

Submitted by Kay Miller

“A Drop to Drink,” Globalization – Water. Gallery talk by Ken Krenz, Associate Registrar. Nov. 2, 2012. Gallery 280

Kaywin Feldman has said that Ken knows collection better than anyone else. Worked with other curators in setting up Globalization, making suggestions about pieces that would fit in well. Example, big yellow Imperial Chinese bowl: a 7-figure bowl. Other things brought things out storage that are rarely, if ever, seen.

Globalization Working Restrictions: Done in-house from MIA collection. Just two loans in Krenz water exhibit. Not spending lot of staff time making trips to borrow. Making better use of things we have.

“A Drop to Drink.” Water is my theme: Water, water everywhere. Quoted English lit class high school class. Quote from Samuel Taylor Coleridge, “The Rime of the Ancient Mariner.” The captain of the Mariner leads his crew into the Antarctica and they get stuck without any filling bins, they can’t move:

*As idle as a painted ship
Upon a painted ocean.
Water, water, everywhere,
And all the boards did shrink;
Water, water, everywhere,
Nor any drop to drink.*

All human beings need water to sustain life.

- Every human being needs 13 gallons of water a day for drinking, bathing, washing clothes
 - Average American uses about 180 gallons a day
- Simple but dire need.
 - Parents lived overseas for 25 years. Father was an agricultural economist. After brother left for college, father took job in Zambia, in central Africa. Visited. Remember the sight of a group of men in the village digging a well in a dried-up river bed. They were well over their heads and still digging because their source of water had dried up.
- Getting water is an incredibly difficult, time-consuming task for people in many places.
 - 7 billion of us on the planet
 - One in eight people still walks to local river or well, carrying it in a bucket or water pot.
 - Average trip – 3 ½ mile there to get water. Then carry 3 ½ miles back.
 - Every gallon of water weighs 8 pounds. If use 5-gallon bucket (such as a plastic pickle or paint bucket) that’s 5 gallons. That’s a total of 40 pounds to carry back every trip.
 - Then have to clean it, boil it, make it sanitary for human consumption. Incredible amount of work
- Mostly **women and young girls** who carry the water.
 - In many places a girl’s education stops when she **reaches puberty** and has first period. Most schools don’t have proper sanitation for them to properly care for themselves. So girls stop going to school. They become the ones who carry water. Girl’s education stops at that point in many places
- 70 percent of fresh water in the world goes to the production of food.

- My father said the reason they do that – they don't have to PAY for it. If irrigate in late afternoon, much of the water evaporates
- In America, we waste 40 percent of the food we produce. If use 70 percent of fresh water to produce 40 percent of food we waste, we're **wasting 25 percent of fresh water** resource by throwing away or letting rot food that could feed people. Or water could be put to better use.

Will be rotations in this exhibit. Want to put up map where water is hard to get, facts about water such as water-borne disease. Long wanted to show Chinese pot and Native American pots side-by-side:

"Storage Jar, artist unknown, Neolithic China, 2400 BCE, #89.9



On left in exhibit

Gallery label: The striking visual similarities between Neolithic Pan-Shan and Ancient Pueblo jars is remarkable. Both cultures have taken a globular earthenware vessel designed for storage of water or food and highly decorated them with pigmented slips. Each has central medallions carefully spaced around the surface. Intricate linear designs have been added leading the eye in a circular swirling path around the jars. The high level of craftsmanship and attention to detail in the painted patterns indicates that these were highly treasured possessions. Examples from both cultures have been found in burial sites. Time and geography have prevented either culture from influencing the other making the similarities even more intriguing.

"Olla," artist unknown, Haaku (Acoma Pueblo), 19-20th century, #89.93



On right in exhibit

In my history of ceramics course, I saw ceramics from the Pan-shan culture, 2500 BCE, and thought how incredibly similar they were to Southwest Pueblo or Anasazi pots. Many possible reasons for that:

- Purpose. Both are water jars. People needed something to hold and carry water.
- Many of these survive. So incredibly beautiful, they were cared for.
- Central medallions on many. Often in fours – one on each side.

- Decorated with simple geometric patterns and linear motifs that lead your eye around the pot.
- Made of earthenware. Simple clay body.
- Not lot of technology involved. Find clay and dig it up. Minimal purification and work to make into very useful clay body.
- Pigments: simple earth pigments. On Chinese pot, the darker pigment is probably mix of iron oxide and manganese. Lighter color is probably red iron oxide thinly applied with a little clay.

Amazing how similar these two pots are, yet they are 4,000 years apart. Why did that happen?

- Idea that the Native American people came from Asia on land bridge. But that was 12,000 years ago. So if there is any cultural connection, it would have to go back further. The Chinese pot would have been 8,000 years after that. And the Native American pot would be 1,200 years after that.
- These cultures may share certain underlying values or design instincts.
- Two other possibilities: **Simultaneous invention** – finding same solutions to common design problems. Or the Jungian notion of the **collective unconscious** – that all human beings share a reservoir of archetypes, ideas and values.
- Here are two cultures with similar ceramics. But they are so separated by time and geography that one cannot draw a connection that “this one led to that.”

Something else was at work:

- I see waves in the design. People are dependent on water to live. So that could be part of these designs where you have a central medallion with things swirling around it – feeding it.
- There’s something natural about painting water on a water jar.
- The same is true in the glass water pitcher:

“Pitcher,” Redford Crown Glass Works, c.1840, #90.46



Gallery label: The decorative wave patterns on this pitcher were created with molten glass being applied to a liquid glass bubble on the blow pipe. The aquamarine color, the process of creation, and the purpose of this vessel perfectly combine to express the theme of water.

- Another element is flowing glass: You’re playing with a liquid.
- So it’s a vessel **for liquid**, that’s made by **playing with liquid** (molten glass), in **aquamarine color** and is **decorated** with a wave pattern on it.

“Storage Bottle,” Artist Unknown (Yang Shao culture), 5000-4000 BCE, #98.125



Gallery label: *This long slender water vessel was created in northwest China in the Yang-shao period. It was used to retrieve and store water from local rivers. The long pointed end could be used to anchor the jar along the stream in mud or in a hole dug into dirt when carried away. Some examples have been found in sites associated with Neolithic burial rituals.*

- Like Egyptian pot below: Plain design. Functional = designed to get water out of the local river.
- Dates from 5,000-4,000 BCE. [6,000-7,000 years old]

“Water Jar,” unknown artist, Egyptian, 1990, L2012.155



Gallery label: *This jar was purchased along the banks of the Nile in 1990 from the potter at a price the most common Egyptian could afford. Images of similar vessels can be found in Ancient tomb paintings and hieroglyphic carved panels in Egypt. The rounded base allows it to be propped up easily in the sand. A rope can be strung through the lug handles in order to pull the filled jar from a river. This type of jar continues to be used daily in villages along the Nile and its basic design and purpose has not changed for thousands of years.*

- Loan from Krenz.
- Bought Christmas day in 1990. Visiting parents in Cairo. Going to visit pyramid and Memphis. Along the road a man was making and selling pots for a living to rural Egyptian people who did rudimentary farming.
- Bargained. Bought one for myself; one for brother and sister-in-law. Paid 3 Egyptian pounds for two - 17 cents apiece.
- This is such a common vessel – it’s their Tupperware.

- Was suffering from amoebic dysentery, losing lots of weight and drinking lots of water – one liter of water an hour, around the clock. Mother had to get special dispensation from Embassy to obtain for Krenz and his brother. Had to drink 24 liters of water /day.
- I remember thinking , “What if my mom had to go down to the river to get this water?” Mad me consider the struggles people go through to get the simplest, necessities to survive.
- People still have to go to the river to get their water. People drink from the Nile.
- Americans have such delicate systems. More susceptible to water-borne illnesses elsewhere because of all the water purification system that our society provides for us, cuts immunity.

Rotation – will feature new approaches to water purification. One is a hypo roller – 25 gallon barrel made of durable plastic. Big handle like a lawn mower. Instead of taking 4-gallon jug, you have this jug that rolls on its side. You can push or drag behind you and get 25 gallons at a time instead of 3-4 gallons.

- Another company making a large plastic tricycle – a big water trike. Peddle to water source. Fill 40-gallon tank. Peddle back to village. At the front where we have little basket for groceries, there’s a clean water jug. Water filtration system, operates pump. As you peddle, you’re filtering the water. When you arrive, you have clean water. Clutch system lets you ride it in place and filter water with human power. Don’t need source of power or sun light.
- Las Vegas has won all these awards for water management. Use grey water from showers and laundry water for fountains. An water not from sewage is reused.
- Portland and Seattle, entire municipal programs to make better use of gray water.
- My parents grew up 20 miles south of Canadian border in center of North Dakota. Very little water there. Told story of when they were kids. They remember meeting each other when both of their families were down to local river in February. Cut blocks of ice to take home and boil for water. When father was young, rain water and snow drained from roof into cistern with purification system. Created lots of systems to sustain life and raise kids.

“Jar with Lid,” Lobi, (Burkina Faso- was Upper Volta), 20th century, #99.115.2a,b



Gallery label: This jar is made with a crude earthenware clay. When filled with water the nodules, which increase the amount of surface area on the exterior, allow water to evaporate more easily through the fissures in the clay body. The evaporation would cool the water on the interior a few degrees below air temperature. The Lobi revered jars of this type as objects which kept families together and placed them on altars. This jar has probably never been used on a daily basis. On a supernatural level the nodules protected the contents from spells, bad luck or illness. The lid kept out contaminants both natural and spiritual.

- This vessel **not** vitrified. Vitrification takes place at high temperatures - above 900 degrees. The chemical structure of the silicate molecules changes to create a bonding. Forms a tight mesh.
- Open mesh of this vessel allows it to breathe.
- When pot like this has more surface area on exterior than on the interior and it breaths. Water that goes from the inside to the outside through evaporation, cools the water inside. Water isn't icy cool. But it's 5-8 degrees cooler than air temperature.
- So farmer toiling in the hot fields can come back and can get a cool drop to drink. Can feel cooling effect in your body.
- Water ladled out. Pot has a lid. What looks like a spout is actually a handle.
- Lid keeps bugs out. Reduces pest-transmitted illness.
- Potter's motivation in creating stamping in the earthenware - to cool water and beautify pot.
- Lobi people came to believe these pots were spiritually important: By holding water, keeping it cool, keeping it pure - that kept a family together. If have regular water, people don't get sick as often.
- Protruding nubs. Discourages one from grabbing it.
- Keeps evil spirits away. Some Lobi jars have "critter" figures on outside protect from evil spirits or disease.
- Religious item. The Lobi revered these pots . Eventually stopped using for water. **Put on altars.**
- Very simple idea. Still making in 20th century.
- Lobi probably continued to make some vessels like this. But this vessel is so intricately done, it probably was never used to cool water. Probably had religious use.
- **Burkina Faso- was Upper Volta** when British had it. Mid-20th c. Water shortage always a problem.

"Storage Jar," Artist unknown (China), 1122-772 BCE), #98.60



Gallery label: This handbuilt vessel has been stamped with a wave pattern on its upper half and the lower half with a woven stamped pattern. The raised patterns create a greater amount of surface area on the exterior of the pot which in earthenware can cool the contents. This jar is made of stoneware which does not allow saturation of the clay body and thus no cooling occurs. A new technology at the time, high-fired stoneware is much more durable and thus the vessel will last longer. A few centuries later the stamped patterns were used in bronze as potters, experienced in high-firing techniques, were recruited to create vessels in that new medium.

- Like Lobi vessel [above], exterior stamping greatly increased surface area.
- Patterning on outside of vessel normally would create cooling effect. BUT this jar won't COOL water because it's stoneware. It was vitrified in higher temperatures. That made it impermeable. Vessel didn't breath.

- Process of creating pots with patterned exterior was superseded by new technology.
- Stoneware comes along long after earthenware was created.
 - Stoneware requires high temperatures – above 1,000 degrees.
 - Requires know-how to build kiln and get it above 1,000 degrees.
 - Requires whole different approach to firing techniques.
 - This is a vitreous vessel. Vitrification takes place when go above 900 degrees. Silicate molecules change. Forms tight mesh.
- Whole stamping process, which started in effort to make water-cooling pots, gets translated a few centuries later into the patterning seen on Chinese bronzes.
- Methods used to make these patterns transferred to another new technology centuries later.
- Technology continues to evolve: Potters who knew how to deal with high temperature environments, how to create kilns, how to do high temperature casting were taken out of pottery and put in bronze industry.
- In TCW, see ceramics with bronze patterning.

“Ewer,” Attributed to George Logan, Scottish, 1905, Wedgwood, ceramic transfer print, #98.276.210.1



Gallery label: The Scottish Rose was a hallmark of the Arts and Crafts movement in Glasgow at the turn of the Twentieth century. The motif is a square which spirals into itself in a series of petals creating a rose, an appealing play of simple shapes. The black linear designs of the rose stems are echoed on and define the elongated handle. The Arts and Crafts movement initially was defined by hand-made objects but as the popularity of the style increased manufacturers stepped in to fill the demand.

- Swirling Scottish Rose pattern, motif is a square that spirals into itself in series of petals, creating a rose.
- Appealing play of simple shapes.
- Scottish Rose associated with George Logan. He was Member of circle that designed this pot. But not actually his design.
- Design comes out of the Arts & Crafts Movement, which was a reaction against the industrial revolution. People created things by hand.
- **Irony:** Popularity of this style was so great that individual potters couldn't keep up with demand.
- So this pot was created with molds and print transfers through **industrial production**.
- Come s from tradition where hand-made is appreciated. But the appreciation is so great that potters can't keep up and they revert to industrial methods.

“Lifan amphora,” artist unknown (China), 1st century BCE-AC 1st century, #2000.34.6



Gallery label: This hand built amphora has a unique and elegant shape. Round at the base, divided into four raised spiraling sections at the body, two long handles extending to the mouth and neck which have been squared off. Small incised lines at the neck and around the spirals give definition to the design. The interplay of simple shapes make this jar feel very modern. Many of these pots were made and yet the design details remain the same; the MIA has three nearly identical jars. The same design occurs in smaller sizes and examples can be found in many museums.

- Very modern feel. Looks like art deco object, though 2,000 years old.
- Simple shape & design. Squared off rim. Flaring handles.
- Hand-made in prehistoric era, but were **mass produced**. We think of as hand-made, one at a time, in slow process. Here have something mass produced 2,200 years ago.
- Chinese pots – this design is very common. Can find vessel identical to that in almost every major museum with Chinese historical ceramics. MIA has three of them [in G204 & basement].

Wanted to show struggles and different approaches to struggles with water. Images of agriculture. First with Dutch and famous wind mills:

“Cattle Grazing at the Water’s Edge,” 1880-90, Willem Maris, Dutch, #2010.108



Gallery label: The Dutch used windmills to pump salty water out of intricately designed irrigation systems, over dykes, and into the sea. They reclaimed land from marshes in order to graze cattle on their cheese and dairy farms.

- Dutch windmills used in Netherlands to pump water OUT. Process they used to reclaim most of their land. Areas formerly swampy or very wet.
- Most Windmills you are adjacent to drainage canals. Use wind power to pump sea water out to create agricultural land, used mostly to graze cattle, production of meat and dairy products

“Waterwheel at Onden, 1831-1834, Katsushika Hokusai, #P.70.152



- Japanese depiction of water wheel. Flooding rice paddies with water mill.

“Wooden Paddled Water Wheel on family Farm,” 1941, Carl Mydans, China. #2007.35.165



- Rural area in 1940s in the People’s Republic of China
- Peddling to move water from one rice paddy to another

“Fujikawa: Preparing Rice Fields,” [from “The Tokaido Road series], Edward A. Foster, 1991, #2003.250.38





Gallery label: *In Japan space is at a premium and rice fields often extend to the edges of roads, housing, and even train tracks. After fields are plowed, seedlings are transplanted into the beds which are then flooded with a few inches of water. The warmth of the sun and the water provide an excellent environment for the seedlings to grow. This also aids the hatching of mosquitoes that spread malaria and encephalitis which are endemic across Eastern Asia.*

- 425-degree panoramic color photo. Fields with standing water. Figure on small tractor in field at center. Other figures at proper right. Buildings in background. Train visible at left and right.
- In Japan, farm land goes right up their house. Often no yard. Their yard flooded to create rice paddies. Use all the space they can.
- Japanese flood rice paddies in springtime. Leave water there until earth absorbs it. Standing water for 1-2months. Bright sunshine lets plants grow. But it's a breeding ground for mosquitoes - spreading malaria and encephalitis.
- Mosquitoes ubiquitous in all of Asia because of dirty, standing water. People's immune systems probably better than ours at repelling mosquito-borne disease.
- Irony: Water essential to grow food. Yet, its source of disease.

“Wheat Field in Snow,” Larry W. Schwarm, 1975, silver gelatin print, #76.84.5



Gallery label: *Snow cover provides needed soil moisture when it melts in spring. Without it, fertile topsoil can blow away in dry winter winds.*

- Being from North Dakota – when visited parents at Christmas. Dry year. Top soil blowing away. Grandfather: No snow that year. Snow not only provides moisture, but also holds top soil they have in place.
- Farmers don't plow in fall, but wait until spring. Leave roots. Holds top soil.

“Dust Storm, Cimarron Country, Oklahoma,” Athur Rothstein, 1936, #92.76



Gallery labels: In the 1920's and early 1930's farmers in western states began working land that had previously been covered in drought resistant native grasses. When an extended El Niño driven drought occurred the crops on those lands dried up as did the soil. Winds carried the dust to the east and north of areas typically affected by such droughts, covering them in dust and destroying the crops. What was a naturally driven disaster was made far worse by poor land management practices.

- Dust bowl. Farm Service Administration photo.
- In 1920s/30s USDA promoted use of land in Western Plains that up to then used for grazing cattle or left barren. Native buffalo grass and other prairie plants with deep roots had evolved. Same plants now used for rain gardens. Can survive drought.
- Started plowing up fields in Texas and North Dakota. Rotated through two crops a year. Grew short-lived spring wheat or barley. Got two crops. When had natural small droughts, El Nino driven droughts, plants couldn't withstand, they died. Soil started to blow. That actually spread the drought beyond normal area. Covered immense area of drought areas far to north and east of naturally occurring drought.
- Example of poor agricultural management and poor retention of soil moisture, ended in much larger disaster than simple drought.
- Norman Ernest Borlaug - friend of my dad's. As result of occurrence of dust bowl, went into desert of New Mexico and developed new plant breeds, - wheat oats, and barley that would grow in desert conditions. His research developed different plant that can grow in Siberia – extreme dry and extreme cold.
- Look for: Ken Burns PBS special on the dust bowl & “The Worst Hard Times” – good book on the subject.

As part of our Globalization exhibit and everyone's need for water, we're now moving from global to local. The next three walls are my homage to our own big river – the mighty Mississippi. I don't yet if in the rotation if we'll extend our coverage to the other big rivers – the Nile, the Yangtze, the Ganges: “Too thick to drink, too thin to plow!” This is also a time-line, starting with Seth Eastman. These were all done by Minnesota artists or artists visiting Minnesota.

“Itasca Lake, Source of the Mississippi, 1575 feet above the Gulf of Mexico,” Seth Eastman, 19th c., Watercolor, #L94.259.60



- Water colors done in the 1840s in Minnesota.
- Starts with the source of the Mississippi: Itasca.
- Very simple life style – Native Americans.
- Early depiction of the very source of the big river.
- Seth Eastman was visiting here.

“Winona’s Leap, Lake Pepin, Mississippi River,” Seth Eastman. #L94.259.61



- Depiction of Lake Pepin.
- Winona’s Leap: the Big Cliff, where Native Americans supposedly jumped to their death

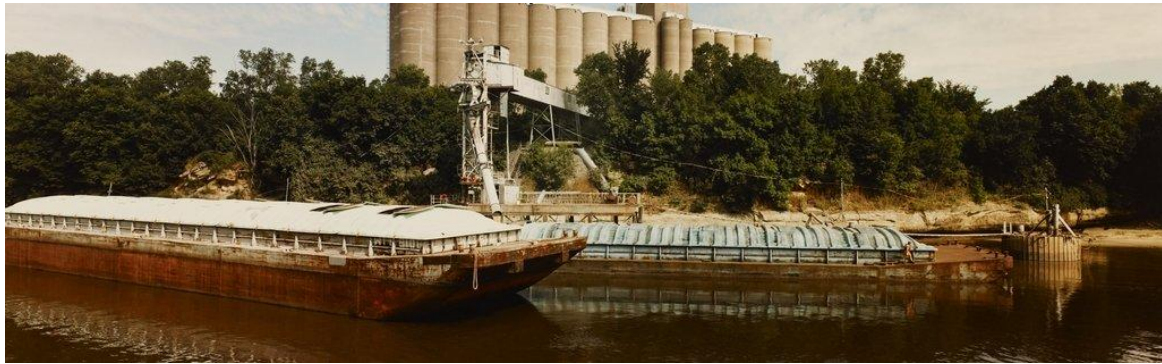
“St. Anthony Falls as it Appeared in 1848,” Henry Lewis, 1855, #28.79



Gallery label: Executed in 1855, when the site was already highly industrialized, this painting shows the falls before European settlement. It is an idyllic image, establishing the northern Mississippi as part of a romantic past, when the Northwest Territory was a wilderness paradise and Native Americans lived in peaceful harmony with nature.

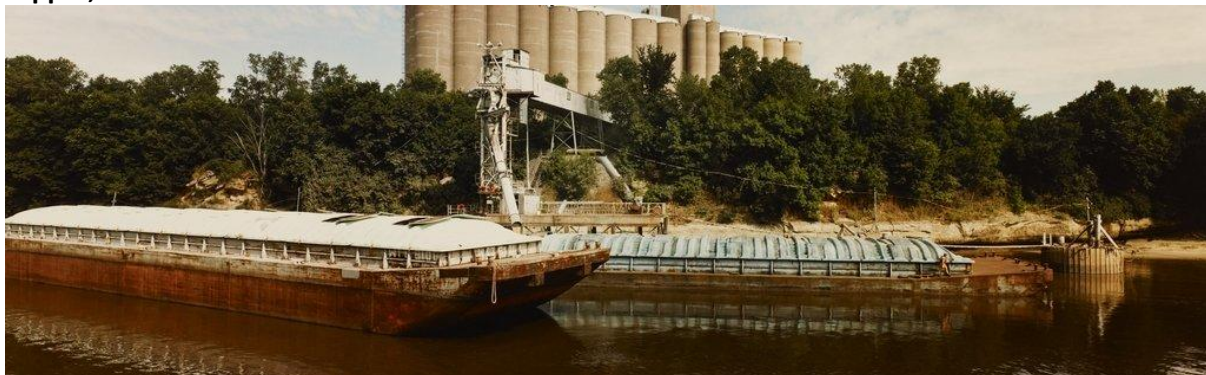
- Right downtown, just south of Nicollet Island
- No habitation by white people. Very simple scene of Native American playing his flute and enjoying nature
- Portrait of St. Anthony Falls as appeared in 1848. Actually painted in 1855. Artist looking back before any industrialization or colonization. In that short period, there was a big switch, a big change in the culture. Reminiscence: Looking back to simpler times and simpler use of the river.
- Henry Lewis was visiting here

“Grain Terminal, Mississippi River, St. Paul,” Stuart D. Klipper, 1984, #85.4.7

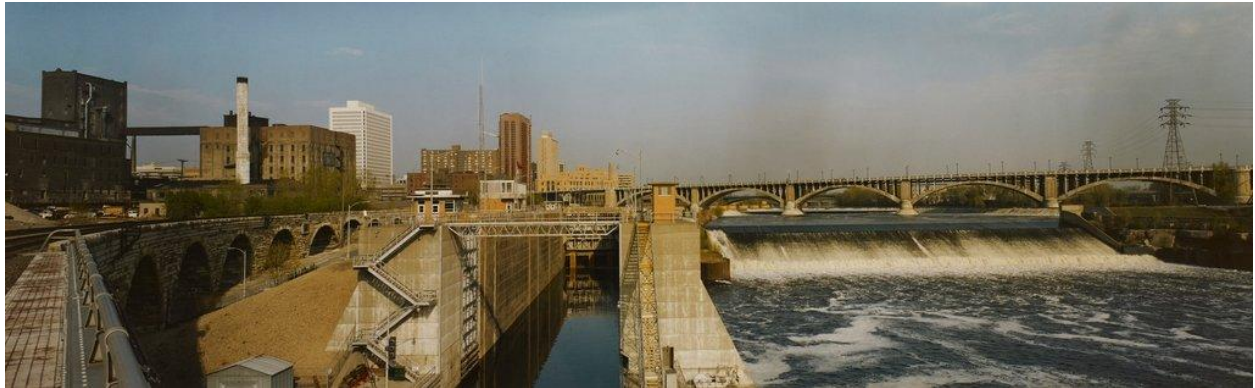


- St. Anthony Falls as it appears in the mid-1970s
- **Same location** as in the Henry Lewis painting.
- Completely transformed. River is tamed, caged!
- Bridges going across it.
- Progression of how the Mississippi has been changed by the people who live here.
- Use of the Mississippi not just as source of water, but also transportation
- Important in Minnesota – Flour City to the nation. Main miller of grain in the country.
- Four moved west by train. South by the Mississippi River.

“Grain Terminal, Mississippi River, St. Paul,” From "The World in a Few States" series, 1984, Stuart D. Klipper, # 85.4.7



“St. Anthony, Lock and Dam from Jim Hill Stone Bridge, Minneapolis,” from "The World in a Few States" series , 1981, Stuart D. Klipper, #85.5.2



- Part of set of photos that Klipper did along the Mississippi.
- Look at whole series. Different aspects of Mississippi. Some are simpler images of agriculture, drainage ditches. Industrialization of river. Transport goods.
- Here barges carrying grain from St. Paul from the grain elevators and then further south.
- Change in how river used not just for water, but transportation - shipping, commerce and generating electricity.

Power Plant, Mississippi River, Minneapolis, 1979,” Thomas F. Arndt, #93.70.29



- This is power plant on Mississippi.
- Minnesota photographer, famous locally for political photographs.

Next four pictures by Alec Soth. Alec has an amazing knack. He’s from Minneapolis s area. Actually worked at MIA for 4 years - color correction and ivisual resources dept. Great fun to show former colleague’s work now that he’s world famous. As part of my job, I get to travel with works of art. At the LP Arts warehouse in Paris – whole section of warehouse with magnum photographs – entire walls of crates stacked to ceiling marked “Alec Soth.” His work travels from Paris to different museum.

These all from a series he did called, “Sleeping by the Mississippi.”

“Harbor Marina, Memphis, Tennessee,” 2000, Alec William Soth, #2007.109.9



“Fishermen, Wickliffe, Kentucky,” 2002, Alec Wiliam Soth, #2007.111.4



“Angola, Louisiana,” Alec William Soth, 2002 , #2007.110.13



“Peter’s Houseboat, Winona, Minnesota,” 2002, Alec William Soth, #2007.110.1



“Mississippi Delta,” Siah Armajani, 2005-2006, #2010.100a-c



Gallery label: Armajani's drawing captures the disaster that befell the Gulf Coast and New Orleans in the wake of Hurricane Katrina. All of the destructive forces of water are unleashed when a great flood occurs. Waters overflowing banks, dykes, and levees contaminate water and sewage treatment facilities making tap water undrinkable. Industrial waste, agricultural chemicals and other pollutants get added to the mix and flow into neighborhoods. Water shortcircuits electrical systems, turning out the lights, shutting down refrigerators and freezers, leaving little to eat. A dining table with empty plates, a bed, and a house, the comforts of home, flow downstream. A car floats by upside-down, no longer a means of escape. Upstream the bridge has collapsed. Crows survey the catastrophe, ignore the scarecrow, and wait to exploit the carnage.

“Vessel,” Artist unknown (Moche), 400-499, #44.41.2



“Vessel in the Form of a Duck,” Moche, 1-8th c., #2002.197



Gallery label: *In the high desert of Peru water is very scarce. These ceramics, although made of porous earthenware, are slip coated and highly burnished to reduce loss of water due to evaporation. The spouts on the stirrup handles would also have been stoppered.*

“Vessel,” Chimú, 11-15th c., #75.82.19

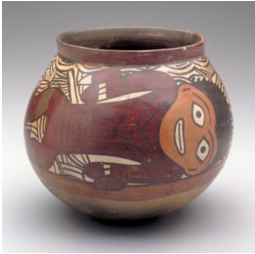


“Double Spout Jar,” Nazca, 3rd-7th century, #77.59.6



Gallery label: *In the Andean region the Nazca once called home, barren desert sand dunes plunge into the deep, cold waters of the Pacific Ocean. These waters are cooled by a current which yields some of the richest fishing grounds in the world. Fish and coastal birds appear frequently in ancient Andean imagery. This jar portrays a pelican fishing and catching three mythical killer whales, howing the importance of coastal activities in Nazca culture.*

“Vessel (Bowl with Swimmer Motifs),” Nazca, 100-600, #42.61.13



“Maze Fountain,” c.1850, #2002.9



Gallery label: Part of a larger complex of fountains, water flows into one of the openings at the back of this maze from a hidden source. The water courses its way through the maze and out through the second opening in the back. As water in the desert region of Rajathan is scarce, fountains such as this one are used only on very special occasions.

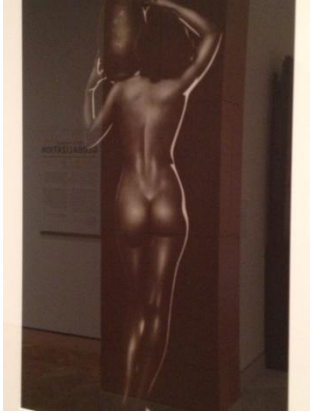
“allevythingthatisyou pockowteg,” Doug Starn and Mike Starn, 2006, #2008.6.3.1-9



Gallery label: Water molecules are composed of one oxygen and two hydrogen atoms. The electrons that bind the molecule together create a “V” shape, two hydrogen atoms at the top and the oxygen at the bottom. When molecules fall to earth they align and stick together along their polar axes, solidifying as they freeze. Changes in temperature and humidity and collisions with other snowflakes change the exact pattern of each flake as it is built, but because of the molecules matching “V” shapes

and magnetic properties they align themselves in six sided symmetry. The repeated process of individual molecules attaching together in a patterned yet somewhat random style illustrates the basic principles of fractal geometry.

"The Water Nymph," 1949, Thomas Limborg, 94.12.9



"Blanc de Chine Figure of Kuan Yin, Goddess of Mercy and Hearer of All Prayers, Standing Upon Crested Seawaves," c.1800, #87.71.1



"Underwater Swimmer, Esztergom, Hungary," Andre Kertesz, 1917, #2007.35.155



Gathering Water Lillies," Peter Henry Emerson, 1886, # 2000.50



"Vanitie, International Yacht Races, Newport, Rhode Islnd," 1934, Margaret Bourke-White, #92.18.3



"Ice bucket with tongs," Michael Graves, 1989, #2001.15.1a,b



"Water jar with cover (mizusashi)," 2009 Kawase Shinobu, #2009.40a,b



Gallery label: Water is ladled from the Mizusashi and heated in a kettle by the Tea Master in order to make tea during the Japanese Tea Ceremony. This jar evokes the purity of the water held within.