1. Introduction

1.1 TRANSPORT AND SOCIETY

Transport is crucial for society: societies cannot function without the transport of people and goods. It enables us to participate in many activities at different locations, such as living, working, education, shopping and visiting relatives and friends. In addition, it allows us to transport goods, from the locations of mining of raw materials, via several production stages, culminating in the shops where people buy products, or even up to the final locations of use, such as houses or offices. On the other hand, transport carries costs, in terms of money, time, effort and negative impacts on society. In most western countries people spend 10 to 15 percent of their income on transport (Schafer and Victor, 1997). On average, and at the aggregate level (e.g. all persons in one country), people travel between 60 and 75 minutes per person per day, in almost all countries worldwide (Mokhtarian and Chen, 2004; Szalai, 1972; Zahavi, 1979). In addition to time and costs, it takes effort to travel. Cycling takes energy, and the cyclist can get wet, while driving a car over a longer period is tiring for many people, and switching trains, or changing from a bus to a train, is itself a negative experience for most people, not to mention the time it takes (Wardman, 2001). Transport also causes negative impacts on society, mainly due to accidents, emissions of harmful pollutants and CO₂, noise, the barrier effects of infrastructure for people, land take and fragmentation of nature.

1.2 TRANSPORT: A MULTI-DISCIPLINARY RESEARCH SUBJECT

Transport has been studied by many disciplines, including transport engineers, economists, psychologists, geographers, planners, environmental scientists and sociologists. First, a key reason for this wide variety of disciplines studying transport is the multitude of its important impacts on society, as presented above. Secondly, transport is, like land use, an object of study, not a discipline like economics or psychology. The object is also
highly influenced by people, and can be studied from several disciplinary backgrounds, including economics, psychology, sociology and civil engineering. Thirdly, transport literally connects people, goods and activities, and therefore it is highly interwoven with spatial developments and general trends in society (including the economy), linking it to, amongst other disciplines, spatial sciences, economics and sociology.

As a result, mainstream transport journals are dominated by work from scholars with diverse backgrounds, as presented above. In addition, probably more than average in science, transport is highly inter-disciplinary, though mono-disciplinary studies on transport are still very common. If I refer to mainstream transport journals, I refer to journals such as *Transportation Research Parts A—F, Transport Policy, Transport Reviews, Journal of Transport Geography, Journal of Transport Economics and Policy, European Journal of Transport and Infrastructure Research, Transportation, Transportation Science*, and the like, as well as to transport-related papers in spatial sciences, as published in journals such as *Urban Studies, The Annals of Regional Science* and *Environment and Planning (A–C)*.

### 1.3 ETHICS AND TRANSPORT

Ethics is defined as ‘the discipline related to what is good and bad or right and wrong behaviour, including moral duty and obligation, values and beliefs and the use of critical thinking about human problems’ (Beach, 1996: 2). Ethics differs from morality. Morality ‘consists of a society’s most general standards’, whereas ethics ‘are not general standards of conduct but the standards of a particular profession, occupation, institution or group within society’ (Beach, 1996: 15).

Perhaps slightly surprisingly in mainstream transport literature, there is hardly any explicit literature on the ethical dimensions of transport, the major exceptions being social exclusion (see Chapter 4), distribution effects as recognized in economics (see Chapter 3), and some reflections on the mobility system or the car-dependent society from a sociological perspective (e.g. Beckmann, 2001; Khisty and Zeitler, 2001; Urry, 2004). Consequently, transport ethics has been largely ignored in the area of philosophy (Khisty and Zeitler, 2001). As a result, a literature search in SCOPUS (in the social sciences and humanities section) using the search term ‘ethics AND transport’ in the title, abstract or key words, and selecting ‘all years’, resulted in 50 hits, of which only 15 related to transport of persons and goods (and not, for example, the transport of substances via the blood through the body). Of that 15, about half were only vaguely
related to the subject of this book. A search on ‘ethics AND mobility’ resulted in even fewer useful hits. Searches on ‘transport’ and ‘mobility’ in the *Stanford Encyclopedia of Philosophy* resulted in 32 and 38 hits respectively, of which only a few were useful. Additional useful literature can of course be found (and actually was found – see the references in this book) using keywords like equity, environment and social exclusion, but the message is that there is hardly any literature that explicitly deals with ‘ethics and transport’. In this book, I argue that transport relates to many ethical issues, which are given scant attention in the transport literature.

1.4 AIM OF THE BOOK

The aim of the book is not to give a full overview of all ethical aspects of transport, but more to elaborate on a selection of ethical issues in order to make the reader aware of ethical aspects of transport and give them ‘food for thought’. The target audience for the book is the researcher, practitioner and policy maker who belong to the mainstream transport communities. I would not argue that the book is not relevant for philosophers (philosophy is the dominant science that studies ethics), but the book is primarily written for the mainstream transport community. The aim is only to make this target group aware of the ethical issues of transport, not to convince them of what is morally ‘right’ and what is ‘wrong’, nor to provide solutions for all the ‘problems’ that I discuss.

1.5 POINTS OF DEPARTURE AND DEMARCATION

My first point of departure is to take the perspective of the *ex ante* evaluation of transport projects and policies. Another option could be to take the perspective of design. The reason for taking evaluation as the point of departure is that this is generally broader in character. Design dimensions are normally also included in evaluations, but evaluations can be broader. For example, the designer of a public transport system can have dimensions such as distances from bus stops to train stations in mind, as well as speeds and travel times, capacity, comfort levels and construction costs. But she might not explicitly have to include emissions or barrier effects. These effects nevertheless are important from the perspective of evaluation.

As a result of this point of departure, I do not include areas such as the ethics of driving behaviour, and general philosophical and sociological reflections on mobility, hyper mobility, car dependency, etc. In addition, I also do not discuss moral aspects related to how far policy makers can go
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in the use of technology to change the behaviour of people, including technologies such as the alcohol lock, or advanced road pricing systems that could (at least theoretically) endanger privacy (for an overview of the links between philosophy and technology and engineering see Meijers, 2009).

It is important to realize that from the point of departure of *ex ante* evaluation for decision making, a distinction can be made between choices in which moral aspects are included, versus those in which they play no role (Morton, 1991). For example, the choice between two locations for a potential new railway station probably does not necessarily include moral aspects, while the choice between speed levels on motorways probably does: a balance needs to be found, on the one hand, between travel time savings and maybe also the fun of fast driving, and on the other hand the environmental impacts and risks. In the case of moral decisions, utilitarian approaches (see Chapter 3) may not be as attractive as in non-moral decisions.

My second point of departure is linked to the aim of the book and its target group: this theoretical point of departure is the ‘mainstream economy’, as most often used, not only by economists, but also civil engineers, geographers and other disciplines studying transport. I do not present a sharp definition of what ‘mainstream economy’ is, but I refer to it as a collection of theories, including Random Utility Theory, neo-classical economics, welfare economics and the like, that dominate transport research – see, for example, handbooks on transport economy (Blauwens et al., 2008; Button, 2003, 2010) and handbooks such as the one on transport modelling (Hensher and Button, 2000). The choice of the mainstream economy as a point of departure does not imply that the ethical issues discussed in this book take this perspective, it implies that I have readers in mind who are familiar with the use of the mainstream economy, and related methods and evaluation practices, in transport research. In several chapters I will at least make clear that the choice of the mainstream economy has several ethical implications.

My final point of departure is that I have in mind western societies. I do not claim the book to be irrelevant for developing countries, but I did not dig deeply into the specific studies and discussions of third world countries.

A first demarcation is that in this book I focus on transport *in public space*, ignoring within-buildings transport, and transport over the territory of an industrial plant. A second demarcation is related to overviews of environmental and safety impacts. These impacts in themselves are relevant from an ethical point of view, but are only included in this book in a very limited way, because they are widely addressed in the mainstream transport literature. Besides, the aim of the book is to give food for
thought on ethics and transport, not to present overviews of effects that are ethically relevant.

1.6 ORGANIZATION OF THE BOOK

This book is organized as follows. Chapter 2 describes a questionnaire-based research survey amongst members of the transport community in the Netherlands, aiming to find out the opinions and wishes of the target audience for this book in the area of transport and ethics. Chapter 3 explains the use and ethical aspects of Cost–Benefit Analysis in transport, nowadays in most countries the most used ex ante evaluation method in the area of transport. Chapters 4–6 discuss the ‘what question’: what are the ethical aspects of specific subjects? Important issues for transport policies relate to accessibility, the environment and safety. Probably the most studied ethical subject related to accessibility is ‘social exclusion’ – this subject is discussed in Chapter 4. Chapter 5 then focuses on the environment, in particular on long-term sustainability, probably one of the most difficult-to-address environmental subjects from an ethical perspective. Chapter 6 then discusses safety. Chapters 7–8 focus on the ‘how question’: how to do research and develop and use models from an ethical perspective? Chapter 7 discusses the ethics of doing research. Chapter 8 then discusses modelling transport from an ethical perspective. Finally, Chapter 9 finally summarizes the main conclusions, and discusses avenues for further exploring the links between transport and ethics.