

**Moral Responsibility in Traffic Safety
and Public Health**

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Abstract

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The general aim of this thesis is to present and analyse some ethical aspects of traffic safety, with a special focus on responsibility. Essay I addresses this aim by presenting some of the questions that should be further discussed in a new area of research analysing the ethics of traffic safety. Essay II is focused on the question of who is responsible for traffic safety, taking the distribution of responsibility adopted through Vision Zero as its starting point. Previously, the individual road users were said to be responsible, but according to Vision Zero the system designers are ultimately responsible and the question is how this change of perspective should be understood. It is argued that responsibility ascriptions consist of three conceptual components and that Vision Zero should be analysed according to this idea. Essay III discusses responsibility ascriptions in relation to public health problems like obesity and lung cancer. It is argued that what makes discussions about who is responsible for such problems complicated is that we want to achieve two goals when ascribing responsibility to someone. First, we want responsibility ascriptions to be fair and morally justified. Secondly, we also want to achieve progress and solve problems through ascribing responsibility to someone. It is argued that both perspectives influence debates concerning who is responsible for problems like obesity and lung cancer and that we should aim at striking a balance that is both perceived as fair and that is efficient.

Key words: moral responsibility, responsibility ascriptions, traffic safety, public health, paternalism, privacy, road traffic suicides.

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Introduction

Aim and scope of the thesis

The road traffic system is one of the places where human beings in modern societies meet on a daily basis. There is almost no way of avoiding using the transport system in one way or another; as a pedestrian, a cyclist, and a passenger or as a driver. Hence, there is essentially no way of escaping the risks associated with road traffic completely and the risk to be in an accident is substantial, as are the effects of accidents. About 1.2 million people die globally every year as the result of traffic accidents.¹

The ultimate goal of traffic safety is, of course, to save people's lives, to reduce the number of dead and injured. This goal can be achieved or at least approximated in different ways. It is not completely clear how it should be done. This uncertainty makes policy-makers and traffic safety professionals take different standpoints and views on how best to achieve the goal and these views are influenced by ethical and political norms and ideas. A second fact that makes it hard to reach the goal is that because of limited resources priorities have to be made. This is certainly true of underdeveloped nations, but also of wealthier nations. There are many activities in modern societies apart from road traffic that cause people to die and get injured; smoking, eating unhealthy food, not exercising, stress and so forth. So, the question of where public resources are best spent is inevitable.

Priorities have to be made concerning where we should spend our money. Should more money be spent on counterterrorism measures than on preventing people from getting lung cancer, or should more money be spent on reducing the use of alcohol? As a consequence of limited resources priorities also have to be made concerning which measures, within the area of road traffic, should be prioritised in order to get closer to the goal of saving people's lives.

This being the goal, the question for ethicists or ethically interested traffic safety professionals is the following. What measures, policies and technologies are *ethically justifiable* to achieve the goal to save people's lives? It is possible to prevent people

¹ Global Forum for Health Research, *Unnoticed Public Health Disaster* Geneva August 2002.
http://www.globalforumhealth.org/pages/page1_00070001_12.htm.

from dying and being injured. Decisions have to be made about roads and vehicles and laws have to be created to regulate human behaviour in the system. These decisions have a direct impact on the number of dead and injured. The decisions inevitably involve choices that can, and should, be analysed from an ethical perspective.

Some examples of such ethical questions relating to traffic safety are the following. Should vehicle-producing companies be forced to install alcohol interlocks? Is it right to force people to wear bicycle helmets? How should we strike a balance between general safety and people's privacy?

The first aim of the thesis is to analyse the ethical aspects of road traffic safety and the first essay addresses this aim, by providing an overview of topics that should be further analysed and discussed in an emerging new area of research focused on the ethics of traffic safety.²

One important question for anyone interested in the ethics of traffic safety is who is morally responsible for traffic accidents and traffic safety. This question is at the core of other issues that are discussed in essay I, for example the issue of paternalism, road traffic suicides and to some extent the potential conflict between privacy and safety. Are the individual road users primarily responsible or are there other actors worth considering as subjects of responsibility?

According to Vision Zero, the policy goal for all traffic safety projects in Sweden, the system designers are ultimately responsible for traffic safety. The previous view, which is still codified in law and which is a common view in most countries is that the individual road users are responsible. With Vision Zero, this view was fundamentally changed. It was now said that although individuals must abide by the law and behave responsibly, the system designers (primarily road maintainers and vehicle-producing companies) are ultimately responsible, which means that *they* have to take measures if individuals fail to take responsibility.

² There are a few philosophical texts about traffic safety. Two of the few are Zeitler, Ulli *Transport Ethics. An Ethical Analysis of the Impact of Passenger Transport on Human and Non-human Nature*, Aarhus University Aarhus 1997, and Weumore, Jamey *Systems of Restraint: Redistributing Responsibilities for Automobile Safety in the United States since the 1960s*, Cornell University 2003.

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Against this background, a second aim of the thesis that is addressed in essay II is to analyse what such a shift of focus means and, more generally, what we claim when we ascribe responsibility to e.g. individuals or system designers. A question that arose in the process of analysing responsibility ascriptions and Vision Zero, partly due to a contemporary public debate about the growing social problem of obesity was who is responsible for public health problems. This issue is analysed in essay III.

Thus, in essence the second aim of the thesis is to analyse responsibility ascriptions with a special focus on traffic safety and public health.

Modern philosophical discussions about moral responsibility have largely focused on the classical question whether human beings have a free will and hence can be said to be responsible or whether we are pre-determined to act the way we act and therefore are not responsible for our actions. In this thesis, the question of free will versus determinism is not addressed. It is assumed that regardless of whether determinism is true or not the concept of responsibility that human beings use everyday is worth a careful analysis.

The question of when it is *reasonable* or *justifiable* to hold agents responsible for events is not the main topic of the thesis. Instead, the essays focus on what we claim when ascribing responsibility to agents.³ By responsibility ascription I mean statements of the following form:

The agent A is responsible for the problem P

The certain kind of responsibility ascriptions discussed in the essays concern problems that consist of individual events like traffic accidents or an instance of lung cancer, but which are also social or political. This means that many people are affected by the problem and the government, public authorities, private companies and so forth causally affect the problem and/or could contribute to a solution.

³ In this thesis, an agent can refer to individuals or organisations. The question of whether collective entities can justifiably be said to be moral agents who are responsible in the same sense as individuals is beyond the scope of these essays, since they are focused on the practice of holding responsible rather than on the question of being responsible.

Responsibility ascriptions

Responsibility is a concept frequently used in public debates and there is often substantial disagreement concerning who is responsible for a certain problem. One example of a confused discussion concerning responsibility is the one following the terrorist bombings in London on 7 July 2005. Not surprisingly, a heated debate arose about the causes of the attacks. According to polls, a large proportion of the British public supported the Chatham House Report⁴ which had come to the conclusion that the British involvement in the American war against Iraq had increased the risk of terrorist attacks in the UK. According to the report, "there is no doubt that the invasion of Iraq has imposed particular difficulties for the UK", that the situation in Iraq "has given a boost to the Al-Qaeda network's propaganda, recruitment and fundraising" and that it "provided an ideal targeting and training area for Al-Qaeda-linked terrorists". However, the prime minister, Tony Blair, and his government strongly rejected this suggestion, denying that the situation in Iraq had anything to do with the London attack, thereby also rejecting the implication that the government was in any way responsible for the events that led to the attack.⁵

The debate of which this was one expression was made more polarised than necessary due to an imprecise use of concepts, all having to do with responsibility.⁶ At least four different questions got mixed up in the debate:

- What are the underlying causally relevant factors?
- What were the triggering causal factors?
- Who is to blame for the attack?
- What should be done, and by whom, in order to prevent it from happening again?

⁴ Chatham House, *Security, Terrorism and the UK* SIPN/NSC Briefing paper 05/01 July 2005 <http://www.chathamhouse.org.uk/pdf/research/niis/BPsecurity.pdf>.

⁵ BBC 25 July 2005, http://news.bbc.co.uk/2/hi/talking_point/4692697.stm.

⁶ Obviously, psychological as well as political factors also contributed to the debate getting more heated and polarised than necessary. However, this serves as an illustration of the fact that concepts and how we use them matter a great deal even in the world outside of academic seminar rooms.

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Even if participants in this debate would have acknowledged the difference between these questions, disagreement would probably have been substantial. However, generally, the likelihood of understanding and agreement is higher if we make sure to separate the different components of responsibility ascriptions.

Summarising and conceptualising the above-mentioned questions concerning responsibility and the London terrorist attacks, responsibility ascriptions can be said to include the following components:

Causal responsibility

Blame responsibility

Forward-looking responsibility

It is commonly understood, in ordinary language as well as in philosophical discussions, that claiming that A is responsible for E includes an idea that A caused E. Furthermore, if E was something bad and especially if it was done voluntary and knowingly⁷, A is also considered blameworthy. The notion of responsibility as a combination of causal responsibility and blameworthiness is discussed in an illuminating manner in Marion Smiley's "Moral Responsibility and the Boundaries of Community. Power and Accountability from a Pragmatic Point of View"⁸. That responsibility sometimes is more forward-looking than backward-looking is a somewhat neglected topic, as acknowledged by Henry S. Richardson in his article "Institutionally Divided Moral Responsibility"⁹. Although it has not been discussed much in philosophy, forward-looking responsibility is a fundamental part of ordinary language responsibility ascriptions.

The different components have been discussed in isolation by various philosophers, but have not to my knowledge been combined as three components of responsibility ascriptions. Deontological writers appear to focus on a merit-based view of responsibility as composed of causal responsibility and

⁷ The so-called aristotelian conditions, i.e. that an agent is responsible if she did something voluntary and with all the relevant knowledge, are well known and appear to be part of the common notions of responsibility.

⁸ Smiley, Marion *Moral Responsibility and the Boundaries of Community. Power and Accountability from a Pragmatic Point of View* Chicago University Press, Chicago 1992

⁹ Richardson, Henry S. "Institutionally Divided Moral Responsibility", *Responsibility* Paul, Ellen Frankel Miller, Fred D. and Paul, Jeffrey (ed) Cambridge University Press, Cambridge 1999, pp. 218-249.

blameworthiness. Consequentialists tend to prefer a notion of forward-looking responsibility or task responsibility.¹⁰ The point in this thesis is that deontological ideas of blame responsibility as well as the notion of forward-looking responsibility/task responsibility¹¹ are parts of the social practice of ascribing responsibility and that both have to be taken into consideration when analysing debates about who is responsible for a certain social problem. The question is not necessarily which is superior as a concept of responsibility, but that both ideas are essential if we want to understand what we are claiming when ascribing responsibility to each other, in particular for social problems like road traffic fatalities and obesity.

This division of responsibility ascriptions facilitates an analysis of responsibility ascriptions in public debates about many social problems. Although terrorist bombings are very different from traffic fatalities and obesity, debates about whom is responsible for the different problems, have similar traits that could be understood if we use the three-component conceptual scheme.

Sometimes they are all relevant and one agent is said to be causally responsible, blameworthy and responsible to e.g. prevent something from happening again, but sometimes all components are not relevant in relation to one and the same agent, and different components are relevant to different agents. Two agents can also be said to be responsible in all three ways, but to different degrees.

Vision Zero and three components of responsibility ascriptions

Vision Zero is the Swedish policy goal for traffic safety since 1997. It is based on the idea that it is not ethically acceptable that people die and are seriously injured in road traffic and hence, the goal is that no one is killed or seriously injured in road traffic. It also includes a novel approach to the question of who is responsible for traffic safety that has not been discussed to the same extent as the goal of zero dead in road traffic. It is stated that whereas individual road users are responsible to follow rules and behave responsibly, the so-called system designers are ultimately

¹⁰ Forward-looking responsibility is discussed in Richardson (1999). The case for task responsibility as opposed to blame responsibility is made by Goodin Robert E. in "Apportioning Responsibilities" in *Utilitarianism as a Public Philosophy* Cambridge University Press, Cambridge 1995.

¹¹ The idea behind forward-looking responsibility and task responsibility appear to be very similar.

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responsible for traffic safety. The traditional view does not include a shared responsibility, but holds that solely individuals are responsible. The view adopted with Vision Zero became an empirical starting-point for this thesis. One question was whether the new view represented an abandonment of individual responsibility, which some critics have claimed and which at first seemed like a valid and reasonable concern. If this critique is right and Vision Zero entailed an abandonment of individual responsibility, the new distribution of responsibility would be hard to accept for most people.

A more general question is the following. How can, and should, this change in perspective be understood? What is asserted when stating that system designers, instead of individual road users, are ultimately responsible?

According to a libertarian argument, Vision Zero transfers responsibility from the citizens to the government and hence, it is not acceptable. This analysis seems to treat responsibility as a zero-sum game. A less simplistic analysis can be made if we recognize that responsibility ascriptions include different components. This is vital in understanding the new distribution of responsibility.

Instead of removing all responsibility from the individual road users, Vision Zero emphasises the forward-looking component and adds a subject of responsibility, namely the system designers. The idea appears to be that individual road users are still causally responsible and possibly blameworthy and should be held accountable when they have acted recklessly and when they break the rules intentionally. They are also responsible in a forward-looking sense since they have to abide by the rules and behave responsibly. However, it is recognized that the system designers can be causally responsible too. More importantly, they are ascribed forward-looking responsibility, regardless of whether they are to blame or not, to design the systems in such a way as to reduce the fatal consequences of accidents. This rests on a pragmatic insight that it is simply not enough to blame individuals. If we want to solve the problem, i.e. to reduce the number of dead and injured substantially, we have to build the systems in such a way that they are “forgiving” to the human body.

Two aims of responsibility ascriptions

The three-component analysis appears to hold for complex social problems, i.e. problems that have both individual and social causes and effects and an illustrating example of that are public health problems like obesity and smoking-related lung cancer. Such problems are caused by individual actions or behaviour, but individuals are affected by advertisements, the way groceries and tobacco products are presented in supermarkets as well as by tax levels and other political measures. Furthermore, they have social effects related to, for example, people dying and the collective resources being stretched. Discussions about whether the individuals themselves, the government or private companies are responsible for obesity and smoking-related diseases have been heated in recent years. Is McDonalds responsible for people's obesity or are individuals to blame? Do people choose freely to smoke and hence, are they responsible for contracting lung cancer or are the tobacco companies exclusively responsible?

These questions are difficult to answer, yet many participants in the debate appear to be quite sure about whom we should ascribe responsibility to and it is often either individuals, private companies or the government. However, it appears safe to say that they are all responsible to some extent. The problem with responsibility ascriptions in these complex cases is that we want to attain two possibly contradicting goals. First, we want to achieve an efficient distribution of responsibility that contributes to a solution of the problem. Secondly, we want the distribution of responsibility to be morally justifiable or at least acceptable, hopefully to most people.

The two aims of responsibility ascriptions represent two different perspectives of responsibility. The first is a consequentialist view of responsibility that focuses on forward-looking responsibility. This view is based on the premise that if ascribing responsibility to the agent A does not contribute to solving the problem, if it does not have the best possible consequences, we should not ascribe responsibility to A. The aim is to ascribe responsibility to someone in order for the consequences to be optimal. Hence, if the most efficient thing to do is to ascribe all responsibility for obesity to fast food chains like McDonalds, we should do that. However, most people would intuitively think that although McDonalds may be partly responsible, we should not remove all responsibility from individuals. The second perspective is

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the retributivist idea that responsibility should only be ascribed to someone if she deserves to be held responsible. Proponents of this view are not primarily interested in the effects of a certain distribution of responsibility, but in which distribution of responsibility is fair and morally justified.

Preview of Essays I-III

Essay I “Ethical Challenges for Traffic Safety Policy”

This essay is an overview of ethical aspects of traffic safety. It is not exhaustive, but gives examples of ethical challenges within the field of traffic safety. It aims at introducing the questions, hopefully inviting further discussion on the various topics and preferably with ethicists as well as traffic safety researchers.

The need to analyse traffic safety from an ethical perspective has become more urgent due to some recent tendencies. First, the problem of traffic accidents is a growing global problem. Approximately 1,2 million people globally are killed in road traffic every year, many more are injured and road traffic injuries represent a growing global problem and people in modern countries cannot move from one place to another without coming in contact with the risk-prone transportation systems. Road traffic accidents are the ninth leading cause of disease in the world and it is expected to become the third leading cause of death in 20 years.¹²

Secondly, due to technological development there are a number of new possibilities that either force road users to behave in a certain way to increase safety (for example through alcohol interlocks) or that control the behaviour of road users (e.g. surveillance cameras and GPS).

Thirdly, an ethical debate on the goal of traffic safety started in Scandinavia after the adoption of Vision Zero in Sweden in 1997 in Norway in 2001. The new policy, saying that the long-term goal for traffic safety should be zero deaths and serious injuries, was followed by similar policy decisions in the other Scandinavian countries. These new policies illuminated the ethical dimension of traffic safety by

¹² Global Forum for Health Research (2002).

saying that it is not acceptable that people are killed and seriously injured as a consequence of traffic accidents.

The following discussion about the goal of traffic safety policy raises a number of questions, many of which relate to the much-debated concepts of liberty and responsibility as well as the relation between the individual and the government. In the essay, some of the ethical questions concerning traffic safety are presented. The main purpose is to show that just as transportation is analysed and discussed from economical, technological, political and geographical perspectives, its ethical dimensions should be thoroughly and continuously analysed and discussed. Ethical problems of transport have been discussed in some articles, and one dissertation covering many aspects was published in Denmark in 1997.¹³ However, some of these questions should be discussed on a regular basis. Hopefully, in the future, ethical discussion of transportation is just as common as discussions of medical ethics. In transportation as well as in healthcare, people die or are prevented from dying due to actions and omissions of individuals as well as functioning and dysfunctional systems.

Four major ethical problem areas of traffic safety are discussed. The first question is who is morally responsible for traffic accidents and traffic safety? Secondly, to what extent is the state or companies justified in using potentially paternalistic measures to save people's lives? Thirdly, to what extent is the government or private companies morally entitled to intrude on people's privacy by using surveillance cameras and similar technology to coerce people to abide by traffic legislation? Finally, many people choose to commit suicide by using the transportation systems (road as well as rail) and this fact arguably raises ethical questions, for example whether suicides should be treated as other traffic fatalities.

The examples show that safety is one of many values that we may wish to promote, but that there are others, for example individual liberty. In cases where many values are involved we need to think carefully about how to manage potential conflicts. Furthermore, there are cultural and social conventions about life and death that affect traffic safety and these should be questioned. For example, do we just

¹³ Zeitler (1997)

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assume that very little can be done to prevent people from committing suicides although there is scientific evidence for the opposite view?

It is concluded that the goal of traffic safety policy should not only be a reduction of traffic fatalities, but that this is attained in an ethically acceptable way. The best way to achieve an ethically acceptable as well as a safe road traffic system is to understand that and to keep a continuous ethical debate about these issues alive.

Essay II “Responsibility Ascriptions and Vision Zero”

In this article, the three components of responsibility ascriptions are presented and discussed in relation to Vision Zero and traffic safety. This topic was introduced in essay I, but in this article it is the main focus. The policy was adopted by the Swedish Parliament in 1997 and its major statement was that it is not ethically acceptable that people are killed and seriously injured in road traffic. It is less known is that a new distribution of responsibility was adopted along with the goal. As before, it is recognized that individuals are responsible for following rules and behaving responsibly in road traffic. What is more controversial is the addition that the so-called system designers are responsible for the systems and that if individuals fail to take responsibility, the system designers “must take measures”. This implies that system designers, instead of individual road users, are ultimately responsible for traffic safety (which is also explicitly stated). The libertarian critique that has been made against this view is presented, followed by the three-component analysis of responsibility ascriptions. It is concluded that the critique is simplistic in that it treats responsibility as a zero-sum game where responsibility is viewed as a cake consisting of a certain amount of responsibility to be distributed. According to this view, the responsibility of the individuals is reduced if the responsibility of the system designers is increased and vice versa. Instead, the view introduced by Vision Zero should be analysed in terms of causal responsibility, blame responsibility and forward-looking responsibility. Instead of removing individual responsibility, it adds a subject of responsibility and ascribes causal responsibility and, most importantly, forward-looking responsibility to the system designers. In other words, Vision Zero can be interpreted as acknowledging the three different components,

assuming that several subjects can be ascribed responsibility for the same problem in different ways and to degrees.

Essay III “Responsibility Ascriptions and Public Health Problems. Who is responsible for obesity and lung cancer?”

In this essay, the question discussed is who is responsible for public health problems like lung cancer caused by smoking and obesity. The question arose against the background of an intense public debate about whether individuals, the government or private companies (such as the food industry for obesity-related diseases or the car industry for traffic fatalities) are primarily responsible for such problems. It appears reasonable to assume that the individual, the public authorities and private companies are all responsible to some extent. The question is then where to draw the line between the responsibility of the individual, the responsibility of the state and the private companies and how to describe their respective responsibilities. The answer inevitably depends on one’s ethical and political approach.

If one takes a consequentialist approach, the efficient way to distribute responsibility is also the right way of doing it. Efficiency in this context refers to a distribution of responsibility that contributes to solving the problem at hand. However, to someone defending a non-consequentialist view of responsibility, for example a non-consequentialist libertarian, the most important requirement on responsibility ascriptions is that it should be fair and morally justified. Common morality and hence public debates about who is responsible for e.g. obesity include consequentialist as well as non-consequentialist notions of responsibility.

There is an inherent tension in responsibility debates between efficiency concerns and moral concerns because we often want to achieve two things when ascribing responsibility to someone. First, we want to assign responsibility to the agent who is, from a moral perspective, responsible so that the following distribution of responsibility is justified and fair. Secondly, we also want to achieve progress, for example to solve public health problems, by assigning responsibility to someone who can actually make a difference. Some of us emphasise the moral content of responsibility ascriptions and believe that we cannot legitimately ascribe

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responsibility to someone who is not at all blameworthy. Others point to the importance of a problem-solving approach to responsibility ascriptions. Most of us are neither pure consequentialists nor strict retributivists, but recognise the importance of both aspects of responsibility ascriptions.

The conclusion is that both perspectives are needed when discussing public health and when creating new policy. It is important to strike a balance between the two in order to achieve an efficient as well as a morally justifiable distribution of responsibility.

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