

RIVERS IN HISTORY: DESIGNING AND CONCEIVING WATERWAYS IN EUROPE AND NORTH AMERICA

Conference at the GHI, December 4–7, 2003. Conveners: Christof Mauch (GHI), Thomas Zeller (GHI/ University of Maryland). Co-sponsored by the Center for Historical Studies, University of Maryland, College Park and the GHI. Participants: Isabelle Backouche (Ecole des Hautes Etudes en Sciences Sociales, Paris), Wendy Bigler (Arizona State University), David Blackburn (Harvard University), Charles Closmann (GHI), Timothy Collins (Carnegie Mellon University), David Ekbladh (SAIS, Johns Hopkins University), Jacky Girel (Joseph Fourier University, Grenoble), Elmar Henrich (York University, Toronto), Uta Hasenöhl (Wissenschaftszentrum Berlin), Elmar Henrich (York University, Toronto), Steven Hoelscher (University of Texas, Austin), Eva Jakobsson (Stavanger University College, Norway), Tom Lekan (University of South Carolina), Vera Lind (GHI), Patrick Malone (Brown University), Meredith McKittrick (Georgetown University), Bernhard Müller (Institut für ökologische Raumentwicklung, Dresden), Edward K. Muller (University of Pittsburgh), David Neufeld (Parks Canada, Western Service Center), Harold L. Platt (Loyola University of Chicago), Guido Poliwoda (University of Bern), Martin Reuss (U.S. Army Corps of Engineers), Dan Ringrose (Minot State University), Francisco Jorge Rodríguez (European Common Law Institute, Murcia, Spain), Helena Ruotsala (University of Turku), Eva-Maria Stolberg (University of Bonn), Joel A. Tarr (Carnegie Mellon University), Erik Törnlund (Umea University, Sweden), Christine von Oertzen (GHI), Dorothy Zeisler-Vralsted (University of Wisconsin, La Crosse), Frank Zelko (GHI).

Rivers have served different purposes, had different social functions, and have been assigned different cultural meanings over the course of time. Fear and control, individual submission and professional exuberance have been hallmarks of the shared history of humans and rivers. European and North American societies have come up with a variety of answers to economic and environmental questions posed by river use; for example, questions about fishing, log driving, water supply, and flood control. This international and interdisciplinary conference brought together a number of scholars working on these issues. While often seen as a backdrop to human development, rivers have in fact played an important role in human history, influencing the location of cities, causing devastation through floods, or merely generating drinking water. The conference aimed at obtaining a clearer picture of the ways in which humans and rivers have interacted by comparing the findings of histo-

rians of technology, the environment, and culture, as well as of anthropologists and geographers.

The conference began with a keynote address by David Blackbourn, which was held at the University of Maryland, College Park and co-sponsored by the University's Center for Historical Studies. James F. Harris, Dean of the College of Arts and Humanities, welcomed the conference participants to campus, while Arthur Eckstein, Director of the Center for Historical Studies, spoke on behalf of the Center. In his speech "Time is a Violent Torrent: Constructing and Reconstructing Rivers in Modern Germany," Blackbourn introduced the topic of the conference by examining a few case studies, including the remaking of the Oder in the eighteenth century under Frederick the Great. Blackbourn noted that the construction of a new landscape went hand in hand with the construction of the myth of "taming" the river. When writing river histories, Blackbourn concluded, historians are well advised to avoid a narrative of benign modernization as well as a narrative of decline and disaster. "There is no baseline from which to measure a 'lost' natural world," Blackbourn insisted. However, it is still possible for historians to register processes of cumulative degradation. "Paradise lost," he concluded, "is an agreeable human myth, but it is a myth all the same."

The rest of the conference was held at the German Historical Institute. In a methodologically rich survey of the field, Eva Jakobsson asked, "How do Historians of Technology and Environmental Historians Conceive the Harnessed River?" She categorized the literature under rubrics such as "The Exterminated River" and "The Conquered River," and traced the influences of Richard White's seminal "The Organic Machine," a study of the Columbia River in the Northwestern United States, on other historians. She pointed out that despite White's efforts to overcome the nature/culture dichotomy in favor of a larger continuum, historians are still wrestling with these issues, and for good reason. In the end, Jakobsson asked historians to look beyond rivers and see them as parts of larger water systems.

In her contribution "Cultural and Technological Responses to Dryland River Variability," Wendy Bigler contrasted the management of the Salt River by the Akimel O'odham (Pima Indians) to that of the city of Phoenix today. While flexibility and mobility marked the Akimel O'odham's response to the river, the city of Phoenix has almost obliterated the river; most Phoenix residents today are not even aware that a river used to flow through the city. Bigler pointed out that the Native Americans quite skillfully and profoundly adapted their lives and livelihoods to the river, but obviously to a lesser degree than later inhabitants of the region.

The second panel, "Early Modern Cities," contrasted case studies of river management in Italy, Spain, and France. Elmar Henrich presented "Negotiating the Serchio: An Early Modern River System between Conflict and Cooperation." He highlighted the conflicts over resources such as fishing and transportation possibilities offered by the Serchio, a river in northwest Tuscany, and analyzed the power relationships between villagers and representatives of the Lucchese, Medici, and Estense territories. Among the most useful sources for Henrich's research were legal documents and complaints by law enforcers, toll collectors, and executors, which he analyzed regarding their statements on river usage and river conflicts. Francisco Jorge Rodríguez examined the different ways in which the city of Murcia tried to control the Segura river in his paper "The Domestication of a Terrible River: The Model of the Segura River and the City of Murcia." He paid particular attention to ordinances and institutional frameworks for addressing riparian conflicts, and underlined the sustainable character of the local irrigation system, which has been in place for some one thousand years. Murcia offers a vivid example of a legal superstructure that has been governing usage of an urban waterway and mediating conflicts for many centuries, and Rodríguez underscored the endurance of this waterboard. In her presentation "From a Parisian River to a National Waterway: The Changes of the Social Functions of the Seine River (1750–1850)," Isabelle Backouche argued that Paris gradually turned its back on the Seine with embankments, railways, and roads. For Backouche, these changes amounted to a "vulgarization of the river-space" in the city by softening the physical boundary which the Seine had earlier represented. Riverine spaces mattered less and less to the city and its bourgeoisie. In her paper, she stressed that this transformation was not the result of concerted town planning, but rather evolved through the reorganization of practices *on* the river and the interventions in river design.

The two papers in the panel "Urban Rivers and Canals" dealt with case studies from the United States. Patrick Malone presented a paper entitled "Surplus Water in Lowell: Engineering the Merrimack River for Profit." Malone showed how the availability of surplus water in nineteenth-century Lowell, Massachusetts, provided an important advantage for Lowell as it competed with other growing textile centers in New England. He detailed how the "Proprietors of Locks and Canals" became a private service company, selling water to the town's industrialists. The utility's managers were opposed to the "waste" of water and therefore objected to fishways, the lack of which greatly impeded the downstream and upstream movement of fish. Edward K. Muller, Joel A. Tarr, and Timothy Collins examined two centuries of change in "Pittsburgh Rivers: From Urban Industrial Infrastructure to Environmental Infrastructure."

The Allegheny, Monongahela, and Ohio Rivers were profoundly changed in the half-century after 1870, turning them into “industrial infrastructures—engineered and utilitarian.” Progressive elites tried to refashion the rivers, often unsuccessfully. For example, a 1911 plan for Pittsburgh by the landscape architect Frederick Law Olmsted, Jr. lamented the dilapidated condition of downtown riverfront lands. Olmsted’s proposals for pedestrian walkways, lookouts, and park development were never realized. Only in the last few years has the city rediscovered its river, as the “panoramic aesthetic” is now seen as both pleasing and economically useful. Pittsburgh’s recently opened Convention Center, unlike its predecessor, no longer turns its back on the river.

“Risk and Disaster” was the topic of the fourth panel. Guido Poliwođa examined “Disaster Management and the Social Response to Catastrophic Floods: The Example of Saxony (1784–1845).” Poliwođa detailed the Saxon state’s responses to a flood catastrophe in 1784 on the Elbe in the form of bureaucratic and technological infrastructures. Locals were involved in the new systematic river management by measuring the river and reporting unusual activities to authorities in an example of spatially distributed state power in the early modern era. Bernhard Müller argued that the same river’s floods of 2002 were not simply a natural catastrophe, but also the result of human intervention. Müller pointed out how flash floods from the uplands and mountains combined with slow swell floods of the Vltava River (Moldau) to cause major damage. Previous efforts to exclude floodplains from human development had often been ignored in the 1990s, thus increasing the material damage during the 2002 floods. Risk assessment and zoning are therefore necessary to prevent future damage.

In a panel entitled “Imperial Rivers,” Eva Maria Stolberg and Dorothy Zeisler-Vralsted discussed changing notions and roles of two major rivers, the Volga and the Mississippi. Stolberg (who unfortunately could not attend the conference herself, but whose paper had been submitted to all participants before the meeting) emphasized the socio-cultural role of the Volga as a border of friction and conflict between different ethnic groups. The politics of “russification” and xenophobia were the main factors that contributed to social instability in the Volga region. Stolberg emphasized that the Russians, the Tartars, and the Volga Germans who inhabited the river valley each had their own notions of the Volga. In the mind of Russian intellectuals, such as Trotsky, the anti-autocratic upheavals that took place in the Volga region symbolized the rejuvenation of the Russian nation. For the Tartars, who traditionally dominated trade on the river, the Volga was a symbol of intercultural exchange between the worlds of Islam and Christianity. Finally, the Germans, who dominated

agriculture, identified the landscape of the Volga with notions of German nationalism.

In her comparative paper on the Mississippi and the Volga, titled "Engineering Rivers," Dorothy Zeisler-Vralsted analyzed the shared traditions and common developments of the two rivers. According to Zeisler-Vralsted, both the Mississippi and the Volga served as major transportation arteries, both were idealized through art and literature, both were the sites of a thriving tourist industry, and both underwent large-scale transformation during the era of industrial growth. Despite considerable pollution and heavy development, idealized views of the two rivers have persisted throughout Russian and American history. One of the central questions of Zeisler-Vralsted's paper concerned the fact that the outcome of river engineering was very similar in Russia and the United States, even though the political and economic systems of the two countries were different. She argued that by the 1930s, despite different models of local participation ("top-down" decision-making in the Soviet Union vs. engagement of local actors in the United States), Americans realized that the adoption of large-scale water projects required a large federal government role. Furthermore, the two countries "shared similar views toward modernization and industrial growth and the potential utopias that could result."

In a panel on "Nordic Rivers," David Neufeld, Helena Ruotsala, and Erik Törnlund discussed the history of "wild rivers" in Canada and Scandinavia. According to David Neufeld's presentation "People of the River," the Yukon River has been a central and unifying element in the world of the Athapaskan people of Canada and Alaska. Throughout history, the Athapaskan people have drawn subsistence from the river, they have applied meaning to it, and they have established spiritual relationships with rivers and their natural surroundings. Neufeld demonstrated how the Athapaskan languages set stories in a specific riparian geography. He explained how these place-based stories have for centuries been the mnemonics for a "complex value system and moral order." Thus rivers have provided a framework not only for topographic orientation, but also for the moral and spiritual guidance of the Athapaskan people.

In her paper "Rivers in the North—Symbols of Free Nature or only for Energy Production?" Helena Ruotsala discussed the socio-cultural impacts of the construction of waterways in Northern Finland over a period of two hundred years. Ruotsala pointed out the different and often conflicting functions and meanings that rivers have had for the Sami fishers, the reindeer herders and energy companies. She also focused on the battles against the construction of waterways throughout the twen-

tieth century, and on discussions about cultural values of rivers in Finnish society.

In a paper titled "Making Wild Rivers Wilder?" Erik Törnlund discussed the history of log driving and exploitation in Northern Sweden during the log-driving era of 1850–1980. He described the development of the log-driving system—the clearing of streams and increased canalization—essentially as an attempt "to control nature," and he explained that rivers have been undergoing restoration in recent years. Technological structures have been removed and boulders placed back into the channel in order to reconstruct a "more natural" or "wilder" appearance of Swedish waterways.

Panelists discussed projects in France and the United States in the next panel, entitled "Engineering Developments." In his paper on "River Diking, Canalizations, and Floodplain Drainage," Jacky Girel focused on the engineering developments of the Alpine Isère River in France. In the wake of a major flood in 1816, a large-scale diking scheme was developed which concentrated the various water flows into one deep channel. The project was successful in giving work to a great number of people in an otherwise impoverished region, but it failed in its more important goals of protecting soils, reclaiming large areas of land, and eliminating marsh fevers. Girel distinguished two major periods of nineteenth century engineering in the French Alps. Until 1830, physiocrats and agronomists intended to transform wetlands for utilitarian reasons, whereas from 1830 to 1880, engineers and physicians promoted the removal of standing water for health reasons.

In a paper on watershed practices in provincial France, Dan Ringrose claimed that nineteenth-century French engineers developed a "national style" or "national policy" for water management. In his examination of the technical and political decisions of engineers who managed the Canal de Bourgogne and those who worked in France's industrial north, Ringrose found that engineers were forced by local interests to acknowledge specific interests and concerns about ecology, agriculture, pollution and economic opportunity. "The compromises, practices and solutions associated with managing watersheds reveal a powerful local dynamic in each region of France," according to Ringrose. "As the Corps' engineers sought to accommodate local interests they established themselves as an access point to a national state, effectively drawing diverse regions of France together into a nation."

In his paper "The Tennessee Valley Authority (TVA) as a Symbol for U.S. Overseas Development, 1933–1973," David Ekbladh focused on the cultural construction of the TVA and its significance as an international symbol of modernization. The "grass-roots" participation of local populations was promoted around the globe as a distinct American model that

would set it apart from projects in communist or fascist states. It took until the late 1960s before the failures of this big project were exposed by environmentalists and researchers, who discovered the profound ecological consequences of this and other large-scale technological projects.

In a panel about "Control and Restoration," Charles Closmann and Thomas Lekan discussed issues of water management and national identity in postwar Germany and England. Closmann examined political efforts to limit pollution within Britain's Humber Estuary Watershed and along Germany's Elbe. He argued that there were two different national styles of riverine management at work in England and Germany, both connected to broader social, economic, and political goals. While the British established local river boards as intermediary bodies between the national government and local institutions and movements, the German system ensured the authority of the German states. According to Closmann, Germany's postwar focus on quick economic recovery exempted heavy industry from tough pollution laws. The result was "a confused muddle that stimulated economic growth, but allowed the Elbe to deteriorate." In his paper "Restoring the Rhine: Ecology, Culture and the Reinvention of German Identity, 1945–1970," Thomas Lekan tried to explain the rapid change in the fortune of the Rhine between the immediate postwar era, when the Rhine was labeled "the sewer of Europe," and the 1990s, when it was declared "the cleanest river in Europe." In contrast to conventional explanations that viewed the public anxiety of the 1960s over the intolerable conditions of the Rhine and the rise of the green movements as major factors in this transformation, Lekan argued that environmental demands of the decade between 1955 and 1965 centering on pollution control were responsible for the change. Above and beyond that, the turn toward "post-material" ecological values and international cooperation served broader political and cultural purposes that came to symbolize a new era, as they replaced the political and economic tensions symptomatic of the period before World War II.

The last two papers presented at this conference were part of a panel on "Picturesque Rivers." In her presentation on "Perceptions of Natural and Designed River Landscapes," Ute Hasenöhrl explored the relationship between nature conservation, energy companies, and tourism between 1945 and 1980. She took her examples from the Lech River in Bavaria. In the conflict over the establishment of hydroelectric power plants, tourism was employed as an argument from both energy companies and conservationists. However, while energy companies pointed out the prospects and benefits of mass tourism and water sport activities, conservationists argued against the establishment of dams and reservoirs, instead propagating a concept of "green tourism" that offered peace and solitude. Hasenöhrl claimed that most energy projects could not be

stopped, particularly because they were generally backed by a strong commitment of state governments to local energy production.

In his paper "Viewing the Gilded Age River," Steven Hoelscher examined photography and forms of early tourism in the Dells of the Wisconsin River. Hoelscher pointed out that Gilded Age Americans used rivers not only as arteries of transportation; they also began to envision them as areas of recreation and leisure. The photographic image that created imaginative and sublime landscapes played a powerful role in the cultural construction of a "wild and morally uplifting" geography. Late nineteenth-century photographic views of the Wisconsin Dells constructed a picturesque "post-frontier space" that contributed to the promotion of bourgeois tourism and eventually to "mass culture forms of entertainment." The conference ended on Sunday afternoon after a roundtable discussion with comments by Meredith McKittrick, Harold L. Platt, and Martin Reuss.

Christof Mauch and Thomas Zeller