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# A Governance Approach to Sustainable Mobility

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## Abstract

Sustainable mobility has become an important catchphrase in transportation policy and planning. Yet, at the same time, it is an inherently normative and political concept, which raises questions of governance. This chapter outlines a means to think about sustainability from a governance perspective. The term governance is conceptualized in the chapter as, on the one hand, a set of structures developed collectively to order and shape societal progress, and on the other hand, as a set of processes among diverse actors collectively engaged in shaping society. Drawing upon the works of political theorists and other writers in the field of governance and interpretive policy analysis, this chapter aims to (1) conceptualize governance in the context of the debate on sustainable mobility, and to (2) connect the socio-political context of Munich with these key ideas and concepts concerning governance. At the end of the chapter, the example of the governance of cycling promotion will be briefly elaborated in order to connect these key conceptual frames to an empirical context. The chapter closes with arguing for the importance of studying the dynamic processes through which various forms of governance are socially constituted. It also highlights how not only knowledge, but also values, beliefs and power, play a key role in governance processes for sustainable mobility.

## 1 Introduction

Sustainable mobility has become an important catchphrase in transportation policy and planning. Seldom do debates on specific measures or modes of transportation today fail to include the terms “sustainability” and/or “mobility.” This situation is due to the increasing need to address the negative environmental, social, and economic impacts of present mobility patterns (Banister 2005), as well as to develop new approaches to understanding what entails, shapes, and governs movement — not only of humans and goods but also of information (Urry 2007; Sheller et al. 2006). The popularity of the concept of sustainable mobility represents society’s growing awareness of these two phenomena. Nevertheless, when we try to define this concept, and especially when we attempt to operationalize it in everyday practice, it is often difficult to find the “right” or “best” answer. As Farrell et al. (2005) and Meadowcroft (2007) have observed, the concept of sustainability is inherently normative and political, thereby necessarily raising questions of governance. Governance here refers not only to the *structures* we develop to order and shape societal progress, but it also to a specific set of *processes*. Structures may be seen as institutions, rules, and norms shaping not only policy-making but also society and the economy, whereas processes describe how actors come together, engage in defining goals, and implement their visions of sustainable mobility in practice.

To consider these abstract concepts related to governance more directly in terms of everyday policy practice, this chapter outlines how a “governance approach” could help to operationalize a complex, often ambiguous term like sustainable mobility in both research and practice. It begins by outlining the concept of governance, in terms of structures and processes, and then describes the relevance of governance in developing an understanding of sustainable mobility. Following this, the case of cycling promotion in Munich is used to apply and connect the outlined ideas about a governance approach in an empirical context. The ultimate goal of this chapter is to demonstrate how a governance approach could benefit the analysis of sustainable mobility, particularly by revealing dynamic structures and processes that highlight the normative and political nature of the concept of sustainable mobility.

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## 2 The concept of governance

The term governance is often associated with positive social impact. For example, good governance is seen as reducing corruption; effectively incorporating public opinion; or improving the speed and efficiency of governmental policy and pro-

jects. Here, the structures or the institutions through which public policy is made, or through which change occurs, are emphasized. Governance in this sense has to do with the “built-in” ways of thinking and operating that shape our collective ability to make decisions and implement change. The term *institution* is important here, and is not the same thing as an organization per se. Rather, in the context of governance and political theory, an institution is a collection of norms, shared ideas, and rules for acting (both legal and inherent). In other words, it is those elements that can inhibit or enable collective action. March and Olsen (2006: 3) define an institution as

“a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources”, which can remain relatively stable despite individual turnover or preferences, or external events and circumstances”.

The concept of governance, following Pierre and Peters (2000), is often conceived in two ways. Governance, in this institutional sense, is viewed as specific *structures* that shape the way in which actors (individuals and groups) make decisions. However, these structures are not a natural occurrence. Rather, they are produced by and a product of humans, in their social interaction with each other. From a constructivist perspective, the term structure refers to the idea that how we engage in politics and decision-making is based on socially constructed and shared understandings or ways of doing. The social construction of meaning reflects how we, as collective and interacting actors, simultaneously call upon and reproduce ideas through everyday practices. As Anthony Giddens (1984: 2) explains:

“The basic domain of study of the social sciences ... is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time”.

Thus, the ways in which we engage in shaping and changing the social system in which we live (here seen as processes of governance) are not based on individual interests or attitudes, nor on a given world of structure implying a defined cause and action. Rather, “[i]n and through their activities agents reproduce the conditions that make these activities possible” (ibid.). We can see this pattern in, for example, an elected politician’s right to vote in a legislative body: he (or she) uses his (or her) position to influence policy, which is not simply a given but rather the product of a specific democratic system and voting process. Or we might see it in the planning of physical infrastructure, as administrative officials refer to their city’s traffic code and planning documents to sketch out and implement a measure, such as defining the width of a new street or the placement of bicycle lanes.

This definition of the social nature of governance also hints at the second way in which Pierre and Peters (2000) describe governance: in terms of process. In contrast to structure — although it is better to consider these terms as two different emphases in the study of governance rather than as two contrasting ideas — processes of governance describe how actors steer and coordinate action. In other words, how we govern relates to the dynamics of political debate (including defining the problem and solution) as well as policy- and decision-making. For example, new forms of governance arise as private and public actors interact in partnerships to carry out policy to build road infrastructure. Governance as process has more to do with the changing nature of decision-making, which, as many argue, is less centered on the authoritative action of governments and increasingly influenced by the practices of non-governmental actors. Recent examples of such non-governmental influences have included public protests, such as those against the construction of Stuttgart 21 in Germany; the activities of global philanthropic organizations such as the Bill and Melinda Gates Foundation in the United States; and, less transparently, the role of the private sector in shaping electric mobility policy in Germany.

Beyond considering governance as structure and process, many key thinkers in the field argue today that the ‘state’ (that is, the modern-day idea of a nation-state) must be a starting point for any discussion about governance. Although the sovereign nation-state has been the key institution governing both economy and society since the Peace Treaties of Westphalia in 1648, the last half-century has witnessed a significant shift in this regard owing largely to globalization and neo-liberal reform. Governed by ideas of deregulation and the free economic market, neo-liberalism has substantially altered the state’s historical position as the sole governing institution (Bevir 2009; Pierre, Peters 2000). This change can also be seen in the provision of infrastructure and services for modes of transportation, as Docherty and Shaw (2012) explain in their discussion of the governance of transportation policy in the United Kingdom.

In sum, national governments are no longer the only players governing the economy and society at large. The private sector, organized civil society, the media, and even new forms of governmental organization, such as the European Union or United Nations, are increasingly important players in processes of governance. Thus, a governance approach today must be rooted in (1) the changing role of the state, (2) the changing nature of institutions including social structures and norms, and (3) the changing processes through which the state interacts with other actors and governs or steers the direction of societal development (Meadowcroft 2007; Pierre, Peters 2000; Bevir 2009).

## 2.1 Relevance of the governance concept for sustainable mobility

Governance is a dynamic concept, as becomes readily apparent when we begin to analyze processes and structures of governance in a given context. Further, when applied in the analysis of political processes, they become meaningful and relevant to policy-making. In governance for sustainable mobility, actors identify new problems and solutions, form new policy, implement new measures, and expand and grow their coalitions in interaction with new actors. These are all important attributes in the politics of sustainable mobility, and they play an important role in actors' efforts to define the nature and direction of policy. As this section will argue, a governance approach can contribute to research on sustainable mobility by its ability to (1) identify and discuss how specific social, political, economic, and environmental institutions shape our understanding and identification of sustainable mobility; and (2) enable analysis of the processes through which we debate, contest, decide on, and implement the key ideas, concepts, and categorizations of sustainable mobility.

Sustainable mobility is often referred to, in both research and practice, as a static concept rather than as a dynamic, socially-constructed idea which is reproduced and transformed in practice. This more static understanding often derives from transportation studies, which tends to interpret the role of policy and planning as the provision of infrastructure and services for modes of transportation, as well as the organization of urban transport systems through concepts and ideas of traffic flow, bundling, routing and the separation of modes of transport. In everyday policy-making and practice though, sustainable mobility is not simply a fixed idea that must be implemented in a particular way. The term 'sustainability' often has little to do with the key ideas outlined in the Brundtland Report (*Our Common Future*) or with a specific quantifiable model for measuring the extent of sustainable mobility in a given urban area. Rather, it is a political concept, which is dynamic and changes over time as new actor constellations come to shape the debate. Policy-makers evoke specific narratives or stories to argue for and make sense of the key problems and policy issues they face, and sustainability is often a key term they call upon to label or make sense of specific issues. Scientific research such as models, or specific people such as experts or interest groups, shape the debate as they define sustainability in this way or that way. Knowledge, and relatedly, the power to define what 'the problem' is play a key role in policy-making. For example, academics and scientists involved in policy-making — whether presenting the results of a specific study to politicians at a City Council session or compiling a report commissioned by the local planning department — shed distinct light on

what sustainable mobility is or could be in practice. The concept is thus less tied to abstract ideas and more to the everyday push and pull of the policy process. In governance terms, decisions are based on dominant structures (such as economic and planning norms or cultural understandings of mobility) and normal, routinized processes of interaction, such as expert decision-making isolated from any form of public comment, a vote by elected officials in a council session, or a structured public debate over a project currently in progress. By studying these processes, we can reflect on both what sustainable mobility means as it is produced in practice and how these practices of decision-making and political input are structured. By reflecting on how specific arguments and ideas are accepted (or rejected) in public debate, we can address the power dynamics of governance. Is planning democratic? Are all stakeholders involved to an equal extent in shaping policy, or is there a clear imbalance of power and input? Whose “expert” input defines the terms of a given policy? What types of arguments do those involved acknowledge as legitimate?

Today, efforts to better understand the concept of sustainable mobility in the transportation sector often result in the establishment of indicator systems and other types of frameworks for measuring sustainable mobility as a fixed object or goal of policy. In such models, sustainable mobility is defined in “neutral” terms and there is no consideration of the term’s *construction* and *use* (Gudmundsson 2004). By referring to an indicator’s construction and use, Gudmundsson highlights the need to consider questions of governance. This includes the processes through which actors define and develop specific concepts, the forces (or structures) that shape how these definitions are made, the processes through which such definitions are used and the ways in which their use shapes and changes policy at large.

“This would require research ... into the construction and use of indicator systems more broadly. Among the questions for this research could be: How have existing indicator systems been established and which forces have shaped them? How are they used and by whom? To what extent have indicator systems made a difference in policy-making, and under which institutional circumstances has that been the case?” (Gudmundsson 2004: 213)

One further difficulty with defining a concept like sustainability in neutral terms is that the key ideas underlying the concept are usually developed by experts and are then (ideally) implemented, tested, or audited in specific settings by an entirely different set of actors. Here there is a large gap between the concept’s *construction* and its *use*, i.e., between the contexts in which actors develop key concepts in decision-making and those where the decisions are implemented. Although expertise provides a key role in organizing and developing the best solutions to everyday problems, it can become disconnected with the real world. In everyday policy

practice, politicians and local administrators, along with other actors, debate and decide on specific solutions in response to real-life problems. Although abstract concepts such as sustainable mobility can shed light on problems in relation to transportation and mobility, they are rarely reflected upon in everyday practice for the purpose of identifying problems. Rather, actors react to a complexity of societal and political processes, including increases in traffic accidents, weather patterns, and popular activism. Policy is thus established and implemented in real-life settings, and the term sustainability is often defined in terms of a given solution — for example, “X is sustainable” — rather than itself being a key factor in the creation of policy. Sustainability is thus often identified and incorporated into policy through these practitioners, who make the concept and policy at hand meaningful through their given skills, their knowledge, their lived experiences, and their interpretation of the world around them.

In sum, many researchers argue that the term sustainability should be understood as a process, rather than as a definition or foundation for policy thinking (see, for example, Meadowcroft 2007; Farrell et al. 2005; Vergragt et al. 2007). Consistent with this understanding, the concept of sustainable mobility should be seen as an approach that practitioners could utilize to steer society and to govern for sustainable development. Voß and Kemp (2006: 4) elaborate on this understanding:

“Sustainability cannot be translated into a blueprint or a defined end state from which criteria can be derived and unambiguous decisions taken to get there. Instead, it should be understood as a specific kind of problem framing that emphasizes the interconnectedness of different problems and scales, as well as the long-term and indirect effects of actions that result from it”.

Their approach to governance for sustainable development is a reflexive way to study sustainability. Here they argue that despite the need for a solidified, clear, operationalized term, in terms of indicators or other frameworks, the concept is, in reality, developed through the everyday pressures and problems that decision makers face. As a result, in actual practice, the sustainability of a given concept or set of goals often does not structure the debate. Rather, specific definitions and understandings of sustainability evolve *within* the debate, in the context of real-life policy-making, including its politics and its inherent definitional power struggles. This kind of problem framing is shaped by and dependent on the institutions, norms, and rules that actors utilize, as well as the constellation of actors involved in the debate and the socio-historical context in which policy is debated and defined. When specific arguments make sense (that is, when they fit within the problem framing of the debate), they tend to stick, become integrated into policy documents, and become a key element of planning (Hajer 1995). In Munich, this

pattern can be seen in the increasing promotion of cycling, its identification as a mode of transportation, and its integration into everyday policy practice.

## **2.2 Connecting Munich with a governance approach: The case of cycling**

To many policy-makers, practitioners, and cycling advocates, the bicycle is an environmentally friendly mode of transportation that should be promoted due to normative concerns related to environmental degradation, urban quality of life, public health, and climate change. The bicycle produces virtually no emissions when used, requires less physical space than other transportation modes for its use and storage, involves relatively low costs, and is a healthy form of “active” or human-powered mobility. As it is most often described as a mode of transportation, it has naturally become an object of transportation policy. In addition, its use is often described in relation to other modes of transportation, i.e., as an alternative to using private cars or public transportation.

In Munich, the promotion of cycling in public policy dates back to the 1980s (Koppen 2014). The postwar period (from 1945 until roughly the 1980s) is commonly referred to as the period of car-oriented planning (*die autogerechte Stadt*) in Munich. Car-oriented planning prioritized the organization of urban space for the flow and efficiency of motor vehicles at the expense of other modes of transportation (Schmucki 2001). As the environmental movement grew in Germany during the 1970s and 1980s, cycling was advocated at the grassroots level as an important, environmentally friendly, and emission-free mode of transportation. Yet, at the same time, urban cyclists were forced to share traffic lanes with vehicles or sidewalks with pedestrians, as the city often lacked the proper infrastructure or regulation for cycling in traffic. This limited their mobility and safety in traffic, and although some infrastructure for cycling existed, it was built only sporadically, and mostly in areas with leftover space and funds for bicycle paths. Everyday cyclists were labeled as “rambos” or “rowdies” in their interactions with users of other transportation modes. These cyclists were often described as reckless and dangerous, lacking basic morals or a proper understanding of traffic rules.

This situation began to slowly change in the 1980s, as Munich policy-makers identified cycling as a relevant object of planning. This was due in part to transport planners’ changing discourse. In relation to a growing environmental movement, two oil crises and an increasing recognition of the limits of car use in dense, urban centers, they began more strongly articulating for the promotion of alternative modes of transport. For the first time, policy-makers began to frame cycling as a



partial solution to problems of urban traffic and pollution. In the 1990s, plans for a citywide cycling route system were formally approved. Nevertheless, the choice of routes and their implementation in practice were highly contested. In many cases, the implementation of cycling routes did not limit the mobility of cars in the urban system in any way. In the 1990s, for example, after a two-way cycling path was implemented in the Leopold street in downtown Munich, it became politically controversial. The conservative party (particularly from the State of Bavaria) argued that it was unsafe, and it was eventually reversed in order to 'make cyclists safer' by essentially limiting their mobility. What could in part be seen is that the route had limited the free flow of motorized traffic and this was in particular what was controversial.

At the same time, the 1990s saw a larger shift in urban planning in Munich. Urban planners developed, in close relation with the public and other relevant stakeholders, an overarching policy document that would function as a mission statement for planning and policy in Munich. The "Perspective Munich" redesigned the engagement of transportation planners and other experts with the public in many ways (Koppen 2014). In the early 1990s, the Social Democrats in the City Council formed a coalition with the Green Party, the latter of who had strong agenda for the promotion of cycling. It was in the 2000s, though, that larger changes in policy for cycling took place. Here we see a number of key factors, that in relation to each other, influenced a larger shift in policy: (1) an increasing social acceptance for cycling; (2) new policy at the federal level, specifically the traffic code, that fostered the safety of cyclists in road traffic being implemented in the context of Munich; (3) a changing approach of the media, from being critical of policy to promote cycling to being critical of those policy which do not promote cycling enough or in the right way; (4) a changing structure of the local administration and new personnel (from 2008 onwards) directly responsible to promote cycling; and finally, (5) the development of new international partnerships, particularly the international recognition of cycling in Munich which took place from their hosting of the Velo-City Conference in 2007.

Although much has been done to promote cycling in Munich, policy remains highly contested among both politicians and the general public. Many of the key problems confronting cycling promotion are not due to a lack of political will, as all parties agree that it is important to encourage cycling. Rather, the key barriers for improving cycling infrastructure and the culture of cycling lie within the mobility system itself. This includes on the hand the institutional field and planning practices to encourage cycling and on the other hand the norms and practices of everyday mobility; two key elements of the mobility system. Many debates on cycling in Munich focus on whether, where, and how bicycles should be integrated into main traffic

arteries and axes. These streets, which usually carry the majority of urban traffic, function as key routes on which traffic is bundled and organized. Traffic arteries and axes function to improve the flow of traffic and relieve congestion as well as reduce traffic in neighborhood areas. However, in urban areas, housing is not necessarily restricted to low-traffic neighborhoods and is often found along key axes. In the postwar period, development of major traffic arteries was promoted as a means to improve traffic flow, and by the 1970s and 1980s, they were even more essential to reduce congestion, noise, and air pollution in residential neighborhoods. During this time, one-way streets were created throughout the city to further streamline traffic flow in neighborhoods.

In the 1980s, cycling was first written into transportation planning documents, albeit largely as a forgotten and unimportant mode of transportation. It was not taken into consideration in traffic calming measures, which during this period focused primarily on reducing traffic in neighborhoods rather than promoting alternative means of mobility, such as cycling. For example, cyclists were often hindered from free movement in neighborhood areas by the prevalence of one-way streets, which forced cyclists either to engage in circuitous travel or to walk their bicycles. The efficiency and speed of cycling were thus poorly exploited, and cycling, even though mentioned in policy as a solution for traffic problems, was overlooked among traffic calming measures. In 1997, changes in the national traffic code provided a framework by which advocates could push more directly for the opening of one-way streets to cyclists traveling in the opposite direction. Nevertheless, the transition of many streets is an arduous political process to this day. These streets, in a way, remain a remnant of the traffic calming measures of the 1980s.

When we talk about sustainability today in terms of cycling, we are no longer simply speaking of reconciling economic, environmental, and social interests. Rather, we are talking about a reflexive process of policy development based on a grounded, context-dependent understanding of the dynamics of policy itself. This includes the contexts in which specific policy issues are problematized, specific groups of actors come together, specific understandings of how to enable mobility are debated and defined, and key mechanisms for promoting sustainable mobility are debated, decided upon, and institutionalized in practice. Institutionalization here refers to the key rules, norms, and institutions of policy-making as well as how practitioners and citizens “do” policy and “live” mobility on an everyday basis.

### 3 Conclusion

Cycling promotion in Munich provides an interesting case study that sheds light on how governance plays out in practice. The city has adapted new approaches to planning for cycling, as described above, that have led to significant changes in how cycling is lived and experienced. Whereas 20, 30, or 40 years ago the transportation sector discussed movement in terms of *traffic*, today it is discussed in terms of *mobility*, thus shifting the focus from modes of transportation to ways of getting around. Nevertheless, although Munich can be called a good example of sustainability policy in the transportation sector, the case also reveals the inherent power of institutions and everyday norms in planning. In particular, ideas concerning what is sustainable are not fixed in documents and guidelines but are produced, reproduced, and transformed by politicians, by the local administration, by interest groups, and by activists in political processes of agenda setting, policy-making, and implementation. Thus, in practice, sustainability is more often implemented in the context of political power than, for example, in the idealized terminology of an agreed-upon document, such as the existing policy documents on cycling in Munich. As described above, the efforts to integrate cycling into main traffic arteries have demonstrated how powerful social, physical, and planning structures can limit approaches to cycling promotion. In this way, developments in Munich illustrate the dynamics between governance structures and everyday political processes and help us better understand the opportunities and limits of governance for sustainable mobility.

What insights emerge from this review of governance in Munich? By considering how the dynamic between actors' practices and key social structures shapes such actions, we can develop a better understanding of the opportunities for and limits of efforts to shape or steer the direction of planning and practice in the transportation sector today. One key insight offered by a governance approach to promoting sustainable mobility is that it allows for a clearer analysis and consideration of the social, historical, and systemic factors steering the direction of change. By highlighting those socially constituted ways of doing things, we can identify where knowledge, expertise, and rules are expressed or taken for granted, and we can reflect on how, if, and to what extent these need to be reconsidered or revised. Of course, a governance approach does not provide the right answers, nor does it provide fixed models of "good governance." It is up to politics — that is, the dynamic interaction of private-public partnerships, political debate, protests, public participation, and closed roundtable sessions — to decide on what should change. Nevertheless, by reflecting on the embedded social structures that shape not only planning practice and everyday mobility but also the processes of political

debate and decision-making—such as who is allowed to speak — these previously taken-for-granted or “neutral” categories are called into question and critically examined. The key question of integrating bicycle infrastructure in main traffic arteries is no longer based on whether cyclists can reach their destination quickly, whether other routes are available, or even whether accommodating cyclists affects the flow of car traffic. Rather, such debate on integration needs to assess why cycling is not in this location, why cyclists are here not safe, what the norms and practices are that e.g. maintain flow of traffic in urban areas, and *if* and how these ideas (e.g. commuting via the private car) align with key goals and visions for sustainable mobility.

Sustainable mobility, as Meadowcroft points out, deals with larger questions of values and beliefs. This means that some people’s definitions will prevail while those of others are silenced. Thus, it is not only important to consider *what* and *how* but also *why*. Who is defining sustainability and in what way — the media, academia, the public by referendum, or the private sector? What implications does this have for transportation planning and practice? As Meadowcroft (2007: 302; emphasis in original) eloquently elaborates:

“But who is to do this ‘steering’? In a fundamental sense, governance for sustainable development implies a process of ‘*societal self-steering*’: society as a whole is to be involved in the critical interrogation of existing practices, and to take up the conscious effort to bring about change. Thus it involves not only actions and policies to orient development along certain lines, but also the collective discussion and decision required to define those lines. Value choices — about the kind of society in which we want to live, about the kind of world we want to leave to posterity — lie at the heart of governance for sustainable development. At base, it is not a technical project, although technical expertise is essential, but a *political* project. For, while the concept indicates issues that should be of concern, *its practical bearing cannot be established independent of the concrete life circumstances of a particular society* and the needs, interests, values and aspirations of its members”.

In sum, a governance approach to sustainable mobility recognizes that efforts to realize this concept are inherently political, involving ongoing processes of definition, redefinition, and conflict. Nevertheless, it is by reflecting on the structures that shape such processes of definition and redefinition as well as on the nature of these processes themselves that we form a base from which to reflect on, critique, approve, or improve our governance practices, thereby critically assessing whether the direction in which we are going is where we truly want to go.

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