## REVEALING THE MYSTERIOUS WEST

Claude and Guillaume Delisle's maps of North America, 1700–1718

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Three maps published between 1700 and 1718 by Claude Delisle and his son Guillaume reveal the significant advances they made to knowledge of the Mississippi River and western North America. This article considers their contributions and the information sources which enabled them to produce maps that were far superior to those of their contemporaries. Claude Delisle (1644-1720), student of French mapmaker Nicolas Sanson and a geographer for the French Royal Academy of Sciences, produced mostly manuscript maps (Fig. 1). Claude trained his son Guillaume (1675-1726) (Fig. 2) in the family business and arranged for him to be educated by the mathematician and astronomer Jean-Dominique Cassini. As partners, Claude and Guillaume became leading actors in the French enterprise of map publishing. Claude focused on gathering cutting-edge geographical information while Guillaume directed his energies to making the maps. Guillaume was so successful that, by the age of 27, in 1702, he became a member of the French Royal Academy of Sciences. In 1718 he received the special title of Premier Géographe du Roi (First Geographer to the King) and was so celebrated as to be visited by Peter the Great of Russia and the king of Sicily. Although Guillaume's name was usually the only Delisle name to appear on the printed map, his father was an essential partner. After Claude's death his sons Guillaume and astronomer Joseph Nicolas, then Guillaume's widow, and son-in-law Philippe Buache, carried on the Delisle workshop continuing to publish maps into the 1780s.

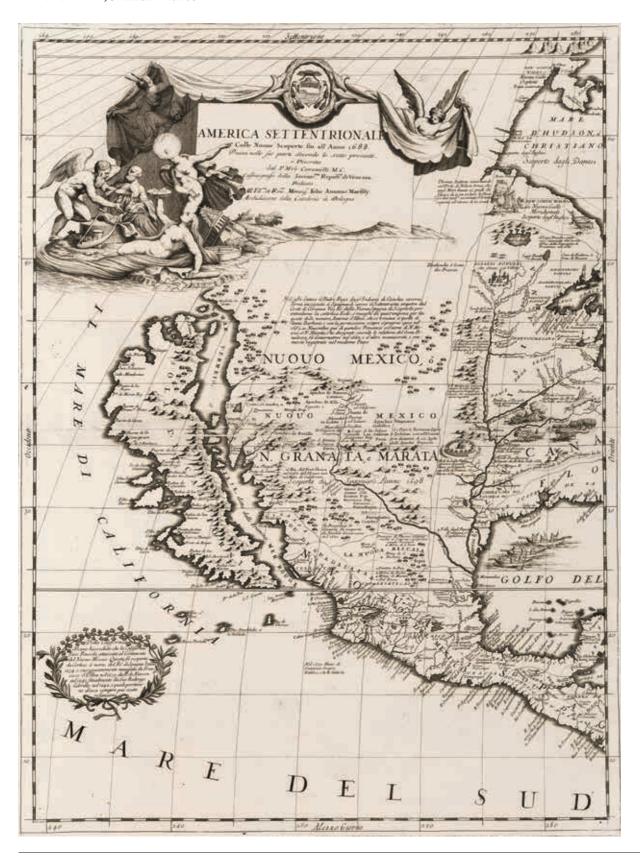
This article will primarily discuss three cartographic treasures created by Claude and Guillaume: the North American maps of 1700, 1703 and 1718. We begin, however, with a discussion of an



Fig. 1 Claude Delisle (1644–1720). Wikipedia Commons. https://commons.wikimedia.org/wiki/File:Claude\_Delisle\_AGE\_V10\_1802.jpg



Fig. 2 Guillaume Delisle (1675–1726). Wikipedia Commons. https://commons. wikimedia.org/wiki/File: Guillaume\_Delisle\_AGE\_1802 jpg



earlier map that illustrates the general understanding of the geography of western North America before the Delisle family published their works.

## Coronelli's map of 1688: 'America Settentrionale'

During the final quarter of the seventeenth century the English were beginning to explore west of their Atlantic colonies while the Spanish were trying to maintain their huge northern empire of New Spain with outposts in New Mexico along the northern Rio Grande and Florida. In contrast, the French had been developing prosperous trading ventures with the native populations. They pushed ever west and south from the St Lawrence river system, taking them farther into the Great Lakes region including some of the northern rivers that drained into the Mississippi.

Working predominantly in Venice at this time was the Franciscan priest Vincenzo Maria Coronelli (1650-1718). His maps and globes were so highly regarded that he moved to France to work directly for King Louis XIV. As a member of the French Royal Academy of Sciences and later Geographer to the King, he was privy to information coming from French traders and explorers. In 1688 he drew a map of North America which was engraved and published by Jean Baptiste Nolin sr (1657-1708), who was responsible for its beautiful artistic elements (Fig. 3). The map includes details about the interior of North America first shown by Coronelli in smaller maps separately published by Nolin a year earlier. But this large map was widely distributed and presents the best cartographic image of the North American West that was generally available to the European public at that time.

Coronelli's map celebrates the explorations of René-Robert Cavelier, Sieur de La Salle, who in 1682, travelled the length of the Mississippi proving that it emptied into the Gulf of Mexico (Fig. 4). This feat, together with the voyages of Jesuit Father Jacques Marquette and merchant Louis Jolliet nine years earlier, are noted on the map by legends alongside the river. Upon his arrival at the Gulf, La Salle claimed the region drained by the mighty river for his king, Louis XIV. However, after travelling the twists and turns for hundreds of miles on the complex river, he had no idea where he was along the coast. His

Fig. 3 Vincenzo Maria Coronelli, Western half of 'America Settentrionale', 1688. The full map is printed on two sheets. Each sheet measures 60 x 45 cm. Author's collection.

longitude was a complete mystery and his latitude imprecisely measured. The 1688 map illustrates Coronelli's attempt to show the parameters of the Mississippi River. In doing so, he perpetuated a significant error of placing the outlet of the Mississippi 500 miles too far west, debouching just next to the Rio Grande (labelled on map as Rio Bravo). This

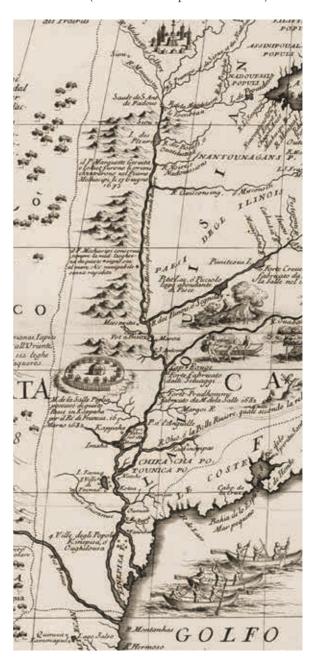


Fig. 4 Vincenzo Maria Coronelli, detail from 'America Settentrionale', 1688. Showing the Mississippi River flowing into the Gulf of Mexico 500 miles too far west.

depiction requires significant lengthening of the Wisconsin, Illinois and Ohio Rivers to reach the Mississippi misplaced further west.

How did this error come about? There are several possible explanations. I have summarised a few of the most significant. First, early French Jesuit mapmakers Claude Allouez and Claude Dablon exaggerated the westward reach of Lake Superior resulting in the upper Mississippi being located too far west.<sup>2</sup> Second, the Rio del Espíritu Santo, or Bay of the Holy Spirit, was first shown on the manuscript map of Alonso Alvarez de Pineda in 1519. It was generally assumed to be the outlet of the great river draining the interior, first heard of in Europe when Hernando de Soto's expedition crossed it in the 1540s. Later it was known as the Mississippi. For the previous half-century, on most maps, the bay had been located in the western third of the Gulf Coast. Marquette and Jolliet's 1673 exploration down the Mississippi ended at its junction with the Arkansas River because they feared attacks from both hostile Indians and the Spanish farther south. Consequently, they assumed the outlet of the Mississippi was the Rio del Espíritu Santo; thus, they naturally placed its location in the Western Gulf. The third explanation by Professor Peter Wood is that the true latitude of the central Gulf Coast is 30° and was generally shown as such on contemporary maps but without the delta, which extends a full degree of latitude farther south to 29°. Upon reaching the Gulf Coast at the mouth of the unknown delta, La Salle attempted to determine his latitude. But when he took his measurements that should have yielded 29°, he obtained 27°. That mistake may have resulted from either a calculation error or the use of a faulty astrolabe. Because La Salle believed the mysterious outlet of the Mississippi must be at 27°, he pushed his expected landing hundreds of miles to the west where the Gulf Coast bends southward.3 Finally, by strategically placing the outlet near the anticipated silver mines of New Spain, La Salle pleased his financial backers. His mistaken assumption of the location of the Mississippi's outlet was illustrated by his draftsman, Jean-Baptiste Louis Franquelin, and copied by Coronelli.4

Spain's ambitions in the northern part of the southwest had long been limited to remote Santa Fe and small settlements nearby along the upper Rio Grande because of the extreme hostility of the Indians and the difficult terrain beyond this region. In his map, Coronelli depicted previously unknown information from Don Diego de Peñalosa, governor

of New Mexico from 1661 to 1664. Peñalosa was later banished from New Spain, discredited for defying the Catholic Church's effort to Christianise the native populations, and went to Europe to sell his first-hand geographical information to the French. Coronelli acknowledged his debt to Peñalosa in a lengthy caption on the map. The image of New Mexico includes many new settlements that survive to this day. Significantly, it reflects the generally mountainous terrain surrounding the upper Rio Grande, here labelled Rio del Norte. The Rio Grande is shown draining due south to El Paso (the town shown for the first time on Coronelli's 1687 map) and then turns sharply southeast to the Gulf of Mexico. As we look at the western portion of Coronelli's map, we see one final feature that deserves note. Since the 1620s, California had commonly been shown as an island. Although laughable today, its insularity was generally accepted by cartographers of the day. We will see how the Delisles played a role in debunking this myth.

# Delisles' map of 1700: 'L'Amerique Septentrionale'

With this background in mind, we turn our attention to the three maps created by the Delisle dynasty. In 1700, father and son, utilising Guillaume's and perhaps brother Joseph Nicolas's astronomical observations from the Royal Observatory of Paris, produced their first printed maps in the form of an atlas. Those observations positioned most of the continents more accurately than earlier maps, thus enhancing knowledge of world geography. Their atlas contained maps of the world and the continents, including a major map of North America (Fig. 5). Although this map bears a decorative cartouche we can see Guillaume's sparse style in the comparatively simple tables and blank spaces where precise information is absent: for example, the northwest region of North America above Cape Mendocino is completely blank. This important map makes three primary contributions to our study. First: it improved coordinates for the positioning of North America; second, it positioned the Mississippi River east of contemporary maps; third, it hinted that California was not an island.

Earlier maps had generally shown the newly discovered Mississippi approximately 500 miles west of its true location. Close inspection of this ultra-rare

Fig. 5 Claude and Guillaume Delisle, 'L'Amerique Septentrionale', 1700. Rare first state published early 1700. Bibliothèque nationale de France. bnf.fr/ark/12148/cb40675939p/.



first state of Delisles' map printed in early 1700 (Philip Burden reports five known copies<sup>5</sup>) shows they moved the Mississippi 5° eastward. The outlet is indicated at 281° (the Delisles used the Canary Island of Ferro as their prime meridian) (Fig. 6). In a letter to Cassini, Claude explained that their rationale for moving the river eastward was based upon their reading of the account of Father Chrétien Le Clerc, a survivor of La Salle's travels and the writings of Father Louis Hennepin. Hennepin, who explored the Great Lakes region with La Salle between 1678 and 1682, published three popular narratives of his travels. His first of 1683 included the map that influenced Delisle.

1697 brought a conclusion to the War of Grand Alliance (known as King William's War in the Anglo-Americas) between France and an alliance of England,

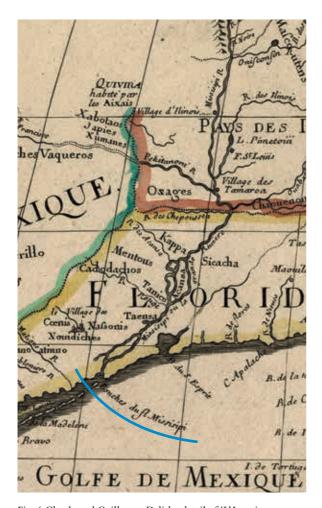


Fig. 6 Claude and Guillaume Delisle, detail of 'L'Amerique Septentrionale', 1700. Rare first state published early 1700 in which the Mississippi River enters the Gulf of Mexico 5° latitude farther east of earlier maps. Bibliothèque nationale de France.

Spain and other European powers. Lasting nine years, the battles raged mainly in Europe. In the New World, French and English colonists and their Indian allies were pitted against each other in eastern Canada and New England. The Treaty of Ryswick (1697) brought no territorial change in the Americas and released both France and England to pursue territorial expansion in the gulf at Spain's expense. Although La Salle's failed colony in Texas dramatised the risk of New World settlement, the opportunity for immense land claims for the French crown and English threats induced Louis XIV to back Pierre Le Moyne d'Iberville's attempt to establish a colony near the mouth of the Mississippi.

Claude Delisle, through his work with the French Royal Academy of Sciences, was charged with producing preparatory maps for Iberville's explorations. In exchange, he was the first to receive the explorer's cartographic findings. D'Iberville's exploration of 1698-1699 was a success. For the first time the Mississippi River was entered from the sea. Nearby at Biloxi Bay he established a colony. Details from that first voyage provided the Delisles with the information for the first state of the map. 8 D'Iberville sailed again from France arriving at Fort Biloxi in December 1699, providing desperately needed supplies to the starving colonists who had established the fort in April 1699. His men went on to establish a second fort on the Mississippi about 60 miles upriver from its mouth. He returned to France in June 1700, and Claude was immediately made privy to these new reports. This cutting-edge information was used by father and son to produce a second state of the map published late in 1700 (Fig. 7). This state shows numerous changes from the first printed earlier that year, primarily along the Mississippi with the most important changes at its mouth. The Mississippi Delta was added for the first time on a printed map. The River's mouth was moved even farther eastward by 3 additional degrees to 284°. The term 'Fort' shows Iberville's new location on the Mississippi. Fort Biloxi is also indicated.

It is interesting that knowledge of the Delta, the approximate longitude of the Mississippi outlet, and the existence of Fort Biloxi were available to the Delisles following Iberville's return to France from the first trip, although this valuable information was not placed on the map until the second state published late in 1700. Why? Seymour Schwartz and Henry Taliaferro, who discovered the rare first state in 1983, offer two possibilities. They speculate this



delay could have been a temporary expediency as the plate might have already been engraved and it was thought it might be corrected with more information from the second voyage that was expected in a few months. Alternatively, there may have been political reasons. During the awkward period of the demise of Spain's King Charles II, French authorities did not want a map published with the sensitive information about French colonisation of Louisiana until Louis XIV confirmed his grandson Philip as heir to the Spanish Crown late in 1700 when the second state was published.<sup>9</sup>

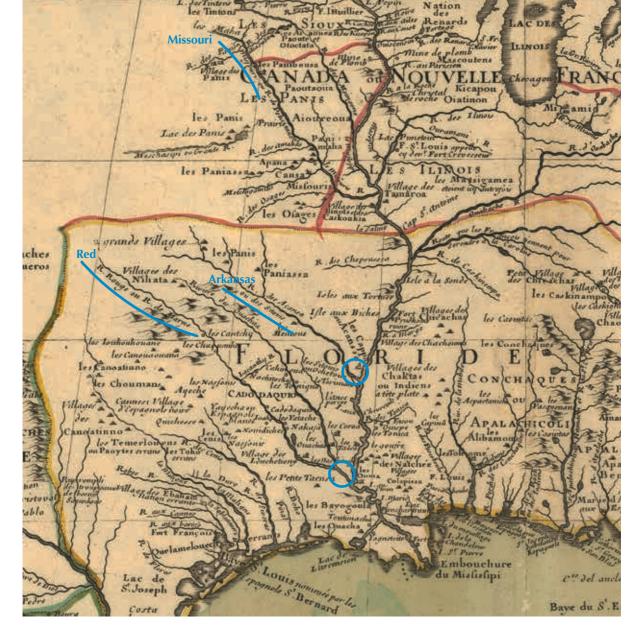
Directing our attention to the vast region of the Southwest boldly titled 'Nouveau Mexique', we see the area of the upper Rio Grande (labelled Rio del Norte on the map) is encircled with a faint dotted line and named 'Nouv. Mexique', probably a reference to the administrative region under Spanish authority. The place names are rather sparse and generally follow those on a 1671 edition of a printed map of North America titled 'MEXICVM' by Giovani Battista Nicolosi (1610-1670). Unlike Coronelli's map, the one created by the Delisles in 1700 fails to reflect the information provided by Peñalosa. There is one feature that deserves our attention. North of Taos there is an east-flowing river titled 'R. de S. Francisco' that perhaps reflects native knowledge of the headwaters of the Arkansas River. 10 This river is

Fig. 7 Claude and Guillaume Delisle, detail of 'L'Amerique Septentrionale', 1700. Second state published late 1700 in which the Mississippi Delta is added, and the river is moved another 3° degrees latitude east from the first state. Author's collection.

connected with a dotted line to 'Pekitanoni R', an earlier French name for the Missouri derived from Jolliet and Marquette. Thus, north of Taos, the Rio de S. Francisco is the headwaters of the Missouri! This idea came from La Salle's writings and was supported by the maps created by Franquelin, his draftsman.

The Delisles suspected that California was attached to the mainland although the generally held view at that time was that it was an island. By showing the land at the head of the Gulf of California as very close to the mainland, the Delisles led some historians to cite this map as the first in print to refute the myth of California's insularity. Nevertheless, the land is not attached on the map. Delisle's uncertainty is expressed in a letter written by Claude in 1700 after he inspected a manuscript map completed by Jesuit Father Eusebio Kino in 1696 that had been forwarded to the Royal Academy of Sciences in Paris. At this time, Kino was still convinced of California's insularity as shown on his map of the Southwest ('Theatre of the Apostolic Efforts of the Society of Jesus in North America') that illustrated his advanced knowledge of the Pima Indian region. In his letter about Kino's map that clearly





shows California as an island, Claude notes 'nonetheless, the most cautious geographers hesitate to express their opinion as to its insular or peninsular nature'. <sup>11/12</sup> The Delisles were clearly unsure.

### Delisles' map of 1703: 'Carte Du Mexique et De La Floride'

In 1703 the Delisles published a pair of exceptional maps of North America, one centered on Canada and the other focused on the south (the subject of this essay), which sheds new light on the Gulf of Mexico and the western interior. Although only Guillaume's name again appears in the title cartouche,

Fig. 8 Claude and Guillaume Delisle, 'Carte Du Mexique Et De La Floride', 1703/1708. 47 x 64 cm. Author's collection.

Fig. 9 Claude and Guillaume Delisle, detail of 'Carte Du Mexique Et De La Floride', 1703/1708, showing the Red and Arkansas Rivers flowing into the Mississippi River from the west and the Missouri River which has been moved far to the northwest. Author's collection.

he stated that his father was the primary compiler of the map (Fig. 8).<sup>13</sup> The title 'Carte Du Mexique et De La Floride' announced that most of North America was controlled by the Spanish or French. The English possessed the small region east of the Appalachian Mountains from Carolina northward. Florida, where France and Spain jostled for control, expands far westward to include Louisiana and Texas. With Iberville's new base on the lower Mississippi, the intense exploration undertaken during the first years there provided the Delisles with information from

many sources enabling them to map the most up-todate image of the continent's interior.

On the 1703 map, which used the prime meridian of Ferro in the Canary Islands, Delisles moved the Mississippi River's outlet three more degrees to the east to 287° (Fig. 9). If we convert to Greenwich Prime Meridian, the Delta is placed at 91° west, only two degrees west from its correct position. The Delta, Lake Pontchartrain and the Gulf Coast are enhanced as the result of Iberville's reports. The explorer is specifically mentioned in the title cartouche. It was the first printed map to convey significant new information about the Mississippi's western tributaries. It illustrates the Red and Arkansas Rivers, whose sources although incorrectly shown far to the mysterious west, join the Mississippi with reasonable accuracy at their confluences. The Delisle map illustrates this lower section of the Mississippi using earlier reports from Henri de Tonty, La Salle's faithful lieutenant, on the first trip to the upper Mississippi in 1682 and several later excursions on the river. Other important sources were Iberville and his assistants, Father Du Ru and Pierre-Charles Le Sueur. For the upper Mississippi, new elements are shown to the very northern edge of the map including the R. St. Pierre (likely the Minnesota River) entering the Mississippi from the west at its source Lac de Tintons (Teton Sioux). This valuable information came from Le Sueur, who left Iberville in 1700 to explore the Mississippi north, where he had been seeking mineral wealth. He found copper and lead in what is today Minnesota. The travel memoirs of this 'able voyager', so described by Joseph Nicolas, were a primary source for the upper Mississippi information on the 1703 map.<sup>14</sup>

We also note that the position of the Missouri River is now quite different from that on the map created only three years earlier. Delisles' 1703 map eliminated the error of connecting Rio de S. Francisco, above Taos, to the Missouri. They are now separated by a great distance. On the earlier map, the Missouri flowed due east; now it flows from far in the northwest. Key information about the Missouri was conveyed to Le Sueur by Father Gabriel Marest who established a mission at its base in 1700. These revelations resulted in a tremendous improvement over all prior images in the depiction of the Missouri River on the 1703 Delisle map.

Despite the many advances regarding the locations of the northern rivers, the map includes two confusing images that might have been derived from native descriptions of the Missouri. Well south of the 'Missouri ou R. Pekietanoni' on Delisles' map is an additional western river titled 'Meschasipi ou Grande R'. flowing southwest from the 'Lac des Panis'. Historian Ralph Ehrenberg explains that this fiction derives from the testimony of Le Sueur, who based his account on legendary Sioux lore.16 Another confusion is found further north; between the Mississippi and the Missouri is the large 'R. des Moingona' that leads northwest to the top of the map. Delisles' 1703 northern map of Canada meant to pair with this one (image not present) shows the continuation of this river as it bends west into a huge river and a series of giant lakes leading the way to a great mountain chain. On the western side is a mighty river that flows west into a huge body of 'salt' water which suggests that the Great Salt Lake or even the Pacific were intended. This image derives from the manuscript of Baron Louis La Hontan who, from 1683 to 1692, served as a French officer in the Great Lakes and upper Mississippi region. In 1703 he published his captivating tales and famous map that illustrates the 'River Longue' that the Delises' have reproduced to full effect.

Although the Mississippi River is more detailed and accurate on this map, the region that would become Texas is still crudely depicted. The Delisles, with little French information, drew from the Spanish. They obtained the itinerary of Spaniard Alonzo de León's successful expedition across Texas to discover La Salle's lost colony in 1689 (he had conducted three prior unsuccessful attempts to find its whereabouts). This inland information, in addition to details of several coastal voyages, was assembled into a manuscript map by New Spain's leading cartographer, Carlos de Sigüenza y Góngora.<sup>17</sup> This valuable espionage was smuggled out of Mexico through an arrangement executed by Frenchman Abbé Claude Bernou and delivered to France.<sup>18</sup>

Farther west, unlike on Delisles' 1700 map, the area of the upper Rio Grande on this map shows greater resemblance to Peñalosa's manuscript map than Coronelli's 1688 map we studied earlier (Fig. 10). Delisles' excellent image of the upper Rio Grande Valley and the settlements thereabout shown on the 1703 map would be copied by most European mapmakers until the final decades of the eighteenth century. Just above is the text 'Grand Teguaio habite par les Tiguas'. Teguaio is a general term for the region north and west of the upper Rio Grande, the Great Basin region as we know it today, often enlarged as a huge legend on maps later in the century. <sup>19</sup>

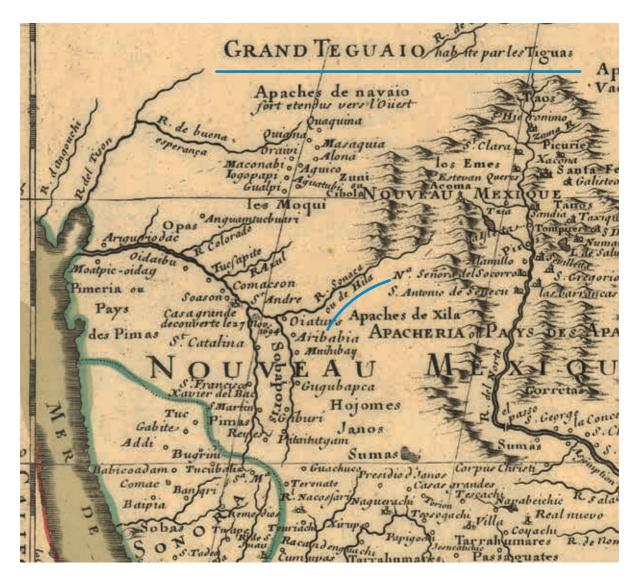


Fig. 10 Claude and Guillaume Delisle, detail of 'Carte Du Mexique Et De La Floride', 1703/1708, showing Nouveau Mexique with an improved depiction of the upper Rio Grande Valley, Hila River to the west, and Grand Teguaio.

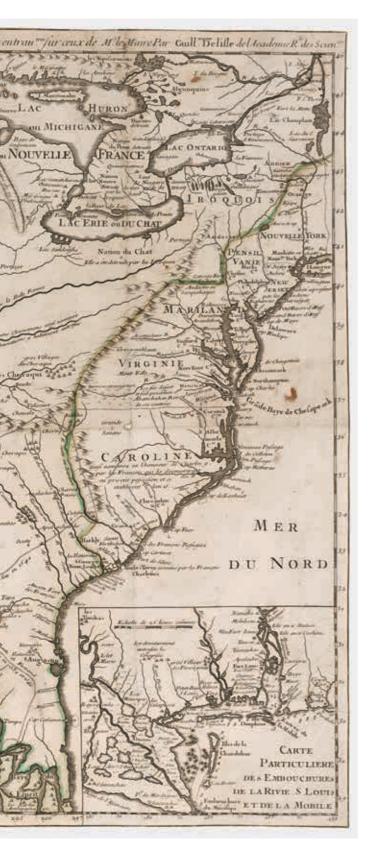
In the far southwest, the Delisles made full use of Father Eusebio Kino's 1696 manuscript, showing extensive and accurate toponyms in the areas of the Pima in southern Arizona, Sonora and Sinaloa. Regarding the theory that California was an island, the Delisles were still unsure. It would take Kino nine expeditions to the area around the mouth of the Colorado between 1698 and 1701 to provide evidence for him to produce his famous manuscript map of 1701 (finally printed in 1705) that shows accurate detail of the area and boldly states in its title 'Overland Passage to California'. Although the Delisles did not have the

benefit of Kino's 1701 manuscript before the publication of their 1703 map, they were quick to accept Kino's work. But others were not so sure. Leading English mapmaker Herman Moll wrote in 1711, 'Why I have had in my office mariners who have sailed round it'.<sup>20</sup> In response to the persistence of many European map publishers in showing California as an island, King Ferdinand VII of Spain issued a decree in 1747 that 'California is not an Island'.

This landmark map, first printed in 1703, was reprinted in 1708 and 1722. After Guillaume's death, the map was printed by his widow and then by his son-in-law, Philippe Buache (1700–1773), and after that by his successors until 1783! The map was copied by most other European publishers during the first half of the eighteenth century.



Fig. 11 Guillaume Delisle, 'Carte De La Louisiane Et Du Cours Du Mississipi', 1718. 48 x 64.5 cm. Author's collection.



### Guillaume Delisle's map of 1718: 'Carte De La Louisiane Et Du Cours Du Mississipi'

When I think of Louisiana, Delisle's famous 1718 map pops into my mind (Fig. 11). After 1703, the Delisle family continued to receive maps and journals from explorers in the region drained by the Mississippi and along the Gulf of Mexico. Their information culminated in the publication of 'Carte De La Louisiane Et Du Cours Du Mississipi'. With Claude's waning involvement because of his advanced age, the map was primarily Guillaume's work. Along the top, printed in simple text is the map's lengthy title; latitude and longitude for each degree are noted around the other three borders. It has absolutely no decoration other than a standard compass rose in the Gulf of Mexico. Few maps have influenced the public image of North America more than Guillaume's masterpiece. Yet he never set foot on the continent! This astounding fact requires us not only to describe the map but also to study his primary sources.

At the time the map was published, the rivalry between France, Spain and England was intense in North America and the Treaties of Utrecht and others between 1713 and 1714, while resolving the issues of the War of Spanish Succession in Europe, hardly settled those in North America. English colonists threatened Spanish Florida from the east and the French posed threats from the west as they moved eastward along the Gulf from the Mississippi's outlet. The English wanted the Ohio Valley, pressuring the French, and the Spanish sought to protect themselves from the French by occupying Pensacola Bay on the Gulf and establishing permanent settlements in Texas.

It is in this context that Guillaume published his map on which advanced geographical information had an aggressive political ambition. The map is centered on the Mississippi River which extends past the border at the northern edge of the map and omits land that would become Canada. By extending all the rivers that drain into the Mississippi further north, west, or east, the mapmaker was clearly inflating the domain of French authority. With the term 'La Louisiane' in the largest print on the map reaching from the Rio Grande to the Appalachian Mountains, the Spanish and English holdings were squeezed. Neither world power was amused; this map set off a cartographic territorial war during which mapmakers from each competing nation produced maps that exaggerated their holdings. The English promptly rebutted Delisle's 1718 map with one by Herman Moll

('A New Map of the North Parts of America Claimed by France', 1720) showing the interior of the continent, and specifically illustrating (almost mocking) France's claims.<sup>21</sup>

We begin with the map's geographic details. The revised longitude of the Mississippi Delta shown on Delisles' 1703 map is affirmed on the 1718 map but now with vastly greater detail as elaborated in the inset map. Its accuracy along the Gulf Coast stems from Delisle's access to the coastal chart dated 1716 made by an officer and pilot of the French navy. Known only as Soupart, he participated in coastal surveying during 1715 between the Mississippi Delta and the west coast of Florida on the Dauphine, a brigantine in the French service.<sup>22</sup> Delisle's map contains the first accurate depiction of the lower reaches of the Arkansas and Red Rivers as they join the Mississippi (Fig. 12). Delisle shows the Missouri as a tributary of major size whose confluence with the Mississippi is close to accurate. Further up the Missouri, the outlets of the Kansas River ('Cansez') and the Platte ('Panis') are shown for the first time. This information was obtained from the journals of a French-Canadian officer Sieur de Bourgmont describing his 1714 expedition up the Missouri River as far as the Platte River. 23

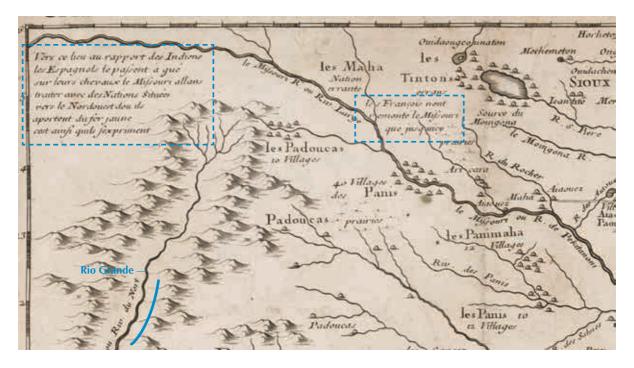
Near the Missouri, upstream, is a legend, which translated reads: 'The French have only ascended the Missouri this far' (Fig. 13).<sup>24</sup> To the left, the Missouri is shown ascending northwestward to the map's



western edge. In 1673, seeing the heavy flow of the Missouri entering the Mississippi, Marquette remarked, 'I hope by means of it to make the discovery of the Vermillion Sea and California'.25 Forty-five years later there was still a strong conviction among mapmakers that there must be some waterway across the continent or a short portage between a great eastward-draining river and one that emptied into the Pacific. On this map, Delisle does his part to uphold this hope. A legend names this westward extension 'Le Missouri R. ou Riv. Large'. The term 'Large' may be a reference to La Hontan's 'River Longue' marked on Delisles' 1703 map. By 1718 Guillaume had concluded that La Hontan's mysterious river represented a confusion with the Missouri River, an opinion no doubt influenced by Father Le Maire, who described the feature as a 'fairy tale'.26 The mythical river was entirely removed, and this word 'Large' is the only remaining reference to this concept. It remained prominent on many maps of North America published for thirty more years.

The mapping of Texas and its complex river system is a great improvement on all prior published maps (Fig. 14).<sup>27</sup> The extensive body of southeast flowing rivers between the Rio Bravo (Rio Grande) in the west and Red River in the east are detailed. The complex coastal features are shown including 'Baye of S Louis or S Bernard' (Matagorda Bay); the term S Louis here refers to the short-lived fort established here by La Salle in 1685. The three great tribes of the Caddo-speaking Indians are illustrated with the 'Cadodaquios' (Kadohadacho) and 'Natchitoches' along the Red River, and the 'Tejas' (Hasinai) to the west. Natchitoches, where a French trading presence had been established by Frenchman Louis Juchereau de Saint-Denis as early as 1700, now shows text noting a French fort was established here by Sieur de Bienville in 1717, just one year before the Delisle map was printed. This same intrepid and wily explorer had led an extraordinary excursion across Texas to the Rio Grande in 1713-14 and back again in 1716. As noted on Delisle's map Saint-Denis was captured, interrogated and imprisoned by the Spanish in Mexico City. Impressed by his knowledge of the area they wished to claim, the Spanish commandered him to

Fig. 12 Guillaume Delisle, detail of 'Carte De La Louisiane Et Du Cours Du Mississippi', 1718, showing the most accurate depiction of the course of the Mississippi River with major rivers flowing into it, and especially a new detail of the Missouri River. Author's collection.



lead them to the 'Mission de los Teijas etablie en 1716', the area of Hasinai Natives. This was the earliest of Spanish missions in east Texas. It was built to thwart the French threat evidenced by Saint-Denis' exploits. This notation - 'Teijas' - is the first appearance on a map of a form of the place name Texas.

In detailing the path of Saint-Denis across Texas as far as the Rio Grande and then back to the Mississippi from 1713 to 1716, and by showing the fort at Natchitoches, Delisle was demonstrating the French footprint in the form of prior French explorations to shore up its territorial claims. Likewise, after Bienville founded New Orleans in December 1718, the city would be prominently placed on all subsequent printings of this map. It does not appear on this example because it is the rare first state, printed before the city's founding.

Claude and Guillaume received information about the New World through a 'virtual' pipeline. The Compte de Pontchartrain, the Minister of the Marine, around the turn of the century had established an official Bureau of Maps and Plans in Paris to archive valuable written intelligence about the French colonies. French explorers such as Saint-Denis came back to key Louisiana forts for supplies and recovery. Their personal accounts together with copies of their journals and maps were conveyed to local authorities who passed this data downriver. The information was aggregated into official reports by others, such as

Fig. 13 Guillaume Delisle, detail of 'Carte De La Louisiane Et Du Cours Du Mississippi', 1718, showing upper western reaches of the Missouri River yet unexplored, next to headwaters of the Rio Grande River placed 7° latitude too far north. Author's collection.

Antoine de La Mothe, Sieur de Cadillac, governor of Louisiana from 1713 to 1716.

One of these sources was especially important. In June 1706 François Le Maire arrived in Louisiana. His reports indicated that he, a secular priest, unassociated with any order, had become disillusioned with saving souls, but was fascinated with the political affairs, science and geography of Louisiana and the Gulf Coast. Serving primarily in Fort Louis in the French hub of Mobile Bay and for a few years in Pensacola Bay, Le Maire was a keen observer, talented geographer and sly recipient of French and Spanish information. Forming a trusted bond with Father Jean Bobé, a well-connected priest in Versailles, Le Maire sent him back detailed relations and manuscript maps; he, in turn delivered the materials to the Bureau, but often shared them directly with his close friends, the Delisles. Thus, as geographers to the King and members of the inner circle, they had access to the documents in the Bureau but occasionally even received advance copies from Bobé.<sup>28</sup>

Guillaume's task was to evaluate the maps and relations of his most important source, Le Maire, as

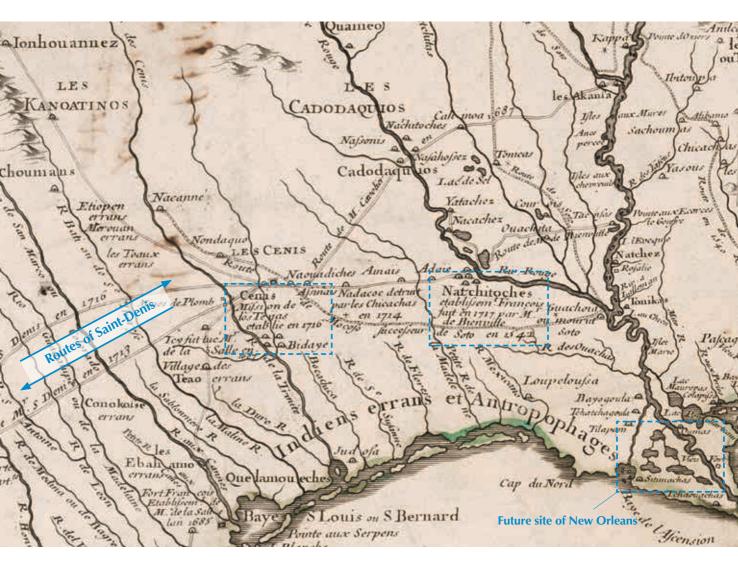


Fig. 14 Guillaume Delisle, detail of 'Carte De La Louisiane Et Du Cours Du Mississippi', 1718, showing details of Texas including 'Mission de los Teijas etablie en 1716', the first time that a form of Texas as a place name has appeared on a printed map. Author's collection.

well as those of many other primary sources, for example, the journals of the Sieur de Bourgmont's 1714 expedition up the Missouri River. For Texas, Delisle evaluated the inland itinerary of Spanish explorer Alonzo de León; coastal maps of cartographers Següenza and Enríquez Barroto; and early expeditions of Saint-Denis when he traded with the Caddo tribes up the Red River (labelled as Riv. Rouge on the map) as far as Cadodachos, as well as information from his later treks across Texas. For the coastal detail east of the Mississippi, Delisle relied on Le Maire, who in turn used Soupart's 1716 chart. One final manuscript

map with significant new information about the far interior west up the Missouri, Arkansas and Rio Grande sent to the Bureau in December 1717 or early 1718, was shared with Delisle just before the publication of his great map in June 1718. The manuscript has been lost, but a manuscript copy survives, made by Sieur Vermale, a French cavalry officer responsible for preparing maps from the colonies.<sup>29</sup> Thus we can evaluate the final map sent by Le Maire used by Delisle through Vermale's copy.

# The overly-extended Rio Grande River on the 1718 map

This lost map contains one final riddle that requires discussion. One of the most curious features of Delisle's map is the extremely elongated Rio Grande (labelled Riv. du Nort on the map) (Fig. 13).

Although the latitude of Taos and Santa Fe are only slightly north of their correct position, the Rio Grande extends north to the 45th parallel into the present state of Montana rather than in southern Colorado as it should be. It therefore almost touches the Missouri River at the northwestern corner of the map. Recall that on the 1700 Delisle map, the headwaters of the Rio Grande and the Missouri, or Pekitanoni, as it was called, were very close. Then, on the map made in 1703, the Delisles moved the Missouri far to the northwest and the headwaters of the Rio Grande remained in the south.

So why did Guillaume create this new fallacious arrangement that brought the rivers together? The final manuscript map by Father François Le Maire that was returned to France in late 1717 or early 1718 contained such an elongated Rio Grande<sup>30</sup> plus new details about the Indian tribes in the northwest. The erroneous information about the upper Rio Grande must have come from Saint-Denis and Derbanne's final trip, as Le Maire mentioned in correspondence of his receipt of the latter's journal; this was used in the preparation of the map.31 Assuming the fresh information to be correct, Delisle copied Le Maire's image of the extended Rio Grande. Vermale's manuscript copy locates many of the known landmarks of New Mexico farther north on the Rio Grande than we now know them to be; presumably they are where Le Maire drew them. For example, Acoma and a reference to Cebola are depicted in what would be today's Colorado. Delisle wisely places these landmarks farther south where they belong, but still greatly extends the headwaters of the Rio Grande, with no place names along the way, to north of the 45th parallel.

Why was Delisle so easily convinced? For a considerable period the French believed that the great western river, which became known as the Missouri, must drain from the mountains near the headwaters of the Rio Grande. This belief was amply illustrated on the maps of La Salle, Hennepin and Franquelin. Le Maire states in a 1717 memoir: 'The sources of the Missouri are still unknown but there are strong reasons to believe that they are not far from the place where the Rio Bravo [Rio Grande] leaves [the Missouri]'. If the sources of the Missouri were much further to the north, so must be the Rio Grande, and therefore it was stretched north seven additional degrees of latitude.

A roughly translated legend in the top left corner of Delisle's map notes: 'near this place, according to

Indian reports, the Spanish ford the Missouri on horseback going to trade with nations located toward the northwest whence they bring back yellow iron' (see Fig. 13).33 The placement of this legend seems strange because it is too far north on the map to connect with the Spaniards. But if the legend relates to the headwaters of the Rio Grande (where the Spaniards were fording the nearby Arkansas or Platte Rivers northeastward to trade gold), this Indian legend would have made sense provided the Rio Grande's headwaters were correctly located.34 Although Delisle's elongated Rio Grande remained on copies of his 1718 map for years, it was quickly discarded on maps independently drawn by other mapmakers. For example, it does not appear on most of the maps based on the expeditions of La Harpe in the 1720s, Moll's map of North America in 1720, or the influential map of D'Anville in 1746.

#### Conclusion

Although Delisle's 1718 map contains errors, it was a great leap forward. Why were the Delisles' maps so praiseworthy? Just as in sports and business, success breeds success. As brilliant and exacting technicians, the Delisles received great acclaim. This led them to the inner circle of French geographers and resulted in early access to all the reports from French explorers and New World officials. Armed with these manuscript maps, reports, and those of many others, the Delisles applied their judgment to the preparation of their great map of Louisiana for publication in June 1718. In the map's title-block Delisle explained that his map was based on many first-hand sources, but singles out only one for special mention: Father Le Maire. The Delisle map revolutionised geographic knowledge of North America and, in tribute, the King created a special title for Guillaume: Premier Géographe du Roi.

This map had enormous influence in serving as the benchmark image of the interior West into the final decades of the eighteenth century. During the first quarter of the eighteenth century, the Delisle family dominated the field of European mapmakers. Surely, the Delisles delivered a *tour de force* of cartographic expression.

#### Notes

1 One map focused on the Great Lakes and northeast region; the other on the southwest; both were probably published in 1687.

2 Carl Kupfer and David Buisseret, 'Seventeenth-Century Jesuit Explorers' Maps of the Great Lakes and Their Influence on Subsequent Cartography of the Region', *Journal of Jesuit Studies 6*, (2019), pp. 57–70.

3 Peter H. Wood, 'La Salle: Discovery of a Lost Explorer', *The American Historical Review*, vol. 89, no.2, April 1984, pp. 303–10. 4 Ralph E. Ehrenberg, 'Exploratory Mapping of the Great Plains before 1800', *Mapping the North American Plains*, eds. Frederick C. Luebke, Frances W. Kaye, and Gary E. Moulton. Norman: University of Oklahoma Press, 1987, p. 7 and fn 11.

**5** Philip Burden, *The Mapping of North America*, Rickmansworth, UK: Raleigh Publications, 2007, vol. 2, 482.

6 Seymour I. Schwartz and Henry Taliaferro, 'A Newly Discovered First State of a Foundation Map, L'Amerique Septentrionale'. *The Map Collector*, No. 26, March 1984, p. 4. 7 Jean Delanglez, 'The Sources of the Delisle Map of America, 1703', *Mid-America* 25, 1943, p. 285.

8 Jean Delanglez, p. 289.

9 Schwartz and Taliaferro, p. 6.

**10** This follows the 1660 North America map of Giovani Battista Nicolosi where it is labelled 'R. de San Francisco'.

11 The letter from Claude Delisle to Monsieur Régis of the Royal Academy of Science in Paris is described by Ernest Burrus, Kino and the Cartography of Northwestern New Spain. Tucson: Arizona Pioneers' Historical Society, 1965, p. 64.

12 Yet Delisle's globe, produced in 1700, clearly showed California as a peninsula as noted in Wagner, vol. 2, 322. Henry R. Wagner, *The Cartography of the Northwest Coast of America to the Year 1800*, 2 vols. Berkeley: University of California Press, 1937, vol.1, pp.140–42; image 141; vol. 2, map 459.

13 Delanglez, pp. 276-78.

**14** Delanglez, pp. 291–92. The 1697 manuscript map of Louis de la Porte de Louvigny was also used.

15 W. Raymond Wood, 'Mapping the Missouri River Through the Great Plains, 1673-1895,' in Mapping the North American Plains, eds. Frederick C. Luebke, Frances W. Kaye, and Gary E. Moulton (Norman: University of Oklahoma Press, 1987), p.30. 16 Ehrenberg, p.182.

17 Delanglez, p. 298.

18 Jack Jackson and Winston DeVille, 'Le Maire and the 'Mother Map' of Delisle', *Mapping Texas and the Gulf Coast*, Jack Jackson, Robert S. Weddle, and Winston DeVille eds. College Station: Texas A&M University Press, 1990, p. 32.

19 Tiguex was originally the name given in 1540 by Coronado's Spaniards for the collection of pueblos near the upper Rio Grande from Taos south to Albuquerque; some of his men spent two winters there. But nothing was known about the area to the north, home of the Tiguas.

**20** R.V. Tooley, *The Mapping of America*. London: Holland Press Limited, 1980, p. 11.

**21** Susan Schulten, *A History of America in 100 Maps.* Chicago: University of Chicago Press. 2018, pp. 64–71.

22 Jack Jackson, 'The Soupart Map of 1716 and its Influence on Gulf Cartography', *Mapline*, No. 81–82, Winter 1996–1997, p. 11. 23 Ehrenberg, 'Exploratory Mapping of the Great Plains before 1800', 184. Also, Wood, 'Mapping the Missouri River Through the Great Plains, 1673–1895', p. 30.

24 Wheat, Mapping the Transmississippi West, vol. 1, p. 67.

25 W.P. Cumming, S. Hillier, D.B. Quinn, G. Williams, *The Exploration of North America 1630-1776*. New York: G.P. Putnam's Sons, 1974, p.160.

26 Jackson and DeVille, p. 31.

27 Authors Jackson and DeVille make the point that had Delisle been willing to accept the river system well described by Saint Denis's itinerary, the reader would have been better off. But Delisle's insistence to blend incorrect stream courses and names from his 1703 map created some problems. Jackson and DeVille , p. 43.

28 Jackson and De Ville, p.28.

**29** The map titled 'Carte Generale de la Louisiane ou du Miciscipi' was most likely produced in early 1718 (dated 1717 by another hand). An image of Vermale's manuscript map is found in Wheat, *Mapping the Transmississippi West*, fig. 98 and pictured

opposite page 63 in vol. 1. Additional commentary in Jack Jackson, *Manuscript Maps Concerning the Gulf Coast, Texas, and the Southwest (1519–1836).* Chicago: Newberry Library, 1995, pp. 22–23.

30 Jackson and DeVille, pp. 44-45.

**31** Jackson and DeVille, p. 44.

32 Jackson and DeVille, p. 36.

**33** Wheat, *Mapping the Transmississippi West*, vol. 1, 67 The text was derived from a memoir of Le Maire according to Jackson and DeVille, p. 45.

34 Delisle takes care to locate various Indian names near the rivers of the Great Plains. We see numerous references to the Padoucas, a name generally thought to be associated with the Commanche, whose range was further south than shown during this period. Again, because the Rio Grande is mistakenly placed way too far to the north, the Padoucas are placed there as well.

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