ISSUE EIGHT : FALL 2017
OPEN RIVERS :
RETHINKING WATER, PLACE & COMMUNITY

GRASPING WATER

http://openrivers.umn.edu
An interdisciplinary online journal rethinking the Mississippi
from multiple perspectives within and beyond the academy.

ISSN 2471-190X

The cover image is of Delta of the Yellow River, China (top) and Delta of the Zambezi River, Mozambique (bottom). Landsat imagery courtesy of NASA Goddard Space Flight Center and U.S. Geological Survey.

Open Rivers: Rethinking Rethinking Water, Place & Community is produced by the University of Minnesota Libraries Publishing and the University of Minnesota Institute for Advanced Study.

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ISSN 2471-190X

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PRIMARY SOURCES

REFLECTIONS OF "NEW" GEOGRAPHIES: A BRIEF GLIMPSE AT PRE-MODERN CARTOGRAPHY

By Marguerite Ragnow

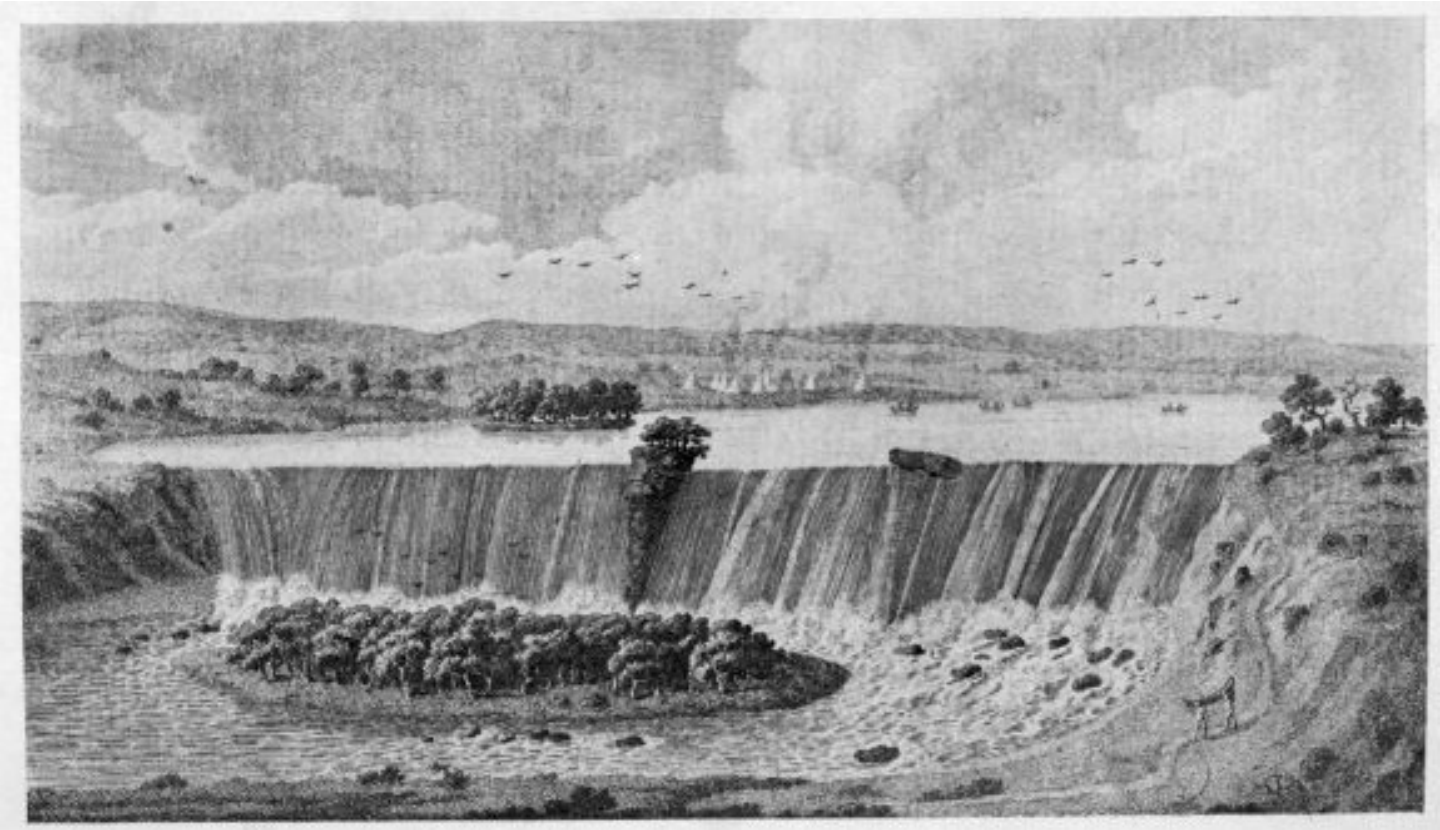
I watched my father build a cedar strip canoe when I was five years old. I remember pieces of wood bent and clamped onto a form in our garage; I remember Dad shellacking the wood,

Map of New France. Vincenzo Coronelli, Partie occidentale du Canada ou de la Nouvelle France... Paris, 1688. (Bell Library 1688 mCo)

which gave it a shiny, slightly orange-tinged luster. I remember him layering fiberglass sheets on the hull, gluing them down until they formed a watertight barrier. Most of all I remember painting the hull a dull black, because I got to help. We took her on a camping trip up the Wisconsin River, just north of Stevens Point, when I was seven and I was allowed to take the front and paddle. It was thrilling! There were a lot of camping trips and a lot of canoe paddling during my childhood, on rivers and lakes in both Wisconsin and Minnesota. There is a feeling of awe you get paddling in what seems like a very tiny canoe on a large lake or broad river, with towering pines or tall bluffs on all sides. Nature's majesty can overwhelm. I can easily imagine how the early explorers of the Upper Midwest may have felt experiencing this territory for the very first time, traveling down the Mississippi or the Wisconsin in dugout canoes.

I wasn't very surprised, therefore, when I first saw this 1688 map by Vincent Coronelli that features mountains along one side of the Mississippi River. My students, however, think it's crazy. "Why," they ask, "would anyone think there were mountains along the Mississippi in Minnesota and Iowa?" Here is what one of the very first European explorers of the Mississippi, Father Louis Hennepin, wrote, describing the river below Lake Pepin:

> This River has a range of mountains on each side throughout the whole of the way; which in particular parts approach near to it, in others be at a great distance. The land betwixt the mountains, and on their sides is generally covered in grass with a few groves of trees interspersed, near which large droves of deer and elk are frequently seen feeding. In many places pyramids of rocks appeared, resembling old ruined towers; at others amazing precipices and what is very



St. Anthony Falls. Jonathan Carver, Travels through the interior parts of North America in the years 1766, 1767, and 1768. London, 1778. (Bell Library 1778 Car)

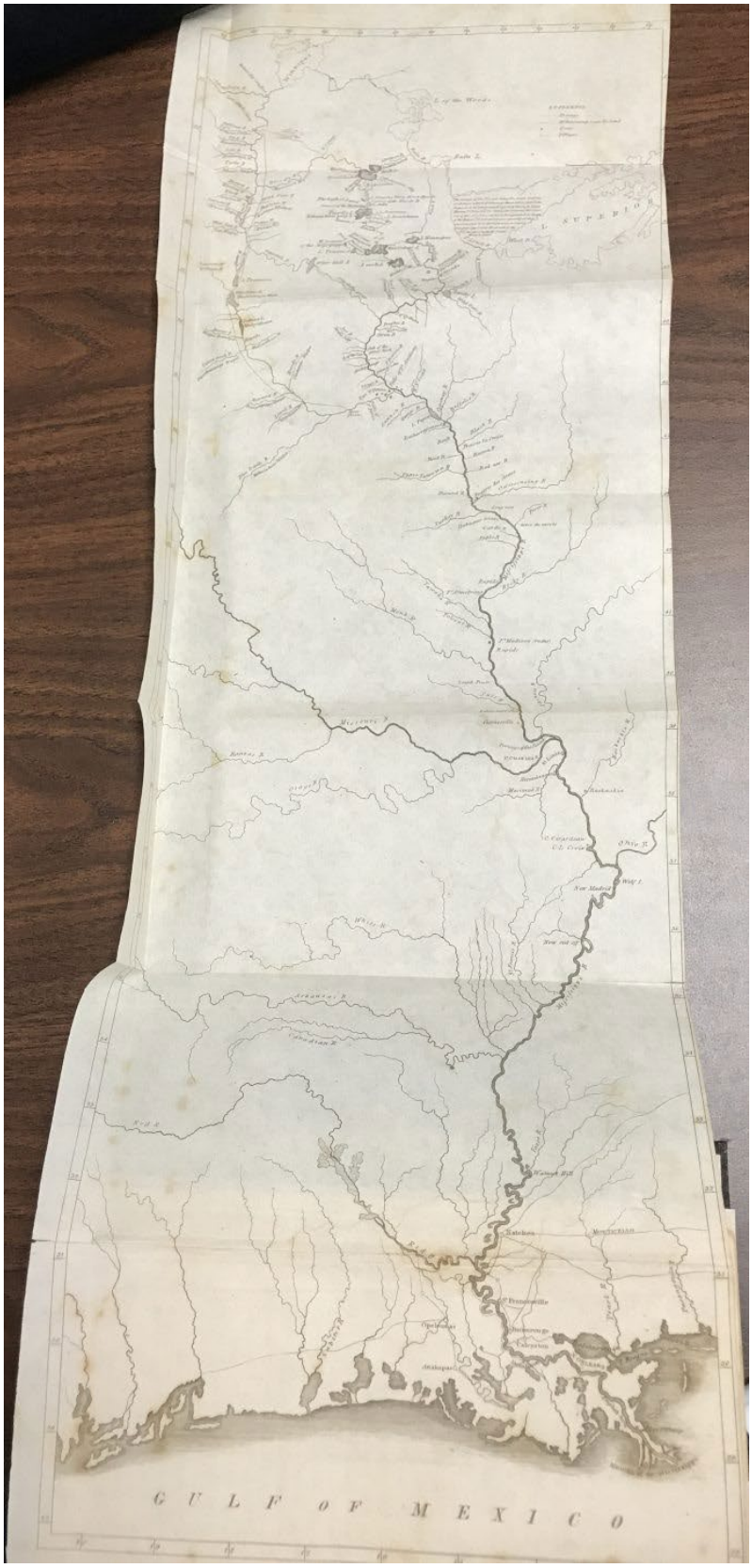
> remarkable, whilst the scene presented itself on one side, theopposite side of the same mountain was covered with the finest herbage. … But above all, the fine River flowing near and reaching as far as the eye can extend, does by turns attract your admiration and excite your wonder (Hennepin 1698).

From Father Hennepin's perspective, traveling by canoe in a totally foreign and unfamiliar

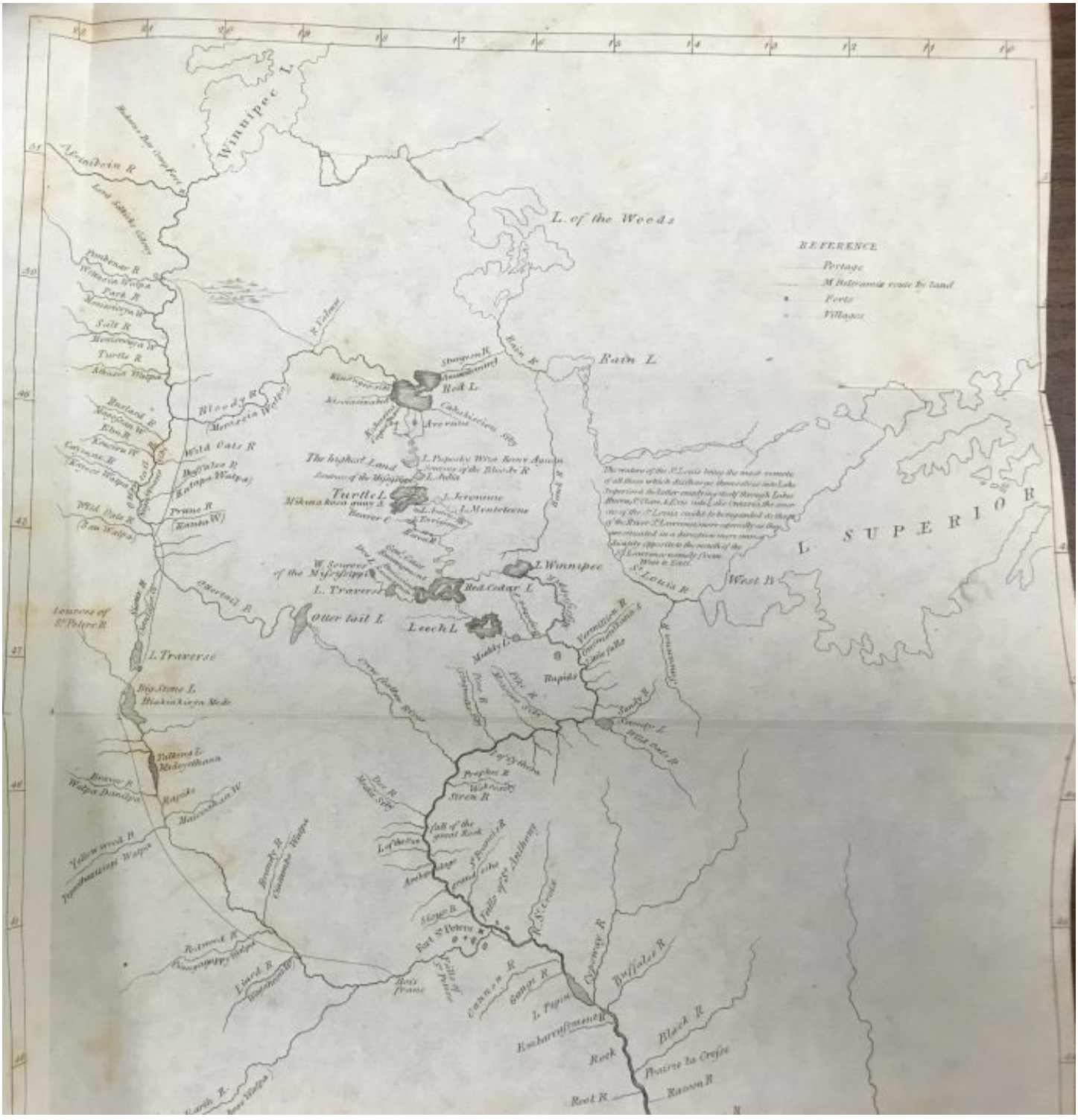
landscape, the bluffs along the Mississippi River south of the Twin Cities looked like mountains. Perhaps he had never seen real mountains. Nevertheless, Coronelli, like several other cartographers, was influenced by Hennepin's account and many early maps of North America show mountains along the Mississippi River. However, it wasn't really the mountains that impressed him, but rather the Mighty Mississippi.

The river impressed other European explorers over the years, as well. Giacomo Costantio Beltrami (1779-1855), a former Italian diplomat turned explorer, traveled up the Mississippi River in the company of Captain Stephen H. Long (1784-1864) and Lawrence Taliaferro (1794-1871), the U.S. army's Indian agent who would eventually be stationed at Fort Snelling, at the confluence of the Minnesota and Mississippi Rivers.

"What a scene presents itself to my eyes, my dear Madame! How shall I bring it before you without the aid of either painting or poetry?" wrote Beltrami to a friend upon his first view of St. Anthony Falls, a site transformed by Minneapolis'



Map of the Course of the Mississippi River. Giacomo Costantino Beltrami, A pilgrimage in Europe and America: leading to the discovery of the sources of the Mississippi and the Blood River…. London, 1828. (Bell Library 1828 Be)



Close-up of map of the Mississippi showing its "source." Beltrami, A pilgrimage... 1828.

industrial growth and which is now the heart of the city of Minneapolis. He determined then and there that he would search for the source of the river.

Beltrami created his map based on his own surveys—and that of his expedition with Stephen Long. Beltrami argued with Long and went his own way, leading to his discovery of what he thought were the headwaters of the Mississippi in August of 1823. (It was later determined that the source of the Mississippi is Lake Itasca.)
In 1718, French cartographer Nicolas de Fer created this composite map of North America, incorporating information from LaSalle, Marquette, Joliet, Hennepin, and others. Rather than focus on a single river, this maps draws the eye to the Great Lakes. Of particular importance to many scholars are the notations that locate various Native American tribes in the Midwest and elsewhere. This beautiful map was water-colored by hand. At some point, the original paper split along the folds and the map was glued to a linen backing, which has caused a rippling effect.
De Fer did not, however, neglect the Mississippi and in this close-up you will see that he has also included some of Hennepin's mountains, along with a mysterious giant chicken.

Close-up of the Great Lakes. Nicolas de Fer, La nouvelle France ou la France occidentale… Paris, 1718. (Bell Library 1718 mFe)

Close-up of the Mississippi. de Fer, La nouvelle France... 1718.

While the James Ford Bell Library has a wonderful collection of maps related to European exploration and early settlement of the Americas, for which the maps above are a very small sampling, its focus is global, although often from a European perspective. For this special issue of *Open Rivers*, I have also selected a few images that reflect rivers and other bodies of water in Africa and Asia, as well.

This late medieval portolan or nautical chart is hand-drawn and painted on vellum using mineral inks, which is why the colors remain so vibrant. Azurite was a common ingredient for the vivid blue ink, for example. Like most pre-Columbian portolan charts, this one focuses on the Mediterranean world. It was created by Genoese cartographer Albino Canepa in 1489 CE.

Little is known about the purpose of portolan charts, but all have similar features: lines, called rhumb lines, radiating out from compass roses and similar compass points; a basic underlying grid pattern; and place names dotting the coastlines. While a few undecorated portolan charts have survived, most of the survivors are decorated with a common iconography that is recognizable from map to map, from cartographer to cartographer, even though there might be variations in style. The Red Sea, for example, is often this oblong shape and is colored red. The Nile is prominent, as it is here, and so is the unnamed river leading to two large inland lakes to the west in Africa, which will not be found on any modern map in this configuration.

This is, perhaps, the most popular map in the Bell Library collection and I use it a lot for teaching.

Albini de Canepa. Portolan Chart, 1489. (Bell Library 1489 mCa)

By pointing students to recognizable topographical features of the map, such as the Red Sea and the boot of Italy, students are able to quickly orient themselves to the map and start to pick out other features, notice unusual characteristics, and to ask questions. They learn a) that they can learn from early maps even when the text on the maps is written in a language they cannot read, and b) that early maps are rarely objective. The Canepa portolan depicts a strong Genoese trading presence in the Black Sea some 40 years after the Turks took control of the region and restricted Genoese trade—the Mediterranean world as it was prior to 1453 rather than as it really was in 1489, reflecting perhaps the desire on the part of the person who commissioned the map to regain some past family glory.

Another reason I like this map is that it draws Africa into the late medieval Mediterranean world. The romantic nineteenth-century image of Africa as a dark, mysterious continent often overshadows northern Africa's vibrant civilizations that thrived long before Columbus sailed his tiny ship across the Atlantic Ocean.

Africa. Joan Blaeu, Le grand atlas, vol. 10. Amsterdam, 1667. (Bell Library 1667 oBl)

The map below, from a 1667 atlas by Dutch printer Johannes Blaeu, offers a different perspective of Africa—one focused on its inhabitants, both human and animal. This printed map is also hand-colored, with rivers, lakes, and mountain ranges clearly delineated. The importance of Africa's port cities is also highlighted with small inset maps at the top of the page.

However, despite the importance of northern Africa to Mediterranean culture and commerce, and the importance of its coastal ports, the interior of Africa posed difficulties for early explorers. According to the *1788 Proceedings of the Association for Promoting the Discovery of the Interior Parts of Africa*:

> As both Europe, and its adjacent continent, Asia, are spread over with inland seas, lakes, or rivers of the most extended navigation, so as collectively to aid the transport of bulky articles of merchandise from one extreme to the other; and to form (like stepping stones over a brook) a more commodious communication: so likewise the northern part of the new continent [Africa] appears to have an almost continuous inland navigation which must prove of infinite advantage to the inhabitants, when fully peopled; & to contribute to their speedier civilization… . But Africa stands alone in a geographical view! Penetrated by no inland seas like the Mediterranean, Baltic or Hudson's Bay; nor overspread with extensive lakes like those of North America; nor having in common

Cairo. Olfert Dapper, Description de l'Afrique… . Amsterdam, 1686. (Bell Library 1686 fDa)

> with the other continents Rivers running from the centre to the extremities: but on the contrary, its regions separated from each other by the least practicable of all boundaries, arid deserts of such formidable extent, as to threaten those who traverse them, with the most horrible of all deaths, that arising from thirst! (*Proceedings* 1810).

Here, it is the lack of water rather than its majesty that is of greatest importance (Europeans had yet to discover Victoria Falls!), and which poses the greatest obstacles.

China, like Africa, is a land of great contrasts. It has arid deserts, humid jungles, and an impressive system of waterways, as well as a rich coastal region.

This map of "Nanking" province highlights the dominance of the Yangtze River to the region. Today, the city of Nanjing, in the Yangtze River delta, is one of the world's largest inland ports.

The Yangtze and other rivers also are prominent on the famous 1602 map, *Kunyu Wanguo Quantu (Map of the Ten Thousand Countries of the World)*, created at the court of the Wanli Emperor in Ming China under the direction of

Imperial China. Blaeu, Le grand atlas, vol. 11. Amsterdam, 1667.

Jesuit missionary Matteo Ricci. Ricci's Chinese collaborators were not interested in investing much energy in the depiction of China on this map, compared to the details provided about the rest of the world. The map wasn't about China, but rather China's relationship to the Americas and other parts of the globe.

> The Middle Kingdom is renowned for the greatness of its civilization. It comprises all between the 15th and 42nd parallels. Tributary countries are very numerous. In such a general map as this, only some mountains, rivers, provinces, and circuits are indicated; for a more detailed account, various gazetteers may be consulted (*Kunyu Wanguo Quantu*).

Ricci, however, understood fully the power of maps. Perhaps one of the reasons he designed this map in six panels to fit on a folding screen, each approximately 5 feet long, and when the

Nanking. Blaeu, Le grand atlas, vol. 11. Amsterdam, 1667.

China. Matteo Ricci, Kunyu Wanguo Quantu, Beijing, 1602. (Bell Library, on display)

panels are placed side-by-side the map is 12 feet in extent—a very impressive sight, indeed. On one of these panels are printed the following words from Matteo Ricci:

> Once I thought learning was a multifold experience and I would not refuse to travel [even] ten thousand Li to be able to question wise men and visit celebrated countries. But how long is a man's life? It is certain that many years are needed to acquire a complete science, based on a vast number of observations: and that's where one becomes old without the time to make use of this science. Is this not a painful thing?
>
> And this is why I put great store by maps and history: history for fixing [these observations], and maps for handing them on [to future generations] (Ricci, *Kunyu Wanguo Quantu* 1602; trans. d'Elia).

By viewing just a few of these early modern maps, the subjective biases and errors of the maps seem so obvious, often presenting a particular world view commensurate with a non-geographical objective, such as the conversion of China to Christianity as was the case with the Ricci map, or the commemoration of Genoa's strong commercial presence in the Black Sea in the early fifteenth century, as seen in the Canepa portolan chart. These biases seem evident particularly as we are accustomed to maps of today, which use satellite technologies for detailed and precise representations. Nevertheless, these early maps allow us to ask questions about changing perspectives and about how water and humanity's relationship to it played a significant role both in pre-modern society and in the maps that society created. These questions might also help us pause to question our own changing perspectives on place and our relationships to place as well.

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Recommended Citation

Ragnow, Marguerite. 2017. "Reflections of 'New' Geographies: A Brief Glimpse at Pre-Modern Cartography." *Open Rivers: Rethinking Water, Place & Community*, no. 8. http://editions.lib.umn.edu/openrivers/article/reflections-of-new-geographies-a-brief-glimpse-at-pre-modern-cartography/.

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