

Spring 2022 Arts of Asia Lecture Series
Gifts of Rivers and Resources: Art and Power in
Ancient Asia

Sponsored by the *Society for Asian Art*

The Yellow River: A Natural and Unnatural History

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February 11, 2022

Today the Yellow River is the world's most sediment-laden watercourse, but that was not always the case. The rate of sediment deposition increased rapidly about a thousand years ago. This talk covers three thousand years of Yellow River history in order to explain what changed and how people gradually adapted to the new state of the river.

Yellow River Regions

- The Upper Course: The river flows rapidly through a high-elevation region that begins at its headwaters on the Tibetan Plateau. This region also encompasses the arid western reaches of the river's Great Bend around the Ordos Plateau.
- The Middle Course: Thirty large tributaries flow east or south to join the Yellow River in its slow-moving middle reaches. They drain the highly erodible soils of the Loess Plateau, and they are the source of most of the river's sediment.
- The Flood Plain: The river discharges onto a large alluvial plain. Before denizens of the plain built levees, drainage canals, and dams, the floodplain was a region of many shallow streams and lakes through which the river meandered and frequently changed course.

Eras of Yellow River History

- Approximately 8000 BCE-750 CE: "Before it was Yellow." Farmers and engineers engaged in practices that affected the behavior of the river, but floods and avulsions (course changes) were infrequent. The river generally flowed clear.
- Approximately 750 CE to 1350 CE: "The Middle Period Tipping Point." Timbering, settler colonialism, and military fortification caused erosion in the middle reaches of the watershed. Soon thereafter, commentators began reporting unprecedented number of floods, levee breaches, and course changes. The abrupt transformation in the behavior of the river confounded a series of imperial regimes.

- 1351 CE to 1855 CE: “The Engineered River.” Intensive land use and environmental degradation upstream caused even more erosion and frequent floods downstream. Beginning in the sixteenth century, imperial regimes invested heavily in river management in order to maintain canal transportation in the floodplain.

Names and Terms

- Concepts: rivers are “sediment sorting machines” (Anthony Acciaviati), rivers have “biographies” (Richard White), rivers are “hydrosocial” (Jamie Linton and Jessica Budds), China has experienced “three thousand years of unsustainable growth” (Mark Elvin).
- Rivers, lakes, and canals: Yellow River (*Huang he* 黄河), Wuding River (無定河), Jing River (涇河), Wei River (渭河), Fen River (汾河), Huai River (淮河), Hongze Lake (洪澤湖), Grand Canal (*da yunhe* 大運河).
- Mountains and deserts: Mu Us Desert (*maowusu shamo* 毛烏素沙漠), Qinling Mountains (秦嶺山), Lüliang Mountains (呂梁山), Taihang Mountains (太行山).
- Hydrocrats: Yu the Great 大禹 (legendary figure), Zhang Rong 張戎 (fl. 4 CE), Wang Jing 王景 (30-85 CE), Ouyang Xiu 歐陽脩 (1007-1072), Jia Lu 賈魯 (1297-1353), Liu Tianhe 劉天和 (1479-1545), Pan Jixun 潘季華 (1511-1595), Hu Ding 胡定 (1709-1789), Li Yizhi 李儀祉 (1882-1938).

Suggestions for Further Reading

Chen Yunzhen, James Syvitski, Shu Gao, Irina Overnee, and Albert Kettner, “Socio-Economic Impacts on Flooding: A 4000-Year History of the Yellow River, China,” *Ambio* 41 (2012), 682-98.

Chi Ch’ao-Ting, *Key Economic Areas in Chinese History: As Revealed in the Development of Public Works for Water Control* (Routledge, 2019 [1936]).

Randall Dodgen, *Controlling the Dragon: Confucian Engineers and the Yellow River in Late Imperial China* (Honolulu: University of Hawai’i Press, 2001).

Mark Elvin *The Retreat of the Elephants: An Environmental History of China* (New Haven: Yale University Press, 2008).

Jamie Linton and Jessica Budds, “The Hydrosocial Cycle: Defining and Mobilizing a RelationalDialectical Approach to Water,” *Geoforum* 57 (2014), 170-180.

Ruth Mostern, *The Yellow River: A Natural and Unnatural History* (New Haven: Yale University Press, 2021)

David Pietz, *The Yellow River: The Problem of Water in Modern China* (Cambridge: Harvard University Press, 2015).

Ling Zhang, *The River, the Plain, and the State: An Environmental Drama in Northern Song China, 1048-1128* (Cambridge: Cambridge University press, 2016).