## Concrete Dreams: Infrastructure and the Regulation of Behavior in the Global Twentieth Century

Workshop held May 14–15, 2023 at the Max Kade Institute for Austrian-German-Swiss Studies at the University of Southern California (USC), Los Angeles. Co-sponsored by the GHI Washington, USC Dornsife Dean's Office, and USC's Center on Science, Technology, and Public Life. Conveners: Andreas Greiner (GHI), Jan Hansen (Humboldt University of Berlin/USC), and Paul Lerner (USC). Participants: Andrew Demshuk (American University, Washington), Anna-Christine Grant (Occidental College), Juliana Kei (University of Liverpool), Ognjen Kojanic (University of Cologne), Brigitte Le Normand (Maastricht University), Tambet Muide (Tartu University), Christoph Schimkowsky (University of Tokyo), Laura Isabel Serna (USC), Oliver Sukrow (Technical University, Vienna), Katherine Zubovich (University at Buffalo, SUNY).

This two-day workshop explored the history of attempts to influence human behavior through interventions in urban infrastructure. In the past, scholars have analyzed the emergence of techniques through which the modern state reacted to or managed social change and ultimately attempted to manipulate human actions. Government interventions such as laws, economic incentives, educational campaigns, or the enforcement of personal hygiene have received extensive scholarly attention, as have penal institutions, most famously the prison. However, we know little about how various actors sought to use the built environment to regulate behavior, that is, to direct the flow of people, enhance social interaction, reduce crime, encourage more environmentally sound choices, or promote individual physical or mental health. This gap is all the more surprising given that social engineering became a defining feature of the rise of the metropolis and the emergence of distinct spaces for work,

family, and leisure in both the capitalist and communist worlds in the twentieth century.

Addressing this gap, the Concrete Dreams workshop sought to understand how the built environment and architecture as techniques of governmentality have regulated life and behavior. The workshop also sought to historicize the belief that space and the built environment could shape human behavior. Focusing mostly on Europe and the United States in the twentieth century, the papers covered a wide range of topics, including the construction and utilization of various infrastructures such as transportation systems, mining pits, utility networks, and housing developments, as well as the domestic infrastructure of single-family homes. Allowing for comparisons across time and space and rendering transnational currents visible, each of the papers revolved around questions including: Which normative assumptions are designed into the built environment? Who has the power to make and unmake decisions about human behavior, in terms of ideology, but also in terms of design and building? What are the roles of state and commercial actors, architects, and social reformers in these processes? How did users – or those imagined as users – react to and interact with infrastructure? What, finally, were and are the ongoing environmental consequences of these schemes?

After opening remarks by Paul Lerner, Katherine Zubovich addressed some of these questions in her keynote lecture on high-rise architecture in Stalinist Moscow. By examining the planning and (partial) construction of seven skyscrapers in the Soviet capital before Stalin's death in 1953, Zubovich eloquently highlighted high-rise architecture in Moscow as an extreme case of attempting to shape human behavior. Not only did the Soviet leadership envision the city as a vital site of surveillance, but they also aimed to instill specific values in the people and make them concrete. In her lecture, Zubovich offered a number of novel perspectives on Moscow's

Stalinist transformation, discussing the eviction and displacement of Muscovites to the city's outskirts (where they struggled to adapt to country life), the employment of forced labor, and the many complaint letters written by tenants. Zubovich's discussion of high-rise architecture – clearly inspired by American towers but strictly dissociated from them in official discourse – also highlighted how attempts to shape the urban environment transcended the political and ideological divides of the Cold War.

Andrew Demshuk opened Panel 1 on "Socialist and Post-Socialist Landscape and Environment" with a paper on openpit mining in the German Democratic Republic. He outlined the social and economic consequences these coalfields had on the Leipzig region, causing air and water pollution, the creation of "moonscapes," and the dislocation of villages to seemingly modern high-rise districts. Addressing official plans to tackle these problems in the 1980s, Demshuk highlighted one important aspect inherent to many largescale infrastructure projects: long-term planning. Officials projected the eventual transformation of mining pits into recreational lakes but operated the mines largely heedless of this potential future, leaving the burden of dealing with environmental consequences to future generations. Brigitte Le Normand's presentation focused on urban planning in Belgrade from c. 1945 to 1970. Placing Yugoslav reconstruction in the broader history of social engineering through urban planning, she demonstrated, firstly, that urban infrastructure was meant to influence social behaviors and transform peasants into socialist citizens. Secondly, she emphasized that the plans for reconstruction of Belgrade's city center betrayed the influence of Le Corbusier, thus again highlighting the circulation of concepts and ideas in a transnational sphere. The panel's concluding paper by Ognjen Kojanic also tackled urban transformation in Belgrade, but from a different angle: scrutinizing the Pančevo Marshes outside of the city, he showed how the

Agricultural Combine Belgrade created and developed a suburban neighborhood out of a mostly uninhabited area. Urban development went hand in hand with raising the standards of living of the new settlers through apartments enabling new patterns of consumption and hygiene. The new inhabitants, however, as Kojanic also revealed, were not easily transformed into urban residents and retained some of the practices of rural living.

The second panel, "Urban Planning, Rural Retreats, and Behavior Regulation" was opened by Juliana Kei with a presentation on the origins of the "built environment" concept. Focusing on discussions among British urban planners and architects in the 1960s, she illuminated the evolution of the term and its role in underscoring the importance of building design and town planning on a national scale. Kei argued the initial usage of the term was motivated by the belief that altering urban layouts could wield an influence on society and could also be interpreted as an effort to fortify the linkages between urban planning and social science research. Oliver Sukrow's paper focused on resorts and spas in the post-World War II era, a period often overshadowed by the 19th century, the golden age of spa culture. As Sukrow detailed, health resorts adapted to the new phenomenon of mass tourism and resorts in Central and Eastern Europe were reimagined as places of fitness and active vacations. From this perspective, amenities such as bathhouses, pools, and water pipes emerge as elements of the built environment designed to empower guests/patients in the pursuit of good health and to become better citizens. It also became clear in Sukrow's talk that spas, located outside of populated areas, were understood as a remedy for the allegedly immoral life and deleterious influence of the urban environment. Anna-Christine Grant drew a similar conclusion in her paper on penitentiary agricultural colonies, comparing the Mettray colony, founded in 1839 near the French city of Tours, and the Gorky colony, founded in 1920 near Poltava, Ukraine. In both places, troublesome youth from urban spaces were to be confined and monitored in rural settings to elicit moral betterment. The structure and layout of both colonies were intended to bolster this effort through distinct spatial arrangements.

Panel 3, "Urban Flow: Mobility, Consumption, and Lived Experience" was opened by co-convener Jan Hansen with a paper on how electric meters shaped consumer behavior in interwar Los Angeles. By shedding light on the prevalent issue of "electricity theft" in the early twentieth century, Hansen introduced an innovative perspective on urban electrification. He showed that utility engineers relied significantly on consumers for critical tasks like meter reading, and that only after 1920 did this approach give way to more formalized meter-handling procedures. Moreover, his presentation demonstrated how this shift reflected a purposeful effort to shape behavior through interventions in the built environment. The decision to relocate meters from within houses to their exterior walls was one such disciplinary tactic, he argued, aimed at dissuading users from tampering with their electrical setups. Likewise focusing on Los Angeles, Laura Isabel Serna zoomed into the microcosm of domestic space and its furnishing. In early-twentiethcentury Southern California, Mexican immigrants were considered difficult to assimilate. Targeting Mexican women, reformers developed a model home in a boxcar, simulating a domestic environment in which immigrant women were taught sewing, cooking, and sanitation, in this way also being exposed to the English language. As Serna argued, the model boxcar home aimed to Americanize immigrant women and make them participate in mainstream social life. The third paper in this panel, by Christoph Schimkowsky, examined transport infrastructure in Tokyo from the 1880s through the present. Until the mid-twentieth cen-

tury, he observed, tramway usage was marked by disorderly and dangerous behavior as passengers frequently boarded and disembarked between stops. Only in the 1960s, when it became clear that transport capacity had reached its limit, did proper queuing become more common. This reinterpretation of proper behavior in the public, Schimkowsky argued, went hand in hand with a broader renegotiation of what the public and society meant. He thus found that official governance entailed both "governing for infrastructure" making users fit into the system, e.g. through teaching proper codes of conduct - as well as "governing through infrastructure" – making users adapt their behavior through changes in the layout and arrangement of stations and carriages. In the fourth and final paper of this panel, Tambet Muide explored the roots of the current dominance of cars in Tallinn and Estonians' preference for driving over public transportation. The boom of car ownership after the collapse of the Soviet Union, Muide argued, was not solely a result of newly awakened capitalist dreams of ownership but also of the previous decades of infrastructure planning. While mobility was already very car-centered in the Soviet era, the administration struggled to develop a scheme for rapid tramways, which was conceptualized in the early 1980s but barely implemented before eventually being abandoned in the 2000s. Pathways that had been marked out as future train routes instead became parkways.

After these three panels, closing remarks by co-convener Andreas Greiner and an ensuing discussion highlighted the common themes and surprising areas of continuity and similarity across geographical and political divides. One key topic that emerged was the differentiation between the urban and the rural. Multiple papers showed how the countryside was conceptualized as a counterbalance to allegedly morally corrosive and insalubrious urban landscapes, but also reminded us that the divides between urban and

rural were seldom clear cut and were often reimagined and reconfigured. The new inhabitants of the Pančevo Marshes, for instance, kept farm animals in their backyards, a behavior that was strongly discouraged and even punished. A second recurring theme was the question of transfers. Several case studies convincingly demonstrated that similar processes and debates occurred in different systems, whether communist or capitalist. They also indicate urban planners on both sides of the Iron Curtain transferred practices and drew on similar sources. A third recurring theme was the question of who engaged with the built environment and for what purpose. Architects, state officials, and designers were the central actors in most of the papers, but users also mattered whether they accepted the provided arrangements, criticized them, or subverted them. Connected to this issue was the question of the agency of the built environment itself. The organization of the built environment may be a conduit for translating planning concepts into patterns of human behavior, yet new insights might also be gained from considering how objects and spatial configurations also wield agency. Participants also asked how users reacted to intended and unintended consequences and managed their disappointment when systems failed. Again and again, the papers demonstrated that official efforts were not always successful. Often, state authorities and planning experts overestimated their abilities, misjudged the responses of affected populations, or failed to surmount environmental obstacles to their visions.

As a whole, the Concrete Dreams workshop successfully brought histories of human bevavior and psychology into dialogue with the study of the built environment. Its contributors brought diverse perspectives to a topic that had been treated mostly by scholars of urban planning, architecture, and infrastructure, and seldom analyzed in transnational context. Ultimately, this workshop was just a beginning, and

ideally opens the door to further cross-disciplinary conversations at the intersection of behavior regulation and urban infrastructure, addressing their entanglement with imperial and post-colonial projects in a world on the brink of environmental catastrophe.

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