Transforming Rivers into Streets: How the Nineteenth Century Scheme to Improve Shipping on the Vitava, Elbe and Danube Failed

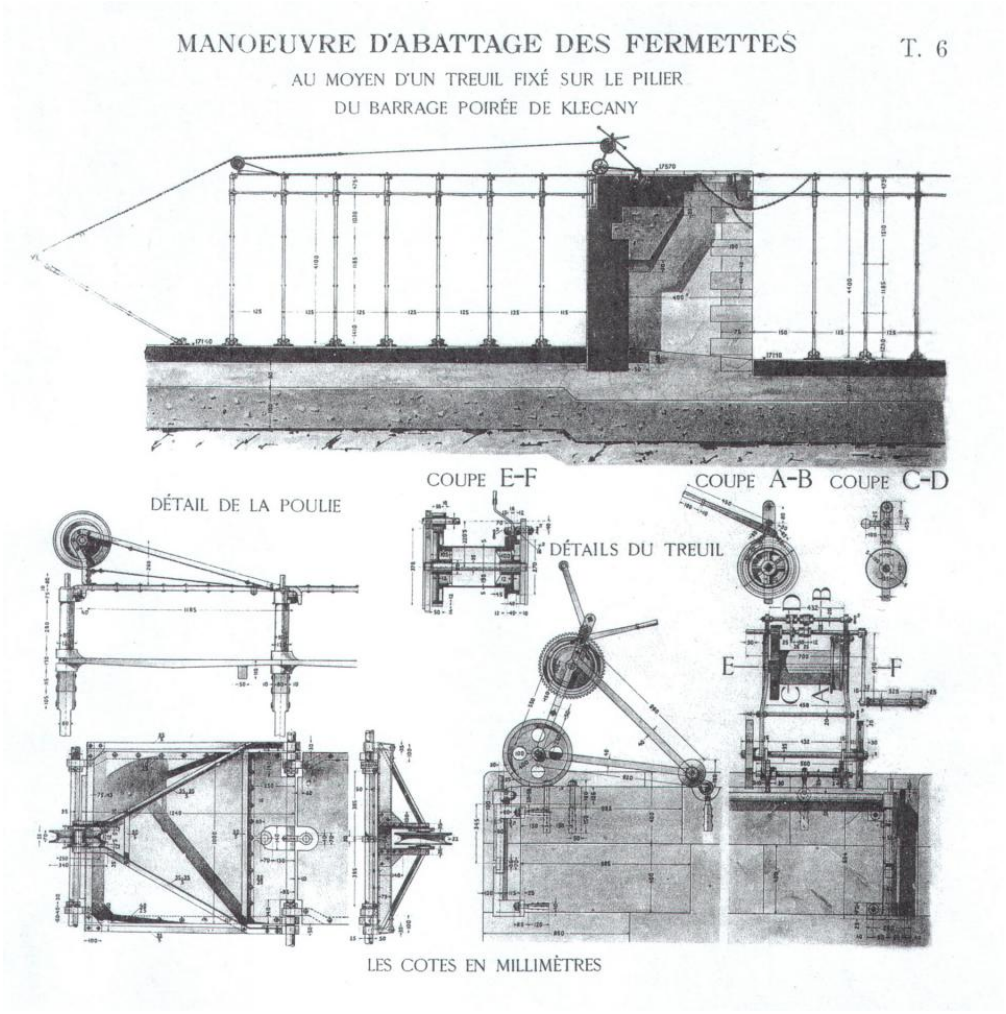
Stephan Brabec

Summary

In the second half of the nineteenth century, projects aimed at improving ship-based commerce by connecting various rivers boomed. One such project was the establishment of an Elbe-Vltava-Danube canal.
Approved in 1895, the canal promised reliable water levels throughout the year. Sluices and dams were built on the Vltava and Elbe River but the canal was never an economic success and the project stopped with the onset of World War I.

In the second half of the nineteenth century, projects aimed at improving ship-based commerce by connecting various rivers boomed. One such project was the establishment of an Elbe-Vltava-Danube canal, which, however, was never completed.

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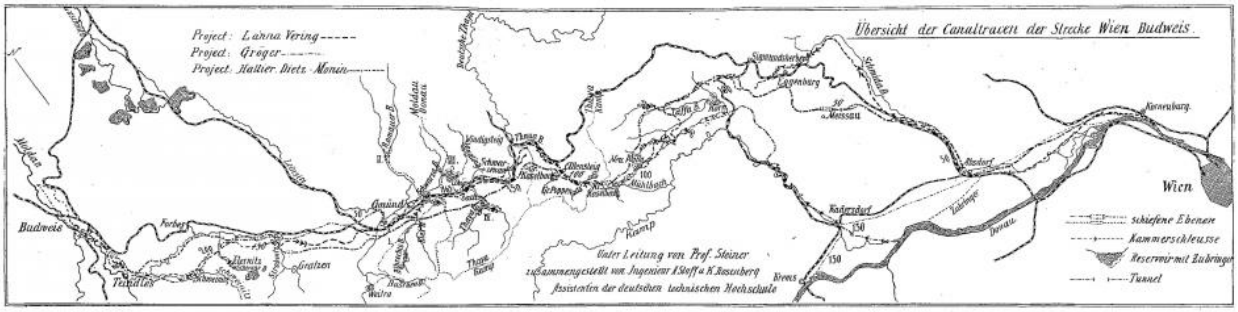
Poster with the construction plans of the dam near Klecan (Paris International Exposition 1900)

Image source: Rubin, Wenzel. *Die Canalisirung des Moldau- und Elbe-Flusses in Böhmen. Ihre Entwicklung und ihr Stand zu Beginn des Jahres 1900.* Prag: 1900.

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A connection to the Danube was a fanciful dream beyond the capacities of engineers at the time. Only a canal suitable for shipping between the Vltava and Elbe was built between Prague and Usti nad Labem.

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Map of the area between Vienna and Budweis with three canalisation-projects

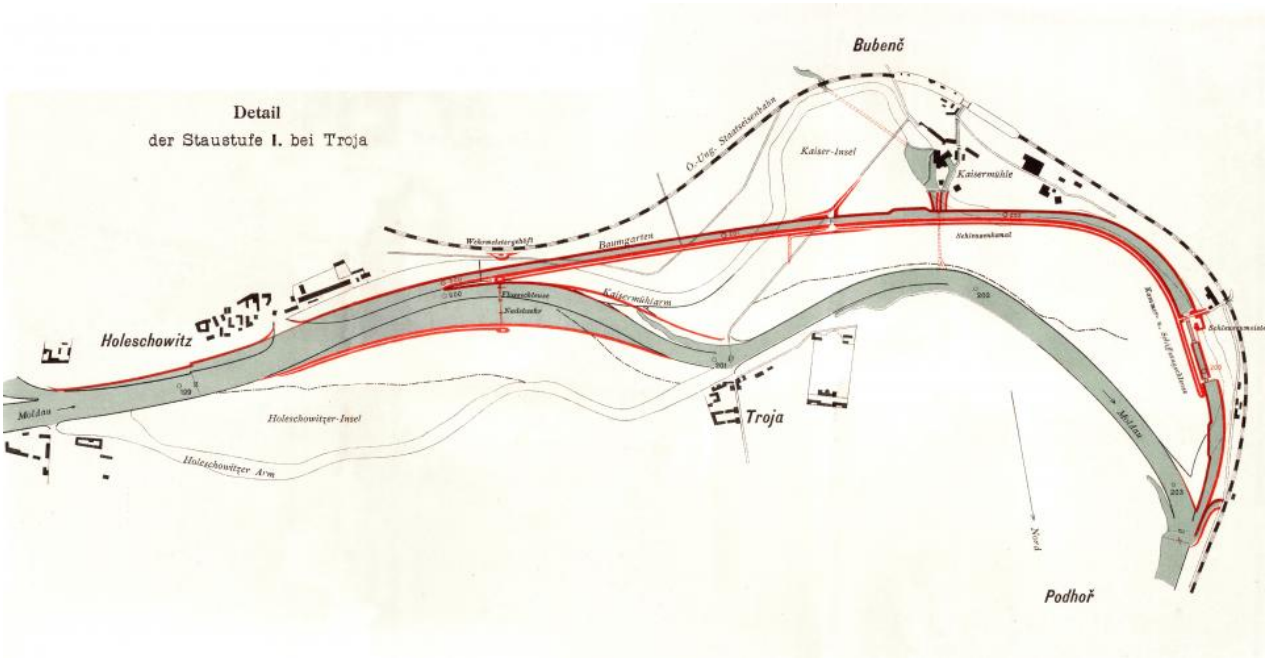
Map modified by Stephan Brabec 2009

PUBLIC DOMAIN Map source: *Deutsch-Österreichisch-Ungarischer Verband für Binnenschiffahrt*, Berlin: Verbands-Schriften, 1897–1911.

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The construction project was approved in 1895, and work began in 1897. A commission for the channeling of the Vltava and Elbe River in Bohemia was created, which dutifully reported on problems and successes from 1897 to 1912. Economic interests were the main driving force for this comprehensive transformation of river landscapes into an “Organic Machine” (White 1995); flood protection played no role. Low water tables had been a hindrance for ship and raft transportation alike; the canal promised reliable water levels throughout the year. Sluices and dams were built in Prague, Troja, Klecan, Libschitz, Mířowitz, and Wraňan/Hořin on the Vltava River, and on the Elbe in Beřkowic, Wegstädtl, Raudnitz, Leitmeritz, and Lobositz.

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Detailed plan of the barrage near Troja

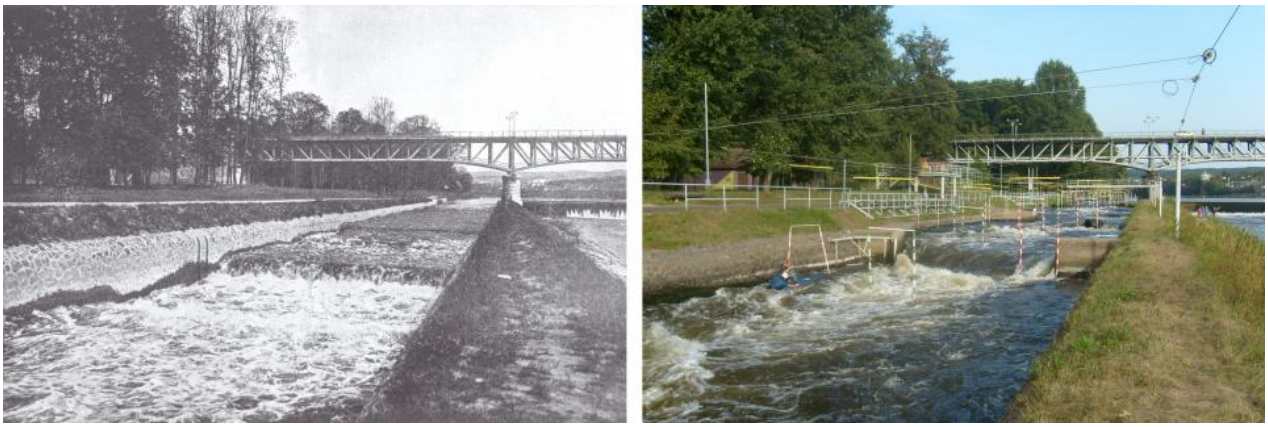
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The canal was never an economic success. Shipping statistics between 1882 and 1916 show that, from the beginning of the twentieth century, the number of transport vessels actually sank. Rafts had to be towed as the flow of the water had been diminished. The construction never fulfilled the hopes placed upon it. World War I meant the end of the project, which, however, had a lasting effect on river ecosystems. Most of the buildings are still in place; only locks and sluices were modernized. After World War II, the integration of water power plants or kayak courses added new forms of use.

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Comparison of the raft sluice in Raudnitz 1912 (left photo) and the situation in 2009 (right photo)

Left image BY-NC-SA Historic photo modified by Stephanc Brabec 2009
Image source (historic photo): PUBLIC DOMAIN *XIV., XV. und XVI. Jahresbericht der Kommission für die Kanalisierung des Moldau und Elbeflusses in Böhmen über ihre Tätigkeit in den Jahren 1910, 1911 und 1912* Prag: Kommission für die Kanalisierung des Moldau- und Elbeflusses in Böhmen, 1913.
Right image: The raft sluice was modified into a kayak course. BY-NC-SA 2009 Stephan Brabec
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Further readings:

- Brabec, Stephan. *Die Kanalisierung von Moldau und Elbe: Die Umgestaltung von Fließgewässern aus umwelthistorischer Sicht.* Saarbrücken: VDM Verlag, 2011.
- White, Richard. *The Organic Machine: The Remaking of the Columbia River.* New York: Hill and Wang, 1995.

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- Center for Environmental History
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Stephan Brabec was born in Vienna in 1981. He studied water management and environmental engineering at the University of Natural Resources and Life Sciences in Vienna and history at the University of Vienna. Currently he is working at the Institute of Hydrobiology and Aquatic Ecosystem Management at the University of Natural Resources and Life Sciences in Vienna.

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