

# Towards a Potential Paradigm Shift: The Role of Vision Zero in Global Road Safety Policy Making

# 21

#### Ann-Catrin Kristianssen

#### **Contents**

Introduction	64
How Do New Ideas and Policy Choices Enter and Consolidate on a Global Level?	65
Global Policy Diffusion	65
Global Policymaking and Agenda-Setting	65
Global Advocacy	65
Global Road Safety Policymaking Research	65
Research Design	65
Vision Zero in Global Road Safety Policymaking	65
The Vision Zero Policy in Global Road Safety Policymaking	65
Safe System and Vision Zero in Practice	66
Analysis	66
What Vision Zero Is Diffusing?	66
Why Is Vision Zero Diffusing?	60
Who Diffuses Vision Zero?	60
How Is Vision Zero Diffusing?	6
Conclusions and Discussion	6
References	60

#### **Abstract**

Vision Zero is a term mainly connected to road traffic safety and has its roots in the Swedish road safety policy, although similar concepts are used in other countries. It was adopted by the Swedish Parliament in 1997, and due to the success of lowering the number of deaths in traffic crashes significantly, it has become an inspiration to road safety strategies in countries and cities all over the world. An important factor as to why Vision Zero diffuses is the incorporation of the vision in reports and strategies from international intergovernmental organizations and through the work of nongovernmental organizations. The development of finding a common global

A.-C. Kristianssen (⋈)

School of Humanities, Education and Social Sciences, Örebro University, Örebro, Sweden e-mail: ann-catrin.kristianssen@oru.se

strategy for road safety has been an ongoing process for many years, and the purpose of this chapter is to map the role of Vision Zero in this global development process. This is performed by studying the integration of Vision Zero in the road safety work and strategies of key international intergovernmental and nongovernmental organizations. The chapter also contains an account of possible opportunities and advantages of working with Vision Zero as a tool on the global level as well as the criticism towards the approach. This chapter discusses the content of what is being diffused, why it is diffused, who is diffusing, and how it is diffusing. The material consists of key global policy documents and 29 semistructured interviews with senior experts working with road safety on a global level. The main conclusions are that Vision Zero is a well-established global road safety policy program and a road safety philosophy integrated into both the work and texts of the major intergovernmental organizations working with road safety. There is a widespread opinion that Vision Zero and other safe system approaches constitute a paradigm shift in global road safety work. It is regarded as an innovative and inspiring policy based primarily on its ethical approach. It is also regarded as a coherent policy program and rests firmly upon years of progress and experience. Even though many of the respondents are positive towards the ethical base and the systematic approach, there are still those who argue that Vision Zero cannot be used as a policy tool, at least not in low- and middle-income countries. It is obvious that Vision Zero is not interpreted and reproduced in the same way in all contexts, but the question is if that is part of a natural transformation process leading to new interpretations or if it is a problem for the Vision Zero trademark.

#### **Keywords**

Vision Zero · Global road safety policy · Global governance · Policy diffusion

#### Introduction

Road injuries or road traffic crashes is one of the main health problems globally as 1.35 million people are killed in road traffic crashes yearly. It was the eighth cause of death in the world in 2018 and the leading cause of death for children and young adults aged 5–29. In comparison, deaths in road traffic crashes now supersede the number of deaths caused by HIV/AIDS (WHO 2018). In addition, it is estimated that 20–50 million people are injured in the road traffic every year. The burden of road traffic injuries is highly disproportionate hitting the populations in low- and middle-income countries particularly hard as 93% of the fatalities can be found in these countries (UNECE 2019). With projections of even higher numbers of road traffic deaths in upcoming years, particularly in low- and middle-income countries, international organizations, individual countries, and city administrations all over the world have acknowledged the need for action. Legal frameworks and guidelines have been in place for many decades, but the process of creating global policies, programs, and institutions has been significantly slower. Many of the conventions

and legal provisions in place, such as the Geneva Convention for road traffic from 1949, have helped not only governments but also private companies to conform to global standards, and these legal guidelines have been a solid foundation for further progress. These conventions have mainly been under the supervision of the United Nations Economic Commission for Europe (UNECE). Despite a growing number of agreements, the progress concerning global policies, conventions, and resolutions for road safety was slow for a long period, and road safety was not a prioritized global policy area. This started to change, particularly during the late 1990s and early 2000s, and two important factors were the influx of resources leading to the collection of more data on traffic crashes and the publication of the World Report on road traffic injury prevention by the World Health Organization (WHO) in 2004. The same year, the WHO was invited by the United Nations to coordinate global road safety efforts, in close cooperation with the UN Regional Commissions, and one of the first actions related to that UN resolution was to establish the UN Road Safety Collaboration. After the adoption of the Decade of Action 2011–2020, the inclusion of road safety in several of the sustainable development goals in 2015 (road safety was not included in the millennium goals), and a number of ministerial conferences on road safety, it is fair to say that this policy area is established as one of the key development issues on the global agenda. On the other hand, millions of people still die every year in traffic crashes, and there is a growing demand for more concrete action.

Vision Zero, which is normally included into the family of safe system approaches, has received growing attention during the last two decades and is seen by many experts as a coherent policy program and even a policy innovation (Belin et al. 2012; Belin and Tillgren 2013; Kim et al. 2017). Vision Zero, as it will be described in this chapter, was developed in Sweden and adopted by the Swedish Parliament in 1997 (Swedish Government 1997; Swedish Parliament 1997a, b). The Swedish road safety work was already well established before the introduction of Vision Zero, but as the number of deaths in traffic crashes went down significantly after the introduction, many experts give credit to the systematic road safety work that Vision Zero enabled. In 2019, Sweden reported 2.1 deaths/100,000 population (Trafikanalys 2020) compared to approximately 18 deaths/100,000 population as a global average (WHO 2018). As the policy area of road safety grew increasingly global, actors within this field began to look at what was being done in countries like Sweden and the Netherlands but later on also in countries such as Australia and Norway who have all adopted similar, but also somewhat different, kinds of safe system approaches to road safety. Vision Zero is also inspiring and diffusing to other sectors in the society (Kristianssen et al. 2018). The progress made in these countries received global attention, and many organizations and individual experts were inspired by this approach, but there were also conflicts as the traditional views of road safety work differed quite considerably from that of the safe system approach (Salmon et al. 2012).

The purpose of this chapter is to map the role of Vision Zero in the development of global road safety policy. This is performed by studying the integration of Vision Zero in the road safety work and strategies of key international intergovernmental and nongovernmental organizations. The chapter also aims to account for possible

opportunities and advantages of working with Vision Zero as a tool on the global level as well as the criticism towards the approach. A final purpose is to analyze whether Vision Zero has been transformed as a philosophy or policy program as it lands on the global level.

The main research questions are:

- What is the role of Vision Zero in global road safety policymaking?
- Do the key components of Vision Zero change when integrated in global policymaking?
- Why is Vision Zero seen as a promising approach and by whom?
- What are the challenges of working with Vision Zero on a global scale?

Why are these relevant questions to ask in relation to the development of global road safety policies? First, the global road safety policy process is an example of how global agenda-setting works and how actors in different capacities relate to a new idea. Second, it is important to scrutinize the strengths and weaknesses of new and inspiring ideas, particularly those who become role models for so many.

The chapter consists of six parts starting with this introduction. The second part addresses diffusion processes and how global agenda-setting is made. The methodological approaches are described in the third section followed by the presentation of the empirical material, i.e., the mapping of the role of Vision Zero in global road safety policy and the reflections on Vision Zero as a tool in practice. The fifth section contains an analysis, and the final part of the chapter is devoted to conclusions and a discussion about the significance of the diffusion of Vision Zero in conjunction with the global sustainable development goals as well as other implications for the future.

# How Do New Ideas and Policy Choices Enter and Consolidate on a Global Level?

Every global policymaking and agenda-setting process is unique in the sense that all policy areas have their own settings and preconditions, but there are also general discussions about mechanisms and factors related to policy change on the global level. The purpose of this section is to provide a theoretical foundation to the aspects of policy diffusion, global policy change, and global agenda-setting processes. These perspectives will help us to understand why some ideas become the base of new global policies and why other ideas are discarded. The theories can also provide an insight into the motives and roles of actors in the policymaking and agenda-setting processes.

# **Global Policy Diffusion**

Policy diffusion is a wide scientific field and relates to all societal levels, and research is performed with both quantitative large N studies as well as qualitative case studies. There are a number of empirical questions related to policy diffusion

such as identifying actors, structures, methods, motives, timing, and content. Studies on how ideas travel between different contexts have been performed for decades, and we can, for instance, find inspiration in early research about imitation (Simmel 1904). Policy diffusion is a theoretical and empirical topic in many disciplines such as Political science, Public health, Technological disciplines, Human geography, Sociology, etc. Many researchers within this field depart from books such as Everett rogers' diffusion of innovations (1962). Rogers' theories, which have been developed in many revised editions, focus on the diffusion of new ideas and technological innovations and are based on four central dimensions: the innovation itself, how it is being communicated, temporal factors, and social system. According to Rogers, the innovation has to be adopted by a critical number of entities in order to be established and thus regarded as an innovation. The theories are based on an actor perspective and timeline, as the adopters are categorized as early adopters, early majority, late majority, and laggards (Rogers 1962). It is today more and more common to use new ideas, reforms, and innovations in the public sector, often seen as a part of the diffusion of new public Management, and these so-called policy innovations "... offers a new definition of a political problem, provides a new political vision for the political community, and/or proposes a new set of political goals and strategies" (Sørensen 2016:157). Inspired by the early research on diffusion, many influential studies have been published particularly within the field of political science (c.f. Berry and Berry 1990), and three subfields began to emerge: (1) policy diffusion, (2) policy transfer, and (3) policy learning. To learn from others is an intrinsic part of a lot of the policy development that is taking place, but it does not necessarily mean that policies are diffused or transferred. Research on policy diffusion have traditionally been more focused on structures, mechanisms, finding patterns, and explanations in predominantly quantitative studies (Gilardi 2016), while policy transfer relates more to actors, cases, and to follow processes rather than explaining them (Evans 2009). In attempts to create an overarching approach to both these subfields, various frameworks have been presented, such as the following model by Dolowitz and Marsh (1996, 2000) suggesting that there are seven ways to understand policy transfer: (1) Who is diffusing? (2) Why is a policy diffusing? (3) What is diffusing? (4) Are there degrees of diffusion? (5) What is the inspiration or original policy? (6) Are there factors limiting the diffusion? (7) Can the diffusion be connected to more successful policies? Several models such as this have mainly been used in a transnational or national setting. There are other examples of broader theories and models of explanation linked to global diffusion processes. These models often relate to mechanisms of diffusion, such as learning, imitation, coercion, and competition (Shipan and Volden 2008).

The international and global dimension is also prevalent in concepts such as bandwagoning (Ikenberry 1990), where states join other countries' policies for different reasons. It could be related to different kinds of alliances or that smaller countries adopt policies of bigger countries for political gains. In an international perspective, it is also relevant to talk about concepts such as policy translation or policy borrowing, as this is part of the ongoing process of creating global policies. Good examples are discussed and diffused in various circumstances, such as during international

negotiations, conferences, and the like, and are at times incorporated into global policy documents. Finally, another key concept in the development of global policies is diffusion of ideas (c.f. Goldstein and Keohane 1993). This concept is often used in relation to specific arenas for diffusion, for instance, regional organizations such as the EU (Börzel and Risse 2009), and many studies have also focused on conscious strategies of diffusion (Stone 1999, 2012). The actors actively diffusing ideas are often called policy entrepreneurs and linked to global advocacy networks (Finnemore and Sikkink 1998; Keck and Sikkink 1999). They form knowledge-based groups often called epistemic communities (Haas 1992). We will return to these concepts later on, but we can already establish that Vision Zero is part of a diffusion process as countries and cities all over the world have adopted Vision Zero policy packages. In relation to these models mentioned above, the question is what kind of policy has diffused, why has it diffused, who diffuses, and under what circumstances?

#### **Global Policymaking and Agenda-Setting**

What ends up as a prioritized issue on the global agenda is as stated based on many aspects, and it is quite complicated to ascertain whether and when a problem has become a global issue (Neveu and Surdez 2020). Political scientist David Held argues that there are three different ways for promoting issues and for changes to happen on the international level. First, actors and organizations within the civil society link with progressive or powerful governments and make a case together. Second, international institutions can by themselves adapt to a new situation or push an issue forward regardless of opinions on the domestic level. Third, powerful networks of actors are formed in order to influence a policy area either from the top or from below (Held 2017). These factors can help us understand the direction of the development of a certain policy area. But there are also other important preconditions, such as the availability of resources, information, and data, and of course the political will to make changes. Agenda-setting is related to power, and such a process also involves risks and challenges. Klaus Dodds (2005), a geopolitics researcher, provides four critical aspects of global agenda-setting. First of all, how do we know that the key actors are focusing on a relevant problem? Second, by creating a global network for a certain policy area, there is always a risk that some geographic areas or views are not represented and that some perspectives get lost on the way from the national to the global level. A third concern is the incentives and motives of the actors involved in shaping the agenda. There is always a risk that powerful actors set the agenda in a way that creates division instead of global unity. Fourth, international relations are based on voluntary cooperation, and it is a dire task to argue with and convince skeptical actors to participate in certain governance structures such as international conventions and the like, which makes the jurisdiction of the decisions made a constant subject for discussion (Dodds 2005). Challenges apart, actors will not seize to promote issues on the global level that they find important, and it is particularly relevant to understand not only agenda-setting and policy change but rather the mechanisms related to deeper institutionalization processes, which require a more profound change of global structures.

## **Global Advocacy**

To answer the questions raised in this chapter, we also need to understand the role of actors more specifically. Here, two perspectives will be used: transnational advocacy networks (TANs) (Keck and Sikkink 1998, 2014) and the advocacy coalition framework (ACF) (Sabatier 1998; Sabatier and Weible 2007). The seminal work by Keck and Sikkink from 1998 established the concept of transnational advocacy networks which has been used widely to describe both loose and more formal collaboration between various actors working on a global level on a specific issue sharing basic values. These networks are based on "the centrality of values or principled ideas, the belief that individuals can make a difference, the creative use of information, and the employment by nongovernmental actors of sophisticated political strategies in targeting their campaigns" (Keck and Sikkink 1998). The TAN concept is focusing mainly on the work of NGOs, and the network actively promoting road safety on the international level is broader. Therefore, we need to acknowledge that these global networks can also contain various actors from many institutions. The Advocacy Coalition Framework (ACF), as presented by Sabatier, views policy change as either caused by external shocks or a more long-term negotiation, that all participants in the coalition or network share a common belief system, and that there is a high degree of learning between the participants (Sabatier and Weible 2007). This can be related to the earlier mentioned epistemic communities. Although ACF has primarily been intended for contexts where there are competing coalitions, it will be an open empirical question in this chapter whether there are such constraints within the policy area of road safety. This brief introduction to theories on diffusion, global policymaking, and agenda-setting does not presume to be all-encompassing but helps us to understand what happens when new ideas are introduced on the global level. The focus is both on the content of the new idea and on the actors actively promoting or discarding this idea. Was Vision Zero actively promoted, or was it part of a more traditional policy borrowing process? Being a new idea, was the introduction of Vision Zero a conflictual process?

# **Global Road Safety Policymaking Research**

Although there is plenty of road safety research with a global or transnational perspective specifically targeting different aspects such as road assessment, speed management, vehicle safety, traffic crashes, etc., not a lot has been written about global road safety policymaking. Research on road safety tends to focus more on the national level and local examples, although policy-related research about road safety is scarce also on those levels. The existing research on global road safety policymaking focuses mainly on two perspectives, concrete policies and/or measures often related to specific global commitments, and more actor-centered studies. As an example, there is research following the progress made in relation to the pillars of the Decade of Action. Hyder et al. (2017) conclude that a lot of progress has been made

in terms of systematic efforts on all levels to decrease the number of deaths but that it is still difficult to measure progress. There is need for more data and above all better data. An example of policy-related research is the set of literature on road safety philosophy mainly those writing about safe system approaches (c.f. Larsson et al. 2010; Hughes et al. 2015). The existing literature on safe system approaches recognizes both the ability of this approach to be used in global and national road safety contexts and also that existing safe system models can be further modified. There is both a possibility to learn from other sectors and from within the road safety sector. Turning to studies with a focus on actors within the road safety sector, McIllroy et al. (2019) have performed an interesting mapping of the influence of road safety actors at various levels as well as their interaction. This is a particularly interesting study as it gives a vivid image of the system and clearly visualizes both the potentials and challenges. When actors are intertwined in a system, there are opportunities for single actions to have effect in the larger system under certain circumstances, but the study also makes it clear that it is more likely that actions directed only towards one topic will divert the attention from the broader picture. There is also literature offering a helicopter perspective on road safety looking both at the historical development of road safety thinking (Hakkert and Gitelman 2014) and forward-looking approaches (Wegman 2017). This brief summary of research on global road safety policymaking shows that we need to know more about the role of global road safety strategies and policies in the overall road safety system.

# Research Design

The content of this chapter is based on a research project mapping global road safety policy and governance. The project is financed by the Swedish Transport Administration, and one part of the project relates to the role of Vision Zero in global road safety policymaking. The empirical material consists of policy documents, such as reports, resolutions, visions, and other kinds of statements from key intergovernmental organizations, such as the United Nations and its regional commissions, the WHO, the World Bank, and the OECD. The documents from intergovernmental organizations (IGOs) have been studied using a qualitative content analysis where sections on Vision Zero and the related concept safe system have been selected for deeper analysis. These texts are scrutinized in order to find key components of Vision Zero. These key components used for the analysis can be found under section "The Vision Zero Policy in Global Road Safety Policymaking." Other sections of the texts have also been read as a way to analyze whether Vision Zero components have been used while not using the terms Vision Zero and Safe system. Statements and reports from nongovernmental organizations (NGOs) have been analyzed in order to identify whether there are alternative perspectives on the role of Vision Zero.

In addition, the chapter is based on an interview study with 29 respondents from various IGOs, NGOs, and research organizations working with road safety. The interviews were performed in 2017–2018. The selection process is based on finding

senior experts within the field of road safety, and the criteria are that they are or have been working for intergovernmental organizations or nongovernmental organizations. The respondents also include researchers with an expertise covering global road safety issues and experience in cooperating with various kinds of international organizations and institutes. The interviews are semi-structured and have all been transcribed word by word. The interviews were made equally on online platforms, face to face, and over telephone. The respondents are anonymous and coded according to the following: intergovernmental organizations (IGO 1, 2, 3, etc.), nongovernmental organizations (NGO 1, 2, 3, etc.), and researchers (research 1, 2, 3, etc.). The respondents have in almost all cases a broad background, often starting their careers on the national level, and a majority of them have been working for several kinds of international organizations. The respondents have been selected based on two parameters: their current affiliation where they are asked to talk about the discussion and work of their organization and the unique expertise in this field where they are also asked to reflect more personally on the development of global road safety policies. In order to find these senior experts, a snowballing approach has been used, where the respondents have been asked to name other experts who both agree and disagree with their position. This has been complemented by direct contacts with specific organization. The questions asked concerned the following topics:

- The role of Vision Zero in the global road safety policy documents
- The role of Vision Zero in the global formal and informal discussions concerning road safety
- The advantages of working with the Vision Zero policy
- The challenges of understanding as well as implementing Vision Zero
- The past and current road safety philosophies
- The implementation of Vision Zero in relation to the specific challenges of lowand middle-income countries

# Vision Zero in Global Road Safety Policymaking

In order to understand the role of Vision Zero in global road safety policy, we will first identify the main events in this development process concentrating on the last two decades. As mentioned earlier, there have been existing guidelines and regulations for road traffic ever since transportation systems were established. These regulations, such as the Geneva Convention from 1949 (United Nations 1949) and the Vienna Convention from United Nations 1968, have mainly been supervised by the UN Economic Commission for Europe (UNECE) and are today under the supervising umbrella of a number of work packages. The temporal focus of this chapter is from the late 1990s up until 2020, mainly because of the establishment of Vision in the later part of the 1990s, but also due to the fact that we have during these last 20 years witnessed a consolidation of road safety as a global policy area. Before this period, many actors regarded this policy area as falling mainly within the

national interest sphere. This was also a period where new organizations were established promoting road safety, such as the World Bank-sponsored Global Road Safety Partnerships (GRSP) established in 1999 and hosted by the International Federation of Red Cross and the Red Crescent Societies. The question is what made road safety a global problem besides being an evident national and local issue? Both the respondents in this study and the documents point to an increasing and more systematic collection of solid data as a key reason for the growing global interest in road safety. This began already in the 1990s, and one such process was a collaboration between the World Health Organization (WHO) and the World Bank. This process of data collection and bringing road safety to global attention was also backed by individual countries, aid organizations, and later on by other IGOs and NGOs. This data collection process led to the publication of the influential World Report on Road Traffic Injury Prevention (WHO 2004). Although this was not in any way the first attempt to frame and form global road safety as shown earlier in this handbook, this report was for many an important turning point for global road safety measures as it so clearly identified the basic problem; millions of people are dying each year in traffic crashes. The same year, the United Nations adopted a resolution (United Nations 2004 UNRES 58/289) inviting the WHO to be the coordinator for road safety within the UN system. The same resolution also called for the WHO to cooperate closely with the UN Regional Commissions in this capacity. As the resolution also named the World Bank as a key actor, it broadened the interpretation of how the coordination would be structured. When accepting this coordinating role, the WHO, in close cooperation with the UN Regional Commissions, established the UN Road Safety Collaboration (UNRSC) in 2004. The first high-level ministerial meeting on road safety took place in Moscow in 2009, and it was followed the same year by the UN declaration of the Decade of Action for Road Safety, 2011–2020. Specific programs were set up to monitor the progress related to the pillars of the Decade of Action (Hyder et al. 2017). During this decade, many NGOs established programs for road safety, and some of the most influential have been the FIA Foundation, the Bloomberg Philanthropies, the Global Alliance of NGOs for Road Safety, specific road assessment programs such as iRAP, car assessment programs such as Global NCAP, several victim's organizations, etc. The second global ministerial meeting took place in Brasilia in 2015, a global envoy for road safety was established at the UNECE the same year, and in 2015, the sustainable development goals (SDGs) were adopted, where road safety was explicitly included. From not being mentioned in the millennium goals to being included in the SDGs in relation to both health and transport has already made a big difference worldwide. The consolidation and institutionalization of road safety as a global issue has continued with the establishment of the UN Road Safety Trust Fund (United Nations 2018) placed at the UNECE and the third Global Ministerial Conference in Stockholm in 2020. The recommendations presented at the conference have since then been endorsed by the United Nations (United Nations 2020). The question asked in this chapter is if specific road safety philosophies can be discerned in this process and particularly Vision Zero.

## The Vision Zero Policy in Global Road Safety Policymaking

Before identifying the role of Vision Zero in global road safety policy, it is important to create a common point of departure as to what Vision Zero is. This is naturally mentioned in many chapters in this handbook, so this is a brief recap based on Belin et al. (2012). First of all, the problem to be solved is that people die and are seriously injured in the road traffic system, not that accidents occur. The problem is also that the system is not built to handle human mistakes. Humans will always make mistakes, and if the system is adapted to this precondition, crashes are preventable. The ultimate responsibility thus falls on the system designer, not the individual road user. The assumption must also be that nobody wants to die, everyone wants safety. There is therefore no optimum number of deaths in relation to cost. Finally, the goal must consequently be to eliminate fatalities and serious injuries. In addition to this definition, the Swedish Vision Zero is based on a scientific foundation both in relation to human tolerance to violence and how policies and measures are adopted. Vision Zero furthermore adds a long-term perspective on road safety based on a management by objectives, and the vision is grounded in a system of actors where everybody is responsible for its part in the road safety system, ideally a kind of network governance with one clear lead agency.

After the adoption of safe system approaches in a number of countries, particularly Western European countries such as Sweden and the Netherlands (Larsson et al. 2010), the ideas quickly became part of the ongoing discussions in various intergovernmental organizations and collaborations mentioned partly above. The dominating approach to working with road safety up until then can be illustrated by the three Es: education, engineering, and enforcement (c.f. McIllroy et al. 2019). The Swedish Vision Zero has a different approach as already concluded in this handbook as to its ethical approach, scientific foundation, comprehensive or systemic perspective, long-term management by objectives, and its view on shared responsibility and shared safety interest. As the Swedish Vision Zero was adopted in 1997, it is important to remember that the policy has naturally gone through changes and updates over the years.

The pioneering report from the WHO and the World Bank in 2004 introduced the safe system approach to a larger global audience and labelled it as a requirement to work with safety in the complex transport system because there is a need for:

...understanding the system as a whole and the interaction between its elements [...] In particular, it requires recognition that the human body is highly vulnerable to injury and that humans make mistakes. A safe road traffic system is one that accommodates and compensates for human vulnerability and fallibility. (WHO 2004:157)

The description of the Swedish Vision Zero is given space in the report and described in the following terms:

Vision Zero in Sweden and the sustainable safety programme in the Netherlands are examples of good practice in road safety. (WHO 2004:158)

The WHO has continued to produce Global Status reports on road safety, and Sweden is often used as a successful example. The WHO has followed the continued updates in measures and policies in the Swedish road safety strategies.

Experience in Sweden illustrates how better results can be achieved through long-term, perennial planning of systematic, evidence-based approaches to intervention, supported by a strong institutional delivery including leadership, sustained investment and a focus on achieving ambitious road safety goals and targets across government, business and civil society. (WHO 2018:20)

Vision Zero and safe system approaches were also recognized by other organizations during the 2000s, such as in the report from OECD and the International Transport Forum, published in 2008, which is a collaboration with representatives from individual countries and NGOs. This report is mentioned by other organizations and by the respondents in this study as a key in both knowledge development and the diffusion of the approach. One of the key aspects of the report is that:

It describes how a Safe System approach can re-frame the ways in which safety is viewed and managed. (OECD/ITF 2008)

The report argues that the safe system approach, and Vision Zero as an example of it, constitutes a groundbreaking shift in how to work with road safety. The OECD/ITF has contributed to produce reports containing country evaluations (OECD/ITF/IRTAD 2016) and other assessment reports focusing on the role of safe systems. A report from the OECD/ITF from 2016 refers specifically to the process of introducing the safe system approach as a paradigm shift (OECD/ITF 2016).

The Moscow Declaration, which came out of the first global ministerial meeting in Moscow on road safety, acknowledged both the 2004 report from the WHO and the 2008 report from OECD/ITF urging countries to adopt a safe system approach. More importantly perhaps from a global perspective was the call for a decade of action. The Decade of Action for road safety 2011-2020 was declared by the United Nations in March 2010 (United Nations 2010) and contains five pillars focusing on safe roads, safe mobility, safe vehicles, safe drivers, and post-crash response. The global plan for the Decade of Action is based on a safe system approach and provides guidelines as well as urging countries to prepare their own road safety plans in accordance with the pillars. The safe system approach related to the global plan includes the acceptance of human errors, the production of infrastructure and vehicles in direct relation to the limitations of the human body, and shared responsibility (WHO 2010). The UN Road Safety Collaboration, hosted by the WHO, is working actively with its members to find productive ways to work with the pillars, and one has been to promote safety targets and another to base the pillars on a safe system approach. A recent UNRSC report states that:

Integrated with safe system action across all pillars will ensure the global fatality and serious injury reduction targets are met by 2030. (UNRSC 2020)

The United Nations works on various fronts when it comes to road safety. The Global Forum for Road Safety (formerly WP.1) hosted by the UNECE is overseeing the global regulatory work concerning road safety described in its own plan for the Decade of Action (UNECE 2010; UNECE 2012) its integration of a safe system approach into the legal instruments. The UNECE also gives space to introducing new ways to work with regulations and presents in several ways the Swedish long-term method of working with management by objectives. The UNECE also hosts the UN Special Envoy for Road Safety, currently Jean Todt, and the role of the special envoy is to mobilize political support, to raise awareness about the work of the UN, to do advocacy work and alleviate partnerships, and to showcase good practice (UNECE 2015, terms of reference). Working for the United Nations, the special envoy's role is to promote the UN agenda (which we can now conclude promote a safe system approach) but also to call for action, which he did in the foremath of the latest high-level ministerial meeting:

Road crashes on the alarming scale we witness today are not accidents. They are the failure of a system which does not sufficiently value safety. This is why we need a new paradigm for road safety that focuses on building a safe system. (UNECE 2020)

Although Vision Zero and safe system approaches are diffusing to all continents of the world, the other UN regional economic commissions such as UNECA, UNECLAC, UNESCWA, and UNESCAP are particularly highlighting the challenges faced by low- and middle-income countries when it comes to road safety measures. For instance, the African Road Safety Action Plan linked to the Decade of Action states that:

The Decade of Action will provide the opportunity for African countries to intensify or to develop activities towards building their institutional capacity. Countries that have made more progress in putting in place structures and processes to improve road safety can focus on more advanced targets, such as capacity building at local government level, and developing local research and road safety monitoring. (UNECA 2011)

It is a valid discussion as to whether certain institutional, political, and civic preconditions have to be met in order to fully apply a safe system approach. When studying documents also from other UN Regional Commissions, the focus in the information on road safety is generally on more specific road safety problems disproportionately bestowed upon low- and middle-income countries and not on global road safety philosophies, although there are exceptions such as in this report by the UN commission for Asia and the Pacific:

Speed management measures should be consistent with the global "Safe System" approach to road safety: road designers, builders and managers must take into account the known limits of the human body. (UNESCAP 2019:14–15)

The World Bank has together with a number of actors, such as the Global Road Safety Partnership (GRSP) hosted by the Red Cross, worked with road safety in

cooperation with low- and middle-income countries. The World Bank supports the safe system approach as stated in a report by the Global Road Safety Facility (GRSF) hosted by the World Bank:

The globally accepted best-practice approach to addressing the road safety crisis is the Safe System approach. (World Bank/GRSF 2020:6)

There is an awareness of the specific problems in low- and middle-income countries, but in a report written in collaboration with the World Resources Institute (WRI) supported by the Bloomberg Philanthropies and the FIA Foundation, the safe system approach and Swedish Vision Zero (termed the best-known brand of the safe system approach) are described as universal approaches.

With the policy concept spreading, caution needs to be taken to ensure that all the features of a Safe System approach are evident in each new context. Although the distinct needs and opportunities in each location require unique strategies for action; the principles, core elements, and key action areas of a Safe System remain conceptually universal and interrelated. (World Bank/WRI 2018:13)

The second global ministerial meeting on road safety, held in Brasilia in 2015, was focused on the inclusion of road safety in the global sustainable development goals (SDGs), and among other perspectives, the Brasilia Declaration (2015) encourages the use of road safety targets in order to reach the goals. In order to find tools to work with the SDGs, several actions were taken such as the establishment of the UN Trust Fund for road safety in 2018 following a UN resolution (UNECE 2018; UN 2016, resolution 70/260). The global strategies for the trust fund specifically mentioned the safe system approach in Sweden and the Netherlands.

This approach takes into account human failings and requires that not only the users are responsible for complying with traffic rules but that joint responsibility is borne also by all actors involved in design, construction, maintenance and improvements of roads and vehicles as well as organisation of post-crash response so as to ensure highest road safety performance. (UNECE 2018)

The third global ministerial meeting on road safety took place in Stockholm in 2020, and the Stockholm Declaration (2020) emphasized the safe system and Vision Zero approach in several sections such as:

Encourage Member States that have not yet done so to [...] ensure that legislation and standards for road design and construction, vehicles, and road use are consistent with safe system principles. (Stockholm Declaration 2020:3)

The declaration also encouraged the private sectors to use safe system principles in their whole value chain and furthermore highlighted "the need for an integrated approach to road safety such as safe system and Vision Zero" (Stockholm Declaration 2020:2). The Stockholm Declaration was endorsed by the United Nations in August 2020 (United Nations 2020).

We have seen through this presentation how the safe system approach and the Swedish Vision Zero as the key example have become part of the strategies and visions of the major intergovernmental organizations working with road safety. It is also clear that there is a partnership between many of these organizations and NGOs providing both resources and projects in line with the global strategies. The advocacy work of organizations such as the FIA, the FIA Foundation, Bloomberg Philanthropies, World Resources Institute, the Global Alliance of NGOs for Road Safety, the Global Road Safety Partnership, and many more has helped diffusing texts and projects promoting a safe system approach and Vision Zero although focusing primarily on "getting things done." The challenge when using a safe system approach and Vision Zero is to get the right things done. The question is whether these commitments stated above to a safe system approach have been or can be transformed into workable tools on the global level. It would first of all require a common comprehension and knowledge on what a safe system approach is and Vision Zero in particular. The question is also whether these approaches can also be tools when working with road safety in a low- and middle-income context or are these perspectives made for countries with all the "right" institutions, political systems, and civil societies in place?

#### Safe System and Vision Zero in Practice

As in many other policy areas, strategies and visions have to be transformed into concrete projects and measures in practice. In this process, individuals and groups establishing these strategies as well as implementing them face all kinds of challenges. This section contains a description of how senior experts in the field of road safety analyze the role of Vision Zero and safe system approaches on the global level primarily, but they also address the link between the global and the national level. Why is it important to study what 29 senior experts have to say about Vision Zero? First of all, these experts are part in forming and framing the global agenda on road safety, and what they base their work on is relevant for the outcome. Second, the selected experts have a long experience working within this field, which makes their analyses grounded and insightful as to the role of various road safety philosophies and strategies, although they do not always agree with each other. Third, as the experts work with different instruments, in a variety of organizations, and with specific areas of expertise, they form a micro society for road safety issues.

# A Paradigm Shift in Road Safety Philosophy?

Policymaking is often easier when there is a group of people sharing the same understanding of the world, so-called belief system (Sabatier and Weible 2007), the same problem definition, and similar sets of solutions to these problems. Many of the respondents in this study are saying that there is a need for a common understanding of road safety problems in order to find the right solutions, but not all agree that it is crucial that everyone shares a common road safety philosophy. The respondents paint a picture of two parallel road safety philosophies: the traditional view that the problem

concerning road safety is primarily the behavior of the road user which causes serious injuries and deaths and the safe system approach where there is basic view that human beings make mistakes and that we have to construct a system that allows for these mistakes. The overall opinion among the respondents is that both these philosophies exist parallel to each other. There are many experts working with road safety that still believe that the behavior of the road user can be considerably altered leading to fewer deaths, but that deaths cannot be avoided completely. Others are convinced that deaths can be prevented and that the transport system can be constructed in a safe way. The study on which this chapter is based shows that there are three perspectives regarding road safety philosophy and a potential paradigm shift. First, a minority of the respondents claim that the traditional view still prevails as the leading global road safety philosophy and that the introduction of the safe system approach has led to interesting discussions but has not changed road safety work in practice. These respondents claim that this is evident when focusing on the national level.

I'd say that the majority of the road safety community is still working to the old approach, and the safe system approach is becoming increasingly recognized, but it still hasn't made it beyond the sort of small group of enthusiasts into the wider community. (NGO 1)

First, I am not sure that it is a package that is well understood by all so there are still in several countries [...] a kind of skepticism about safe systems. (IGO 3)

A second group of respondents argue that the safe system approach is the dominant global road safety philosophy today, but that it has not changed road safety work on the ground yet. They claim that the safe system approach is constantly gaining ground although it is a slow process and that the approach might be seen as a bit too complicated and theoretical.

I think definitely that the safe system has taken a long time to manifest itself and grasp people. [...] I mean really, again, there is a lot of people who work on theoretical level. I mean if you look at the world and who are the thinkers and who are the implementers, there are many more people who have it in their head than actually doing it on the ground. (NGO 8)

There is a growing consensus around Vision Zero kind of approaches and particularly if we talk about safe systems and the number of sort of landmark reports that have led to that [...]. It really embraced a lot of these things and so it is almost a consensus now. Not entirely, but it is almost consensus. (NGO 9)

Others also argue that there is a limit to the usefulness of more theoretical approaches as you need to understand each and every context in order to make a difference. The argument is that enough has been said on an abstract level, now is the time for action.

The third group of respondents is those who claim that there has been a significant shift and that the safe system approach is the leading road safety philosophy today. This is especially highlighted in relation to the global scale and in the work of intergovernmental organizations. These respondents argue that we are witnessing a paradigm shift, significantly altering the way road safety is viewed in terms of problem formulation as well as solutions.

...overall there is a good understanding about the need for an integrated approach. So the philosophies or the ideas are more in tune than in conflict. (IGO 2)

Most respondents view the "conflict" between a traditional road safety approach and the safe system perspective as problematic in terms of hindering organizations to work effectively with road safety on a global scale, while others do not.

Safe System is not that kind of prevailing philosophy, despite the fact that everyone is talking about it. I don't particularly see one paradigm in the world. But I think it is a good thing that there is no one paradigm, because one recipe would never ever work. (IGO 1)

#### The Role of Vision Zero in Global Road Safety Policymaking

All respondents in the study recognize that the Swedish Vision Zero is a leading safe system approach, and as such it is visible in all global road safety discussions. The question here is whether Vision Zero is portrayed in a similar way whenever used, and another question is whether the perspective is recognized on other levels than the global. First of all, the presentation of safe system approaches as portrayed in global policy documents shows that there is a quite coherent image of the approach, but we start seeing different ways of using the concept when looking at the material from some NGOs, specific implementation processes on a national level, and how the perspective is interpreted by cities ready to launch a Vision Zero, for example. This is where we start to see major differences in how key terms are interpreted. This is particularly clear when it comes to road user behavior and enforcement. Several respondents are praising the ambition of Vision Zero but argue that it is difficult for some actors to turn it into a workable tool.

Vision Zero has a big role and we can't justify anything else, of course not. It is what it is all about and that is what it should all be but I think it is still coming across as a very sophisticated western idea and people don't understand why we need another role and it is yet another buzzword. (NGO 8)

Many of the respondents, convinced that the safe system approach is the way forward, are also aware of the difficulties of translating the philosophy to all levels as well as political and geographical preconditions. There is thus a significant difference in how Vision Zero is recognized on different levels.

I would describe it as the leading light within the international community, but I'd also describe it as a policy that people don't understand or haven't traditionally understood well, but I still believe that it has great potential. (NGO 3)

I think one of the problems though is that there is a gap between the countries and governments that really understand what it means and then some countries and governments and other stakeholders are still make a rather simplistic analysis. I find very often when you talk particularly to politicians who have lots of competing pressures on their lives and they have got a lot of demands that they need to satisfy. They will all reach for very simple solutions. (NGO 9)

The respondents are also to some extent reflecting upon whether it is actually the exact content of Vision Zero that is seen as a promising policy or if Vision Zero

represents one way of having a systematic approach to road safety. Therefore, it is an interesting discussion whether countries in dire need of lowering the number of deaths should start working according to a safe system approach or if they should start by establishing systematic road safety strategy, perhaps with one specific area at a time, eventually adopting a full Vision Zero.

...they [a systematic approach vs. Vision Zero specifically] work along each other. They are complementary to each other, but the plan is to having moved [...] your road safety capacity, move it to a higher level of operations. So that is the plan. That may mean concentrating on one or two specific areas first more than others. That doesn't mean you give up the idea of zero fatalities, but it is an operational plan and I always saw Vision Zero from a philosophical term. It is part philosophy, part operational and I think it is a hell of a great philosophy. We don't have a better kind of philosophy right now. (IGO 4)

#### The Advantages of Vision Zero

It is evident that many of the senior experts interviewed for this study acknowledge both the growing role of Vision Zero and also the challenges of introducing new ideas on a global scale. So what are the advantages of Vision Zero, or rather what are the features that make this policy diffuse all over the world? The study identifies at least five "attractive" features.

First of all, the zero approach is presenting something new and unusual, something inspirational going beyond what anyone thought would be possible. Once you start talking about zero, many of the experts argue that there is really no way back. This ethically based argument has, for instance, also been seen in campaigns for safe system approaches.

Second, it provides a whole comprehensive policy program, which makes it a more holistic and systematic approach. It involves all kinds of actors and organizations. Related to this is the notion of shared responsibility but also that the responsibility ultimately falls back on the system designer.

Third, the way Sweden managed to lower its number of deaths and serious injuries is seen as a great inspiration.

...we can build on your experiences and see how safe system has been implemented in practice, what it means. So it starts to become something tangible, that you can observe, that you describe... (IGO 3)

But the inspiration also comes from the "story" of Sweden itself and how Vision Zero fits into the political and cultural dimension.

I think Vision Zero has been the most marketable [...] in terms of having ambitious targets you know it is the Swedish model [...] it is not just the story of what Vision Zero is, it is a political story and how Sweden came to accept certain interventions such as the 2+1 roads [...] So I think the sort of cultural aspects of Vision Zero are very valuable... (IGO 4)

The fourth aspect pointed out as a positive feature is that Vision Zero is a long-term strategy and not a short-term slogan (even though it is a catchy phrase). This

means that you are getting a full policy program but that you have to be patient and persistent. Therefore, you also need political support.

Part of that dynamic is that is, I think it always makes you look forward. You always sort of think well what is coming next. What is the technology that I could use and you will always face new bottle-necks or new problems that come up on the horizon. (NGO 9)

The fifth view of Vision Zero is that it is perceived as based on facts, data, and science. This concerns both the way Sweden works with management by objectives based on a continuous data collection and traffic crash data.

### The Challenges of Vision Zero

On the other hand, the respondents also point to a number of challenges concerning Vision Zero and its implementation in relation to the positive aspects mentioned above. First of all, the zero approach could be regarded as an unrealistic target and also naïve. This pertains in particular to a criticism that Vision Zero is a policy for high-income countries and is more challenging to implement in low- and middle-income countries. And it is at the same time in that context that improvement is mostly needed.

I think the countries in our region, they are not there yet because we are so far from zero so it is very helpful to have this at the horizon saying that no loss of human lives is acceptable for you know in this area but at this point I think if we could just cut them by half, the road safety accidents in our region, that would have been a tremendous progress. That being said, I think, well I know that the idea of vision zero is very useful in a sense that it shows how road safety is something that can be overcome. (IGO 9)

Sweden and several other countries using a Vision Zero approach have seen considerable improvement over the years as we have discussed, but the respondents also point to the uniqueness of these countries. They are all wealthy countries with an opportunity to invest, not only in monetary terms but also in ethics. Not all countries have democratic regimes, and many face other problems.

...the usual argument is that Sweden is very wealthy and it's a small country when it comes to population and it's manageable, and there is a lot of law-abiding citizens and the issue of ethics, and not economics, is something that goes well with the Swedes, okay, part of your psyche, or part of your fabric, so the issue of how replicable the Safe System Approach is, not only for places in Europe, you know, Germany or Poland or Russia, but to Congo, or to South Africa, okay. This is when all of this, it breaks down. (IGO 1)

We have already concluded in an earlier section that although Vision Zero presents a full policy program, it is still difficult to understand. It is also complicated to identify what is part of a system. Therefore, there might be countries saying that they implement Vision Zero but they do not grasp the approach to the full.

I think that there are some very good elements in the Safe System Approach, but the issue, you know, the evidence is that nobody else is doing it, despite the fact that many countries are actually saying that they are doing it. . (IGO 1)

Finally, and in relation to the transparency of Vision Zero and the ability to understand its features, the approach is by some respondents seen as too academic and too theoretical but also that it takes energy and resources to translate the vision so that it both fits and can be accepted in all kinds of contexts. Some countries have less time to spend on being patient and wait for the long-term results and are more eager to find policies that can be implemented right away leading to positive short-term effects.

I think the safe system and all these things are connected and we are definitely supporting the ideas, but I still think that our role is really the implementation and I think translating Vision Zero and the safe systems down to that, it would require some work that might, should might be better spent on implementation. (NGO 8)

## **Analysis**

Looking at the development of global road safety policies, there is no doubt that the safe system approach and Vision Zero play a significant role, the very least as an inspiration. It is undoubtedly a new, inspiring, and for some actors a quite provocative way of thinking. Looking at the selection of the policy documents, there seems to be more or less a consensus that safe system approach is the way forward in road safety policy. The interviews, on the other hand, show that policy implementation is not that simple, nor is the complete change in safety culture that Vision Zero requires in many contexts. This section returns to the theoretical perspectives on diffusion presented earlier and presents a short analysis of the role of Vision Zero in global road safety policymaking.

# What Vision Zero Is Diffusing?

The first question scrutinized in this analysis is if we are observing the diffusion of a coherent road safety policy program or philosophy or if there are several alternative interpretations. In other words *what* is being diffused? Looking at the various documents from intergovernmental organizations, there seem to be a consensus on what a Vision Zero is. The explanation, in some cases, is that the texts have been produced in close cooperation with Swedish authorities or Swedish experts, but the coherence is evident even in other documents. The conclusion is that there is an awareness of what Vision Zero is on a global policymaking scale. When looking at materials from NGOs and the arguments raised in the interviews, the understanding of the content of Vision Zero and safe system approaches is more varied. Some organizations are strong advocates for a safe system approach, but they are simultaneously writing about campaigns directed at educating the driver. These perspectives do not go well together. The respondents in this study point to complexities in

understanding safe system approaches and that there are cases where Vision Zero in particular has been used as a catchy slogan but where the content is more related to a traditional road safety philosophy.

#### Why Is Vision Zero Diffusing?

The groundbreaking report from the WHO in 2004 was one of the first global road safety documents grounded in solid data. Together with other similar reports and documents, it helped identifying deaths in the road traffic system as one of the major causes of deaths, particularly in low- and middle-income countries. The fact that the WHO is the lead agency also framed road safety as a public health issue. All these development prompted intergovernmental organizations to adopt new ways of working with road safety, as we have discussed earlier in the chapter, and it opened a window of opportunity (Kingdon 1984) for Vision Zero and other safe system approaches to offer a new kind of policy but also a completely new way to assess the problem. Another explanation is related to the presentation in the last section on the "attractiveness" of Vision Zero. It is generally regarded as a new interesting policy program, which has also been tested successfully in various contexts.

#### Who Diffuses Vision Zero?

When analyzing the interview material, it becomes quite clear that the voices promoting the Vision Zero approach belong to a global or transnational advocacy network. It is not a formal network, but many of the experts in this study know each other or know of each other. Many of them share the same belief system and form a sort of epistemic community, where their philosophical point of departure is the safe system approach and particularly Vision Zero as the leading policy. Therefore, it has been important to broaden the number of respondents to make sure that alternative voices are included. Using solely the snowballing method of selection would have led to a more one-sided result. This network consists of experts from NGOs, from intergovernmental organizations, from research, and from national governments, and using Held's categorization, this network has helped pushing Vision Zero and safe system approaches onto the global road safety agenda. It has been a process where the NGOs have been particularly successful in forming alliances with key intergovernmental organizations to make sure that certain issues of road safety are emphasized. These actors can also be described as policy entrepreneurs (Mintrom and Norman 2009) using several arenas to promote their ideas.

# **How Is Vision Zero Diffusing?**

The policy entrepreneurs are, in this case, actors deliberately diffusing Vision Zero as a policy program, but there are also more organic processes of policy learning and

policy translation. When a country is making progress in a complicated policy area with many actors involved and with lives on the line, other countries naturally tend to look at this particular success story asking what can be learned from that process. If a country or city attempt to copy a policy, it is rarely without complications. Instead, you often find that there is a translation process to adapt the policy to the context. Vision Zero is definitely diffusing in that way as we speak, but as this chapter is focusing on the global level, we can see how Vision Zero is presented to a wide global audience in the global policy documents, and the inclusion of the vision into these policy documents is part of the diffusion process. Vision Zero is also diffused at global conferences and seminars of different kinds. Representatives from countries that have adopted Vision Zero or other safe system approaches are often invited to share their knowledge in other contexts.

#### **Conclusions and Discussion**

We can conclude that Vision Zero plays a significant role in global road safety policies and that the introduction of the vision has led to a shift in the work mode from a traditional behavioral approach towards a system's approach. But in order to conclude that shift, there are several steps to be taken. Although it is evident that Vision Zero has inspired many intergovernmental organizations as well as NGOs, there is still an ongoing process of implementing this approach in many different contexts. Evaluations of these attempts will determine whether Vision Zero is a vision for everyone or has to be transformed in order to fit various kinds of contexts. This is especially challenging in relation to low- and middle-income countries.

The material analyzed in this study shows that the key components of Vision Zero remain intact in the writings from the intergovernmental organizations. Interpretations and transformations take place on other arenas and other levels.

Vision Zero is seen as a promising approach for many reasons, and one obvious factor is the success of the policy in many countries. It is being regarded as best practice which is exemplified, for instance, in the chapter in this handbook. Another reason is that it can be interpreted as a policy program or package ready to be used, and a third is that the ethical core is viewed by many as the only way forward.

There are challenges when introducing new ideas onto the agenda, and one of those is that certain models or programs are viewed as miracle methods and are introduced too quickly and/or too disorganized. It is therefore essential to see this process going on in global road safety policy with a little bit of caution and as a process of continuous development and transformation. It is also important not to abandon what might be successful processes or policies already in place. The old is not necessarily all bad, and the new is not necessarily all good.

It is important to recognize that there is a huge difference concerning the point of departure for high-income countries and for low- and middle-income countries. Therefore, it is crucial to add a question to the analysis of the diffusion process – where is the diffusion taking place? The difference in preconditions is also relevant in relation to the direction in which countries can go.

Countries with a mature road safety approach [...] are expected to move in the direction of a Safe System approach. [...] Many low- and middle-income countries (LMIC) face a different starting point. Reports indicate that there is a lack of almost everything: a lack of leadership, a lack of political priority, a lack of funding, a lack of expertise, etc. [...] ...although LMIC could learn from HIC, they cannot simply copy successful HIC strategies. Local circumstances differ... [...] LMIC should invest in local capacity building to carry out these tasks and create effective road safety communities that involves all players... (Wegman 2017)

Although there are challenges, several interesting cases can be observed in lowand middle-income countries and not only related to the adoption of new road safety plans resting on safe system approaches but also how to work with the SDGs in an integrative way. The city of Bogotá in Colombia is one example of a city working with integrative approaches. Perhaps it is in these types of cases where we can find new approaches and methods in order to take the next step in road safety policymaking.

This chapter has focused on the diffusion of Vision Zero within the area of global road safety concluding that Vision Zero plays a role in the consolidation and development of road safety as a global policy issue. One interesting question that arises is if the establishment and consolidation process of road safety as a global policy area differs from other areas entering the global policy family. Every area is of course unique, containing an intricate web of actors, policy preferences, and problems (c.f. the issue of HIV/AIDS in Harman 2010), but we have also witnessed a more general growth in bilateral, multilateral, and transnational processes of collective policymaking since World War II. A comparison between global road safety policymaking and other policy areas would be an interesting and relevant continuation of this project, and in the area of global health, there is an interesting distinction to be made between the global policy development of communicable and noncommunicable diseases. Communicable diseases are often viewed as more acutely urgent, as we have seen in the case of COVID-19, and can therefore enter a global policy phase quicker than noncommunicable diseases that tend to linger longer on a national level or possibly regional level. One significant aspect of global governance today as compared to decades ago is that the international system now includes institutions to deal with both crisis situations and day-to-day management of global problems. In any case, it is fair to say that any future comparisons between global agenda-setting processes would have to include aspects such as urgency, problem framing, financial support for data collection, and the establishment of institutions.

#### References

Belin, M.-Å., & Tillgren, P. (2013). Vision zero. How a policy innovation is dashed by interest conflicts, but may prevail in the end. *Scandinavian Journal of Public Administration*, 16(3), 83–102.

Belin, M.-Å., Vedung, E., & Tillgren, P. (2012). Vision zero – A road safety policy innovation. *International Journal of Injury Control and Safety Promotion*, 19(2), 171–179.

Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. American Political Science Review, 84(2), 395–415.

- Börzel, T. A., & Risse, T. (2009). The transformative power of Europe: The European Union and the diffusion of ideas. KFG Working Paper Series 1.
- Dodds, K. (2005). Global geopolitics A critical introduction. London: Pearson Education.
- Dolowitz, D., & Marsh, D. (1996). Who learns what from whom: A review of the policy transfer literature. *Political Studies*, 44, 343–357.
- Dolowitz, D. P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13, 5–24.
- Evans, M. (2009). New directions in the study of policy transfer. *Policy Studies*, 30(3), 237–241.
- Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International Organization*, 52(4), 887–917.
- Gilardi, F. (2016). Four ways we can improve policy diffusion research. State Politics and Policy Quarterly, 16(1), 8–21.
- Goldstein, J., & Keohane, R. (1993). *Ideas and foreign policy: Ideas, institutions and political change*. Ithaca: Cornell University Press.
- Haas, P. (1992). Introduction: Epistemic communities and international policy coordination. *International Organization*, 46(1), 1–35.
- Hakkert, S. A., & Gitelman, V. (2014). Thinking about the history of road safety research: Past achievements and future challenges. *Transportation Research Part F: Traffic Psychology and Behaviour*, 25, 137–149.
- Harman, S. (2010). *The World Bank and HIV/AIDS: Setting a global agenda*. London: Routledge. Held, D. (2017). Elements of a theory of global governance. *Glocalism: Journal of Culture, 2017*(2), 42.
- Hughes, B. P., Newstead, S., Anund, A., Shu, C. C., & Falkmer, T. (2015). Review of models relevant to road safety. Accident Analysis and Prevention, 74, 250–270.
- Hyder, A. A., Paichadze, N., Toroyan, T., & Peden, M. M. (2017). Monitoring the decade of action for global road safety 2011–2020: An update. *Global Public Health*, 12(12), 1492–1505.
- Ikenberry, J. (1990). The international spread of privatization policies: Inducements, learning and "policy bandwagoning". In E. Suleiman & J. Waterbury (Eds.), *The political economy of public sector reform and privatization*. Boulder: Westview Press.
- Keck, M. E., & Sikkink, K. (1998). Activists beyond borders. Advocacy networks in international politics. Ithaca: Cornell University Press.
- Keck, M. E., & Sikkink, K. (1999). Transnational advocacy networks in international and regional politics. *International Social Science Journal*, 51(159), 89–101.
- Keck, M. E., & Sikkink, K. (2014). Activists beyond borders: Advocacy networks in international politics. Ithaca: Cornell University Press.
- Kim, E., Muennig, P., & Rosen, Z. (2017). Vision Zero: A toolkit for road safety in the modern era. *Injury Epidemiology*, 4(1), 1–9.
- Kingdon, J. W. (1984). Agenda, alternatives, and public policies. Boston: Little, Brown.
- Kristianssen, A.-C., Andersson, R., Belin, M.-Å., & Nilsen, P. (2018). Swedish vision zero policies for safety A comparative policy content analysis. *Safety Science*, 103, 260–269.
- Larsson, P., Dekker, S. W. A., & Tingvall, C. (2010). The need for a systems theory approach to road safety. Safety Science, 48(9), 1167–1174.
- McIlroy, R., Plant, K., Hoque, M., Wu, J., Kokwaro, G., Nam, V., & Stanton, N. (2019). Who is responsible for global road safety? A cross-cultural comparison of Actor Maps. *Accident Analysis and Prevention*, 122, 8–18. https://doi.org/10.1016/j.aap.2018.09.011
- Mintrom, M., & Norman, P. (2009). Policy entrepreneurship and policy change. *Policy Studies Journal*, 37(4), 649–667.
- Neveu, E., & Surdez, M. (Eds.). (2020). Globalizing issues. How claims, frames, and problems cross borders. Cham: Palgrave Macmillan.
- OECD/International Transport Forum. (2008). *Towards zero. Ambitious road safety targets and the safe system approach*. Paris: OECD Publishing.

OECD/International Transport Forum. (2016). Zero road deaths and serious injuries. Leading a paradigm shift to a safe system. Paris: OECD Publishing.

Rogers, E. (1962/1993). Diffusion of innovations. New York: Free Press.

Sabatier, P. (1998). The advocacy coalition framework: Revisions and relevance for Europe. *Journal of European Public Policy*, 5, 98–130.

Sabatier, P. A., & Weible, C. M. (2007). The Advocacy Coalition Framework: Innovations and clarifications. In P. A. Sabatier (Ed.), *Theories of the policy process* (2nd ed., pp. 189–220). Boulder: Westview Press.

Salmon, P. M., McClure, R., & Stanton, N. A. (2012). Road transport in drift? Applying contemporary systems thinking to road safety. Safety Science, 50(9), 1829–1838.

Shipan, C., & Volden, C. (2008). The mechanisms of policy diffusion. American Journal of Political Science, 52(4), 840–857.

Simmel, G. (1904). Fashion. International Quarterly, 10(1), 130-155.

Sørensen, E. (2016). Enhancing policy innovation by redesigning representative democracy. *Policy and Politics*, 44(2), 155–170.

Stockholm Declaration. (2020). Third Global Ministerial Conference on Road Safety: Achieving global goals 2030, Stockholm, 19–20 Feb 2020.

Stone, D. (1999). Learning lessons and transferring policy across time, space and disciplines. *Politics*, 19, 51–59.

Stone, D. (2012). Transfer and translation of policy. *Policy Studies*, 33(6), 483–499.

Swedish Government. (1997). Nollvisionen och det trafiksäkra samhället. Swedish Government Bill 1996/97:137 [Vision Zero and the road traffic safety society].

Swedish Parliament. (1997a). Swedish Parliament Protocol 1997/98:13. Decision on Vision Zero for road traffic safety.

Swedish Parliament. (1997b). Parliament Transport and Communication Committee Report 1997/98:TU4.

Trafikanalys (Swedish Transport Analysis). (2020). Vägtrafikskador 2019. Stockholm: Trafikanalys [Road Traffic Injuries 2019].

UNECA. (2011). African road safety action plan. Adopted by African Union Ministers of Transport in Addis Ababa in 2011 and African Union in 2012.

UNECE. (2010). *Improving Global Road Safety. Setting regional and national road traffic casualty reduction targets*. New York/Geneva: United Nations.

UNECE. (2012). United Nations Economic Commission for Europe Plan to implement the United Nations Decade of Action for Road Safety (2011–2020). ECE/TRANS/2012/4.

UNECE. (2015). UN Special Envoy for Road Safety, terms of reference. Geneva: UNECE.

UNECE. (2018). Global framework plan of action for road safety. Geneva: United Nations Road Safety Trust Fund.

UNECE. (2019). Road safety for all. Geneva: UNECE.

UNECE. (2020). UN Special Envoy Jean Todt and UNECE issue urgent call for new road safety paradigm for 2030. Collected from UNECE website, 30 Sept 2020. https://www.unece.org/info/ media/presscurrent-press-h/transport/2020/special-envoy-jean-todt-and-unece-issue-urgentcall-for-new-road-safety-paradigm-for-2030/doc.html

UNESCAP. (2019). Road safety in the Asia-Pacific region. Bangkok: UNESCAP.

United Nations. (1949). Geneva Convention on Road Traffic. Geneva: United Nations.

United Nations. (1968). Vienna Convention on Road Traffic. Geneva: United Nations.

United Nations. (2004). Improving road safety. A/RES 58/289. Geneva: United Nations.

United Nations. (2010). Improving road safety. A/RES 64/255. Geneva: United Nations.

United Nations. (2016). *Improving road safety. A/RES 70/260*. Geneva: United Nations.

United Nations. (2018). Improving road safety. A/72/L.48. Geneva: United Nations.

United Nations. (2020). Improving road safety. A/RES/74/299. Geneva: United Nations.

United Nations Road Safety Collaboration. (2020). The ten step plan for safer road infrastructure. Geneva: UNRSC.

Wegman, F. (2017). The future of road safety: A worldwide perspective. *IATSS Research*, 40, 66-71.

World Bank/GRSF. (2020). Guide for road safety opportunities and challenges: Low- and middle-income country profiles. Washington, DC: The World Bank.

World Health Organization (WHO). (2010). Global plan for the Decade of Action for Road Safety 2011–2020. Geneva: World Health Organization.

World Health Organization (WHO). (2018). Global status report on road safety 2018. Geneva: World Health Organization.

World Health Organization (WHO), & World Bank. (2004). World report on road traffic injury prevention. Geneva: World Health Organization.

World Resources Institute/World Bank. (2018). Sustainable & safe: A vision and guidance for zero road deaths. Washington, DC: WRI/World Bank.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

