

Responsibility, Paternalism and Alcohol Interlocks

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ABSTRACT: Drink driving causes great suffering and material destruction. The alcohol interlock promises to eradicate this problem by technological design. Traditional counter-measures to drink driving such as policing and punishment and information campaigns have proven insufficient. Extensive policing is expensive and arguably intrusive. Severe punishment may be disproportionate to the risks created in most single cases. If the interlock becomes inexpensive and convenient enough, and if there are no convincing moral objections to the device, it may prove the only feasible as well as the only justifiable solution to the problem of drink driving. Taking this to heart, the former Swedish government, supported by the National Road Administration and a 2006 final report of the Alcohol Interlock Commission, proposed that interlocks should be required as standard equipment in all cars. This article assesses two possible moral objections to a policy of mandatory interlocks: 1) That it displaces the responsibility of individual drivers, and 2) that it constitutes a paternalistic interference with drivers. The first objection is found unconvincing, while the second has only limited bite and may be neutralized if paternalism is accepted for the sake of greater net liberty. If technological development can make mandatory interlocks cost-efficient, the proposed policy seems a commendable public health measure.

INTRODUCTION

Drink driving is a grave public health problem, a top contributing factor behind the 1.26 million annual deaths in traffic worldwide (WHO, 2004). The alcohol interlock is a novel technology that promises to eradicate this problem. Interlocks have been used extensively in the US and Canada as a requirement for people convicted of repeated drink driving offences. Such requirements are slowly becoming more widespread and calls are sometimes heard for a wider use of interlocks (e.g. Wald, 2006). Voluntary programs for offenders have been carried out or instigated in Sweden, France, Belgium, Finland and Australia (Svensson Smith, Nilsson, Schönning & Sjöström, 2006, pp. 84-85).

The former Swedish government announced that alcohol interlocks would be part of the standard equipment in all new cars registered in Sweden by the year 2012. At the time of writing the new government has withdrawn their initial commitment to this policy, and the public debate is ongoing. A report on the technical, economical, and legal aspects of mandatory interlocks was presented by a special commission in the summer of 2006 (Svensson Smith, Nilsson & Schönning, 2006). The Swedish reform must be approved by the European Union before it can come into effect. Already, however, interlocks are becoming more and more common in government and commercial

vehicles, and are increasingly offered as an alternative to revoked driver's license for offenders. The car manufacturer Volvo recently announced that they will offer integrated interlocks as an optional feature for some of their sedan models. While the future of a general requirement is uncertain, interlocks are unquestionably becoming an integral part of Swedish traffic safety policy.

The main focus of this article is on two possible objections to mandatory interlocks – that such a requirement inappropriately places the responsibility for sober driving with system designers rather than with drivers, and that the policy is a paternalistic interference with voluntary risk-taking. We take these issues to be the most complex moral issues to be faced by proponents of mandatory interlocks. The two objections are closely related and should therefore benefit from shared treatment. In order to evaluate the objections, we investigate the concepts of responsibility and paternalism as they apply to the case at hand. In the main, we find the objections unconvincing and so tentatively commend the Swedish policy.

While the discussion is of general relevance, we base our inquiry mainly on Swedish data. Sweden has among the least traffic accidents per capita and the least instances of drink drivers among highly developed nations. The problem of drink driving is greater in other countries and should be a grave concern in practically all countries with heavy reliance on the car for transportation. A possible solution to this problem should be of general interest. As we shall see, the technical solution offered by the interlock may be the only justifiable as well as the only feasible way to seriously diminish drink driving.

Since drink driving is a controversial issue and since alcohol interlocks are a novel technology, we will discuss both the problem and its possible solution in some detail before moving on to the core matters of responsibility and paternalism. The second section of this article briefly describes the extent of the problem and considers the efficiency and moral status of traditional responses – mainly policing and punishment. The third section is devoted to describing the interlock, its potential to stop drink driving and the more tangible costs involved. In the fourth section, we discuss social and individual responsibility and whether and how they can co-exist in the case of mandatory interlocks. In the fifth section we discuss whether and how liberty-limiting policies involve paternalism and how rejecting or accepting paternalism affects the moral status of mandatory interlocks.

DRINK DRIVING

Estimating the impact of alcohol on traffic accidents is a complex problem, due in part to great variations in police practice and to the susceptibility of autopsy studies to error due to lower blood alcohol concentration (BAC) at the time of death than at the time of accident. As a general indication, autopsy studies in some European countries show that between 20 and 50 percent of drivers killed in accidents are intoxicated (Austrian Road Safety Board, 2003, pp. 14-20). The Swedish Commission on Alcohol Interlocks (henceforth the 'Interlock Commission') estimates that in 2004 about 108 people were

killed and 1450 severely injured in Sweden in accidents caused by drink drivers (being a large fraction of alcohol-related accidents more generally). This corresponds to 22.5% of all people killed in traffic accidents. The material cost of accidents caused by drink drivers (BAC above .2 g/l) in 2004 is estimated to about 1.5 billion Swedish krona (~€170 million) (Svensson Smith et. al., 2006, pp. 73-75). This cost includes net loss of productive contribution (estimated at 800.000 Swedish krona/death) but not the cost of law enforcement, nor costs arising in the justice and penal system. Arguably, the human cost is much higher. In the US, the National Highway Traffic Safety Administration estimates that over the last years about 17.000 people have been killed yearly in alcohol-related accidents (where at least one person involved had a BAC above .1 g/l), amounting to 40% of the total number of people killed in traffic (National Highway Traffic Safety Administration, 2004, p. 32). The total material cost of these accidents is estimated to be about 51 billion dollars (~€38 billion) for the year 2000 (Blincoe, Seay, Zaloshnja, Miller, Romano, Luchter & Spicer, 2000, p. 40).

In Sweden both the law and the general population consider drink driving a serious crime. Driving with a BAC above 1 g/l entails a minimum of one month in prison and a maximum of two years (eight years if someone is killed), in addition to revoked licence with no right to apply for a new licence for 12 to 36 months. Driving with a BAC below 1 g/l but above .2 g/l entails fines or prison for up to six months, plus suspended licence for up to 12 months. Though many prison sentences are suspended or transformed to community service (Agge, Folkesson & Sjöström, 2002), these punishments (or measures) are rather severe compared to Sweden's comparatively mild treatment of offenders generally. Even so, 90% of the population are of the opinion that punishments should be harsher and calls for harsher treatment are often heard in the public debate. A small majority of the population is also of the opinion that the legally accepted BAC should be lowered from the already very low .2 g/l to zero (Swedish National Road Administration, June 2006, pp. 4-14). This in spite of the fact that the lowering of the concentration from .5 g/l to .2 g/l has had no measurable effect on behaviour (Austrian Road Safety Board, 2003, p. 83).

In contrast, philosopher Douglas Husak (1994) has argued against regarding drink driving a serious offence. Husak points out that most cases of drink driving are not mere foolishness with no social utility. Rather, people drive intoxicated for much the same reasons they drive sober – mainly to get places. There is neither malicious intent nor extreme recklessness (Ibid., pp. 58-60). Husak argues that, risk-wise, drink driving is not all that different from other kinds of driving. Though intoxication makes driving more dangerous, so does sleepiness, stress and distracting activities such as talking on the phone, eating, shaving, reading or applying make-up. None of these other risk-enhancing factors are punishable as such, but only if they result in risky driving, which is and should be a crime in itself. This discrepancy would perhaps be motivated if intoxication was much more likely to cause accidents than was other factors. However, Husak cites studies showing that a typical driver with a BAC of 1 g/l is between three and seven times more likely to cause an accident than the typical sober driver (Ibid., p. 64). That magnitude is not enough, Husak argues, for distinguishing a quite accepted activity such

as sober driving from an activity punishable by imprisonment. Husak's numbers are in tune with the classical Borkenstein study of actual crash frequencies at various BACs (Borkenstein, Crowther, Shumate, Ziel & Zylman, 1964, p. 165) as well as the similar but more recent study by Blomberg, Peck, Moskowitz, Burns & Fiorentino (2005, p. xviii), which both assign a multiple of six to seven for the probability of causing an accident at BAC 1 g/l. Husak argues further that since the probability of being killed on a five mile drive is only one in ten million, even a tenfold increase of this probability must be negligible.

Husak's main argument hinges on two comparisons. First, there is the comparison between drink driving and sober, non-impaired driving. This comparison does not necessarily support the argument. A sixfold or tenfold increase of a small probability of grave negative consequences may well be unacceptable and punishable. Moreover, to the extent that the risks of sober driving are on a par with those of drink driving, that may be an argument against the acceptability of sober driving rather than for the acceptability of drink driving. Compared to other modes of transportation, the risks of sober driving are substantial. Indeed: 'The difference in risk between driving while intoxicated and driving while sober is less than the difference in risk between driving while sober and taking public transportation.' (Husak, 1994, p. 63) It may be argued that sober driving is legal, in spite of the risks involved, because it is socially accepted, rather than the other way around. In fact, Husak himself explores this side of the issue in another article (2004).

Second, there is the comparison between drink driving and impaired driving of other kinds. This comparison does support Husak's argument. Speeding is a contributing factor in a comparable number of lethal accidents (about 13,000 yearly in the US). However, while it is prohibited, and punished on occasion, neither the social stigma nor the legal consequences are nearly as harsh as for drink driving. It may of course be argued that rather than relaxing our stance on drink driving, we should start punishing other kinds of impaired driving (more harshly). As long as such measures are not taken, however, punishing moderate drink driving much more harshly than other kinds of risky driving is at least morally problematic. Even extreme drink driving, where the risks are much higher than for non-impaired driving, may have equivalents in other kinds of behaviour (such as extreme speeding). At high BACs there is also the additional difficulty that drink drivers are to a disproportional extent alcoholics and so possibly less responsible for their actions.

In sum, we find that Husak's argument shows that punishing drink drivers with imprisonment or severe fines is at least morally problematic. Independently of this moral problem, there is also a practical problem. Policing and punishment simply have not solved the problem, as shown by the numbers surveyed above. The deterrence effect of legal prohibition is most tangibly determined by two factors - the *severity* of punishment and the *probability* of punishment. In the case of drink driving, it seems uncertain whether the severity of punishment has any impact, possibly because the probability of detection is too low for potential convicts to consider punishment a real possibility (for a discussion of other possible explanations, see Houston & Richardson, 2004). Though

even this is disputed, it does seem likely that a higher probability of punishment would contribute to the deterrence effect (Benson, Mast & Rasmussen, 1999; Austrian Road Safety Board, 2003, p. 81-84). Increasing the likelihood of punishment would of course require increased policing, which is expensive. More convictions would also entail higher costs for administration and prisons. (It would seem rational to at least decrease punishments and legal administration and use the savings to increase policing.)

The deterrence effect of prohibition is also to a large extent dependent on social norms which help shape the subjective probability of detection and punishment. Norms also have a direct influence on behaviour independently of prohibition. Apart from policing and punishing, the main strategy for reducing drink driving has, quite properly, been information campaigns of different kinds. While such campaigns seem to have an effect, especially when used in combination with other measures such as increased policing (Elder, Ruth, Shults, Sleet, Nichols, Thomson & Rajab, W., 2004), they have proved insufficient in solving the problem. In part, this shortcoming is due to the fact that those persons that are most likely to drive with high blood alcohol concentrations are relatively unaffected by measures based on deterrence and persuasion (Beirness DJ., Simpson, Mayhew & Wilson, 1994; Coben & Larkin, 1998).

There are of course other possible responses to drink driving beyond affecting norms and policing and punishment. Alcoholism and the consumption of alcohol may be targeted generally. Bar and restaurant personnel may be trained not to serve people that are likely to drive and are approaching a certain degree of intoxication. To reduce recidivism specifically, licenses may be revoked, though many who have their licences revoked as a result of drink driving keep driving, without a license (Austrian Road Safety Board, 2003, pp. 87-88). Convicted drink drivers may be offered treatment for alcoholism, though this is expensive. Cars may also be impounded or licence plates confiscated, though these measures may affect others than the driver. More proactively, doctors may be required to report alcoholics and driver's licences may be revoked preventively, though doctors are reluctant to do so since it undermines trust and is considered a breach of confidence (Bjerre, Heed & Kers, 2004).

Some of these measures can be fine-tuned. The availability of treatment programs for alcoholics involving alcohol interlocks rather than revoked licences would most likely increase doctors' inclination to report alcoholics (in Sweden around 70 times according to Bjerre et al., 2004, p. 1818). Recidivism is rather efficiently prevented by requiring alcohol interlocks for convicted offenders. However, several studies have shown that once the interlock is removed, drivers tend to resume their old patterns of drinking and driving (see e.g. Raub, Lucke & Wark, 2003), even if this tendency can be weakened with more comprehensive and more exclusive programs, which include regular medical check-ups and which expel participants that don't meet the requirements (Bjerre, 2005). In sum, reducing recidivism as well as proactive prevention is most efficient when interlocks are used.

THE INTERLOCK

If, for safety reasons, a machine should not be used in a certain way, it is wise to incorporate some feature preventing such use into the design of the machine. If cars should not be driven by people over a certain BAC, it would be wise to simply prevent such use by technical design. The alcohol interlock promises to provide such a safety feature. This device measures the driver's BAC before the car starts, for example through an exhalation sample. The interlock is connected to the car's ignition and if the measured concentration is above the maximum set, the car won't start. With this device installed in all cars, drink driving could be virtually eradicated.

The interlock is presently in a phase of rapid technological development. As the development progresses, detection becomes more and more accurate, and circumvention becomes harder. There will always be ways for the smart and skilled to circumvent safety features, but as long as the misuse is not widespread, this is not a serious problem. It is becoming increasingly difficult to by-pass an interlock breathalyzer by having anything other than a human blow air into it. Preventing sober persons from blowing for an intoxicated driver is harder. One possibility is additional tests during driving, with failed tests leading to gradual shutdown. If this is deemed unsafe, failed test may be registered, reported and later prosecuted (safety would probably be optimized by gradual shut down at high BACs and merely reporting failed tests at lower concentrations). With a system of registration, reporting and the threat of prosecution, interlocks could also come with an override feature to be used in emergencies, without encouraging misuse of that feature.

Electronic driving licenses would ease the prevention of circumvention. With such licences, it could be registered who started a car at any given moment. Technically, the licence could be required to stay in the car during driving, making starting a car with a borrowed licence more difficult. If only certain persons are required to use interlocks, this information could be stored in the licence and accessed by the car. If certain persons are exempt from a general requirement (because they cannot breathe normally for example), this information can likewise be stored and accessed (Austrian Road Safety Board, 2003, pp. 95-96).

While a policy of mandatory interlocks would be expensive, there are a number of reasons to believe that it would be worthwhile in the long run. The technological development of interlocks means that the cost of production is steadily decreasing. The higher volumes that would be needed with a general requirement would likely lead to economics of scale that would further reduce costs. The Interlock Commission estimates that based on the available technology the future cost of having interlocks integrated into the basic design of all cars would be SEK 3.000 (~€330) per car yearly. About a third of this cost is due to the inconvenience of use (the interlock has to warm up which may sometimes take a full minute or more). The total cost for having interlocks in all Swedish cars would amount to SEK 14 billion (~€1.6 billion) yearly (Svensson Smith et. al., 2006, pp. 91-92). The Swedish National Road Administration (NRA) in an official statement (2006:22883, p. 9) regards these estimates as too conservative given the expected technological development. Still, as noted above, the annual material cost of accidents

caused by drink drivers is only SEK 1.5 billion (~€170 million). On the other hand, the human cost should certainly be given some weight, whether it be higher, lower or equal to the Interlock Commission's estimate of SEK 5.5 billion (~€600 million). Human costs should include anxiety and distress caused by the risk of accident as well as by actual accidents. In addition, the commission proposes that interlocks will have positive effects on public health more generally, mainly from earlier detection of alcoholics and lowered consumption of alcohol (Svensson Smith et. al., 2006, p. 92). Finally, one might question whether the status quo is the proper baseline – is the current reliance on cars for personal transportation beneficial as such so that any obstacle to it should be valued at its full monetary cost?

If a general requirement of interlocks in all cars should be deemed too costly, there are various options for making interlocks mandatory only for certain groups of drivers or cars. Convicted drink driving offenders is one obvious category. Young people is another possibility. Focusing on cars, possible categories include government vehicles, commercial vehicles, taxis, buses, and trucks. Again, the costs of either a general or a more limited requirement will depend on technological developments that are hard to predict. It is quite possible that in the not so distant future we will have interlocks requiring less or no air, less warming time and less service. If so, the cost would decrease dramatically. It would seem that some policy of mandatory interlocks is very much a practical possibility. While we will have reason to return to the cost aspect, most of the moral arguments below are made against the background assumption that mandatory interlocks, for some or all cars, is cost-efficient in the wide sense that we consider the death and suffering prevented worth the net material cost.

Interlocks may or may not include a logging function, registering failed tests. As interlocks have historically often been used in experimental programs, collection of data has been crucial. It may be thought, however, that such registration threatens privacy. Why should the government or anyone else know how many times I have tried to start my car after drinking if this is not in itself a crime? This may be a valid concern and it should be noted that logging and collection of data is not a necessary feature of mandatory interlocks. Interlocks may be designed not to store information of failed attempts. As noted above, failed attempts *during driving* may have to be reported in order to deter circumvention. Such reports, however, concern the criminal offence of drink driving, as well as circumvention. Respect for privacy can hardly require that these crimes not be reported. *If* information about failed attempts is stored it could be used by employers as well as by health care providers to identify people in early stages of alcoholism. Even without logging, however, people who repeatedly fail to start their cars due to high BAC may themselves realize that their alcohol habits are not healthy.

RESPONSIBILITY

According to the current Scandinavian traffic safety paradigm, the ambitious goal is that no one be killed or seriously injured in road traffic (Swedish Government, 1996/97). An important means to this end is placing responsibility for preventing traffic accidents

partly on system designers. “If road users fail to abide by the rules – for example due to lack of knowledge, acceptance or ability – or if personal injuries occur, the system designers must take additional measures to prevent people from dying or being seriously injured.” (our translation, Traffic Responsibility Commission, 2000, p. 69) System designers include public and private organizations involved in the design and maintenance of roads, vehicles and transportation services, as well as those involved in the design and implementation of rules and regulations, education, surveillance, rescue work, care and rehabilitation (Swedish Government, 1996/97, p. 17). This paradigm has been criticised for eroding individual responsibility (Ekelund, 1999). The possible erosion or displacement of responsibility is the first moral objection to mandatory interlocks.

Discussions about the balance between individual and societal responsibility wage back and forth in several areas, including unhealthy diets and drug use more generally (when not driving). It is important to realize that responsibility for a given event or problem is not a zero-sum game. Making the police responsible for fighting crime does not mean that people become less responsible for the crimes they commit. In certain cases, however, shared responsibility could mean less responsibility for each party. To evaluate the claim or worry that mandatory interlocks erode individual responsibility, therefore, we need to thoroughly analyze the case at hand.

Historically, responsibility for traffic accidents has been ascribed to the driver or drivers involved. The typical response to an accident is to investigate who among those involved is to blame. Interestingly, the narrow focus on individual responsibility can be contrasted with the current trend in ‘human factor’ research, which tends to investigate aviation rather than road traffic. The same focus on individual responsibility used to be prevalent in aviation, i.e. blaming individual pilots for accidents, but recent research has shifted interest towards the context in which decisions are made and actions carried out (Decker, 2002). This is very appropriate – both aviation and road traffic take place in complex systems and consequently accidents in these systems tend to have complex and multiple causes.

When system designers step in to take responsibility for the context in which decisions are made, they may be filling an empty space rather than usurping individual responsibility. The responsibility ascribed to system designers is of the forward-looking kind, aimed at preventing future accidents rather than distributing blame for past accidents. Forward-looking responsibility does include an element of potential blame for future accidents, if efforts at prevention turn out to be insufficient. However, it is essentially a responsibility to get certain things done, rather than to take blame. This should be distinguished from backward-looking responsibility, which is essentially focused on distinguishing the immediate causes of an accident and on the blameworthiness of those immediately involved (Fahlquist, 2006; Dworkin, 1981). In the public debate, both kinds of responsibility ascriptions are common, though not well distinguished from each other. Importantly, the two kinds of responsibility can co-exist without the one diminishing the other. Indeed, the same kind of responsibility can be ascribed to more than one agent without necessarily diminishing responsibility. Under the Scandinavian paradigm, drivers are still expected to do their part in preventing

accidents by driving responsibly and following traffic rules. This is a forward-looking responsibility, since failure to drive safely can incur blame even when no accident occurs.

A public policy focusing on assigning backward-looking responsibility to individual road users could, for instance, emphasise incarceration. The main worry from that perspective is who is to blame for any given accident. If, on the other hand, focus is on forward-looking responsibility, alcohol interlocks is a natural way of managing the problem of drink driving – system designers are responsible to put an affordable and effective systemic solution in place and individual drivers are left with no choice but to take their forward-looking responsibility for not driving after drinking.

Are there reasons to believe that ascribing forward-looking responsibility for accident prevention to system designers will in fact make drivers feel less responsible for their driving and so less cautious? Technical systems that are very sophisticated and where almost all safety hazards are guarded by automatic systems can erode the operator's feeling of responsibility. This has been observed in airplanes, where familiarity with safety devices has led to inattention and complacency (Perrow, 1999, pp. 152-54). However, these effects result from safety devices that take over a certain task from the pilot or driver and that work continuously through the whole journey, such as a collision avoidance system. The interlock, on the other hand, merely establishes whether the driver is sober before she can start the engine. This test has no direct effect on the driving experience. It does not at all guarantee that the driver is a good one or that the safety of the driver and of other road users is automatically protected. There are many other safety features and conveniences in cars that do make drivers more passive, such as automatic transmission, cruise control and automatic braking systems. The interlock, on the other hand, only prevents people above a certain degree of intoxication from driving and is itself passive during the journey.

Could it be that despite these considerations, people will come to think of the interlock as a general test for being fit to drive, such that they will discount the risks of driving tired, stressed or under the influence of other drugs than alcohol? This may of course be possible, all sorts of misconceptions can spread, but there seems to be no direct reason to expect such a development. It is explicit and obvious that the (standard) interlock measures BAC and nothing else. Could people come to think that activities that are not protected by interlocks are safe to perform after drinking? Again, this seems farfetched. It is obvious that many activities are risky to perform after drinking and it is common knowledge that drink driving is a serious problem. Attending to this problem should not induce people to lose their everyday experience and knowledge of the impairment that comes with intoxication. In sum, the case for claiming that interlocks erode individual responsibility seems very weak.

Drink driving is a shared, social problem not only in light of its grave aggregate consequences, but also in the sense that social norms sometimes indirectly encourage drink driving. Alcohol is a natural ingredient in social life for many people. In most European and in many other cities, public transportation is extensive and runs at night time. It is then possible for most people to engage in social life, drink alcohol, and avoid driving. However, in rural areas as well as many cities in the US and elsewhere, there is

no convenient and affordable alternative to driving, especially at night. Social norms then require one to show up at a bar or restaurant or friend's place, to drink alcohol, and then to get home in some fashion. Responsible people try to assign a designated driver or otherwise plan their getting home without driving after drinking, but this is cumbersome and it is not surprising in the circumstances that people often drive intoxicated. Especially so since every single instance of drink driving with a moderate BAC is not that dangerous, despite the severe aggregate outcome. Individuals make their own choices about how to spend their nights, but these are made against the background of social expectations, city planning, nightlife culture, laws and regulations, and technology. Should mandatory interlocks become a fact, social life would simply have to adjust to the technical circumstances. It seems likely that this would encourage ways of socializing without alcohol, extensive public transportation, and local pubs and other ways of meeting more locally.

The problem of drink driving, and of impaired driving more generally, is a problem where many individuals fail to be responsible enough, with grave aggregate consequences, but where punishment of these individuals is very costly and possibly morally unjustified. The best way to solve such a problem is to change the background circumstances. Directly influencing social norms and increasing the (subjective) probability of detection are two ways to combat the problem, but they are insufficient. Drivers will continue to make mistakes and break the rules. Profound change will only come by conscious design of the system within which individual decisions and mistakes are made. Today, the technological design of cars provides drivers with opportunities which are illegal and dangerous, such as driving very fast and driving after drinking. The danger is not only to the driver, but to other road users as well. While driving after drinking is not to be dismissed as totally lacking utility, the right to drive after drinking is arguably rather trivial and defeated by other road users' rights to safety. The government should strive to eliminate opportunities that are harmful, dangerous, and relatively unimportant. Eliminating the opportunity to drive after drinking by making interlocks mandatory, if worth the material costs, seems a perfect example of sound public health policy.

PATERNALISM

The Interlock Commission explicitly states that the purpose of the interlock is 'mainly' to protect other road-users from harm (Svensson Smith et. al., 2006, p. 2). The Swedish National Road Administration takes the same position (Swedish NRA, 2006:22883, p. 4). However, death and injury to drink drivers themselves forms a large portion of the total cost of drink driving. Both government entities base their recommendations to implement mandatory interlocks on total cost estimates. In an important sense, therefore, the desire to avoid self-inflicted harm comprise a large part of the rationale for the policy. This raises the spectre of paternalism - limiting the liberty of drink drivers for their own good. The charge of paternalism is the second moral objection to mandatory interlocks. The Interlock Commission and the Swedish NRA understandably attempt to avoid a

complex moral problem by referring to harms to others as the main rationale. However, this moral problem should not be avoided, but rather recognized and analyzed.

Mandatory interlocks are potentially paternalistic because they limit liberty.¹ People would unquestionably be freer if they did not have to succumb to a BAC test before driving. However, liberty-limiting policies are not necessarily paternalistic. All criminal laws are liberty-limiting in that people would be freer if they did not have to avoid the prohibited activity, be it murder, theft or forgery. Policies are only paternalistic in so far as they are supported by certain reasons.² There are in principle three kinds of reasons that may potentially justify mandatory interlocks – direct protection of others from harm, avoidance of indirect costs to others from accidents, and direct protection of drivers themselves. We will, in turn, discuss these kinds of reasons and whether or not invoking them for limiting liberty is paternalistic.

The Interlock Commission and the Swedish NRA state that the main reason for mandatory interlocks is direct protection of others from harm. Limiting liberty for this reason is clearly non-paternalistic. A liberal justice system allows liberty to be exercised only within boundaries set by concern for others. Drink driving imposes significant risks on others for no comparable benefit and so the first rationale for mandatory interlocks should be morally relatively unproblematic. Objections may possibly be raised from a libertarian point of view, from which it is always a grave matter who bears the cost of reducing risks. It is reasonably clear that libertarians can support prohibiting drink driving, since it generates widespread fear and anxiety (Nozick 1974, pp. 73-84). It is not clear, however, whether this prohibition may be ensured by technical means, and if so, who should bear the cost. It is true that the costs of mandatory interlocks, both in terms of the monetary cost of installation and service of the interlock and in terms of the inconvenience of testing, is shared by all, regardless of whether or not they would have driven after drinking themselves, and regardless of whether or not they would have been victims of drink driving. For more moderate liberals, the fair distribution of costs is intertwined with broader questions of fair distribution, and it is taken for granted that society should protect its members by general safety measures, even if these impose some costs on the collective. This is very reasonable. Some drivers are very skilled and cautious and never cause an accident. Nonetheless, these drivers have to share the cost of roadside safety barriers and speed cameras. The same drivers could probably be allowed to drive through red lights when they deemed it safe to do so – still they are inconvenienced by traffic laws shaped to suit the general population. It is an open question whether in any one case the costs are worth the benefits. It is generally not considered a form of paternalism, however, to force all to share the costs of protecting all or some from the mistakes or misbehaving of the few.

The second kind of reason for mandatory interlocks is that they prevent the incurring of costs on others, cost that are not in the form of direct harms. These indirect costs include the psychological cost of knowing that people kill themselves driving after drinking, and occasionally seeing it happen. However, the largest indirect cost is arguably the material cost to society from drink drivers causing death and injury to themselves, with subsequent need for medical attention and diminished productive contribution to

society. As noted, these costs form a large portion of total costs (we are not aware of any estimates as to how large exactly). Is it paternalistic to count the avoidance of these costs as a reason for mandatory interlocks? If it is, and if paternalism is unacceptable, these costs should simply be disregarded when considering the costs and benefits of the policy, making it much less cost-efficient.

There are good arguments on both sides of this issue. On the one hand, other people than the drivers themselves are as a matter of fact made to bear much of the material costs of drink drivers harming themselves. On the other hand, it may be argued that parts of these costs are voluntarily assumed by society, which need not provide free health care to drink drivers and which may charge these drivers for other costs of the accident, such as the cost of clearing up the road and costs resulting from delays in traffic. Furthermore, it may be argued that the net loss of productive contribution to society is something that society has no right to expect or demand from an individual, who may at any time chose to end her life, or to live in ways that provide no net contribution, if she can do so without infringing on the rights of others. If this individualistic argument is correct, the costs incurred by drink drivers harming themselves and disrupting traffic are costs that they should themselves bear and so accepting the avoidance of these costs as a reason for limiting their liberty is indeed paternalistic.

Against the individualistic argument it may be argued that most of us want to live in a humane society that provides (emergency) health care to all and that we are within our rights to create such a society. If so, at least those costs of accidents and care that can not be paid for by those directly responsible are quite properly costs to the collective. It may also be argued that distinguishing between on the one hand the sober or insured, who deserve health care, and on the other hand the intoxicated and uninsured, undeserving of health care, would incur administrative costs, possibly as large or larger than those of providing care also for the undeserving. If so, it seems that mandatory interlocks do in the end prevent the incurring of costs on others.

Yet again, the pain one feels when others bleed to death in the street is perhaps an other-regarding pain, caused by one's own sensitivity and so an improper ground for limiting liberty. Furthermore, the administrative costs may possibly be charged to the undeserving, so that drink drivers would not only bear their own costs, but would also pay for the administration that decides whether or not they are deserving, similar to the way in which people are sometimes made to bear court costs when they lose a civil court case.

It seems that the final judgement as to whether the second kind of reason for limiting liberty is paternalistic or not depends on whether or not one favours a welfare state with free emergency health care and an ambition to avoid unnecessary suffering regardless of its cause. This background assumption should be recognized. If we reject paternalism and still accept that indirect costs provide grounds for mandatory interlocks we should admit that we take the welfare state or a humane society for granted, or provide some other explanation for why these costs are relevant.

The third kind of reason concerns to the direct protection of drivers themselves. We may think that saving people from being killed or injured through their own drink driving is a good reason for mandatory interlocks, independently of the resulting material cost to society. In terms of cost-benefit analysis, this attitude entails putting the 'human cost', the loss of quality of life, to drink drivers themselves on the scales. This clearly amounts to paternalism in the sense of limiting the liberty of drivers for their own good. However, at this point we should distinguish between 'hard' and 'soft' paternalism, where the former is the limiting of people's voluntary choices, while the latter is the limiting of choices that are substantially involuntary, or not voluntary enough (to warrant protection from interference) (see e.g. Feinberg, 1986, chapter 19).

Intoxication is a standard case of impairment not only in the context of driving a car, but also in the context of making rational decisions. The decision to drive after drinking is to some extent impaired and so less than perfectly voluntary. At some degree of intoxication, the decision is substantially involuntary – not voluntary enough that benevolent usurpation of that decision qualifies as hard paternalism. Moreover, drink drivers who are alcoholics may not only be acting involuntarily when they chose to drive, but also when they get themselves intoxicated in the first place. This point bears also on the indirect costs discussed above – even on an individualistic account it may not be paternalistic to avoid indirect costs by limiting liberty, if they are brought about involuntarily. Varying estimates indicate that about 50 per cent of drivers killed after drinking are alcoholics (Brinkmann, Beike, Köhler, Heinecke & Bajanowski, 2002; Swedish NRA, June 2002, p. 8). Still, not all drink drivers are alcoholics and not all alcoholics always act substantially involuntarily. Presumably, some drink drivers are acting voluntarily (enough). Unless (hard) paternalism is accepted, the costs incurred by these drivers would have to be disregarded, again making a policy of mandatory interlocks less cost-efficient. Exactly which costs should be disregarded depends on where the line is drawn, in this particular context, between voluntary and not voluntary enough.

Importantly, the fact that there exists a paternalistic rationale for mandatory interlocks in no way affects the reasonableness of other rationales. A paternalistic rationale is not something that stains a policy so that its mere existence makes the policy less justified than it would otherwise have been. The moral status of paternalism determines whether or not the protection of the very people whose liberty is limited (and who act voluntarily enough) should be accepted as a contributory reason for a given policy (Grill 2007; Husak 2003). If it should not, other reasons for that policy remain in full force.

As already noted, the Interlock Commission and the Swedish NRA have no clear position on the issue of paternalism. They point out that they support mandatory interlocks 'mainly' for other reasons, while they include the costs of death and injury to drink drivers themselves in their calculations, without commenting on the possible inconsistency. This is perhaps the standard procedure in public policy matters – the least controversial reasons are the ones officially cited, while costs are taken into consideration regardless of whether or not they are self-inflicted (and voluntary). Such a procedure

implicitly entails comprehensive acceptance of paternalism – in the actual policy decision the avoidance of voluntary self-harm is assumed to be as valid an aim as the avoidance of involuntary self-harm or harm to others.

It is far from clear that paternalism as understood here should be rejected. It is common to hold that paternalism involves some sort of bad or wrong, but this may simply be because it entails a cost in terms of liberty or autonomy. The principled anti-paternalism that holds that this cost cannot be outweighed by any benefit is uncommon and arguably unreasonable. Naturally, if paternalistic reasons are accepted as valid, they must still be balanced against other reasons, such as reasons that concern the value of liberty. Barring a principled anti-paternalism, the liberty cost of mandatory interlocks should most obviously be compared to the corresponding liberty gain. It is not obvious that interlocks entail a greater limitation or interference with liberty than do policing and punishment. On any one occasion, being forced by the police to undergo a random exhalation test is surely more inconvenient and intrusive than being forced by the technical design of the car to do the same thing. Random police tests are less intrusive only to the extent that they are less frequent. Of course, the less frequent they are, the less efficient they are. If comprehensive, efficient policing would be acceptable, so would interlocks. Would it? We propose that in the case of drink driving, as well as any other activity that should be prevented because of its potential destructiveness on any single occasion (and not just because of the accumulative effect of activities of that type), extensive policing is in principle acceptable, as long as it is not too costly or too inconveniencing. To the extent that interlocks can become cost-efficient and non-inconveniencing then, they are acceptable, and less intrusive than policing. As for imprisonment, it is of course the most severe interference when it is actually carried out. Again, the small probability of actually being punished may make a policy of policing and punishment less interfering, but to that extent also less efficient. In comparison with the amount of liberty taken away by imprisonment or even by heavy fines and/or revocation of one's driver's licence, the inconvenience of the interlock and the loss of the freedom to drive intoxicated seem rather trifling.

To sum up, it makes little sense to hold that a policy of mandatory interlocks would be paternalistic as such, since it is supported by strong non-paternalistic reasons. The fact that it may also be supported by paternalistic reasons does not change this fact. The question is, rather, whether paternalistic reasons should be allowed to bear on the issue. Such reasons are assumed to be valid in official investigations of the costs of drink driving. This seems to us very reasonable, as long as the costs of limiting liberty are not forgotten, but properly weighed against other, perhaps more tangible costs. A look at the liberty costs of policing and punishment indicates that these costs are comparable to the liberty costs of mandatory interlocks. If, contrary to our tentative position, paternalistic reasons should be disregarded when deciding whether or not to implement mandatory interlocks, the first step should be to look closer at which costs of drink driving are costs to drink drivers themselves. If soft paternalism should be acceptable, but not hard paternalism, a further important issue is to what extent drink drivers are acting

voluntarily, especially in view of the fact that many, in particular at higher BACs, are alcoholics.

CONCLUSION

Drink driving is a societal problem of great proportions. Punishing drink drivers has proven an insufficient measure and it may be questioned if harsh punishment is morally justifiable. The interlock offers a technological solution to the problem. The costs are at present too high to make a policy of mandatory interlocks in all cars cost-efficient in the short run. However, technological development might change this estimate, especially if stimulated by large orders. Should a comprehensive program still be too expensive, various limited programs are possible.

We propose that the responsibility for dealing with drink driving is to a large extent the forward-looking responsibility of system designers, including politicians. Individuals should take responsibility for their choices, but choices are always made in a context and this context can be changed by system design. It is quite consistent to hold system designers responsible for the circumstances in which individual choice is made, while at the same time holding individuals responsible for the choices they make in these circumstances. Furthermore, there seems to be no cause for worrying that greater social responsibility for system design will erode the individual feeling of responsibility for driving in the case of mandatory interlocks. Unless such a cause can be identified, sound public health policy favours social responsibility in this case.

We propose that paternalistic reasons may well be acceptable as long as the cost in terms of limiting liberty is recognized and considered. By default, the government should promote public health when it is cost-efficient to do so and when doing so does not involve a net loss of liberty or other important values. Should paternalistic reasons nonetheless be rejected as invalid, and certain costs therefore excluded from cost-benefit analysis, great care should be taken to distinguish exactly what these costs are. Regardless of whether these costs are included or not, there are strong reasons for society to combat drink driving, as it presents an obvious risk of harm to others. Given technological development, the interlock may soon be the only justifiable as well as the only feasible way to seriously diminish drink driving.

¹ Joel Feinberg (1986, p. ix) explicitly defines paternalism in terms of 'limiting liberty'. Other definitions speak instead of "interference with liberty of action" (Mill, 1991 [1859], p. 14), "violation of autonomy" (Dworkin, 1983, p. 107), or use similar expressions referring to a diminishing or disrespect of some liberal value.

² Most discussion of paternalism takes for granted that what is paternalistic is an action, law, institution or policy. Whether or not a policy is paternalistic then depends in part on what reasons motivates or justifies the policy. In opposition to this standard account, we assume here that what is paternalistic is the invocation of certain reasons for a policy etcetera. For a defence of this account, see Grill (2007).

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