

1 Equality of restraint: Reframing road safety through the ethics of private 2 motorised transport

3

4 Abstract

5 Background

6 Motoring is an emancipation. It is both an individual freedom and a collective freedom with car
7 ownership at 30,491,000 vehicles by 2019 in Great Britain. Yet, as the evidence of the impact of road
8 transport accumulates and the health and environmental aims of sustainable travel become clearer,
9 demand for an ethical analysis also intensifies.

10 Purpose

11 The paper draws on a previous limited ethics-based literature on road transport. Key tenet of
12 liberalism, of 'freedom from' as well as 'freedom to', are highlighted. This includes Edmund Burke's
13 concept of 'equality of restraint' in meeting common needs. Freedom from fear of road traffic
14 danger forms part of an individual's rights.

15 Findings

16 Equality of rights and freedom from fear in road use have not been key considerations for reducing
17 risks to vulnerable road users. Indeed, ethical issues have largely been ignored. The emergence of
18 Vision Zero within the road safety field with its focus on zero deaths and serious injuries has brought
19 an ethics-based approach to the mainstream although it appears to be struggling to gain traction in
20 neo-liberal societies.

21 Conclusions

22 The Covid-19 pandemic has led to UK governments funding and promoting the use of walking and
23 cycling. These modes have hitherto been left to fend for themselves in an environment where road
24 safety has been measured by casualty reduction while fear has suppressed walking and cycling with
25 the consequence losses to physical and mental health. We ask whether an ethics-based
26 contribution, and lessons from Covid-19, can help re-set the direction of UK road safety policy and
27 practice.

28

29

30 1. Introduction

31 The transport innovations of the railway, the motor car and the aeroplane have created the positive
32 freedom to get places quickly, a utility of such benefit that the harms have received only slight
33 attention. Positions around road safety risks are articulated from time to time precipitating
34 measures which further protect the transported while environmental concerns, first raised in the
35 1970s, have had little impact on the conscience of the travelling public. Analyses tend to be
36 consequential, obvious benefits versus obvious harms, the freedom to travel often trumping deeper
37 consideration. Sometime in the early 1960s the railway, democratic, communal and social, ceded
38 dominance to the motor car, private and personal, symbolic of the neo-liberal, individualistic culture
39 of the first world.

40 As an emancipation, the private motor car is both an individual and collective freedom as the
41 majority have been able to participate, with car ownership increasing from 1,979,000 in 1950 to
42 30,491,000 vehicles by 2019 in Great Britain (Dept. Transport, 2019a). The benefit of personal
43 transport, flexible short, medium and long distance travel to visits friends and relatives, to access
44 goods and employment, have only been tempered by the transport method's own success as
45 increased traffic congestion frustrates the motorist, and passenger, to get where they want, when
46 they want. From the 1960's Beeching Cuts¹ onwards the political will has been to increase road
47 capacity with occasional interludes acknowledging that road building itself encourages travel and
48 that a more effective approach would be 'demand management' (Starkie, 1982; Shaw, Walton,
49 2001; Davis, Tapp, 2018). Moreover, as the evidence of the impact of road transport accumulates
50 and the health and environmental aims of sustainable travel become clearer, demand for an ethical
51 analysis also intensifies (Davis, 1993; Mullen et al., 2014). On the one hand we want to maintain the
52 freedoms that personal road transport has allowed, while on the other we must be alert to the
53 previously unconsidered consequences of unfettered motorised travel.

54

55 The Covid-19 lockdown, unwelcome as it is, has raised a set of questions: do we need cars? Do we
56 need them that much? Have we become habituated to rely on a mode of travel that is more
57 damaging than previously thought? Looking at UK behaviour responses to travel modes in the past
58 six months provides a mixed picture of car travel returning to near pre-Covid-19 levels yet with the

¹ The Beeching cuts closed many of the branch lines across mainland UK on the basis that they were uneconomical but did not factor in their network effect nor the economic, social and environmental costs of mass motorisation and road building that followed. The Beeching Report was ordered by the Conservative Minister for Transport who, at the time, owned majority shares in Marples Ridgeway road construction company. See Hamer, M. 1986 *Wheels with wheels*. London: Routledge.

59 Department for Transport own quarterly attitudes surveys indicating significant support for change
60 in travel behaviour (Department for Transport, 2020). The National Travel Attitudes Study found that
61 39 per cent of adults surveyed were walking more between May and July 2020, and 38 per cent
62 were walking more, compared to before the outbreak of the coronavirus in the UK. Ninety-four per
63 cent of those who had increased their active travel planned to continue to walk or cycle more in the
64 future than they had done before the COVID-19 crisis. In Scotland 64% of those surveyed in mid
65 September 2020 agreed that they will walk and cycle more (Transport Scotland, 2020). So there does
66 appear to be demand for more walking and cycling. This is so even if partly masked by some adults
67 selecting car use now as their perceived least risky option yet willing to use active travel modes if the
68 risks were perceivably reduced through greater provision of segregated infrastructure, speed limit
69 reductions, road closures etc... It seems unlikely too that this is just a UK phenomenon. Now is the
70 time to reappraise what road safety is and should be.

71
72 This paper will consider the broader ethical issues beyond the usual consequential and political
73 viewpoints, beyond the obvious harms to look at the less obvious effects, the hidden damage that
74 should be central to challenging the orthodoxy of private motoring. We will draw on, and apply, the
75 traditional ethics of freedom, looking at the tension between the individual's right to be free and the
76 community's right not to be harmed.

77

78 2. What is Road Safety?

79 In 1992 a researcher proposed an ethical approach to defining road safety. In the absence of
80 published reports, but with handy recourse to a dictionary, he defined road safety as:

81 'freedom from the liability of exposure to harm or injury on the road' (Davis, 1992).

82 Responding to this, we claim that road safety is more than just addressing injury avoidance. It must
83 also address perceptions of the risk of harm, freedom from the fear of harm and its manifestation at
84 the individual, community and societal levels. Road safety measures operating since the 1930s have
85 been assessed in terms of success by the measurement of the number of recorded road traffic
86 events and injury severity. Declining total injury numbers, reported annually, has been deemed as a
87 sign of this success, not least in the light of increasing motorisation. Yet this has led to a substantial
88 decline in walking, cycling and public transport in the UK. Walking was only measured nationally
89 from the 1975/76 National Travel Survey when walking per person per year was 399 kilometres
90 across Great Britain but has since reduced to 338 in England (Department for Transport, 2019b).

91 Cycling use has dropped most significantly from over 23 billion vehicle kilometres in Great Britain in
92 1949 to 5.3 in 2019 (Department for Transport, 2019c), and local bus use has fallen from 47.6
93 passenger kilometres in 1970 to 27.4 in 2018/19 also for Great Britain (Department for Transport,
94 2019d). The suppression of walking and cycling simultaneously leading to a reduction in health
95 benefits. By contrast, when road safety is directed by a focus on casualty reduction, more children in
96 cars will, for example, lead to lower casualty numbers. Yet, while from a casualty reduction
97 perspective road safety has been improved, it has been achieved through fear and by the loss of
98 freedoms and health benefits accrued through active travel. By contrast, walking and cycling use has
99 not fallen so much in other European countries (e.g. Germany, The Netherland, Denmark) because
100 of interventions to promote their safety. It has been noted that “perhaps the most obvious, and
101 certainly most studied, factor affecting walking and cycling safety is infrastructure. Many studies
102 have confirmed the importance of good walking and cycling infrastructure in promoting more and
103 safer walking and cycling” (Buehler, Pucher, 2020). At the top of the mode share for cycling in High
104 Income Countries is The Netherlands at over 25% of all trips yet with the lowest fatality rate per
105 million kilometres cycled compared with elsewhere in Europe and the US.

106 Children, young adults and the elderly are disproportionately exposed to the risk of being injured or
107 killed in a road crash, especially if they are pedestrians. Pedestrians and cyclists are generally
108 exposed to a greater risk than car drivers. Intuitively, there appears to be a morally relevant
109 difference between different groups of road users (Nihlén Fahlquist, 2009). As multiple studies have
110 reported, fear of motorised road traffic has resulted in parents and carers restricting children’s
111 independent mobility. This provides a litmus test demonstrating that casualty reduction alone
112 cannot facilitate the equality of travel choice because of the externalities of car use. In surveys of
113 children’s school travel mode in the UK the top concern of parents and guardians is fear of motor
114 traffic. This then leads to the self-defeating spiral of increased danger as more adults drive their
115 children to school. This erosion of children’s freedom was first identified by the pioneering work of
116 Hillman, and perhaps most noted in his study ‘One False Move’ (Hillman, Adams, Whitelegg, 1990).
117 That study has been followed by many studies across High Income Countries which have likewise
118 charted the fear-driven decline in children’s independent mobility which is largely in response to
119 mass motorisation (Bennetts et al., 2018; Kytta et al., 2015; Lopes et al., 2014).

120 As researchers noted almost three decades ago,

121 ‘road safety usually means the unsafety of the road transport system’ (Silcock, Barrell, Ghee,
122 1992).

123 The casualty reduction approach was challenged in the 2008 House of Commons Transport
124 Committee report which talked on complacency in road safety and noted that making pedestrians
125 and cyclists feel safer was crucial to promoting walking and cycling (House of Commons, 2008). It
126 noted that for vulnerable road users road safety implies freedom from the dangers associated with
127 motor vehicles.

128 By contrast, as Jacobsen and colleagues have concluded, safety is best measured by the risk of
129 injury, not by the number of injuries. Road safety is indicated by the absence of danger, not by the
130 absence of injuries (Jacobsen, Ragland, Komanoff, 2015.). Risk is more accurately measured by time
131 as a unit of exposure, especially for pedestrians and cycle users as their kinetic energy means that
132 they pose little risk to others. Thus, a holistic approach to road safety has to address road danger at
133 source, which modes are most dangerous both to self and others, and reflect this in a definition
134 which is inclusive of freedom from fear.

135 The traditional view of responsibility for traffic safety is closely aligned with the notion that safety is
136 about individuals driving safely. Thus, much of the emphasis has also been upon getting vulnerable
137 road users to bear the burden of responsibility for their own safety and risk exposure (Jacobsen,
138 Racioppi, Rutter, 2009) and through the promotion of secondary safety measures, largely focused on
139 improving safety within vehicles (Tight et al., 1998.). More recently the emerging view that a major
140 role can and should be played by institutions, for example governments and vehicle-producing
141 companies, is useful and reasonable. The implied notion is that responsibility has to be distributed
142 and shared between different actors if a safer traffic environment is to be achieved (Nihlén
143 Fahlquist, 2009).

144 Here we introduce the linked notion of road safety as reflected in Vision Zero, as established first in
145 1997 in Sweden with similar approaches subsequently aligning under the heading of Safe Systems
146 Road Safety conceptual frame. Critically, the Vision Zero approach emanates from an ethical stance.
147 This is that loss of life and serious injury is no longer to be tolerated (Kristianssen, et al., 2018).

148

149 3. The ethics of private motorised transport

150 3.1 A paucity of attention to ethics in road safety

151 Coming back to ethics and road safety 28 years later after a first attempt by Davis (1992) to define
152 road safety through an ethical lens, we find, even in the internet age, that coverage of ethics and
153 road safety is slim, with the caveat of some recent upsurge in interest relating to autonomous
154 vehicles (see Nyholm, Smids, 2018). Others have found a similar paucity. In 2008 Evans noted that

155 ethical issues are largely ignored (Evans, 2008). Moreover, as Nihlén Falhquist noted in 2009,
156 “Ethical aspects of road traffic have not received the philosophical attention they deserve [yet] a
157 continual ethical discussion concerning road traffic is needed” (Nihlén Falhquist, 2009). Her
158 assessment of ethical aspects of road safety is drawn on further in this paper as a checklist against
159 which to explore tensions and opportunities within current transport safety theory and practice.
160 Nihlén Falhquist identifies the normative and pervasive nature of motorised road traffic. A major
161 change to the transport system is possible but needs debating. Ethical approaches can help show
162 that alternatives are possible:

163 “People in industrialised societies are so used to road traffic that it is almost seen as part of
164 nature. Consequently, we do not acknowledge that we can introduce change and that we can
165 affect the role we have given road traffic and cars. By acknowledging the ethical aspects of road
166 traffic and illuminating the way the choices society makes are ethically charged, it becomes
167 clear that there are alternative ways to design the road traffic system.” p.385

168 3.2 Applying an ethics lens to road safety

169 While traditional ethics has been stubbornly anthropocentric, contemporary ethics has a broader
170 remit and includes consideration of the non-human world and the environment. These
171 considerations are pertinent to the ethics of road transport with the crucial question being what
172 level of societal and environmental harm, current and future, is acceptable in exchange for the
173 individual benefit that convenient road transport brings?

174 If private motor transport is a freedom we need to consider if that freedom impacts on others by
175 invoking positions around negative and positive freedom in both philosophical and political contexts.
176 Our liberal political consensus demands that the test for restricting freedom remains high, yet the
177 foundational liberal view of John Stuart Mill [1806-1873] is defined by his Harm Principle that

178 "the only purpose for which power can be rightfully exercised over any member of a civilized
179 community, against his will, is to prevent harm to others" (Stuart-Mill, 1859).

180 This can be interpreted more sensitively than the straight-forward utilitarian ‘greatest good for the
181 greatest number’ by acknowledging *any* harm as a sacrifice for another’s freedom. Similarly,
182 considerations of justice arise in the fair distribution of opportunities, benefits and burdens derived
183 from the activity such that a rights-based approach is needed to protect minorities from harms that
184 may occur. It is easy to think of the non-motoring public as the minority set of people being harmed,
185 however the majority themselves are also subject to harm, they are just experiencing some of the
186 benefit and facility of private motorised transport.

187 The negatives and harms of personal road transport go beyond the increasingly obvious issues of
188 pollution and road traffic injuries, which in 2018 amounted to 160,597 reported casualties of all
189 severities, of which 1,784 were deaths (Department for Transport, 2019e) This would be shocking in
190 any other social endeavour and our acceptance of the risk demonstrates the high value individuals
191 and society place on personal mobility. Awareness of the short and long term effects of air pollution,
192 previously under acknowledged, is increasing as the evidence of the consequences of nitrogen
193 dioxide and particulate pollutants on the health of individuals proliferates, with an estimated 40,000
194 UK premature deaths per year (Royal College of Physicians, 2016). This figure is similar in scale at the
195 time of writing to UK deaths from the coronavirus at 44,830 (as of 14.07.2020). Vehicle emissions
196 are also implicated in global warming raising questions about our responsibility for future
197 generations (International Panel on Climate Change, 2019).

198 Here Edmund Burke’s writing (1729-1797) is apposite. Burke’s support for shaping the legal and
199 social institutions necessary to safeguard liberty is captured by his phrase “the equality of restraint,”
200 which suggests the role of these institutions is to create an environment where liberty can flourish.
201 Burke rejected the possessive individualism of liberalism in favour of social freedom. True liberty, he
202 claimed, is secured by “the equality of restraint”, not empty free choice. Freedom and equality
203 require lived fraternity among citizens who have common needs. In making this case, Burke clarifies
204 that legal and social institutions are necessary to ensure that unfettered individual liberty does not
205 trespass on the liberty of anyone else, and that such a trespass is, in fact, an injustice. To Burke
206 freedom from this encroachment—beyond the exercise of any single freedom ‘to’—is the essence of
207 liberty, a powerful endorsement of the importance of freedom ‘from’ interference, such as fear of
208 motorised traffic in the context of road safety (with its emphasis on reduction of danger at source
209 (Galea, 2017).

210 Reflecting such discourse, freedom ‘from’ in the domain of social and political systems can be rights-
211 based and, for example, found in the Universal Declaration of Human Rights (United Nations, 1948).
212 These include the right to live free from socioeconomic insecurity, the threat of environmental
213 disaster, or the hazard of preventable injury and disease. Here the onus is on Government
214 intervention as is the case with the importance of public health in taking actions to maintain
215 freedom from disease. Here the central role of governments is protecting individual rights, although
216 how rights are policed is critical. The Declaration states in its preamble that “freedom from fear and
217 want has been proclaimed as the highest aspiration of the common people.” Thus, freedom ‘from’ is
218 at least as important as the freedom ‘to’ in modern liberal societies. Contrasting such ethical
219 approaches, in the context of road safety, the reality of lived experiences is that ‘freedom to’ results

220 in 'right by might' outcomes – those with most kinetic energy and protective 'shells' dominate
221 highway space.

222 These points remain challenging because the act of driving a motor vehicle externalises the potential
223 risk such that the risks are largely for those outside that vehicle. Partly reflecting Burke's focus on
224 legal and social institutions, Evans asks whether drivers adequately understand that their normal
225 driving poses an unreasonable threat to others? And, if not, why not? "Have drivers been
226 misinformed? If so, by whom, and for what purposes? While the individual driver is the final agent,
227 other institutions contribute hugely to how individual drivers behave, and accordingly bear a major
228 moral responsibility for traffic harm" (Evans, 2008). The announcement of funding for Covid-19
229 transport responses/initiatives by UK Government from April 2020 in the form of funding for 'pop-
230 up' cycle lanes and pavement widening, 20mph speed limits and similar measures to reduce risk has
231 been revealing in the sense that governments have been prompted to increase use of these modes
232 primarily in order to relieve pressure on other parts of the transport infrastructure. (Department for
233 Transport, 2020; Welsh, Government, 2020; Scottish Government, 2020). This has especially been to
234 enable workers to commute without recourse to private car use and so reduce the risks of motorised
235 traffic congestion and potential gridlock. Such measures could have been implemented before
236 Covid-19 but have not been. Reducing fears of traffic injury was not important enough prior to the
237 pandemic. Equality of rights and freedom from fear in road use have not been key considerations for
238 reducing risks to vulnerable road users. Equality of restraint does not operate with regards to road
239 transport.

240 As walking and cycling activities increase it is incumbent on governments to review safety. In
241 essence, governments have a duty to maximise positive freedom to and reduce negative freedom.
242 Positive freedom includes the provision of better cycling lanes, road crossings, street lighting, and
243 negative freedom involves reducing those obstructions to a healthy free life such as pollution, injury
244 and the fear of those impacts. Covid-19 has provided an opportunity to assess the range of benefits
245 which have unexpectedly presented themselves out of an enforced, sudden and drastic shrinkage in
246 our travel behaviour and where walking and cycling, as part of daily exercise, have been encouraged
247 by Governments across the world. Alongside this has been reciprocal and communitarian behaviours
248 such as social distancing, face-coverings to protect others and various public actions paying tribute
249 to care workers.

250

251 4 Social democratic and neo-liberal values in advancing road safety

252 Propelled by a strong moral imperative to end deaths and seriously injured on the roads, a key
253 ingredient of Sweden’s Vision Zero, and similar approaches including the Dutch Sustainable Safety
254 Programme, it is not surprising that such programmes first emerged in more social-democratic
255 countries rather than in neo-liberal ones. Paternalism or nanny-statism is sometimes cited in the
256 context of Vision Zero and it has been suggested that most measures to increase safety in road
257 traffic can be motivated by the notion of protecting others against harm. As Nihlén Fahlquist notes,
258 such an approach will even be attractive to liberals. Scandinavia has been renowned for its social
259 welfare regime approach in which paternalism is ingrained with the cultural expectations of society
260 (Frederiksen, 2017; Esping-Andersen, 1990). Arguably, the Dutch model of welfare at the end of the
261 last century provided a weaker version of the Scandinavian welfare regime, referred to as a hybrid
262 between social democratic and conservative (Vis, van Kersbergen, Becker, 2008). but still containing
263 an ingrained culture of welfare and its concern for the welfare of the collective society at least as
264 much as that of the individual.

265 By way of contrast, when Evans compared the US (as a neo-liberal regime) and its casualty statistics
266 with European countries, he was clear that the US approach to road safety had failed:

267 “US government traffic safety policy has been a disaster without parallel... US safety policy
268 priorities are ordered almost perfectly opposite to where benefits are known to be greatest.
269 This happened because the US ignored well documented scientific knowledge to a far
270 greater extent than other countries. The result was that the US placed most emphasis on
271 factors known to have minor effects, thus leaving little energy for factors known to produce
272 major benefits” (Evans, 2008).

273 This is the opposite of what is attempted through Vision Zero which looks to the most effective
274 interventions in terms of the categories of action. With a grading of safety across the main four
275 intervention areas of safer roads, safer people, safer vehicles, and safer speeds, it employs up to 5
276 star accreditation in grading the removal or amelioration of known risk factors. But the task of giving
277 equal freedoms to all mode of travel seems beyond the possibilities for Safe Systems because, as a
278 mass consumption commodity, driving with due care for other road users, perceived risk of harm to
279 self and risk of police sanction are arguably low. Indeed, as Wells notes,

280 “Perhaps it is significant that the frequent, yet dispersed, nature of road deaths sees their
281 attenuation in the media, preventing them from getting their rightful (actuarially conceived)
282 place on society’s risk radar. If the reality of *actual* road death and injury fails to excite much
283 interest, it is perhaps unsurprising that attempts to take action against common behaviours

284 that *sometimes* increases the chances of it happening have met with resistance” (Wells,
285 2012).

286 In addition, with the rise of mass motorisation and a global vested interest multi £billion industry,
287 motorists and the motor industry are powerful players in the international road safety debate
288 (Ericson, 2008; Woodcock, Aldred, 2008) which has lobbied for voluntary approaches to improving
289 safety as measured by casualty numbers (Douglas, et al., 2011; Roberts, Wentz, Edwards, 2006).
290 There is a long history of corporate interests in the motor manufacturing and oil industries of profit
291 subordinating public and environmental safety. Increased public awareness of pollution and
292 environmental issues have at last evoked the beginnings of a shift towards sustainable transport,
293 and in the context of personal transport, electric vehicles. We should not only embrace these harm
294 reducing initiatives, but also review of our overall usage of private transport as all forms use
295 environmental-depleting energy in some form.

296

297 4. Conclusions

298 Major philosophical tenets articulated by the founding fathers of the liberalist tradition strove to
299 demonstrate how equality of restraint should underpin an individuals’ right to act in ways that does
300 not restrict the rights of others. With the rise of mass motorisation, equality of restraint and
301 ‘freedom from fear as the highest aspiration’ have been sacrificed to the transport choices of a
302 section of society who drive motor vehicles. Our analysis demonstrates that the unequal
303 externalisation of risks and harms in UK road transport has remained largely unexplored and ignored
304 from an ethical perspective. More broadly, some have argued that our complacency will only change
305 with technological progress e.g. Intelligent Speed Adaptation. Yet, during the drafting of this paper a
306 possibly unique opportunity has arisen as the result of the COVID-19 pandemic – a likely permanent
307 change in travel behaviours. This is reflected by the fact that the UK Department for Transport has
308 announced £2Billion to encourage local authorities to implement ‘pop-up’ cycle lanes, to widen
309 pavements, and otherwise improve the perceived and actual safety of these modes (Department for
310 Transport, 2020b). Similar schemes have been established in Scotland and Wales (Scottish
311 Government, 2020; Welsh Government, 2020). As new habits have developed with more local travel
312 and walking and cycling are viewed in a new light of social normalcy, endorsed by Governments, a
313 new normal has elevated the position of these modes. In some city centres and commuter corridors
314 streets are closed to private motorised traffic or general traffic lanes re-allocated to pedestrians and
315 or cycle users.

316 Out of the pain and suffering caused by COVID-19 there does seem some possibility of changing the
317 balance of freedoms in travel choice with greater protection of the rights of people outside of
318 motorised vehicles. This could improve the safety of all road users through reducing danger at
319 source. Ethical considerations forming part of the on-going discussions in transport planning might
320 seem unlikely, but a pandemic has shown to make many things possible within very short timelines.
321 2020 does provide an opportunity for the application of ethical scrutiny to help reinforce efforts to
322 disrupt the status quo of unequal risk as a result of car dominance on our streets.

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