliance with the limits for emissions and noise should be ensured.
- Campaigns for walking could be conducted: Road users, according to what can be understood from their oral statements, feel that walking is a sporty activity, and that it is healthy, stress-free and relaxing. This is a good basis to build campaigns upon.

At the same time, walking has some disadvantages: it is strenuous and often uncomfortable. The latter fact is often connected to the planning of the infrastructure, however. Walking is moreover slow and sometimes boring. These conditions could be kept under better control with an adequate designing.

But not all disadvantages can be eliminated with the help of technical changes. Professional ways of communication have to be implemented to reduce the feeling of people who walk of being second class road users.

References:

Kotler, Ph., Armstrong, G., Saunders, J. & Wong, V. 1996, Marketing. The European Edition, Prentice Hall, London New York Madrid Mexiko City Munich.

Praschl M., Scholl-Kuhn M. & Risser R. 1993, Gute Vorsätze und Realität. Die Diskrepanz zwischen Wissen und Handeln am Beispiel Verkehrsmittelwahl, Bundesministerium für Umwelt, Jugend & Familie, Schriftenreihe der Sektion 1

Risser R. 2003, Gut zu Fuß. Fußgänger sind Verkehrsteilnehmer zweiter Klasse, Mandelbaum Verlag, Wien