



Experiencing history in a canoe

Max Planck researchers cooperate with partners in around 120 countries all over the world. Here, they write about their personal experiences and impressions. Thomas Turnbull from the Max Planck Institute for the History of Science in Berlin is involved in the project “Mississippi. An Anthropocene River”. As part of this venture, Turnbull paddled down a stretch of the Mississippi. He talks about a river that epitomizes the changes that humans have made to natural systems.

As a historian, I’m more at home in the archives than in a canoe. A research expedition that offered the opportunity to experience a river up close therefore seemed like quite an adventure. The Mississippi project investigated whether this river could be used to illustrate the Anthropocene, a proposed geological epoch dominated by humanity.

The three-month journey along the river from Minnesota to the Gulf of Mexico was a fundamental part of this project. I joined the expedition for a week, traveling from Cairo, Illinois, to New Madrid, Missouri, in the company of other researchers, artists and students from Augsburg University in Minneapolis who were spending the fall semester on and near the river.

The impressions I gained on the canoe trip provide an important part of my research, in which I am investigating the history of technical change in the Mississippi Valley. During this trip, I experienced at first hand the positive and negative consequences of past technical intervention in the river’s course – the dam and levee system.

The dam systems and levees were largely built in the 1930s to make the Mississippi easily navigable and help keep it in its channel. This system kept floods at bay and made it possible to use the river as a non-stop transport route for bulk cargo. Nowadays, however, we know that this construction critically undermined the dynamics of the river system and gave rise to new flood risks.



Dr. Thomas Turnbull, 33, studied history at King's College London. He worked for organizations including an environmental think tank and a project for the preservation of endangered languages. Afterwards, he studied at the School of Geography and Environment, University of Oxford. In 2017, Turnbull was awarded a doctorate for his thesis on "Energy Resource Conservation in Britain and America, 1865 – 1981". From 2018 to 2020, he will be working as a guest scientist at the Max Planck Institute for the History of Science. The Mississippi project and other planned activities are all in keeping with his research interests, which lie between the history of science and historical geography.

My starting point was Cairo, a small town on which the deindustrialization of previous decades has clearly left its mark. Nevertheless, the river still strongly resembles an industrial waterway. Tugboats transport cargo day and night, ranging from maize and soybeans to spare parts for oil refineries. Despite their leisurely pace, the tugboats create huge waves and their rattling drowns out the rustling of the nearby trees. Behind the wall of hickory trees and cypresses on the bank, agricultural machinery harvests vast quantities of soybeans, the hop-like scent of which occasionally wafted in our direction. Yet there were hardly ever any people to be seen. It was almost surreal.

Day after day, we paddled down the steadily flowing Mississippi – a never-ending conveyor belt of water and sediment. It was much quieter and wilder than I had expected. We camped on sandbanks and tiny islands in the river. The nights were pitch black, illuminated only by the stars, our campfire and the lights shining from tugboats. The crews were no doubt puzzled by the fact that we spent the night on these narrow sandbanks – and sometimes even sang accompanied by a guitar.

During the expedition, one of our guides found a tree trunk covered in oyster mushrooms. We watched Asian carp leap out of the brownish water and listened to the birds twittering in the trees. Often, the only signs of human habitation were the garbage of civilization that had washed up onto the banks. We even found a large plastic Star Wars spaceship, half embedded in the mud.

Thanks to my experiences on the canoe expedition, I can now think in much more concrete terms about the environmental history of the Mississippi valley and its role in the Anthropocene era – for example about how flood control, industrial agriculture, the transport of fertilizers and power generation are linked by this body of water.