SPECIAL SECTION ON ROAD REPRESENTATION

Displaying Roads
Engineers as Cultural Actors—Introduction

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Abstract

We argue that road engineers—in the cases presented in the articles in this special section—were acting as cultural actors, playing a greater role than experts and especially policy makers. Even as they utilized technical information in cultural debates, road representation had huge symbolic value in driving the social and political discussions. However, once road experts used and accepted such political tools, they could not disconnect themselves from the political process, which determined success and failure in these projects.

Keywords

cultural debate, political feedback, road experts, road representation

This special section is devoted to road representation, that is, the visual display of roads beyond experts' milieus.[1] There are many good reasons to bring such an issue into the view of scholars of mobility, but a paramount reason, in our eyes, is the innovative character of the research on road representation. In the past three decades, scholars of car cultures have paid significant attention to the physical presence of large infrastructural systems such as highways and motorways, emphasizing the technical, as well as the social and cultural, roles of their main actors, namely, technicians and engineers, policy makers, and industrialists. At the same time, scholars have examined how those infrastructure networks exploited, impacted, and made political uses of social and territorial landscapes. We can even find here attempts to investigate the road issue well beyond—and even against—the effective presence of those artifacts.[2]

The three articles presented here all focus on the effort to display twentieth-century "modern" roads and motorways. Focused on European case studies,

the articles investigate the representation of roads in different political and social contexts, allowing readers a wider comparative approach, both diachronic and political. The common feature of these investigations is the explicit implementation of visual display of road projects and visions by experts and engineers. There have been a multitude of road representations made by writers, artists, filmmakers, media actors, users, and policy makers. Think of all the movies and books that have depicted and displayed roads as the core of their outcomes, from Jack Kerouac to Jan-Luc Godard.

In these articles, however, we have a different layer of promoters and displayers, that is, the same technocrats and experts who are also in charge of road planning and construction, and who have explicitly decided to tackle the issue of road representation directed to an audience of nonexperts. In this regard, we claim that this topic occupies a gray area that has not been deeply scrutinized by transport and mobility scholars, or by those engaged in media studies.

Each article shares an interest in presentation and exhibition, usually during the planning or development process, to show how different projects made use of, or responded to, images, maps, and drawings. In examining these efforts, the articles offer views on the way the road builders in twentieth-century Europe stepped into the social debate and actively contributed, *with cultural initiatives,* to the cultural agenda in which roads were negotiated, shaped, and defined. In other words, the representation of roads was a central part of the modernization process as developed by experts, and it must not be understood as a "neutral" presentation to the general public. The display and representation of roads was a fundamental step in positioning the debate. Thus, to some extent, the factual implementation of road networks was a possible, but not inevitable, target of such images and exhibitions. This means that road representations should be scrutinized as political, technocratic, and cultural manifestos, as efforts to reposition the public discussion, to reassure modernity enthusiasts, to encourage tepid supporters, and to convince the hesitant. Yet these representations were imaginary instruments in which the visual portrayal could, at the extreme, have no link with any real construction program.

In the first article, by David Peleman, we learn about two Belgian road exhibitions, one held in 1910 and the other in 1930, that were linked to international highway forums. Despite the twenty-year gap between those two events, the author suggests that a strong continuity can be found in a number of images from exposition guidebooks prepared by the same individual. From those common images it is possible to trace the consistent core concept of the exhibitions. The article demonstrates that even in the view of the technocrats and engineers in charge of the exhibitions, roads have always been more than simple material infrastructures that ensure movement. Rather, they exhibited and displayed them as meaningful artifacts with sociocultural effects, for example, as a "Via Vita," as one guidebook phrased it: a road bringing life to

people. In addition, with some remarkable theoretical contradictions, history was largely used to legitimate modernity.

The second article, by Kristina Skåden, analyses the efforts of German road developers to use a very large-scale map (sized nine by twelve meters) titled *Deutschlandkarte* for the purpose of Nazi motorizing politics. The map was prepared for the 1934 Permanent International Association of Road Congresses (PIARC) meeting to convey the importance of the German *Reichsautobahnen* and ultimately enhance the credibility of the Nazi regime. Skåden demonstrates how visuals, icons, and lines were "mobilized" by Nazi politics to construct a vision of the German autobahn that would unite people and Reich by transcending Germany's different regional customs and habits as well as the potential conflicts of nature, landscape, and technology. In addition, she analyzes the effects on mobility politics elsewhere when this map began to travel through media and to other places.

Finally, the third article, by Even Smith Wergeland, investigates how images from a planning group in Oslo during the 1960s provided a strategy for incorporating technocratic visions and trends circulating among international networks of urban planners. He analyzes the knowledge transfer in the formation of the 1965 *Transport Analysis* of Oslo, a comprehensive transport plan for that city, and the documents and visuals it included. At first, the visual representations of future Oslo, with its planned grid of urban motorways, were a key element in highlighting speed, urban efficiency, and modernity. But Wergeland shows how these visuals turned from a sign of a mobile, fluid, and efficient modernity to one of future threat. This happened when the visuals were seen and interpreted in connection with arising critiques such as Jane Jacobs's *Death and Life of Great American Cities* (1961), which defined traffic arteries not as vital, life-insuring infrastructure but as instruments of urban destruction. As a consequence, while the images were meant to secure support for the planned remaking of the city, eventually and ironically they soon fueled public antagonism toward its realization.

Despite the differences in viewpoints and theoretical stances of the authors, a key argument runs through all the articles: discourses about roads should be framed in a more general context, recognizing that road advocates used several arguments to legitimate road construction. To cut a long story short, legitimation processes rested on efficiency, speed, and modernity.

The discourses about road development were presented to wider audiences, rather than an inner circle of experts. Readers of the three articles will observe that the individuals promoting and advocating these activities rather early realized that the best way to achieve their goal was to boost the place of the road builders in wider society. Thus, conceptually and *visually* those experts sought—with some success—to place highways center stage in a cultural and political debate. Consequently, highways were quickly sublimated in a rarefied form, often with little or no link to the real object. Again, as al-

ready mentioned, the road gained an abstract dimension and a purer visual and conceptual representation. In an American context, the enormous public attention garnered by Norman Bel Geddes's 1939–1940 New York World's Fair exhibit, Futurama, and his subsequent book, *Magic Motorways,* illustrates the potential for such representations (which many engineers dismissed as improbably unrealistic) to nonetheless impact public and even policy discussions. Similarly, we find that road exhibitions, as analyzed by Peleman and Skåden, were among those "key places within the public sphere where this nurturing was realized," as Peleman wrote in his contribution. City planning maps and 3-D representations, argues Wergeland, were other forms of dissemination. Further arenas for such activity included leaflets, books, catalogs, cartography, and popular and professional journals.

The vast array of tools available to road promoters and highway advocates became an essential part of a larger apparatus devoted to road development and implementation. Far from being ancillary elements, the articles show how road representations mobilized material objects, making roads "objects not solely understood as form, function and meaning, but as something procedural, relational and performative."[3]

But beyond power and its role in visual outcome in the mobility realm, we would like to stress one overarching element of road representations—their ambiguity. While roads were propounded more and more through a visual discourse that aestheticized movement, which led to the portrayal of roads as a main outcome of the urban environment, those visualizations changed meaning according to the user and to the time of "consumption" of the images. There is little doubt concerning the deliberate efforts by the Nazi regime to manipulate—during the 1934 PIARC meeting—the German motorway program, which clearly allowed different meanings to be gained from the huge map they displayed. But the changeable meaning of representations were also apparent in Oslo in the 1960s, as the planners' images switched meaning rapidly, turning from the original expression as shiny representations of a golden tomorrow into evidence of a horrible future. It seems that once the technicians fully adopted political language, they could not escape its consequences, including multiple interpretations and resulting ambivalence. So, as Wergeland states in his article, "we need to search for analytical perspectives that enable us to interpret images both as tools of and as autonomous sources with their own inherit meanings and messages."

Some of the authors openly adopt Latour's actor-network theory. Skåden in particular embraces this concept, and while Wergeland does not specifically frame his article on that claim, he does confirm, following a large debate in art history, the concept that the images at the core of his article have agency. Our antennas are twitching a bit at these claims, in light of the significant debate within the history of technology community in recent decades that has rejected the possibility of technology as autonomous from society. Thomas

Hughes's concept of technological momentum might seem to lean this way, though most historians have adopted the position that human agency is the key issue. This discussion drives us to the tension existing between images as autonomous artifacts and the very situation that the authors describe, for example, the same images producing very different reactions in different audiences. Thus, the "users" of the information seem to be the key figures here. To be sure, the images matter a great deal—and the idea that their developers could not control the meaning viewers attached to them is very significant.

This leads to our last point, concerning the next steps that may be possible in terms of the mobility studies agenda. While some years ago one of us pointed out how experts played a role as policy makers, we wonder now if it is not appropriate to investigate technocrats as cultural actors too.[4] The articles presented here suggest this in a rather convincing way. These contributions can fruitfully prompt further investigations of technology *and* culture. But there may also be a wonderful opportunity to reframe the concept and the stereotypes of engineers—not as mere technocrats and executers, displaying their relevance as cultural actors, but as full participants in the much larger social debates.

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Notes

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2. Gijs Mom and Laurent Tissot, eds., *Road History: Planning, Building and Use* (Neuchâtel, Switzerland: Alphil, 2007.
3. Tim Cresswell, "Towards a Politics of Mobility," *Environment and Planning D: Society and Space* 28 no. 1 (2010): 17–31, esp. 20.
4. Bruce E. Seely, *Building the American Highway System: Engineers As Policy Makers* (Philadelphia: Temple University Press, 1987).