

# An Equitable Approach to Road Traffic Law

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## Introduction

Road Traffic Law is among the most important codifications of the duty of care one citizen owes to another, for it regulates behaviour that may have fatal consequences. In particular, it specifies part of the duty of care that an adult owes to a child. Since around half of all fatal injuries to children are caused by motor vehicles, it follows that Road Traffic Law forms a part of the legal codification of that duty of care: existing legislation inadequately protects a child's right to life. As a measure of the inequity arising from this inadequacy, let us observe that while laws dating from the Victorian era prohibit the exposure of children to industrial machinery, today machinery weighing 44 tons, moving at lethal speed, is ubiquitous in the public road-space of our cities.

This report, which is condensed from a longer paper, considers the nature of this inequity by comparison with the law's treatment of hazards of falling.

## Equity on the Roads

While "Equity" has a specialised meaning in English law, here I am using "Equitable" in the ordinary sense of "fair" or "equal" that underlies the specialised English legal usage. In this article I show that while there are strict laws and regulations governing the extent to which the public may be exposed to the hazards of falling in a building, and quite strict regulations about how such hazards must be limited in generally used public space, the standards for protection against equivalent hazards created by moving vehicles are scandalously lax.

*Inequity corrodes a legal system: it is Parliament's duty as the body responsible for enacting statute law to strengthen Road Traffic Law in order to eradicate the existing inequity in child-protection. The consequences of failure to address inequity are dire, immensely destructive of the welfare of the United Kingdom, as we have seen in Northern Ireland. That example shows clearly that we cannot take for granted the maintenance of the whole fabric of law in the presence of inequity.*

For children, the roads are a classic example of the double standards characteristic of inequity. On the one hand the violation of a child's body is rightly portrayed by the media as a horrible crime; on the other hand the legal structure which should protect the integrity of children's bodies from motor vehicles is entirely inadequate. Shamefully, even modest measures to enhance the protection of children by more rigorous enforcement of speed limits have been attacked by sections of that very same media. Where there is a double standard, the values of the lower standard will prevail. Why should a child, when he grows old enough to wield a knife, respect the integrity of others' bodies when he knows perfectly well that motorists, the icons of our society, express in their behaviour contempt for the integrity of his own body? The precise nature of this inequity becomes clear by a quantitative comparison between the hazards to children which motorists are routinely permitted to create on the roads and hazards of falling which are *not* permitted in buildings.

Those who administer space that is publicly owned, or publicly accessible, such as buildings and parks, have a duty to protect members of the public from falling. For example, a hotelier must provide adequate rails for stairways. Yet the manner in which

injuries are caused by a fall is a precise analogue of the way injuries are caused in most pedestrian-vehicle collisions: in both cases injury is caused by the impact of a human body at a high velocity with a surface sufficiently unyielding to ensure that most of the energy of collision is absorbed by the victim.

Hazards of falling form a useful basis of comparison because it is possible to calculate the speed at which a victim collides with the ground from the height of a fall. By examining what kinds of hazards of falling are permitted by current laws and regulations, we can determine which of the corresponding ground-collision speeds are regarded as an acceptable. Knowing these speeds, we have a basis for comparing collisions between vehicles and pedestrians with victim-ground-collisions arising from falls. *In equity, Road Traffic Law should ensure that the public is protected from the hazards of collision with a vehicle by exactly equivalent laws and regulations to those which protect the public against the hazards of falling.* In both cases, the "hazards" referred to are those which are necessarily encountered by members of the public in the normal activities of daily life, such as shopping or going to work. The fact that people may legitimately choose to expose themselves to great hazard in activities such as rock-climbing is not relevant to setting an acceptable level of hazard for daily life.

Below are tabulated approximate falls for various circumstances .

Height in metres	Kind of Event	Final velocity in m.p.h.
1	An adult male falling over.	9.9
2	Child falling off a bunk bed. Child using current playground equipment	14.0
3	Unfenced falls to be found in some park areas;	17.2
4		19.8
5	Falling one storey	22.3
10	Falling two stories	31.3

Exactly what level of falling hazard is generally acceptable in a public place is debatable. What is clear, however, is that it is unacceptable to have unprotected falling hazards of 5 metres or more in a public space intended for general use. A hotel manager, for example, who knew that the doors to a lift-shaft had failed, leaving the shaft open, with a fall of one storey or more, and who failed to take action to prevent his customers from falling down the shaft would indubitably, in a civil action, be found to have been negligent. In the event of a fatality, it is conceivable that he would be found guilty of manslaughter or culpable homicide.

*Since a fall of four metres corresponds to a final velocity of almost 20.m.p.h., and a fall of 10 metres corresponds to a final velocity of 31.3.p.h., it seems clear that in equity the driver of a vehicle should be considered negligent if he collides with a pedestrian while his vehicle is travelling at more than 20 m.p.h..*

It is useful to note that studies by the Road Transport Laboratory (and summarised in the Highway Code) show that pedestrian mortality rises steeply between 20 m.p.h. crashes and those occurring at 30 m.p.h..

## What are appropriate speed limits?

How the civil duty specified above (with respect to restricting collision speeds) should be translated into law is a matter for further consideration. Clearly, in towns, it could be satisfied by a universal 20 m.p.h. speed limit.

However, there is still a 5% chance of a pedestrian being killed in a 20 m.p.h. collision. Proper exterior design of vehicles could be expected to reduce this figure considerably. The Honda company deserves praise for devoting care to this aspect of vehicle design.

Let us, however, discuss in what circumstances a speed as high as 30 m.p.h. is safe. The usual argument for not treating a motor vehicle on the same basis as fixed industrial machinery or as a railway train is that the driver, having control over direction and more effective brakes, is able to avoid posing an unacceptable risk to public safety. This argument has strictly limited validity, for the driver needs time as follows:

- to react to a situation
- to slow the vehicle or to swerve (itself a problematic manoeuvre, for it may risk a serious head-on collision.)

knowing these times, we need to know

- at what speed it is reasonable to expect a pedestrian to move

before we can calculate

- the clearance between vehicle and pavement, or parked vehicles, required for safe operation at 30 m.p.h..

*As is shown in the long version of this paper, to meet these requirements a normal motor-vehicle operating at 30m.p.h. in average conditions needs a 3 metre clearance from the pavement or from parked vehicles in order to be able to ensure that collisions above 20m.p.h. do not occur .*

## Making it happen: Education

Education, by presenting to the public the consequences of problematic behaviour, is an essential component of modifying that behaviour. It can achieve significant success. For example, attitudes to driving while intoxicated have been changed markedly. In particular, the Hygienic Revolution initiated by the Victorians is an encouraging example of a highly successful transformation which illustrates the potentiality for change. By providing cities with clean water and adequate sanitation it broke the feedback loop that occasioned epidemics of water-borne disease, delivering huge cuts in mortality. It is clear that education played a vital role, for there is a total gulf in our own attitudes to the disposal of human waste and that of our ancestors. If we could return to the 18th century we would simply be *revolted* by the casual way that human excrement was treated .

Making our streets safe for children will certainly put motorists to what they see as inconvenience. However this is a move that should command public support, given a little education on actual risks. While parents need no longer expect to lose a high proportion of their children to disease, the dread of the death of a child is certainly still present. The intense public interest in recent child-murder cases is a strong pointer to this. While, of

course, there are uniquely horrible features about the abduction and murder of children, it remains the fact that children killed by vehicles are just as dead as those killed by violent paedophiles, and there are many more such children. And some will suffer excruciatingly before they die. And parents will suffer a lifetime of grief and bitter anger, the intensity of which victim support organisations such as RoadPeace can confirm.

*The sewers built during the Hygienic Revolution removed harmful agents, bacteria, from contact with the public by segregation; a similar separation must be achieved with vehicles travelling at lethal speed.*

### **The Highway Code .**

The Highway Code specifies what is currently considered "good practice". It is a major source of guidance for courts making decisions in both civil and criminal cases. It is also the core document for driver education.

Unfortunately, the Highway Code is dangerously imprecise. Consider what it says in section 104: "You should always reduce your speed when ... sharing the road with cyclists and pedestrians, particularly children,...". It does not define "sharing the road", neither does it specify by how much to "reduce your speed".

A suitable definition of "sharing the road" might be:

A driver knows he is *not* sharing the road with pedestrians when he can see that there are no pedestrians on pavement or roadway, and there are no vehicles which could obstruct his view of pedestrians. Otherwise he should assume that he *is* sharing the road with pedestrians. In this case a speed of 20 m.p.h. or less is appropriate. Only if there is, and will continue to be, a 3 metre clearance between the track of his vehicle and all pedestrians, and a 3 metre clearance between the track of his vehicle and any vehicle that could obscure pedestrians, is a speed of 30 m.p.h. permissible.

### **Driving Schools**

Given the heavy toll of child mortality on the roads, it is clear that driving schools are as important to the health of children as medical schools, and moreover that they are underperforming. A review of driving school standards is necessary, together with consideration of regulatory structure.

### **Making Malefactors Manifest**

If education can establish a climate of opinion that sees road-crime as no different from any other, to be abhorred by all upright citizens, an advantage that will accrue is that criminals, who by definition are not law-abiding, will tend to make themselves conspicuous as they go about their nefarious business, for driving within the constraints of the law will not come naturally to them.

This observation is particularly applicable to terrorism which, because of its scale of violence and destruction, is one of the greatest challenges to the United Kingdom. We may see that this is a useful approach if we remember that the neighbours of the farm that was a base for the operations of the Real I.R.A. were reported as being distressed by the violence of the driving of the terrorists. Unfortunately, because of currently lax standards, this genuine signal of the existence of a nest of villains was ignored by the police.

### **Non-lethal, universal personal transport**

The motor-car is marketed as providing universal personal transport, a role for which it is quite unsuited, for it might be said that all of the people some of the time, and some of the people all of the time are incapable of driving a motor-car safely. The consequence of a general acceptance of this misleading marketing is that our society has painted itself into a corner. Because access to a motor car tends to be regarded as a universal right, people structure their lives so that they depend heavily on such access. Such heavy dependence creates pressure for lax enforcement of standards, since denial of access to a motor-car disrupts an offender's life, yet the consequence of such laxity is that children are killed.

We can escape from this impasse by developing a non-lethal personal transport, which can truly be regarded as universal, for it could safely provide mobility for all adults and for older children. What is required is to develop vehicles which are capable of a low maximum speed under manual control, but which are capable of higher speeds under automatic control, and which are comparable in mass to a heavy human (for a vehicle presents danger in its mass). Of necessity these will operate at speed only in suitably engineered trackways. The technology developed at Bristol University for automated "taxis" offers a possible basis for fully-automatic control for universal personal transport, though it would probably need to be modified. This issue is discussed more extensively in the long version of this paper.

### **Making it happen: Enforcement**

Statutory definition of a road-crime should serve two purposes

- to define precisely what duty that a driver owes to the public.
- in order to preserve equity, to define an equivalence between failure to perform that duty and a Common law crime, with a scale of penalties set. Thus, for example, causing death by dangerous driving is equivalent to manslaughter.

In particular, the prosecution of any road-killing of a pedestrian should be treated as a case of causing death by dangerous driving. Going abroad on foot is a fundamental human right, to be strongly defended by law. Under a humanely precise interpretation of the Highway Code, punctiliously observed, pedestrian fatalities should be a rarity.

We have here a dilemma for policy-makers: a resort to severe punishment signifies a failure of policy. Imprisonment is expensive, and is likely to make a convict more of a problem to society than when he (or she) entered. On the other hand, the legal system must make a clear statement about the extreme gravity of taking a human life. The mere paying of wergild of a few hundred pounds is not adequate. Not least in scale of importance is the preservation of respect for the legal system among those close to the victim.

An important part of the elimination of the dilemma is *early* intervention. This is appropriate for dealing with drivers whose problem-behaviour escalates over time. The key to early intervention is *rigorous enforcement of speed limits*.

Given the endemic nature of road-crime, with a significant proportion of motor vehicles in each category exceeding the relevant speed limit, the inevitable conclusion is that most corporate bodies using motor-vehicles in the furtherance of their business do so criminally. If a corporate body has reason to believe that its employees are conducting its business in a criminal manner, it has a duty to put administrative mechanisms in place to prevent this, particularly where the criminal behaviour endangers children.

## Equity Versus Safety.

I have stressed *equity* rather than *safety* in this discussion because equity is central to our legal system. Respect for the law depends on its being perceived as equitable. Unless the law is respected, no legislation, including safety legislation, can be effective. Thus are we all placed in danger.

Moreover, it has to be recognised that, especially for young people, *safety* has negative connotations. To take risks is pleasurable (and moreover a risk-taker has a certain sexual attraction). Many see it as not the law's business to regulate their risk-taking. On the other hand, saying that we want to legislate to prevent drivers from killing children places the proposed legislation firmly in a category which is universally regarded as the proper business of the legislature.

## Conclusion

A civilised society must nurture a *qualified trust* within its citizens, that is to say a knowledge of whom to trust, how much to trust them, who not to trust. In essence, trust is a belief that a particular individual will not expose one to certain hazards. For example, while one would trust a grocer to sell one sugar rather than arsenic, one might not always trust all grocers to give one the correct change.

The efficient and pleasant working of our society depends upon trust - it would be very inconvenient to have to feed part of every purchase at the grocer to one of a colony of mice to see whether the rodent expired. In particular, the functioning of our economy depends upon qualified trust. For, example investors trust companies with their money. Where that trust is betrayed, the economy falters. If trust is destroyed, the economy will collapse. More basically, trust in the value of money is essential, for without it we will relapse to a barter economy.

Children growing up must learn about qualified trust. They must learn about distrust: "Never speak to strangers", but they must also learn about trust within a wider community. And they must learn to be *trustworthy*, for we cannot nurture trust without building trustworthiness. And here our car-culture creates a problem. The natural place for a child to learn qualified trust is in the public space round his home. But a child, for his safety, must be told that that space is dangerous, for the neighbours may kill him with their motor-cars. Thus a child learns that some people in whom he should have a trust not to harm him in a public space are untrustworthy.

Worse, children learn that to be untrustworthy is something to be admired, for much of the marketing of motor cars conveys the message that to own a particularly dangerous motor car, an "Avenger" or a vehicle with "Va Va Vroom" is admirable. Would you trust a motorist high on "Va Va Vroom" not to kill your child?

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