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The Mississippi River (Revised)

The Mississippi River is among the significant rivers systems in biological productivity and habitat diversity globally. Native Americans lived along this river, utilizing it for transportation and sustenance. The river is one of the world's most essential commercial waterways. The river is also one of the major migration routes for both birds and fish in North America (Munoz et al., 2019). Besides, the Mississippi River was utilized by early European travelers to explore the interior and the northern reaches of what was to become the United States. The history of the Mississippi river tells us how political and social factors have influences the river, its residents, and its name. Its history serves as a reminder about the change and impact human activity has implemented throughout the years. Only to remind us of the early beginnings of indigenous history, the ice age, water pollution, the discovery of water skiing, and flour milling. Now, we have become tourists of such historical and serving river.

The name *Mississippi* can be traced to Ojibwa origin. In this case, *Missi is akin to Gitchi* or *Kitchi*. *Zibi*, on the other hand, means a great river. Therefore, the combination of these two words means "Great River. " This has also been interpreted in various instances to mean the "River-of-the-Falls." To the Chippewa (or Ojibwa), the Mississippi River only becomes below Leech Lake River junction, not Itasca as designated by the whites (Tavakoly et al., 2017). Itasca lake was previously considered as O-mush-Kozo Sa-Gai-igan. An O-mush-Kozo Zibi was the stream running out of this lake. As a general rule in which a river takes the immediate name of

its source lake was considered in this case. This stream changed its name three times more after reaching Lake Bemidji, Cass, and Winnibigoshish (Tavakoly et al., 2017). On the outlet of Leech Lake, Ojibwa considered the stream as the Mississippi river.

Since the 4th millennium BCE, Native Americans have lived along the Mississippi River where it acted as the western border for the U.S. prior to the Louisiana Purchase. The waterway was utilized to transfer fur and other products during trade with the Indian tribes. The river became a crucial mode of transportation resulting in the revolutionization of river commerce when steamboats were invented. Furthermore, dams and artificial locks were developed to control flooding and ensure deeper water for steamboats (Alexander et al., 2012). Nevertheless, this system made it more challenging for water to be absorbed, resulting in more flooding. The constant water supply and the convenience of trustworthy mode encouraged cities, industries, and agriculture to spread to various areas along the river. High productivity for these areas led to enormous amounts of nutrients being discharged from the river system into the Gulf of Mexico. The occurrence of hypoxia can be attributed to these nutrients. It has been indicated that different human activities have significantly reduced the ability of Mississippi River Basin (MRB) to remove nutrients.

Over more than three centuries ago, cultural activities such as cleansing were still common. Historically, different cultural activities were carried out on the Mississippi River. These activities were majorly carried out along the river (Twilley et al., 2016). The Mississippi river was considered one of the best places for carrying out cleansing activities among the locals. Besides, the river acted as the source of herbs utilized to cure various diseases. Most herbs could dry up during dry seasons and could only be found along the riverbanks.

Furthermore, the river serves as a reminder that Kaskaskia, Illinois, was on a peninsula at Kaskaskia (Okaw) and Mississippi Rivers confluence. It was the initial state capital of Illinois before 1819, and it later became the Illinois Territory capital. Successive flooding made the Mississippi River encroached east slowly in 1844. Huge flooding that occurred in 1881 made it overtake the lower 16 km (10 miles) of the Kaskaskia River (Holm et al., 2016). As a result, the town was cut off from the rest of the state due to the formation of a new Mississippi channel. The flooding later destroyed the original State House together with most parts of the town. Currently, a community of 14 residents and the remaining 930 ha (2,300 acres) island.

The Mississippi also played a role during the civil war as it was an essential military highway since it boarded almost ten states roughly equally divided between Confederate and Union loyalties. Both sides were aware that control of the river was a vital strategy towards success. The double-bend on the Kentucky-Tennessee line and New Orleans at the mouth of the river were secured by the Unions in April 1862. These were considered the major points, and only the middle section was left for the Confederate. Lincoln declared, "The Father of Waters again goes unvexed to the sea" after the main river-ports of Vicksburg and Memphis fell. This was the period when the liberation of the Mississippi was considered complete. Even though the river acted as the common water source for the two warring groups, it served as a source of success for one group based on controlling the critical points along the river (Munoz et al., 2019). During the war, thousands of people lost their lives. Some of those killed were thrown into the river. The river reminds those who lost their loved ones of the deadly war. Conversely, those who won the war by controlling the critical points along the river are reminded of their success.

Through the Mississippi Rivers history and lifetime, it faced changes that were triggered by a flooding, leading to significant long-term political and social changes in the U.S. There were various changes, especially among Black Americans concerning political loyalty based on how the administration handled the Mississippi River flooding (Twilley et al., 2016). The community shifted their support from President Calvin Coolidge's anti-slavery Republican Party to the Democratic Party. This was also one of the significant aspects that contributed to the fight for freedom by the Black Americans. During various rescue operations during the flood, Black Americans believed they were not treated fairly (Falcini et al., 2011). The Black Americans displaced by the flood were not compensated like other Americans. This made most people believe that there were many impartialities in the ruling government and, therefore, change was necessary. These changes were achieved when Coolidge's government was later overthrown. Therefore, the river reminds political changes that occurred after the flood. Besides, after the flood, the Black Americans migrated from South to North. This migration occurred due to various reasons. First, they relocated to avoid such incidences in the future. They were migrating to a place where they were less likely to experience a flood. Also, they migrated to obtain social and political protection. They experienced different social and political challenges in the South, including inequality.

Moreover, the formation of the fertile Mississippi Valley landscape was caused by the Southern section of this massive glaciation extended into the present-day Mississippi basin and the United States. Several feet of rich sediment were deposited after the ice sheet receded. The present form of the Mississippi River was the majorly most recent Ice Age Laurentide Ice Sheet. The residents are reminded of the river's role in the formation of this valley whenever they visit the valley. Since the formation of this valley, several activities that were not there have occurred.

For instance, previously, the region never received tourists from different parts of the country and the world like it does now (Falcini et al., 2011). The valley has become a significant source of attraction. Besides, different scientists and miners are visiting the region to explore the possibility of getting precious metals such as gold. This further reminds the residents of the essential roles the river has played. Initially, the river had been a significant source of fish and irrigation. However, it is now a major source of different precious metals. After the ice sheet completely retreated, most "temporary" rivers found their paths to the Arctic Ocean or Hudson Bay.

Also, the river reminds that it was once home to more than 25% of all North American fish species. However, this is no longer the case as some fish species have disappeared from the river for various reasons. The extinction of certain fish species has been attributed to different aspects such as pollution. Pollution has significantly been due to increased agricultural activities along the river. The residents recall how it was easy to fish in the river before. However, different challenges have occurred, including a drastic reduction in the total number of fish in the river. Even with the advanced fishing equipment, the number of fish obtained from the river is not like before. Initially, there were more than 260 species of fish in the river (Tavakoly et al., 2017). This number has reduced to almost a hundred. Most fish are currently found in St. Anthony Falls, which is the only waterfall along the river. This section of the river has attracted a large number of fish because it has backwaters, pools, and currents that create habitats that support different fish species. Some of the remaining fish species in the river include gar, pike, sturgeon, and catfish, among others.

In addition, in the United States, the Mississippi has been considered one of the most heavily engineered rivers. The floodplains and the meanders of the river have been modified

from time to time to allow for different agricultural activities. Interviewed by Alexander in 2012 for the U.S. Geological Survey, John, an 87-year-old man, recounts how various changes have occurred along the river. According to him, multiple things have occurred, and the nature of the river is not as it was more than eight decades ago. He blames human activities for these changes. John has always considered the Mississippi River the major source of livelihood since his childhood. While only eight years old, John remembers how his father taught him to fish in the river. He remembers different risks encountered. However, little was heard about people drowning in the river like today. The river has turned into a death trap due to various human activities along the river (Alexander et al., 2012). One day as John went through a magazine, he was welcomed to a page that discussed microplastics found in the bodies of different water animals in the river, such as fish. Humans also consume these plastics since they consume these animals. These microplastics and other materials reach the river as a result of pollution. There are different instances in which the microplastics found in these animals have been attributed to cancer. To John, this has made the river more harmful than before. Moreover, there have been instances related to a significant reduction in agricultural production along the river. Long time, people could plant different crops without fertilizers and the use of pesticides. This is not possible currently, and various chemicals and fertilizers have become a significant source of pollution for the river.

In response to many changes, in August 2012, the Mississippi River flowed backward. This is one of the major events that the residents in this region had never witnessed. Even though there have been instances where rivers flow backward, this never happened in North America. Hurricane Isaac was one of the major causes of the Mississippi River's flow backward. This occurrence lasted for approximately 24 hours. During this event, the river reached a height of

approximately 10 ft (3m) above average. The flow reached approximately 182,000 cu ft/s (5,200 cu m/s) (Tavakoly et al, 2017). Under normal circumstances, the river flows in the opposite direction at an average of 3,540 cu m/s. Even though such an occurrence was experienced in 2005, it was not intense. It lasted for less than an hour, and most people could not witness the occurrence.

Moving onto discoveries, the people, especially North Americans, have discovered where and how water skiing was invented. When he was 18, Ralph Samuelson became the first to translate snow skiing to water. Nevertheless, it has been shown that he did not proceed to patent the invention. Three years after his first successful water ski ride, Fred Waller obtained a patent for water skis in 1926 (Twilley et al., 2016). His product was named "Dolphin Akwa-Skees."

In addition, the river has played a crucial role in enabling North Americans to recognize the great swimmers, especially those who swim the river's entire length. Martin Strel, a distant swimmer, swam the length of the Mississippi River within 68 days in 2002. The same swimmer also went on to swim the length of the Yangtze and Amazon rivers. The American Navy combat veteran Chris Ring in 2015, became the first American and the second individual to complete a swim of the Mississippi River. It took him approximately 181 days to complete the swim. These individuals had also participated and won different swimming competitions. Their success has been attributed to their ability to swim through the Mississippi River.

Also, most people have heard of or seen saw and flour milling, but they don't know where it originated (Munoz et al., 2019). Some of the old locals who live along the river clearly remember how saw and flour milling came about and its significance in society. On top of offering an essential habitat for fish, St. Anthony Falls became essential during Minneapolis industrialization. The settlers utilized the Falls between the 1700s and 1800s as power sources

for lumber and flour mills. In an attempt to expand milling operations above the Falls, the Falls partially collapsed (Alexander et al., 2012). The American Army Corps of Engineers decided to construct a concrete wall in place of the natural falls after several failed attempts to repair the existing falls. In 1876, the construction of the wall was completed. Flour milling took off in the area after St. Anthony Falls was secured (Twilley et al., 2016). The saw and flour milling developed as a result of enough water in the river reminds the residents of different technological advancements that have occurred since that period. The saw and flour milling became an eye-opener for developing more sophisticated and efficient milling machines.

To celebrate and recognize the significance of the river, different museums have been opened. One of these is the Mississippi River Museum, located in Dubuque, Iowa, USA. This museum has been rapidly growing since it was opened (Munoz et al., 2019). The museum has been majorly utilized as an academic and cultural resource center. The museum has different cultural aspects related to the people who lived along the Mississippi River several years ago. Besides, it has acted as conserving the river's natural and historical environment. This museum serves the local audience, and it is one of the leading environmental and cultural facilities in the region.

In a nutshell, the Mississippi River has historically had so many benefits to the locals. Fish obtained from the river acted as the main food for the individuals who lived along the river. Besides, the irrigation along the river resulted in economic advancement. The river has also been one of the significant sources of tourist attraction. Different ritual activities were carried out on the Mississippi River. The river also played an essential role during the civil war. I chose to study more in depth about the Mississippi river because I was introduced to the form and function of the river in one of my Landscape Architecture courses here at UC Davis. Ever since

then I have had an interest in the backstory and its significance to those who lived and live there now. It has been a place I've been wanting visit.

Reflection for Revision:

Regarding my editing process, my first step was to reread my paper and then look into the feedback I received. The main suggestion to my paper was to rearrange my introduction paragraph to make it like a road map. So, I took the main topics I talk about in the paper and slightly mention them n the introduction for the reader to have an idea of what I will be presenting. Once I had my topics and introduction done, I went to taking the first sentence of each paragraph and creating an outline with it. The intention behind this was to check if the starting sentences were strong enough to capture the whole idea. Some I left how is because I thought they brought relevance or at least introduced my topic. Once I did this, I read my paper again and added missing context. For another comment I received it was brought to my attention that I did not add background information on an interview. Another comment I addressed was connecting the past and present. For instance, I talked at one point about humans causing pollution with new advancements, then followed onto how it affected glaciers and the river flowing backwards. I thought these were great points to mention in the paper because it's an example of how the landform has been impacted by human activity. I think more people should care and learn more about the background of certain places, despite not having any significant relation to it because it can teach and enhance land acknowledgement. In my case, I have never been to the Mississippi river, but by all the emphasis my professors from landscape architecture have mentioned about human activity having a negative effect, it came to my interest to learn more about the river. I think I did a well job talking about humans' interaction with the place and

how it impacted it physically, politically, and socially. It also serves as a reminder of what was there and what remain. Or even what needs to be conserved. This research assignment has helped me value and but also criticise what humans have done or not done to "better" the land. For instance, I did not find much on how people can change things.

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