The Insanity of Normality: Reconceptualising the Road Safety Debate

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1 Introduction

In its recent review of pedestrian safety the World Health Organisation (WHO, 2013) estimated that globally "more than 270,000" pedestrians lose their lives on the world's roads each year. This is 22% of all road deaths and in some countries the proportion is as high as two thirds. Millions more are injured but accurate statistics on this total are not available. The WHO report emphasises that this toll should not be accepted as inevitable "because they are, in fact, predictable and preventable. This combination of very significant impacts (death, injury, grief, disability, loss of income, poverty) combined with the stark reality that it is well within our grasp to eliminate death and serious injury in the road traffic environment points to a serious level of irrationality and disfunctionality in the discourse and policy environment within which road safety sits. The disfunctionality is so serious that it exactly matches what the Swiss psychotherapist, Arno Gruen, has called "The insanity of normality" (Gruen, 1992). It is the objective of this paper to explore the road safety discourse, interrogate the "insanity" perspective to see if it can help us to radically re-engineer the total road safety discourse and use the Swedish "Vision Zero" road safety policy as an example of what can be done to shift global society towards a zero death and zero serious injury future in the road traffic environment.

Thirty years ago Whitelegg (1983) argued that there is a significant policy deficit in approaches to road safety. This deficit is still evident. The persistence of death and injury in the road traffic environment is a major global problem with 1.2 million deaths and 50 million injuries each year on a global scale (WHO, 2004). Road safety policy is still very reluctant indeed to address fundamental structural solutions to the problem of "road traffic accidents" and the basic changes to system design that these solutions would involve. The last three decades have seen no such change in system design and have seen a massive global effort to export the same flawed system design to China and India and other parts of the world where millions of avoidable deaths, serious injuries and life-time disabilities are accepted as an undesirable but inevitable part of modern life.

The perpetuation of a system of mobility and its detailed design elements alongside the enormity of the death and injury consequences of this system can be explained by the phenomenon described as "The insanity of normality" by the Swiss-based psychoanalyst Arno Gruen (Gruen, 1992). This paper explores the insights provided by Arno Gruen and attempts to put into practice his insights through a reconceptualisation of the road safety discourse. This discourse has traditionally been dominated by mechanistic and economistic views of the road, the driver and the "accident" victim with a clear avoidance of the importance of ethics, morality, humanity and the need to re-design systems that punish the poor, the weak and those without power. This reconceptualisation has already commenced in the Swedish Vision Zero road safety policy (Whitelegg and Haq, 2006) but this does not carry a sufficiently strong determination to confront the insanity of normality and address all those societal forces that ensure the perpetuation of car-dominated mobility, large scale public subsidy of this domination and the prioritisation given to speed and saving time.

In what follows we will seek to define the dimensions of the global road safety problem and its impact on those who become the unwilling victims of system design. We will test this reality against Arno Gruen's "insanity of normality" thesis and then define a new reality informed by these insights where road safety problems are eliminated by fundamental re-design of the mobility landscape. Our redefinition of the mobility landscape will be based on original empirical research conducted in a UK Department for Transport research project reported in Whitelegg and Haq (2006). In this project over 300 citizens took part in detailed focus group work and produced a citizen led "Vision Zero" of road safety that is at odds with expert opinion. We conclude with remarks about the barriers to progress represented by

the conflicting world views of citizens and experts and assess the likelihood of an ethical, human-centred approach replacing a model based on speed, saving time and the instant gratification of wants.

2 Murder most foul

Dean (1947) wrote a powerful treatise on the unacceptability of 181,438 deaths and 4.7 million injuries on Britain's roads in the period 1909-1945. In commenting on this huge death toll and revealing his feelings about its moral unacceptability in his title "Murder most foul" he expresses hope for the future:

> "The reconstruction of Britain will indeed be a dismal failure if it includes as a permanent feature of the national life the killing and maiming of a quarter of a million, or more, persons every year on the roads, with the wholesale lying and hypocrisy by means of which the slaughter is concealed or justified. But there is no reason for failure. As in every other direction, the opportunity is ready at hand. All that is needed is the will to act." (page 111)

Dean's hopes for the future were not fulfilled. The very high annual death toll in Britain at the time he wrote his treatise e.g. 7343 in 1934 has reduced to 1754 in 2012 (DfT, 2013) but this apparent improvement in level of safety is rarely evaluated against the observable background of wholesale reductions in those exposed to risk. Nor is it adequately evaluated within a context that can embrace human impact, distress and the overwhelming feeling (see discussion below) that it is unnecessary and can be avoided. The degree to which children are eliminated from the road traffic environment because of the fear of traffic and awareness of danger reduces the population at risk and points to a different conclusion about the efficacy of road safety improvements (Hillman, Adams and Whitelegg, 1990).

Attention has now shifted to the global dimension in a way that could not have been foreseen by John Dean in 1947. The World Health Organization (WHO, 2004) has correctly identified the scale and human nature of the problem in its "World Report":

> "Every day thousands of people are killed and injured on our roads. Men, women or children walking, biking or riding to school or work, playing in the streets or setting out on long trips will never return home, leaving behind shattered families and communities. Millions of people each year will spend long weeks in hospital after severe crashes and many will never be able to live, work or play as they used to. Current efforts to address road safety are minimal in comparison to growing human suffering."

In a strong echo of John Dean the WHO concludes:

> "The time to act is now. Road safety is no accident. It requires strong political will and concerted, sustained efforts across a range of sectors. Acting now will save lives. We urge governments as well as other sectors of society to embrace and implement the key recommendations of this report" WHO (2004).

Clearly a body count cannot convey the enormity of the impact of death, injury and distress on parents, families and friends. A more discursive, ethnographic and narrative assessment is needed to capture the full extent of impacts on people and relationships. We need to find a way to give a much stronger voice to the victims in shaping road safety policy if we are to build a way out of the accepted parameters of the road safety debate and chart a course towards a "Vision Zero". We turn to this in our discussion of focus group results below.

Notwithstanding this strong caveat on the poverty of numbers WHO (2004) uses them to good effect:

- Worldwide an estimated 1.2 million people are killed in road crashes every year and approximately 50 million are injured.
- This annual total approximates to 3000 deaths every day.
- These figures will increase by 65% over the next 20 years unless there is "a new commitment to prevention".
- Road traffic deaths will increase in the period 1990-2020 form 0.99 million

to 2.34 million.

- Low income and middle income countries account for 85% of the deaths and 90% of the annual disability-adjusted life years (DALYs) lost because of road traffic injury.
- Without appropriate action by 2020, road traffic injuries are predicted to be the third leading contributor to the global burden of disease and injury.
- A large proportion of the road crash victims in low and middle income countries are vulnerable road users such as pedestrians and cyclists.
- In the period 1975-1998 road traffic fatality rates rose by 44% in Malaysia and by 243% in China.

The WHO (2004) report concludes by saying that "Road traffic crashes are predictable and therefore preventable."

3 The insanity of normality

Gruen (1992) describes a number of personal and societal circumstances where events and socially accepted norms which are clearly very suspect, highly undesirable and in other ways abhorrent are widely accepted and taken as the norm. Individuals cannot see the contradictions and at the societal level conformity with generally accepted views is the norm and opposition or dissent is the exception. Gruen advances the thesis that in many places and times what passes for "normality" is clearly a manifestation of what could be taken as "insanity". He does not address road safety issues specifically but the widespread acceptance of death and injury in all countries currently running at 3000 per day fits his thesis perfectly. The acceptance of death and injury on a large scale when it can be avoided and when social-technology systems are making things worse (high powered cars, legal devices that permit motorists to avoid detection when speeding) clearly matches the use of the term "insanity". Greater force can be given to Gruen's examination of this subject by the clear statement from the World Health Organization that "Road traffic crashes are predictable and preventable". Why should we not move quickly to prevent the slaughter of 3000 people each day if the manner of death is "predictable and preventable"?

It is, moreover, reasonable to conclude that if several thousand people were going to work everyday in a large office complex and during a normal, routine working day a percentage of them would be killed and we avoided fundamental interventions to eliminate this daily reduction in the workforce then this would be "madness" and could be described as "insanity". Interestingly normality in the office domain is in tune with zero deaths. We do not expect or accept deaths as in any way the norm or in any way unavoidable. We have "Vision Zero" in our offices. In the main people are not killed at work because we make sure we do not have defective elevators, live electrical connections on computers and buildings that give way under the weight of files. Clearly the road traffic environment is different. We do not adopt the approach we use in offices to road safety and this meet Gruen's definition of "insanity". Holzapfel (1995) has drawn attention to the same theme in his analysis of "Violence and the car":

> "The term violence should be used carefully. Many people drive their cars intending no harm. But automobile driving, in its existing form, is anything but a rational phenomenon from A to B: cars designed for speeds at which they hardly ever travel, European cities ripe for good pedestrian development relinquishing their urban charms to chunks of mental – the hallmarks of the car-centred society are all too conspicuous, and it uses by no means compensate for them. The negative influences of the car-centred society are enormous. Indeed car technology resembles no other, not even the technology of war, in the destructive influences it has so far inflicted."

And he concludes:

> "Everything points to an increase in violence brought about by the car. Indeed there are clear signs of a self perpetuating process operating, which fuels itself. Even quite against their will, people are affected by this process and drawn into it. The only way out of this situation is first, a simple admission of the situation and the misery it is spreading. Admittedly it goes

against the grain: a gleaming car in an advertisement is a far more attractive proposition than facing the hospitals where brain-damaged children from traffic accidents try to make sense of the world. By recognizing misery such as this, a process must emerge whereby people can be empowered to make the ultimate sacrifice and to live with fewer cars."

Self-injury and self-destructiveness have always been regarded as a malfunction of individual, group or societal pathology but both Gruen (1992) and Holzapfel (1995) identify destructiveness within a general paradigm of rationality as requiring special effort to understand and overcome.

Gruen identifies the absence of human values and the exercise of power by those who have severed themselves from human roots as key issues to be resolved:

"Whereas people who can no longer bear the absence of human values in the real world are considered "crazy", those who have severed themselves from their human roots are certified "normal". And it is members of the latter group to whom we entrust power and whom we allow to determine our lives and our future. We believe that they have the correct key to reality and know how best to deal with it. But a person's relatedness to reality is not the only criterion for establishing mental illness or health; we also have to ask to what degree feelings such as despair, perceptions such as empathy and experiences such as enthusiasm are still possible" Gruen (1992).

In the next section of this paper we will explore the entirely different worlds of those who exercise power (the experts) and those who simply live in a community, observe daily reality and relate this reality to human values (the citizen). This provides considerable amplification of Gruen's explanation.

4. Expert and citizen views of Vision Zero

Whitelegg and Haq (2006) carried out a research project for the UK Department for Transport which had five main objectives:

1. To explore and explain the Swedish Vision Zero road safety policy
2. To carry out focus groups in England on the concept of Vision Zero and the degree of support for it voiced by citizens
3. To carry out an on-line questionnaire survey of professional working in transport and road safety to ascertain expert opinion on Vision Zero
4. To summarise the advantages and disadvantages of a Vision Zero approach translated to the UK
5. To specify the policy changes that would have to be made in the UK to adopt the full force of Vision Zero.

4.1 The Swedish approach to road safety

The responsibility for road safety has traditionally been placed on the individual road user rather than on the designers of the system. Road safety has tended to focus on encouraging good behaviour by road users via licensing, testing, education, training and publicity. Sweden is among those countries with the lowest number of traffic fatalities in relation to its population. However, in spite of this excellent record, in 1997 the Swedish Parliament introduced a new approach to road safety called "Vision Zero". Vision Zero is based on a refusal to accept human deaths or lifelong suffering as a result of road traffic accidents (Elvik, 1999 and Elvik and Amundsen, 2000). It requires moving the emphasis away from reducing the number of accidents to eliminating the risk of chronic health impairment caused by road accidents. Vision Zero in Sweden requires fatalities and serious injuries to be reduced to zero by 2020.

Vision Zero has had a mixed reception in the academic and professional literature and is by no means immune from criticism (Elvik, 1999 and Elvik, 2008, Elvebakk and Steiro, 2009). The policy has stimulated fundamental thinking around the nature

of policy itself including whether or not it is" rational" (Rosencrantz, Edvardsson, K and Hansson, S O, 2007) and including explicit discussions of the role of ethics in road safety policy (Hokstad, P and Vatn, J, 2008) and including a useful discussion of "backward and forward responsibility" in Fahlquist (2006)

The 1990 Swedish National Traffic Safety Programme set a target of less than 600 fatalities for traffic safety by 2000. In 1993, the Road Safety Office merged and became the Swedish National Road Administration (SNRA). In 1994 the SNRA, now responsible for national traffic safety work, presented a National Traffic Safety Programme for the period 1995–2000. A new target of 400 fatalities for the year 2000 was adopted. This original target was achieved in 1994. The intentions of the National Traffic Safety Programme, with ten sub-targets for traffic behaviour, were not reached but abandoned with the discussion of the Vision Zero concept. An interim target of reducing the number of road accident fatalities from 600 in 2000 to 270 in 2007 was adopted as a move towards the Vision Zero target. The annual number of fatalities has been constant during the period 1994 to 2001. In 2000, there were 591 deaths and 4,103 serious injuries in traffic in Sweden (Koornstra et al., 2002). In the period 2001-2010 the number of fatalities in the road traffic environment in Sweden was reduced from 591 to 266, a decline of 54.4% (Europa Commission, 2012). Sweden was the top-ranked country in the EU on three measures (fatalities per million inhabitants, fatalities per 10 billion passenger kms and fatalities per million passenger cars).

Whilst it is not possible to attribute this success in reducing fatalities directly to Vision Zero it is of more than passing interest that the "top performer" in the EU is the country with an explicit vision zero road safety policy.

Vision Zero requires a paradigm shift in addressing the issue of road safety (Rechnitzer and Grzebieta, 1999). It requires abandoning the traditional economic model where road safety is provided at reasonable cost and the traditional transport model in which safety must be balanced against mobility. At the core of the Vision Zero is the biomechanical tolerance of human beings. Vision Zero promotes a road system where crash energy cannot exceed human tolerance. While it is accepted that crashes in the transport system occur due to human error, Vision Zero requires no crash should be more severe than the tolerance of humans. The blame for fatalities in the road system is assigned to the failure of the road system rather that the road user (Wadhwa, 2001).

Vision Zero is based on the ethical imperative that (Tingvall and Haworth, 1999):

> "It can never be ethically acceptable that people are killed or seriously injured when moving within the road system."

Accidents have to be prevented from leading to fatalities and serious injuries by designing roads, vehicles and transport services in a way that someone can tolerate the violence of an accident without being killed or seriously injured. Common long-term disabling injuries and non-injury accidents are outside the scope of the Vision. Vision Zero is estimated to achieve a possible reduction in the number of fatalities by a quarter to one third over a ten-year period (SNRA, 2003).

Vision Zero strategic principles are:

- The traffic system has to adapt to take better account of the needs, mistakes and vulnerabilities of road users.
- The level of violence that the human body can tolerate without being killed or seriously injured forms the basic parameter in the design of the road transport system.
- Vehicle speed is the most important regulating factor for safe road traffic. It should be determined by the technical standard of both roads and vehicle so as not to exceed the level of violence that the human body can tolerate.

The approach is:

- To create a road environment that minimises the risk of road users making mistakes and that prevents serious human injury when designing, operating and maintaining the state road network.
- To set an example in the SNRA's own operations through the quality as-

surance (from a road safety perspective) of journeys and transports in all areas of activity, both those undertaken in-house and those contracted.

- To analyse accidents that have resulted in death or serious injury in traffic and, where feasible, initiate suitable measures so as to avoid the repetition of such accidents.
- To stimulate all players within the road transport system to work resolutely towards achieving mutually targeted objectives conduct the work on road safety in close co-operation with all players within the road transport system.
- To take advantage of and further develop the commitment of the general public to safer traffic.

Vision Zero emphasizes what the optimum state of the road should be rather than possible ways of reducing current problems. The main change instigated by Vision Zero is a new way of dividing responsibilities for road safety. Rather than emphasising the responsibility of the road user alone, Vision Zero explicitly states that responsibility is shared both by the system designers and the road user:

1. The designers of the system are always ultimately responsible for the design, operation and use of the road transport system and thereby responsible for the level of safety within the entire system.
2. Road users are responsible for following the rules for using the road transport system set by the system designers.
3. If road users fail to obey these rules due to lack of knowledge, acceptance or ability, or if injuries occur, the system designers are required to take necessary further steps to counteract people being killed or seriously injured.

In 1999, a short-term action plan was launched by the Swedish government, containing 11 points aimed at strengthening and stimulating traffic safety work in accordance with Vision Zero principles (Ministry of Industry, Employment and Communications, 1999):

1. A focus on the most dangerous roads (e.g. priority for installing centre-guardrails for eliminating head-on collisions, removing obstacles next to roads, etc.)
2. Safer traffic in built-up areas (e.g. a safety analysis of street networks in 102 municipalities led to reconstruction of streets; the efforts are continuing.)
3. Emphasis on the responsibilities of road users (e.g. creating more respect for traffic rules in particular with regard to speed limits, seat belt use, and intoxicated driving.)
4. Safe bicycle traffic (e.g. campaign for using bicycle helmets, a voluntary bicycle safety standard.)
5. Quality assurance in transport work (e.g. public agencies with large transportation needs will receive traffic safety (and environmental impact) instructions on how to assure the quality of their own transportation services and those procured from outside firms.)
6. Winter tyre requirement (e.g. a new law mandating specific tyres under winter road conditions.)
7. Making better use of Swedish technology (e.g. promoting the introduction of technology - available or to be developed - that relatively soon can be applied, such as seat belt reminders, in-car speed adaptation systems (ISA), alcohol ignition interlocks for preventing drinking and driving, and electronic driver licences.)
8. Responsibilities of road transport system designers (e.g. establishment of an independent organisation for road traffic inspection is proposed by a commission of inquiry on the responsibilities of the public sector and the business community for safe road traffic.)
9. Public responses to traffic violations (e.g. a commission of inquiry is reviewing existing traffic violation rules in the light of the Vision Zero principles and of ensuring due process of law.)
10. The role of voluntary organisations (e.g. the government is evaluating the road safety work of the 'Nationalföreningen för trafiksäkerhetens främjande' (National Society for Road Safety (NTF)) and its use of state funds.)
11. Alternative forms of financing new roads (e.g. possibilities are studied for other forms of supplementing public financing of major road projects.)

In the autumn of 2001 the Government presented an infrastructure plan, where

the traffic safety work will fulfill the 2007 target.

4.2 Implications of Vision Zero for road fatalities

Proponents of Vision Zero see human life as a basic human right to be protected from fatal injuries. While humans are fallible and make mistakes in using the road system, these mistakes should not carry the death penalty (Elvik, 1999). The ethical principle on which Vision Zero is based is that death is unacceptable means that there is a moral obligation to design cars, roads and the rules of the road to protect road users from being killed in traffic. Vision Zero explicitly rejects the trade of human life against other objectives. It also rejects the use of cost-benefit analysis (CBA) to guide priority setting in road safety policy. Tingvall (1997:56) states:

> "If a new road, new car design, new rule etc. is judged as having the potential to save human life, then the opportunity must always be taken, provided that no other more cost-effective action would produce the same benefit."

Although Sweden has a comparatively good road safety record, Swedish policies are still considered to be ineffective in improving road safety. Elvik and Amundsen (2000) indicate that current policy priorities are inefficient in Sweden and concluded that road safety could be substantially improved if policy priorities were based more on CBA then they are today. They argue that cost-effective road safety measures can prevent more than 50 per cent of road fatalities in Sweden. However, current policies prevent approximately 10–15 per cent of the current number of road fatalities over the next 10 years. Many cost effective measures are not being implemented. By rejecting the use of CBA to set priorities, Elvik (2003) argues that advocates of Vision Zero are in effect rejecting a road safety policy that would give far better results than current road safety policies.

The main sources of inefficiency in current road safety in Sweden are (Elvik, 2003):

- Lack of power to introduce new vehicle safety standards – this power now resides with the European Union;
- The existence of social dilemmas, that is situations in which measures that are cost-effective from a societal point of view are loss making from the point of view of individual road users;
- Priority given to other policy objectives, which cannot be adequately assessed by CBA, primarily objectives related to regional development.

Elivk (2003) concludes that the amount of resources that are currently spent on road safety policy in Sweden are sufficient to cover all cost-effective road safety measures, provided the use of inefficient measures ceases.

Elvik (1999, 2003) is rather sceptical about Vision Zero and presents an economic argument against the concept. Other authors e.g. Rosencrantz, Edvardsson and Hansson (2007) conclude that the policy has strengthened Sweden's efforts to eliminate death and serious injuries in road crashes, a view supported by Nihlen Fahlquist (2006) who argues that adopting Vision Zero as a national transport policy goal has signified an important shift of responsibility from individual road users to system designers.

4.3 UK focus groups

Twenty-nine focus groups were held throughout England and a total of 232 people participated in the focus groups. On average eight people attended each focus group. Participants were recruited from the local community e.g. via existing citizens panels, advertising in local community newsletters and at the local library. The participants covered a wide range of ages from 19–88 years old. Attempts were made to achieve an equal gender balance for each focus group; however, this was not always possible. Of the 232 focus group participants 51 per cent were men and 49 per were women.

Each focus group lasted for approximately 60 minutes. In the first part of the meeting, participants were given a short presentation on the level of road traffic fatalities and injuries in the UK and the Swedish approach on Vision Zero. After the presentation, participants were asked a number

of questions including:

1. *What do you think about Vision Zero?*
2. *What is an acceptable level of death from car crashes in the UK?*

The aim of the questions was to test opinion on the current UK policy and as well as Swedish Vision Zero policy. Additional information on the Swedish approach to road safety was made available during the meeting on the request of the participants. The following is an analysis of the main issues, arguments and concerns raised during the focus groups. Particular issues were repeatedly raised at each focus group.

1. *What do you think about Vision Zero?*

All focus groups gave a positive response to the notion of a Vision Zero policy. Participants felt it was "essential" to reduce road traffic deaths and injuries and that Vision Zero was an "admirable" policy and that it made a "good political statement" which was "inspiring". It was an objective that society could aspire towards achieving – "aim for the sky and hit the pinnacle of the church steeple". Comparisons were made with zero tolerance policies and the taboo now associated with drink driving.

> "I think it's very commendable. We have zero tolerance of crime. Why not zero tolerance in road safety as well?"
> "I think having a Vision Zero policy is a laudable aim. You need a goal."
> "I'd second that. I think it's an extremely good goal."
> "A Zero Policy says that it is actually […] unacceptable that people die this way and we all kind of take it for granted that people will die and that's just the cost of having a transport system".
> "We need a system where the road network accommodates the mistakes that people make."
> "I think there is a need to set a target."
> "Rather like striving for perfection isn't it? "

However, while Vision Zero was a good ideal the following concerns were raised.

Achievability in practice

A zero target was seen as being "idealistic", "unrealistic", "unattainable" and that it would be "difficult", if not "impossible" to change the mindset in the country. The biggest stumbling block would be changing people's attitudes.

> "You've got to be realistic otherwise people would not take the policy seriously."
> "People in Britain do not easily accept Utopian ideas. Not sure about it being a government policy"
> "It's a good idea to have a [zero] policy but it's like everything, if you've got something where there's no way of achieving it, somehow it has a negative effect."

Some participants felt that "accidents will always happen" due to the existence of human error and there is a level of "risk" associated with travelling that needs to be accepted.

> "Yes, it would be nice to have zero but unless we make cars out of cotton wool it will never happen. There's an inherent risk."
> "People in Britain do not feel responsible for road safety as a whole"

The difficulties of implementing current road safety policies as well as a vision zero policy were an area of concern. It was felt that ineffective or incompetent implementation of existing policies would affect the implementation of a future vision zero policy.

> "We're lackadaisical about enforcement"

Participants felt that sentences for road traffic deaths and injuries should reflect the seriousness of the offence. It was felt that the police should enforce the Highway Code.

> "The average driver's attitude to road safety is horrible. As illustrated by speed cameras – it's a joke. We slow down and pass the camera and off we go again."
> "It is a challenge between the road enforcers, the system and the individual driver."
> "The car is a lethal weapon."

2. *What is an acceptable level of death from car crashes in the UK?*

The majority of the participants felt that the 'zero' was the only acceptable level of deaths from car crashes in the UK:

"It is ethically wrong to say a certain number will die on the roads"
"There is nothing that is acceptable about death".
"You can't say any death is acceptable at all"
"One death is too many – I can't see anybody arguing with that. If it's my child …"
"No level of death is acceptable especially if you bring it down to your own family. Would you accept the death in your family?"

However, participants were also aware of the difficulties achieving a zero target due to the inherent risk associated with road transport:

"Doesn't matter what you do there is always a risk associated with it. Whether you are walking the street or going on holiday on a plane. There is a risk that is attributable to that transport and no matter what; you will always have a risk attributed to driving."
"If it's not acceptable ban all cars completely"
"We are becoming such a nanny state no-one will venture from the womb before long".
"There will always be accidents on the roads so a target of zero is unattainable"

Some participants attempted to define an acceptable level of road fatalities and commented on the current levels:

"10%, 20%, 40% - these are improvements but they are not acceptable"
"Present levels are tolerable but not acceptable"
"As low as possible"
"As low as reasonably practical (ALARP) is what should be the going principle in that any death or serious injury is unacceptable".
"It is definitely a good idea to strive for as low a number as possible, but road deaths will always happen"
"At the moment we accept nine a day being acceptable because we have not done enough to stop it."
"The reality is that we just play at it … we still don't mind nine people a day being killed"

Some participants felt that road improvements only happened after several accidents had occurred despite warnings from local residents. They had "no faith in traffic engineers" and that we "must spend as much as possible to reduce the risk".

Some of the focus group participants objected to the question being asked:

"It's a question that shouldn't be asked"
"… in principle you have to say of course that no deaths are acceptable. One death is unacceptable. But we know that's not real, that is an unreal question".
"I think it's an abuse of language. I don't think there is an acceptable level. It's the wrong question".
"The wrong question is being asked. All that can be said is risks must be minimized".

Over 90% of those taking part in the focus groups expressed varying degrees of support for the Vision Zero concept and in doing so often used language that is current in Sweden and Norway when this policy is discussed. Participants were of the view that one death in a road crash is one too many, that this is an ethical issue and we should commit to zero fatalities and serious injuries and that we have to do whatever it takes to get down to that level. The citizen viewpoint could not be clearer.

4.4 UK Stakeholder on-line questionnaire

The aim of the on-line questionnaire survey was to gain the views of a range of UK stakeholders on Vision Zero. Approximately 55 stakeholders were contacted and requested to complete an on-line questionnaire survey. The stakeholders included central government, members of parliament, local government associations, motoring organisations, health organisations, non-governmental organisations, the po-

lice and other organisations including road safety specialists.

A total of 85 people completed the online questionnaire survey. This number included private individuals who had become aware of the project either via the internet or through advertising for focus group recruitment. Figure 1 presents the different types of questionnaire respondents. While a number of organisations were contacted the people who responded to the questionnaire preferred to respond in a personal rather than institutional capacity. The majority of the responses were individual responses at 59 per cent followed by campaign groups (13 per cent) and private organisations (8 per cent). Six per cent of the respondents do not indicate any affiliation while government bodies and local authorities each represented 5 per cent of the respondents followed by motorist groups at 4 per cent. The questionnaire survey consisted of eleven questions related to a Vision Zero policy on road safety: it also provided the opportunity for the respondents to elaborate further on their views. The following section provides an overview of the results of the survey. The section also includes direct quotes from the respondents. It is not possible to present all the responses in this article. Instead, the common issues raised have been grouped and presented with some sample responses.

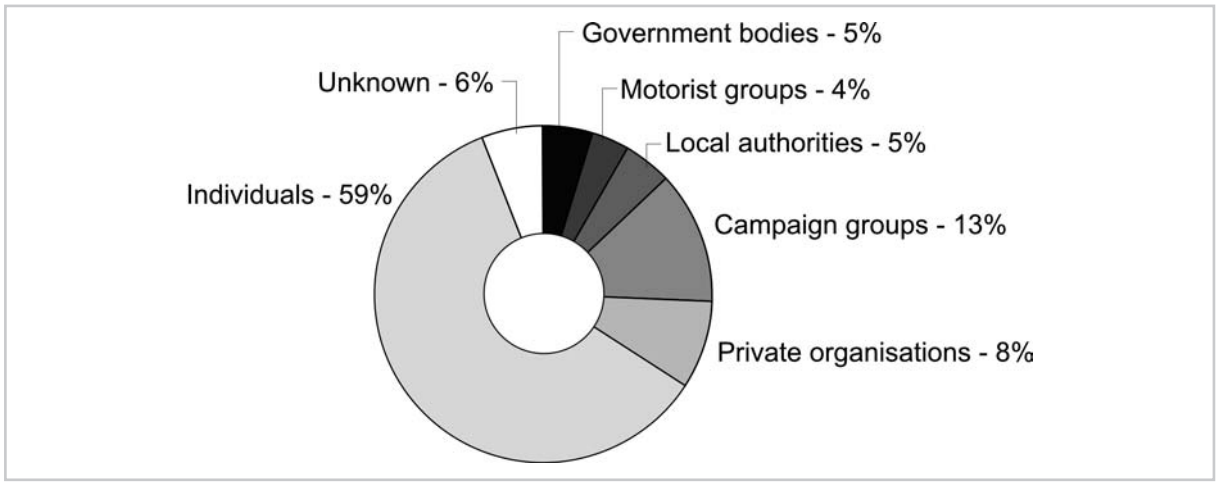

Figure 1 Questionnaire respondents by category

For the question "Do you think it is helpful to have a policy that establishes a vision of zero fatalities and zero serious injuries?" a total of 62 per cent of respondents did not feel that an adoption of a Vision Zero would be helpful.

For the question "Do you think that the Swedish Vision Zero policy should be adopted as a road safety policy in the UK?" 79% of responded did not wish a vision zero polity to be implemented in the UK. The questionnaire then asked "Swedish interviewees have explained that setting a "Vision" has major advantages in setting road safety policy on a new and re-invigorated course. Do you think this would be the effect of introducing Vision Zero in the UK?" A total of 72% of responded said that this would not be the case if Vision Zero was introduced in the UK.

Conclusions on expert and citizens views on Vision Zero

Ordinary citizens were almost entirely of the view that Vision Zero was sensible, logical and the "right thing to do". To many of the focus group participants it was unthinkable that we should accept death and injury on the road with its tragic consequences for all those connected with the death. They wanted to eliminate death from the road traffic environment and warmly welcomed the Swedish Vision Zero approach.

The response from professionals was almost the opposite of the citizen group. Professionals were dismissive of Vision Zero, they thought it was totally unrealistic and had nothing to offer UK road safety policy beyond what was already in place.
The citizen group reacted in a way anticipated by Gruen. Focus group participants

made it clear that they were concerned about children, the elderly, family members and neighbours. They were connected with everyday human concerns and empathized with those experiencing the dire consequences of death and injury in road crashes. They could not understand why we did not have a Vision Zero policy in the UK. It was such a "good idea" and the majority of participants could not understand why we should tolerate the death, injury, misery and disruption of family life and life-time of grieving over the loss of a loved one.

The professionals took a detached view based on a shared understanding of science, policy and bureaucratic procedures and intervention and whilst regretting the death toll on the roads they regarded it as an inevitable consequence of the exercise of daily choices on the part of million of drivers, pedestrians and other road users that will inevitably spawn "accidents". The professional represents what our society regards as "normal" in the sense that this is what educated, well trained individuals with a great deal of knowledge think about the systems they manage. The citizen view whilst not regarded as "insane" is certainly regarded as emotional, subjective, based on ignorance and not the way to deal with this complex problem.

This fits' Gruen's thesis perfectly. Societal norms have developed to regard those operating from clearly articulated human value perspectives as "insane" or at the very least unrealistic and to be dismissed. Those that exercise the power (the professionals) are "normal" and those who disagree with them are not well-informed and don't understand what is being done for them or to them. Citizens in this expert "normal" view of the world have no role to play in setting the aims and objectives of road safety policy The road safety discourse in the UK confirms the insights of the "insanity of normality" analysis.

5 Conclusion and policy implications

The Swedish Vision Zero road safety policy has attracted worldwide attention and has been incorporated in the WHO 2004 report on road safety. In this study we have found large scale public support for the concept in the focus groups and a considerable amount of scepticism in the professional community. The Swedish interviewees were very confident that adopting Vision Zero had reinvigorated road safety intervention and stimulated a high level of co-ordination and common purpose in all the professional stakeholders. This does not mean to say that it is supported by all stakeholders. There is scepticism in Sweden just as there is in the UK.

The core logic underpinning Vision Zero is not susceptible to scientific analysis or logical rigour. The Swedish decision to abandon a materialistic, cost benefit approach to road safety and to ground road safety in an ethical and human centered value system was intensely political. The decision to align road safety with the tacit Vision Zero that already applies to aviation and to health and safety at work was partly logical and partly political. Sweden decided that just as there should be an expectation of no deaths in aircraft accidents and no deaths at the work place so by logical extension there should be no deaths on the roads. The logic is attractive (and meets with public approval) but the decision on equivalence is political.

Gruen has shown that human values in a given population can be side-stepped and discarded by the dominance of professional, scientific and mechanistic models of the way society works. Our focus groups and professional survey show that this is also the case in the UK road safety discourse. The discourse is not polarized to the extent that any group is labeled as "insane" but the insights into such large differences of opinion and perception as we have demonstrated in this research amplify the conclusions of Gruen that human value centered approaches to dealing with problems can easily be regarded as "insane". The use of the word "insane" in a road safety policy discussion might well be regarded as provocative and not capable of justification but it conveys a rather accurate picture of the degree to which those who deviate from the norm are marginalized, discarded and excluded from the policy process. UK citizens have no voice in the debate about Vision Zero. The professionals have dismissed the concept.

The "insanity of normality" thesis carries with it a suggestion of what can be done to recognise and celebrate human value centered approaches with the objectives of establishing a more ethical content to policy development in social and political systems. This involves at least two fundamental structural changes in road safety:

- The exercise of power by engineers, planners and road safety experts must be tempered by the need to incorporate citizen views and expectations in analysis, option generation, policy recommendations and clearly articulated visions about what the world should look like in 2025 or 2050. These are not matters that can be reserved solely for experts and politicians. The "insane" have to be involved as well as the "normals"
- Citizens should be directly involved in decision-taking on crucial road safety matters such as speed limits, eliminating rat--runs, traffic reduction, widening of pedestrian pavements and shared space. New concepts and forms of local democracy are needed to empower citizens to be part of a demonstrable link between aspirations and desires and the delivery of these ideas through all stages of policy design and implementation so that they can be seen on the ground and citizens can see that what they articulated is a visible and tangible reality on the ground.

Both these structural changes are needed to take road safety discourse into a new phase of development and the complete eradication of death and serious injury in the road traffic environment.

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