

About Bridges

Hannah M. Strothmann

Bridges as symbols for conciliation – a commonplace metaphor. Yet, the image and the straightforward concept of conciliating two parties still emits a persuasive aura. Two isolated grounds can be linked with a simple beam: This perceivable characteristic of the bridge as a connective element vaulting obstacles, voids or gaps, establishes the idea of bridges as conciliating entities within our society. With scales dwarfing their immediate surroundings, bridges both visually and psychologically emerge as focal points of interaction and exchange in the built environment. Here, bridges turn into important references to identity building processes.

Across: the passage

Before the invention of bridges opportunities for crossing were either restricted to specific weather conditions or to boats as mobile means of transportation. The moment humans created a permanent and secure passage marks the beginning of the history of bridges. As permanent structures, bridges enable straightforward, linear movement without detours; *bridges are built for movement, not for pausing*. The earliest examples of bridges were most likely made out of a simple wooden beam, a log resting on two opposite points. As technology advances, spans extend to longer distan-

ces; the load-bearing system of a single beam is replaced by stone-arch constructions, sometimes combined with a wooden secondary structure. With the advancement of iron making during the Industrial Revolution, steel is introduced as a new mass-produced material to the building industry. Engineers and designers begin to develop delicate and comparatively light load-bearing steel structures; the continuously increasing structural complexity enables even longer spans, giving access to new territory. As new physical connections, bridges provide the possibility for interaction between people and mutual exchange of knowledge and goods. *Bridges allow for movement, not only physically, but also socially*: Howrah Bridge can serve as case study showing the integrative capacity of bridges. Opened in 1943, it links Kolkata, the former capital of colonial British India, with Howrah, a city emerging out of villages already existing long before the British had conquered the land. As new administrative center of British India, Kolkata was built in the swamp lands on the eastern bank of the Hooghly river; yet, it remained dependent on the connection to its neighboring city: Howrah Station, situated right next to the Bridge on the western shore, served as the single connection between the metropolitan region and the rest of the country. Resources, goods, people and

army forces could only be brought into Kolkata via Howrah Bridge. With half a million pedestrians crossing everyday, Howrah Bridge is now considered to be one of the most frequented bridges in the world. Newcomers, travelers and goods: all arrive at Howrah Station; most move on to cross Howrah Bridge on the lookout for a job in Kolkata. The symbol of colonial control has been turned into a symbol for a step up on the social ladder, the passage itself implying a promise of future prosperity.

Let's shift our focus to Mostar, a city in Bosnia and Herzegovina which derives its name from the word "most", Bosnian for "bridge". Stari Most, an old stone-arch bridge built during the Ottoman Empire had for centuries been the major landmark of the city before being completely destroyed during the Croat-Bosniak war. Even though the destruction was in part strategically targeted at a central element of infrastructure, it was primarily a symbolic act of cultural destruction. *Bridges can be perceived as key elements constructing a collective identity.* After the war ended, efforts were concentrated on reconstructing Stari Most in order to bring people together again. Yet, the ethical division among the local communities, still traumatized by the war, is prevalent. While considerable effort and international capital was directed towards rebuilding the bridge, the people of Mostar were not actively involved in the process, what can be seen as a failure in a potential reconciliatory process between the population of both shores¹.

Beside: the shore

A bridge cannot be seen without its context. Its existence depends on the two sides it is connecting. So let's look at the shore: As a place of crossing, bridges turn into hubs with synergetic effects on its surrounding area and activities, triggering further city development. Hence, it is not only a metaphor when Marshall McLuhan refers to bridges as an early form of communication². Preceding the days of electronic correspondence, a physical connection was the precondition for communication, as

news and mail were delivered by messengers on foot or horse. Bridges allow information to take the shortest and most direct route, accelerating the velocity of communication. While this leads to closer social, economic and political ties across the shores, furthering the propagation of knowledge and spread of information, it also creates the condition for power and control to be exerted from one side onto the other. Being part of a larger infrastructural system, *bridges form the logistics of space and power.* As McLuhan points out, the Romans made use of bridges as means to establish control over the lands and people they conquered. Governing and organizing an empire required that news and orders could be transmitted within a secure infrastructure. As part of large scale infrastructure programs, bridges can also serve to deliberately separate neighborhoods from one another or, in fact, exclude certain communities. The site of a newly planned bridge within a city is often already occupied. During the planning process, questions of relocation and displacement are entangled in the discussion about integrating new neighborhoods on the other shore. In fact, many cities built along rivers often made use of this natural division from early on: whereas one side of the river is preserved for the clean business district and hence the wealthier middle and upper class, the dirty industry is kept on the other shore: cheap ground affordable for the precariously living working class. Bridges built due to economic reasons, as city growth is limited and trade should become simpler, turn into links between these remote two worlds while at the same time manifesting the division. This can be observed in Howrah / Kolkata as well as in New York, where Brooklyn Bridge, much like Howrah Bridge, connects the business district of Manhattan with Brooklyn on Long Island, a neighborhood that was once considered home of the working class. Brooklyn Bridge provided Brooklynites with the opportunity to easily commute to work in

¹ Charlesworth, Esther, "Mostar – reconstruction as reconciliation." *In Architects without frontiers: war, reconstruction and design responsibility* (Esther Charlesworth) (Oxford: Architectural Press, 2006): 99-113

² McLuhan, Marshall, *Understanding Media: the Extensions of Man.* (Cambridge: MIT Press, 1994), 89f.

⁴“Eichbaumoper,” raumlabor, accessed November 20, 2018, <http://raumlabor.net/eichbaumoper/>.

³ Winner, Langdon, “Do Artifacts have Politics?” *Daedalus*, Vol. 109, No. 1, Modern Technology: Problem or Opportunity? (Winter, 1980): 124f.

⁵ Francesco Garutti sheds light on the controversially disputed example of the New York Parkway bridges in his research “*Can Design Be Devious*”. Canadian Centre for Architecture & Francesco Garutti, „Can Design Be Devious?” iBooks, <https://itunes.apple.com/de/book/can-design-be-devi-ous/id1184153702?mt=11>.

Manhattan, whereas Manhattan dwellers were given the possibility to easily access Long Island for recreation.

The Long Island Parkway bridges provide another controversially disputed example of bridges as social agents: initiated in the 1940s by New York’s mayor at that time, they were built to make areas designed for recreational use accessible. With their low height, however, the overpasses encouraged the use of cars, while keeping tall busses, and hence public transportation, off the road³. Langdon Winner argues in his essay “Do Artifacts Have Politics” that these bridges “embody a systematic social inequality and are a “way of engineering relationships among people.”

Underneath: the river

What happens to the space below? After the construction of bridges as linear passages crossing over the obstacle, the space underneath is often left out of sight. The former active areas along the riverfront are slowly neglected. Where boats once provided the opportunity for crossing, there is no longer any need to go down to the river. Valleys as formerly active places of exchange are not necessarily entered anymore by traders and travelers and are rather perceived as an idyllic stage setting of the in-between state of the passage. Building a bridge can, in reverse, serve as a measure to cover sceneries that are neither preferred to be looked at from above, nor considered to be worth noticing, or even passing through. *Bridges can be focal points with a blinder effect*. The new straightforward movement above leaves the space below deserted. In fact, places beneath bridges are often perceived as ambiguous spaces: out of sight from those at the top of the bridge, they appear to be out of control of the public eye. Yet it is this ambiguity of the “underbridge” as an in-between state that can allow for subversive action. “Eichbaumoper”, a project by Raumlabor in 2009, is an opera staged in the in-between space of a metro station which itself is located underneath major highway interchange bridges⁴. Formerly

seen as division and so-called “Nicht-Ort“, the collective re-enactment of the space in-between gave way to develop another perception of the place, and hence, to establish a new identity.

Although the river may have moved out of focus, it has not lost its symbolic importance. Rivers as markers of border lines transform bridges into fragile infrastructures of possible border crossings. During the Cold War’s internal division of Germany, former central inner city bridges, like Oberbaumbrücke in Berlin, turned into highly secured military zones. *Bridges can turn into causes of friction*. Referring again to the example of Stari Most, bridges are the first military targets to be destroyed in wartime.

The history of bridges is not only a peaceful one of conciliation but also one of power and domination: dominating nature as well as dominating people. It is apparent, that as in many urban or infrastructural projects, the process of building bridges entails topographical and structural concerns as well as intentions regarding the formation of societies, their social status and multiple ethnicities. Bridges are then not only engineered objects, but elements within and emerging out of society, and as such shaped by politics. Yet, the relation between politics and the built environment is more complex than described by Winner in the case of the Long Island parkway bridges. As Francesco Garutti points out: to directly derive political objectives from a built artefact may prove to be as misleading as the assumption it is a neutral object⁵.

Questioning the commonplace metaphor of bridges as conciliating entities may lead to a better understanding of how society and its built environment is continuously formed and reshaped by the shift of power and its subsequent reconstitution of society. Bridges are not one-dimensional metaphors, but structures as complex as the social identities they embody.

Hannah Maren Strothmann studied architecture, physics and philosophy at the University of Arts in Berlin, the University of Illinois in Chicago and the University of Konstanz. She has worked as a student assistant to the chair of Art History and Cultural Studies with Prof. Dr. Susanne Hauser and to the chair of History and Theory of Architecture with Prof. Dr. Michael Bollé. She worked as an editor for PROTOCOL magazine and for Kuehn Malvezzi Architects in Berlin. She is currently a Curatorial Intern at the CCA (Centre for Canadian Architecture) in Montréal.

Her interest in bridges dates back to a research project in collaboration with Julius Titze on the Howrah Bridge. The project was a winner of the Paul-and-Margot-Baumgarten Prize in 2016 and resulted in a two-channel video installation which has been exhibited at the 31. European Media Art Festival and at the Rundgang 2017 at the University of Arts Berlin.