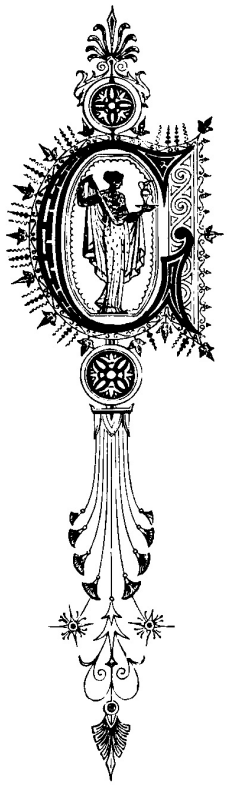


Stretching across eight U.S. states and two Canadian provinces, the Great Lakes region contains the world's largest freshwater system and is likely the greatest single surface aggregation of rare resources on the planet. If it was a standalone country, its economy would be the fourth largest in the world. Yet its natural resources and vibrant urbanity are seldom studied as a unified zone, and have rarely been considered the center of the North American continent's cultural life.

The Great Lakes contain 20 percent of the world's fresh water and their shores are home to 36 million people. The shoreline dwarfs both the Canadian and American East and West Coasts, stretching on for almost 11,000 miles. That's 42 percent of the circumference of the Earth.

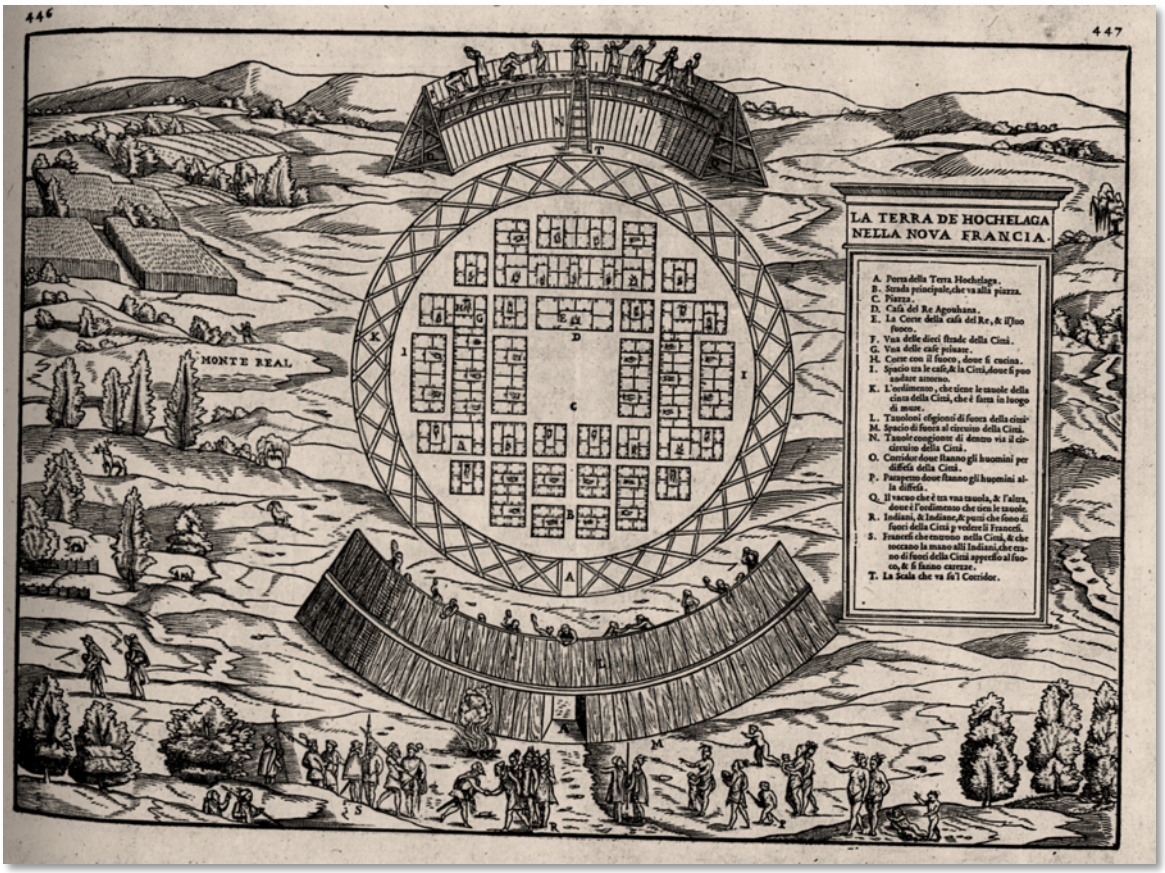
The Great Lakes originated from something much, much larger. As Geoff Manaugh and Anya Domlesky's essay "Living in the Glacial Afterlife" explains, the lakes are the result of the *Laurentide Ice Sheet*, a continent-sized mass of ice two miles thick that originated in northern Quebec, stretching as far north as the Arctic Circle and as far south as Missouri. As it advanced, it remade the region's geology, carving basins and redistributing soil. Ten thousand years ago, the ice began to retreat, melting to fill the basins that would become the Great Lakes.

Setting the Stage: While the Spaniards were the energetic explorers of the southern part of the continent of North America, the French were the first Europeans to visit and penetrate the regions north and south of the Great Lakes. In 1508, it is claimed that Thomas Aubert, a sailor from Dieppe, one of the first French navigators to visit American shores after the Breton fishermen, who arrived there as early as 1504, passed up the St. Lawrence River to a distance of eighty leagues. If this is correct it was the first exploration of that river by any European. The French had established a fishing station just within the Straits of Belle Isle, which they called Brest, early in the 16th century, but it is difficult to determine the date, and there is some evidence that the Portuguese explored the region of the mouth of the St. Lawrence early in the same century. And it is well known that the great volume of water flowing into the Gulf of St. Lawrence from the St. Lawrence River suggested to early explorers that an immense continent lay to the west. This supposition arose first from Giovanni de Verrazano's experience (*see #347*), on the coast in 1524, which was the first decided and official manifestation of French activity in this region.

King Francis I of France intended to follow up this voyage of Verrazano but the political exigencies, in which he found himself involved at the time, caused considerable delays, and it was not until ten years afterward that he commissioned Jacques Cartier in 1534 to visit and explore the country west of Newfoundland, and to add glory to the flag of France. By the early 16th century the rich fishing grounds off the northeasterly extremities of the American continent were regularly visited by English, French and Iberian navigators. Fishermen, not explorers, by trade, they had little incentive to venture further afield or plunge into the dense forests lining the shores. But a longstanding belief in a "golden civilization" like the Spanish found in the south, lying deep in the interior, shifted its focus in that direction, so that when the king of France commissioned Jacques Cartier, a seaman of St-Malo, to explore the uncharted seas beyond Newfoundland, he had in mind 'islands and countries where there are said to be

great quantities of gold', Failing this there was always the possibility that the waters might open into the broad Pacific and an equally lucrative sea route to China. Cartier's first voyage in 1534, although geographically significant, found the Gulf of St Lawrence comparable in worthlessness to 'the land God gave to Cain', but it did fortuitously introduce him to Donnacona, an Iroquois chief whose people had descended on Gaspe for their annual fishing. Cartier was reassured to hear of a gold-rich land called *Saguenay*, while also managing to borrow two of the chief's sons for training as interpreters.

Cartier started on his second voyage May 19, 1535, with three ships and 110 men, reaching the little harbor of Blanc Sablon late in July. Not long afterward he entered, on the north shore between Anticosti island and the mainland, a harbor, which he named the *St. Lawrence*, the first appearance of this name, which was to be the name of the great gulf between Newfoundland and the mainland, and also of the great river draining the Great Lakes. He gave the name to Assumption Island August 15; and passing on to the westward found himself at last in the St. Lawrence River. Ignoring the turnoff to *Saguenay*, now a land of copper not gold, and passing the village of *Stadacona* where Quebec now lies, he was warmly welcomed into *Hochelaga*, an impressively fortified and geometrically planned Iroquois town below the outcrop of Mont Real. Halted by the rapids further up river, Cartier returned to *Stadacona* to be greeted by conditions that would plague so many of his successors. The river froze, his ships lay ice-bound until April, scurvy ravaged his crew, and his relationship with the Indians descended into one of mutual distrust. Cartier finally got back to St-Malo in July 1536, then spent the next four years in relative obscurity. A royal commission for a third voyage was granted in 1540, then upgraded the next year to a fully fledged colonizing expedition in which Cartier would play only a secondary role. This poorly documented expedition abandoned its fragile colonies after another winter in the ice, the local diamonds proved to be quartz, and the region's gold was fit only for fools. The St Lawrence was returned momentarily to the lroquois, and Cartier retired to his estate in France. Cartier left St. Malo in April, 1534, and arrived off Newfoundland, May 10. On May 27 he was at the opening of the Straits of Belle Isle, near which place he met a ship from La Rochelle, and some of the natives of the region. Turning south he followed the inner coasts of Newfoundland, and afterward steered westwardly, passed the Magdalene Islands to Prince Edward Island, whence he headed north, and on July 2 reached the Bay of Chaleur, which he named from the excessive heat he experienced in that bay. After making the circuit of the gulf, he passed again out to sea, August 15, and early in September entered the harbor of St. Malo.



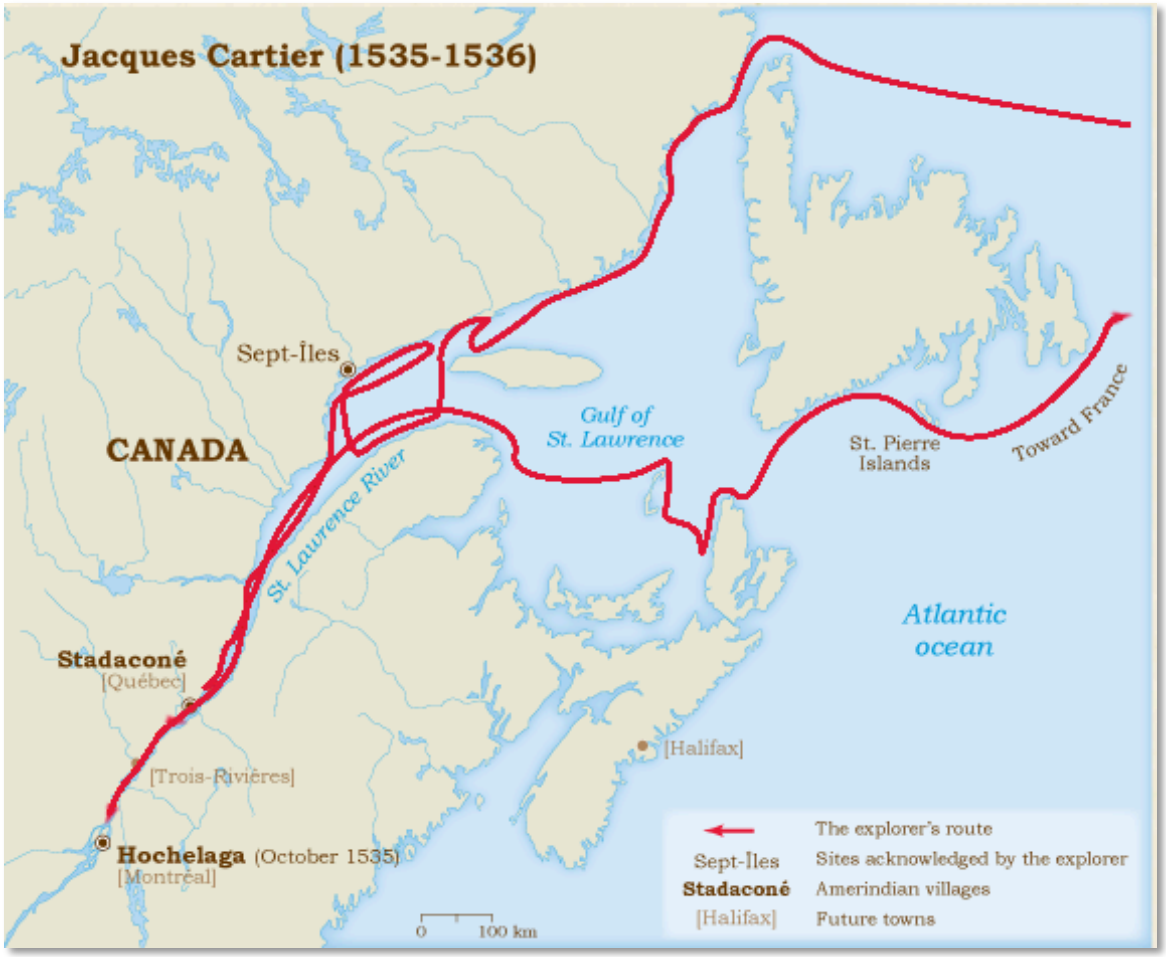
A drawing of the Iroquois village of Hochelaga in 1556 by Giovanni Battista Ramusio in his book Navigazioni e Viaggi

Published in volume III of Ramusio's famous collection *Delle navigationi et viaggi* in 1556, this woodcut is the first printed plan of a settlement in North America. It is based on the description of *Hochelaga* by Jacques Cartier during his visit there in 1536.

Hochelaga was a fortified Iroquois indian village near *Monte Real*: *it was seen as lying near 'a great mountain, tilled round about, very fertile, from the top of which you may see very far; we called it Mont Real'*. On the way to Hochelaga, Cartier observed '*as goodly and pleasant a country as possibly can be wished for, full of all sorts of goodly trees ... Okes, Elmes, Walnut-trees, Cedars, Firres, Ashes, Boxe, Willows, and great store of Vines, all as full of grapes as could be, so that ... our fellowes ... came home laden with them*'.

The plan shows some fifty bark-covered longhouses within a timber palisade, with what appear to be cornfields nearby. The Iroquois and their children welcomed Cartier and his men, squatting before them in rows, awaiting a reply to their request that Cartier might heal their sick.

A typical depiction of North America in the 16th century on Ortelius' 1570 map America sive Novi Orbis Nova Descriptio, without any Great Lakes



Cartier's exploration of the St Lawrence River in the 1530s had two objects in mind: gold and the discovery of a passage to Asia. He found neither, and for sixty years the native peoples were left in peace. As time wore on, hopes of finding gold-rich civilizations began to fade, while the growing appreciation of the true size of the North American continent made the discovery of a quick route to China increasingly unlikely. The age of the gallant armor-clad knight was over and in his place came a new breed of conquistador: the fur trader, less sensational but somewhat more realistic about what was on offer. But having nothing of the pre-established infrastructure of Mexico and Peru, and confronted by dense forests and an overwhelming maze of interconnected waterways, the fur traders' conquest would be gradual and altogether more subtle. Cartier had brought the trade to light, and by 1600 a few enterprising Frenchmen had placed ephemeral outposts around the Gulf of St Lawrence, but it was Samuel de Champlain who would spearhead the conquest and establish his nation's presence in what was to become *Nouvelle France*.

As mentioned, Cartier made his third voyage to the St. Lawrence in 1541, and Roberval followed in 1542, but in each case with little result. After a futile attempt at colonization by Francis Grave, or Pontgrave, as he was more frequently called, in 1600, the most commanding figure in the early history of Canada and the St. Lawrence River, comes upon the scene in the person of Samuel de Champlain, who on March 15, 1603, with Pontgrave sailed from Honfleur, On June 7, Champlain started to explore the *Saguenay*, and on the 23nd he saw the famous Falls of Montmorency. On the 29th he entered and named St. Peter's Lake. Failing to get beyond the Lachine rapids, he endeavored to learn from the Indians what lay beyond. They told him of the Ottawa river, and also told him that by following up the St. Lawrence and passing rapids and expansions of the stream, he would reach a large body of water flowing through a channel broken by a cataract, and above this cataract there was a salubrious lake. At the farther end of this lake it received a river through which the boatman could push his skiff into an immense sea of salt water.

Champlain, a thoughtful and intelligent navigator convinced of the moral and financial advantages of colonialism, had sailed the Caribbean and even advocated the construction of a canal to the Pacific. As royal hydrographer to Henry IV he first came to Canada in 1603, commissioned with charting the waterways and locating the site of a permanent trading factory. Following in Cartier's footsteps, he reached the Lachine Rapids on the St Lawrence and received intelligence of the lakes beyond, then for the next four years he assisted in the search for settlement sites around Nova Scotia, during which he surveyed the New England coast as far as Cape Cod. In 1608 he returned to the St Lawrence, established his center of operations at what would become the city of Quebec, then the next year charted the Richelieu River in the south and saw the lake that now bears his name. For some time the fate of the colony hung in the balance, plagued by Iroquois attack and decimated by scurvy in the long winters, but Champlain held fast to his conviction and in 1610 returned with the support of Rouen merchants. On repeated visits over the next six years he surveyed the Ottawa River, saw Lake Ontario, and in 1615 crossed the heartland of modern Ontario to Lake Huron.

Champlain, from this description, in his fancy visited the waters of Lake Ontario, the Niagara River, whose falls he never saw, then Lake Erie, and thence the Detroit River to Lake Huron, which he afterward knew so far as Georgian Bay was concerned. Shortly afterward he returned to Tadoussac, and then to the mouth of the Saguenay, where he found the ships laden with furs and ready for the homeward voyage.

The next expedition to this part of North America was that of Demonts and Champlain, in 1608, the latter of whom reached Tadoussac June 3, and there set to work to build a *shallop* of about fourteen tons, in which he soon afterward made his way up the St. Lawrence River, and almost immediately afterward founded the town of Quebec.

In summary, this is the order in which the Great Lakes were discovered by the French explorers: **Lake Huron** in 1615, by Le Caron, the Recollect friar, and by Champlain, one of the greatest navigators in New France; **Ontario**, during the same year, by Champlain; **Lake Superior**, about 1629, by Étienne Brûlé; **Lake Michigan**, in 1634, by Jean Nicolet; **Lake Erie**, probably by Louis Joliet, in 1669. It seems somewhat remarkable, from the positions of the lakes, that Erie should have been the last of the five to come under the dominion of the white men. The reason is this. It lay deep in the recesses of a hostile country, guarded by the "Romans of the West," the Iroquois or Five Nations. From Montreal the course of the French missionaries and traders westward was up the Ottawa River, the route to the upper lakes which was followed by the Hurons.

Joseph Le Caron, the Franciscan friar, who first found **Lake Huron**, reached Quebec in May, 1615, with three other Franciscans. To Le Caron was assigned the district of the Hurons as his mission field. Accompanied by twelve Frenchmen he set out about July 1, 1615, with the concourse of Hurons up the Ottawa river, and after many hardships reached the seat of the Huron nation, near the entrance of the bay of Matchedash. Here within an area of thirty or forty miles were many Huron villages, containing a population variously estimated at from 10,000 to 30,000 inhabitants.

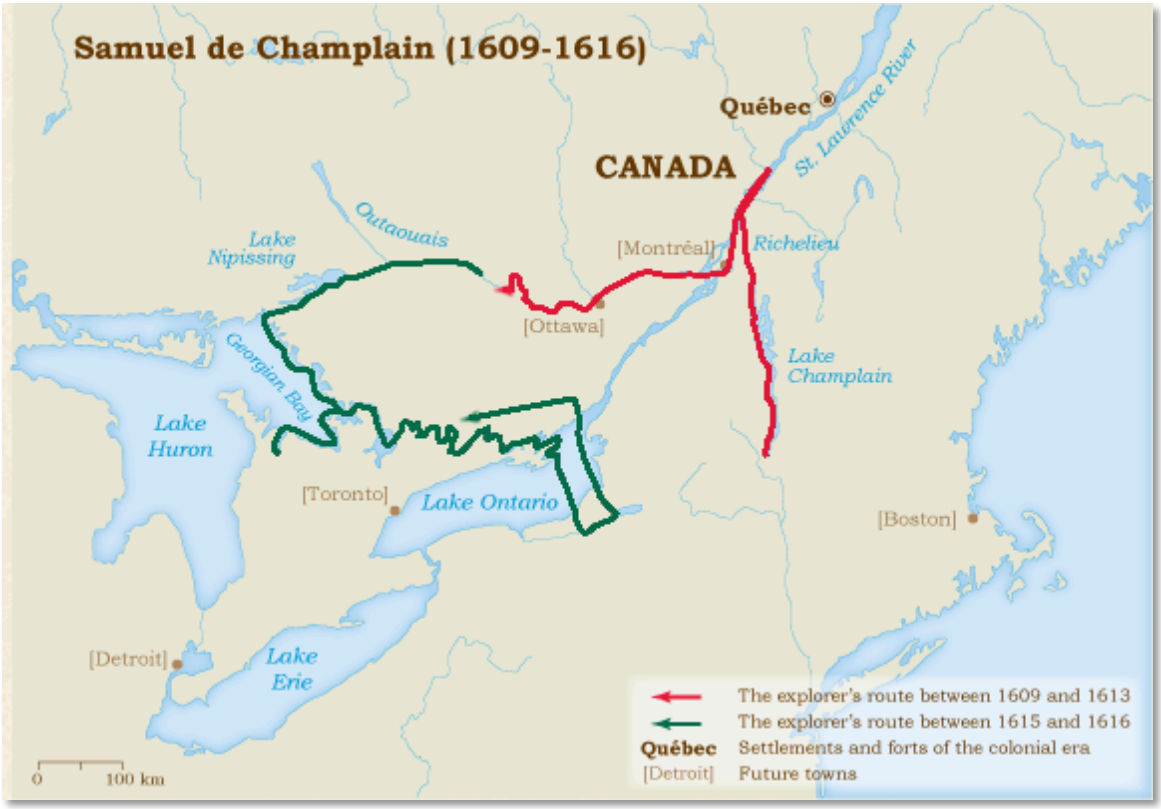
Champlain, with two canoes, two Frenchmen and ten Indians followed Le Caron a few days later, and in his narrative describes the journey by way of Lake Nipissing, and thence down its outlet until along the western sky was traced the watery line of the "Fresh-Water Sea" of the Hurons, the *Mer Douce* or Lake Huron, and southward spread the shores of the Georgian Bay. For more than a hundred miles Champlain followed its dented outlines; thence following an Indian trail inland his eyes soon beheld a scene of cultivated fields, and palisaded villages, the ancient home of the Hurons. Here he met Le Caron, and from this center Champlain led the Huron braves the same year in an unsuccessful campaign against their enemies, the Iroquois, below Lake Oneida, probably crossing Lake Ontario en route from the mouth of the river Trent to a point of land west of Hungry bay.

Lake Superior Disclosure. Étienne or Stephen Brûlé had served Champlain as an interpreter in his journey to Lake Huron, but did not return with him. Brûlé, with another Frenchman, Grenoble, made a long journey and returned with an ingot of red copper and with a description of Lake Superior. He said it required nine days to reach its upper extremity, and that it discharged itself into Lake Huron by a fall. This trip was made prior to 1629, and to Brûlé, the unlettered and adventurous voyageur is probably due the credit for the discovery of the grandest of all the inland lakes.

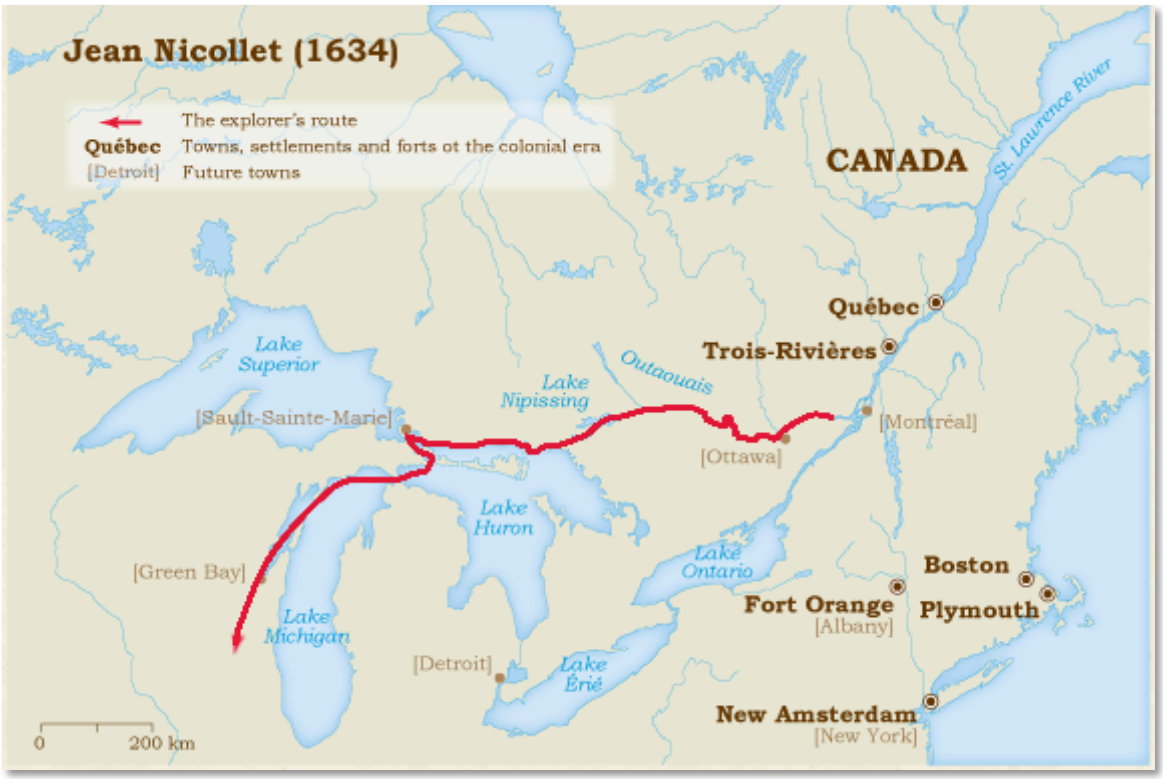
Raymbault and Jogues, two missionaries, made a voyage on Lake Superior in 1641 in search of a passage to China, and to them is often credited the earliest white navigation of Lake Superior.

Lake Ontario Disclosure. The name *Ontario* is thought to be of Iroquoian origin, meaning “beautiful lake” or “sparkling water.” The first European known to have visited the lake was the Frenchman Étienne Brûlé in 1615. The name “Ontario” was first applied to the lake by Europeans in 1641 and appears on maps of North America as early as 1656. However it was also known as *Cataraqui* [a French spelling of the Mohawk

Katarokwi], *Lac de St Louis* and *Lac Fontenac* on these early maps. The lake was a border between the Huron people and the Iroquois Confederacy in the pre-Columbian era.



Lake Erie Discosure. Singular as it may appear, the first known trip on Lake Erie [a.k.a. *Lac Erie ou Du Chat*] by Europeans was a down passage. Joliet had in 1669 made a voyage from Montreal, via Lake Nipissing, to Lake Superior in search of copper, and to discover a more direct route from Lake Superior to Montreal. At Sault Ste. Marie he found among the Ottawas an Iroquois prisoner, and obtained permission to take him back to Canada. The Iroquois guided him from Lake Erie through the Grand River valley to Lake Ontario, where near Burlington bay he met La Salle and two Sulpitian priests. It was a strange and unexpected meeting. La Salle had started westward on a tour of extended exploration, and, doubtless, listened eagerly to the information imparted by Joliet. The latter must have descended the Detroit River, and sailed eastward along the north shores of Lake Erie. The latter body of water had been known to the French as early as 1640, but there is no record of its navigation by white men till this accidental meeting of Joliet and La Salle. What the conversation with Joliet was, is not known. It changed, however, the plans of La Salle. He was seeking a passage to the Pacific coast, and, doubtless, learning from Joliet of the connection between Lake Erie and the upper lakes, he resolved to explore the great river (Ohio) flowing westward to the south of the lakes, leaving the Sulpitian priests to pursue, unattended by him, their journey to the Pottawatomies on the shores of Lake Michigan.



Lake Michigan Discolsure. Somewhere between 1634 and 1638 French Explorer, Jean Nicolet "discovered" Lake Michigan when he was looking for a passage to China. The explorer first landed near present-day Green Bay, Wisconsin where the Ho-Chunk Native American tribe lived. Jean Nicolet, considered the European "discoverer" of *Lac Ilinois* or *Lac des Puans* as it was initially labeled, later Lake Michigan, was a young Norman, who came to this country first in 1618. Nicolet, an employee of the fur company, known as the "Hundred Associates," in the summer of 1634 threaded his way in a birch canoe from Georgian Bay through the straits of Mackinaw, and thus discovered Lake Michigan. Turning southward, he reached Green bay, and was impressed with its length and vastness. Here dwelt the people of the salt or bad-smelling water, neither Algonquin nor Huron, who said they had come from the shores of a far-distant sea in the West, whose waters were salt, and who called themselves "the people of the stinking water."

He was sent by Champlain west among the Indians to further learn their language and customs. Having already been for about sixteen years among the Iroquois and Nipissings, he was well qualified for his new mission. Nicolet's peculiar mission at this time was to learn something definite about those distant western people, who had neither hair nor beard, and who journeyed in great canoes, and who lived by the great salt sea. His course lay up the Ottawa and by Lake Nipissing to Georgian Bay, and thence to the Huron villages. Here he renewed old acquaintances and secured seven guides from among the Hurons, and, launching their canoes at the head of Georgian Bay, they skirted the eastern and northern shores of Lake Huron until they found their progress checked by the rapids in the Sault Ste. Marie.

From the Sault Nicolet retraced his steps, and, following the shore of the northern peninsula of Michigan, soon came to the Straits of Mackinac, just a century after Cartier reached the great northern gateway to the interior of the continent at the

Straits of Belle Isle. From the Straits of Mackinac, Nicolet passed on to Green Bay, and at length reached its southern extremity. Here he encountered the Winnebago Indians, who looked upon him as a strange spirit, as he stalked among them in his robe and carrying his pistols, which every little while belched forth fire and smoke. The Winnebagoes were the first Indians that he had met that were of the Dakota stock, and he could not well understand them, as he had not learned their language, the Algonquin and the Huron languages being the only ones that he had thus far acquired. Still he managed to make them understand that his message was one of peace and good will, in which spirit he was received, and the professions on each side were enforced and fortified with feast and speech.

On his return down Green Bay Nicolet exchanged friendly courtesies with the Pottawatomies, who were then scattered along the western shore of Lake Michigan, and passed on back toward Three Rivers by the way he had gone. At length he reached the Ottawa, and went on down that river to Three Rivers, reaching this place sometime in July. On December 25, 1635, Champlain died of paralysis at Quebec, he who has been appropriately styled the Father of Canada. The Jesuit Claude-Jean Allouez began missionary work among the Indians of Green Bay and the Fox River in 1668. The French explorer Louis Jolliet and the French missionary Jacques Marquette mapped the lake's western shore from Green Bay to Chicago in 1673. Lake Michigan's name is derived from the Ojibwa word *Michi Gami*, meaning "large lake". You will notice on some of the historic maps displayed herein that this Lake was initially labeled *Lac Ilinois* or *Lac des Puans*.

It is the third largest of the five Great Lakes of North America and the only one lying wholly within the United States. Bordered by the states of Michigan (east and north), Wisconsin (west), Illinois (southwest), and Indiana (southeast), it connects with Lake Huron through the Straits of Mackinac in the north. The lake is 321 miles (517 km) long (north to south); it has a maximum width of 118 miles (190 km) and a drainage basin of about 45,500 square miles (118,000 square km), exclusive of its surface area, which is 22,300 square miles (57,757 square km).

Niagara Falls. Many of the early explorers made references to the Niagara region and river, even before any white man had seen them, these writers having received their information from the Indians. Champlain, in his work published in 1603, mentions a fall that is believed to be Niagara Falls, and in his work published in 1613 he locates on a map a river that is believed to be the Niagara, and in that river he marks a *Sault d'eau*, or waterfall. Étienne Brûlé, who was with Champlain as interpreter, was in the vicinity of Niagara in 1615, and some think he may have seen the Falls, and if this be true he was probably the first white man to see this great wonder.

In 1626 Joseph de la Roche Dallion was on the Niagara River engaged in a mission among the Neuter Indians. In 1632 Champlain locates a waterfall very high at the end of *Lac St. Louis* (Ontario). In the *Jesuit Relations*, published in 1642, L'Allement mentions the Neuter nation of Indians (Onguiaahra) as having the same name as the river on which they lived. In 1649 Ragueneau speaks of "Lake Erie which is formed by the waters of Lake Huron and which discharges itself into a third lake, called Ontario, over a cataract of fearful height." De Creuxius, mentioned elsewhere in this work as giving Latin names to the five Great Lakes, locates the Niagara region, and calls the Falls "*Ongiara Cataractes*."

However, René Bréhent de Galinee, who was with La Salle in 1669, at the western end of Lake Ontario, gives the first description that is known to exist of the

Great Falls, but which he never saw. He says: "*We found a river one-eighth of a league broad and extremely rapid, forming an outlet or communication from Lake Erie to Lake Ontario. The outlet is forty leagues long, and has from ten to twelve leagues above its embouchure into Lake Ontario the finest falls of water in the world; for all the Indians whom I have inquired about it say that the water falls at that place from a rock higher than the tallest pines, that is about 300 feet"* [the actual height is 325 feet]

In 1678 Father Hennepin visited the Falls, and in 1683 he published his first work in which he places the height of the falls in the Niagara river at 500 feet. In 1697 he published another work called the "*New Discovery*," in which he gives a description of the Falls, beginning as follows: "*Betwixt the Lakes Ontario and Erie, there is a vast and prodigious cadence of water, which falls down after a surprising and astonishing manner, insomuch that the universe does not afford a parallel.*" In the same work he gives the height at 600 feet. From the time of this publication, which was translated into many of the languages of Europe, most Europeans became familiar at least with the name of this great natural wonder. In 1721 Charlevoix and Borassow, each independently of the other, made accurate measurements of the height of the Falls.

While these early discoveries, thus related, are the records that have been preserved, it is far from improbable that the first explorers were fur-traders, trappers and voyageurs who had neither ability nor inclination to record their wanderings, nor would these prior journeys be likely to be mentioned in subsequent writings, for they would detract from the latter explorations, and possibly jeopardize claims. And, of course, the indigenous people of the Great Lakes region were well aware of these bodies of water.

By the close of Champlain's activity the forces in New France that were destined to affect for almost two centuries the history of the Great Lakes might all have been seen in embryo. The Jesuits were engaged in their heroic but ineffectual efforts to Christianize the native people. The fur trade had excited the cupidity of men, and Richelieu had already made it a monopoly by establishing the company of the "Hundred Associates." Copper to a lesser extent was an incentive to perilous exploration. The search for a route to China was a spur to the adventurous. France had laid claim to this vast territory. The deep hostility of the Iroquois had been incurred, and the great struggle with the English for the mastery of the lakes had been commenced.

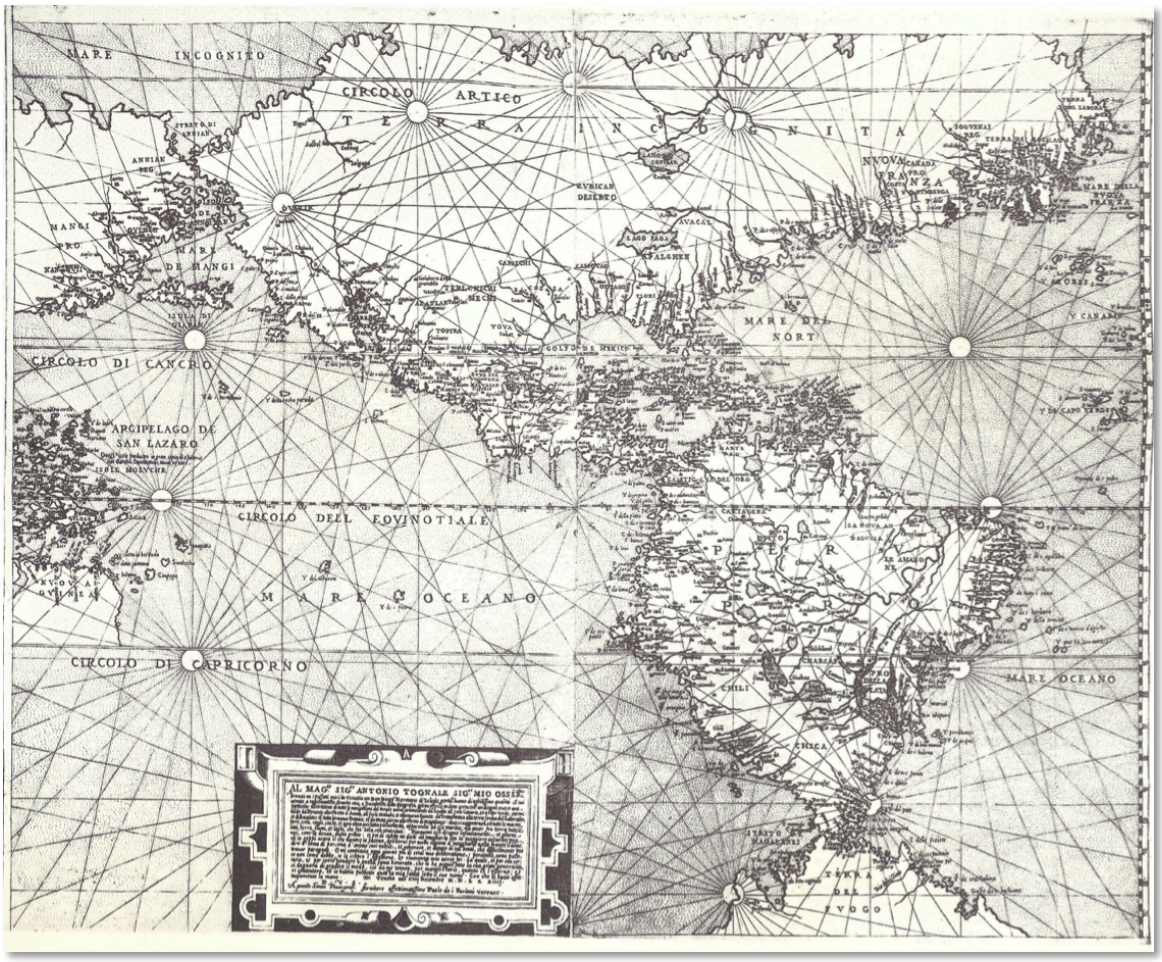
The missionary spirit was active in the Catholic Church in France when the early voyages of exploration were made to the New World, and side by side with the adventurer in search of gain or fame came the priest, who held it his highest duty to convert the native nations to Christianity. The Jesuits were first in the mission field of Canada, but they were soon followed by the Recollects, a reformed branch of the Franciscan order. With Champlain, in May, 1615, came four of the Gray Friars, and of these Joseph le Caron was appointed to labor among the Hurons on Georgian Bay. The Recollects invited the assistance of the Jesuits. These missions were scattered throughout New France, and quickly penetrated the region of the Great Lakes. Father Joseph de la Roche d'Aillon founded a mission among the neutral nations on the Niagara River, and urged the French to open up communication by way of Lake Ontario.

Cartographically

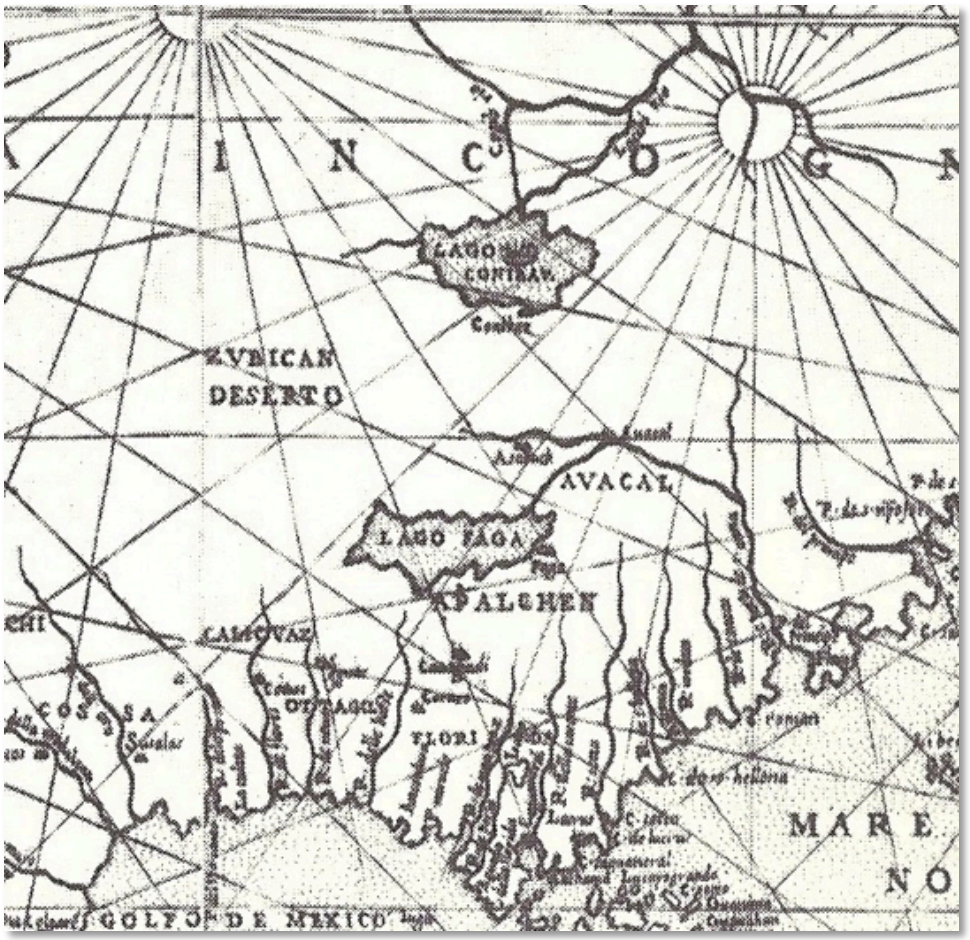
This map is one of the earliest to show the results of Spanish exploration of North and South America, Francisco de Orellana's expedition of 1539 to 1542 is shown in South America. Orellana began his voyage at Quito, traveled across the Andes to the headwaters of the Amazon, and was the first European to make the descent of the Amazon River. He named the river after the Amazons of Greek myth after he and his men encountered a tribe of women warriors. This map has been attributed to Ant6nio Pereira, a Portuguese seaman, and was originally in three parts (the other two parts have not been found).

Part of a manuscript map of North and South America, 1546, attributed to Ant6nio Pereira

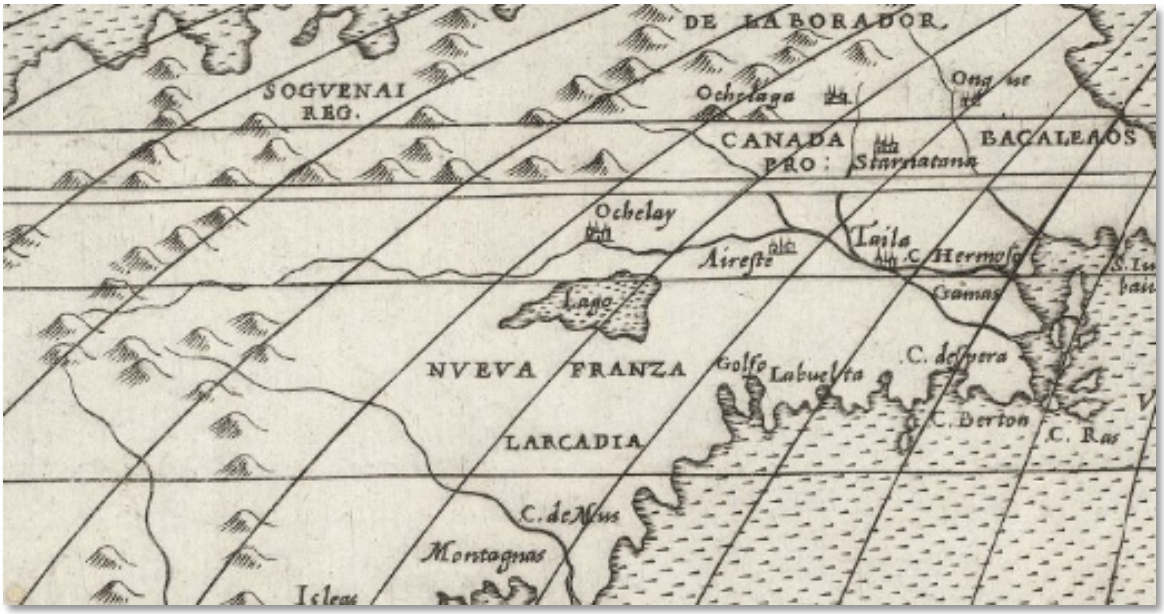
Was the 1546 Ant6nio Pereira map the first appearance of at least one of the Great Lakes on a European map? Probably not, most likely it is pure speculation, but possibly predicated on stories from the indigenous population about large bodies of fresh water. Another speculative map shown below is based upon a sketch given to Paolo Forlani by Don Diego Hermano di Toledo, whom he met by chance in Venice. However, the South American portion is derived directly from Forlani's own *Descrittione di tutto ii Pera*, which appears in atlases dated 1567, and with which Diego Hermano had nothing to do. Note the *Lake Conibaz*, in the present area of the Great Lakes that, although appearing also in Mercator's world map of 1569 *(#406),* has a rather different shape and position in the Forlani map. Some historians regarded this map as the starting point of a new cartographic concept placing the lake in the middle of the continent and feeding a tributary to the Arctic, also claiming it the first map in which the name *Lago Faga* exists, with a river link to the Atlantic, a detail frequently copied by later Flemish and Dutch maps (e.g. de Jode and Wytfliet). This view must now be modified since more recent the discovery of the 1568 Gastaldi world map, in which both these lakes are found.



The Western Hemisphere, 1574, by Paolo Forlani



Detail of two large lakes (Lago) in North America



A similar placement of a Lago on the 1568 Giacomo Gastaldi/Paolo Forlani world map

These same to lakes in North America are also replicated on the Mario Cartaro globe of 1577 shown below.

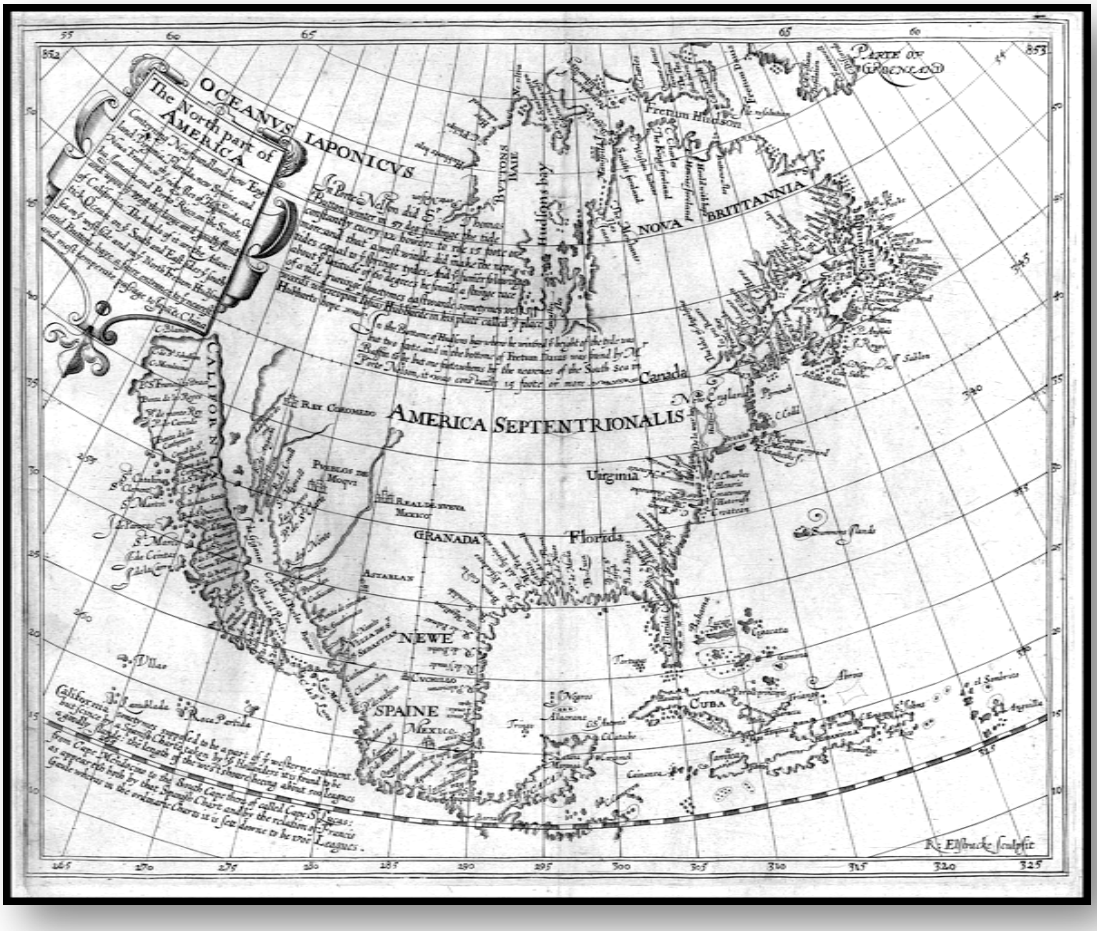
Marius Cartarus Viterbiensis autor incidebat Romae MDLXXVII cum privilegio, 1577 showing two large lakes in North America

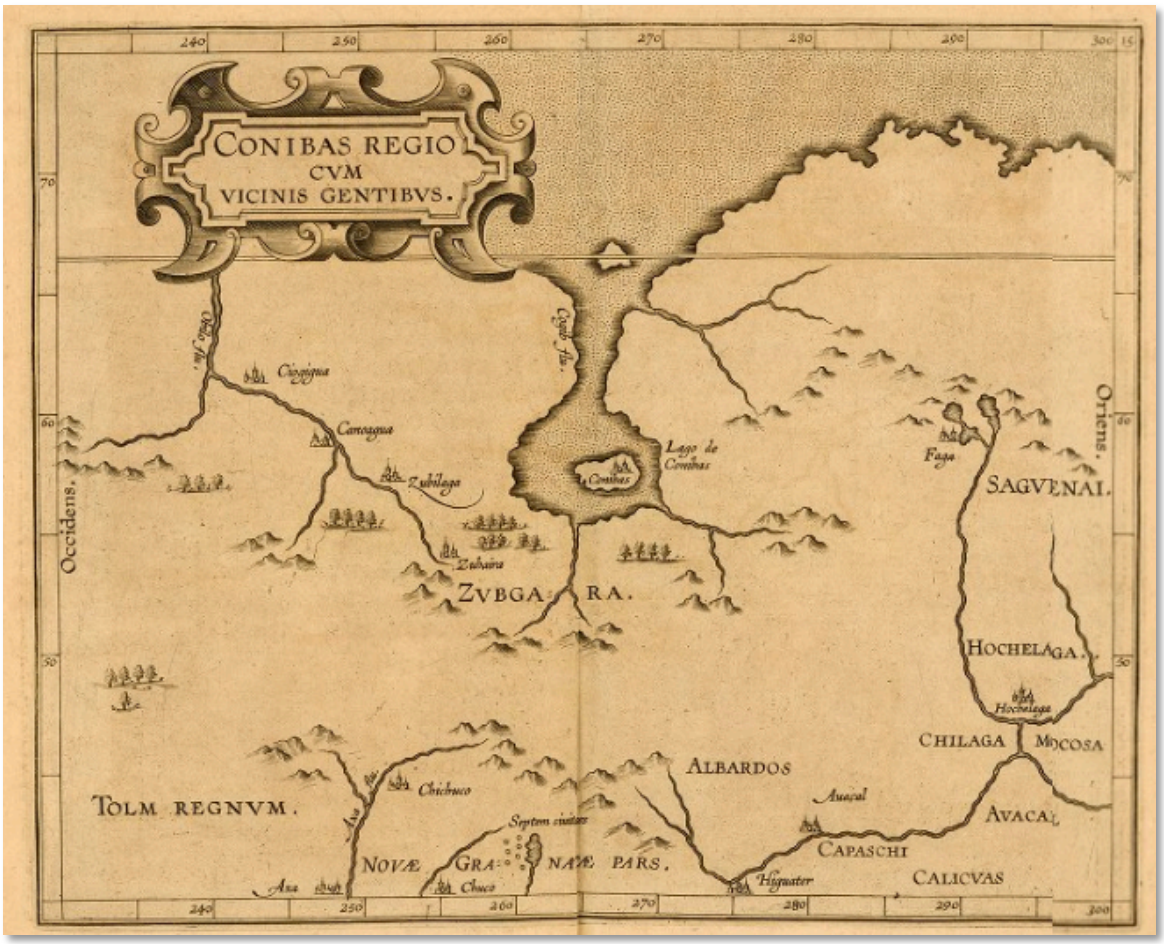
The Zaltieri/*Forlani map of North America: IL Disegno del discoperto della noua Franza, c. 1565 (#391)*

Detail: the St Lawrence River and Lago

Zaltieri's map is one of the earliest printed maps - in this case separately published rather than originating in an atlas - to show the entire continent of North America, despite the wording of the title. However, many French names arc indeed given, for example, *R.S. Lore[nJzo* [St Lawrence River], *Larcadia*, and, well to the west, *La Nova Franza*, together with Spanish names in Florida and on the west coast, such as *Tigua*. *f* [Colorado River], *Quivira Pro*., and *Sierra Nevada* [Snowy Mountains], a name still in use today, of course, and appearing here for the first time on any printed map.

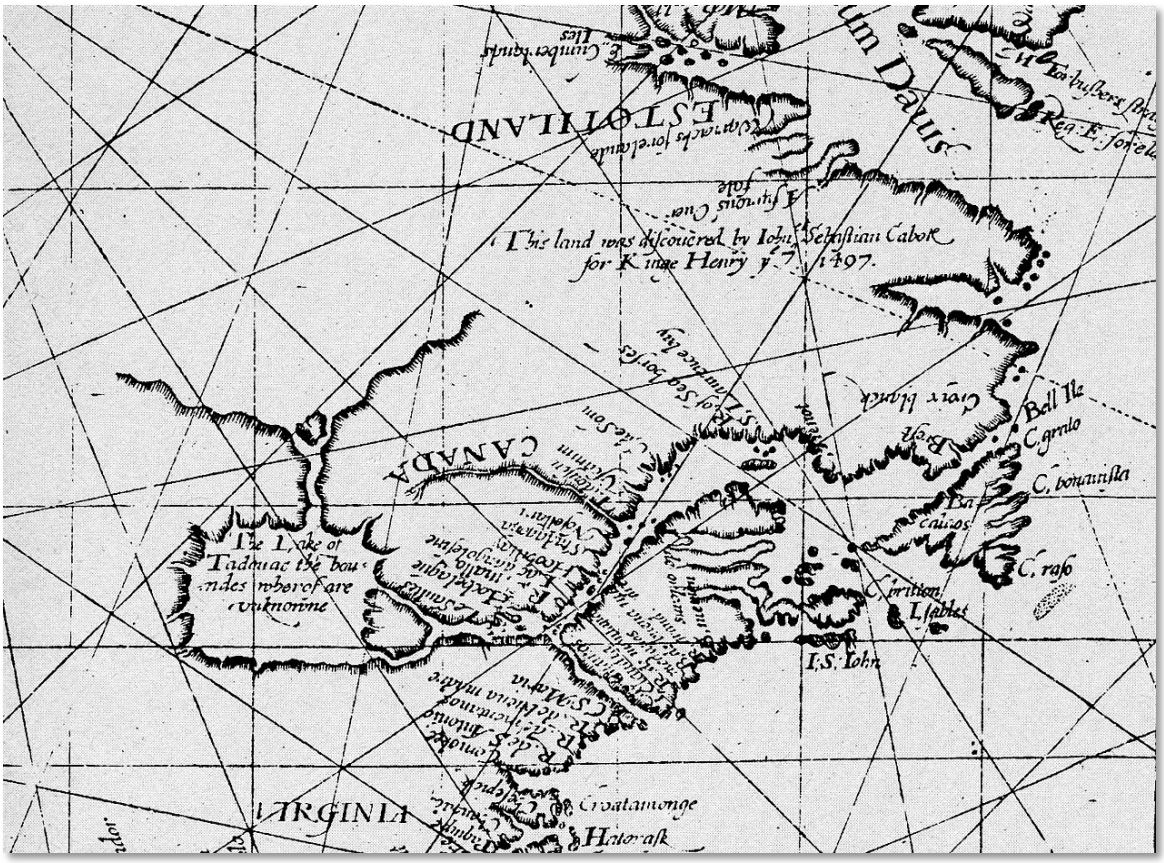
More typical is the Henry Briggs' map, *The North Part of America*, 1625 *(#461)*, shown below, which exemplifies the typical initial cartography of North America (as well as the entire "New World" discoveries – lots of detail of the coastal regions, and little knowledge of the interior. Here there is knowledge of the St Lawrence River and Hudson's Bay, but none of the Great Lakes, Mississippi River, Ohio River, etc.





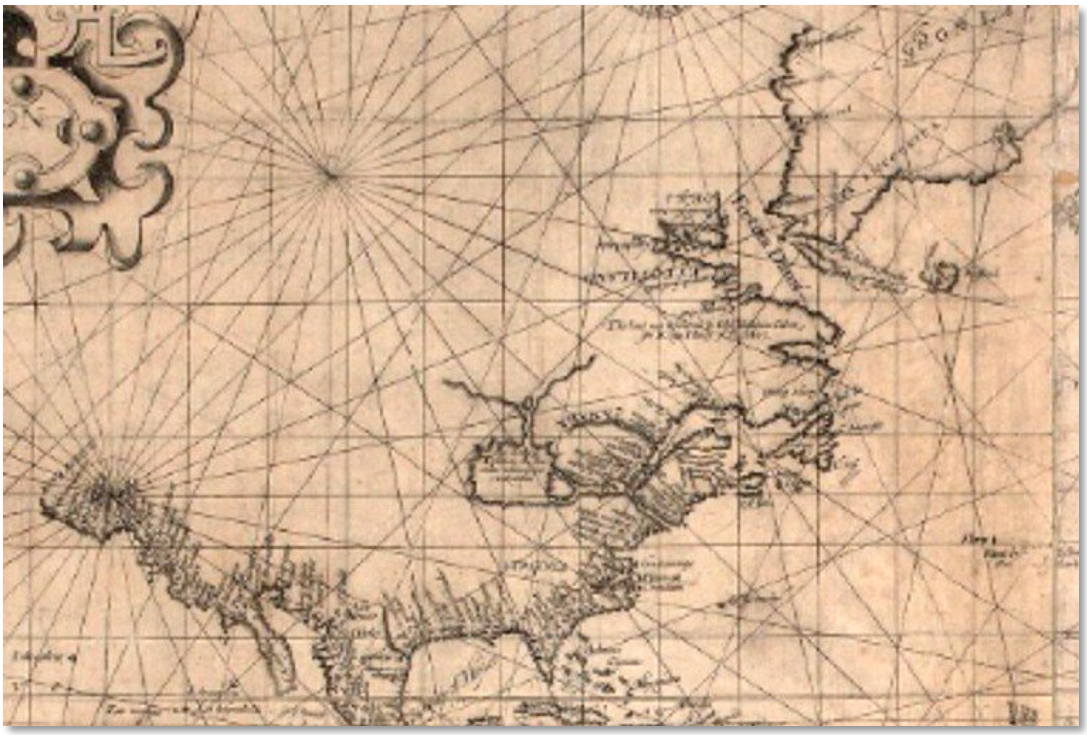
Conibas regio cum vicinis gentibus, 1607, by Corneille Wytfliet

Map of the central part of North America; includes mythical cities and rivers, including Saguanay and Hochelaga.

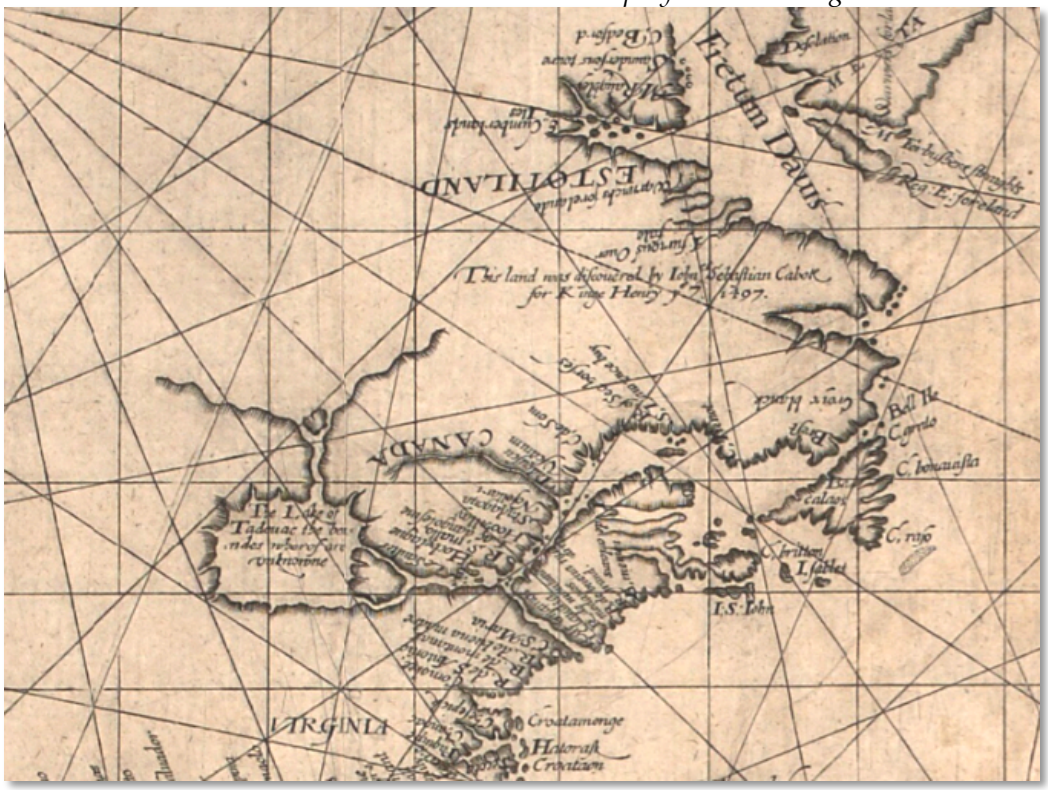


John Davis's discoveries recorded in the world map published by Richard Hakluyt in The principal navigations ... of the English nation, vol. I, London, 1598.

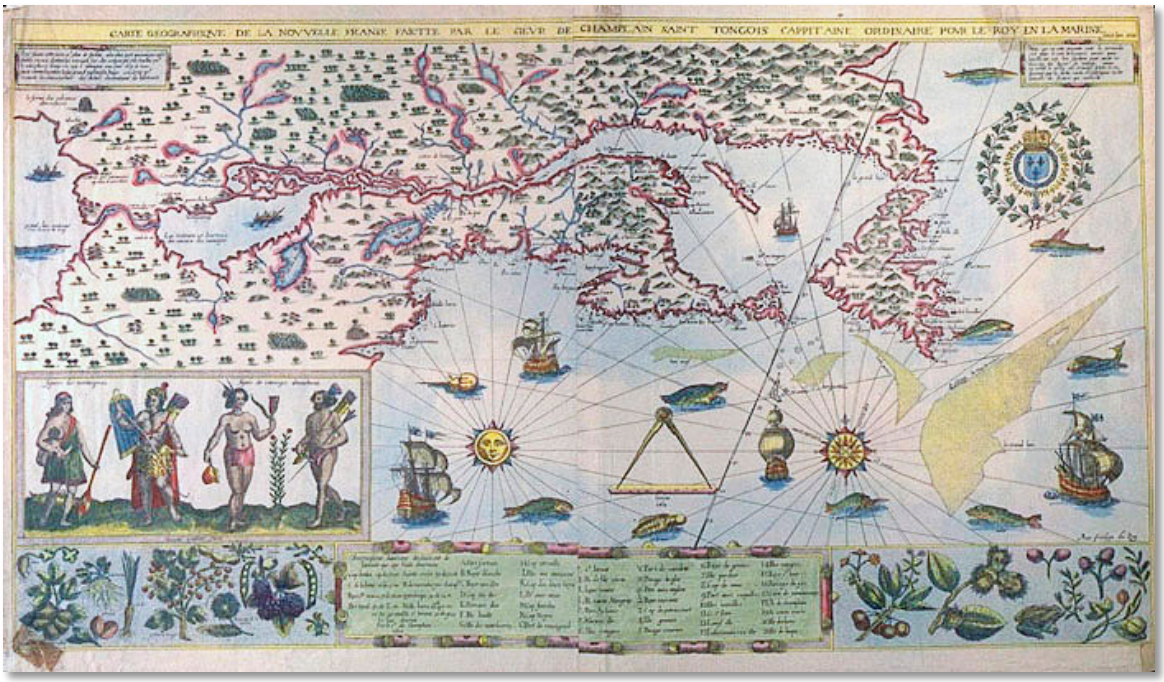
The charts made by Davis and brought back from his three voyages for a Northwest Passage (1585-7), though mentioned by him and by later explorers, have not survived. His discoveries were mapped with authority in the large terrestrial globe (the first to be made in England) prepared by Emery Molyneux and engraved in 1592 at the expense of William Sanderson. The world map on Mercator's projection, probably prepared by Molyneux and the mathematician Edward Wright, and published by Hakluyt in 1598, reproduces that of the globe, with some updating from recent discovery. The cartographer has been careful to depict only lands actually discovered, allowing himself no conjectural outlines. Wright's interpretation is shown below.



North America on the 1599 world map by Edward Wright



Potential confusion between reports of Hudson's Bay and the Great Lakes (Lake Ontario?) "The Lake of Tadousac the boundes whereof are unknowne", is, in general, the location of the Great Lakes is a curious recurrence of the Verrazano Sea



Carte geographique de la Nouvelle Franse faictte par le sieur de Champlain Saint Tongois cappitaine ordinaire pour le roy en la marine. Faict len 1612. Samuel Champlain

In the fall of 1612, Samuel de Champlain had an engraving of his first detailed map of New France made in Paris. The map contained new geographic information, based on his own explorations from 1603 onward. The site of Montreal is clearly identified. Using information obtained from Aboriginal peoples, he was able to include previously uncharted areas, such as Lake Ontario and Niagara Falls. He also made use of other maps to depict certain regions, including Newfoundland. Although the engraving was made in 1612, the map was not published until the following year as an appendix to *Voyages*, Champlain's 1613 account of his journeys.

This map, Champlain's *Carte Geographique de la Nouvelle France* of 1612, shows the Armouchiquios, corn planters who lived west of the Sheepscot, the only images that exist of Maine's residents of this time. Also shown are some American plants. Off the coast of Newfoundland, Champlain also shows the fishing banks. It summarizes what he then knew of North America.

This map, which is an enlargement of the author's *New England*, is intended by Champlain to illustrate his account of the three voyages of exploration in New France in the years 1608-09, 1610, and 1611. Such an artistic drawing on which Champlain locates Quebec and Montreal four years after he founded the one settlement and one year after his foundation of the other, is an unusual document.

On the first of these three journeys Champlain visited the Saguenay River, which he had already explored in 1603, and learned from the Indians there of a salt sea to the north, Hudson Bay, the discovery of which by Henry Hudson in 1610 was known to Champlain in 1612.

"These people of the north," says Champlain, "report to our savages that they see the salt sea; and, if that is true, as I think it certainly is, it can be nothing but a gulf entering the interior on the north. The savages say that the distance from the north sea to the port of Tadoussac is perhaps forty-five or fifty days' journey, in consequence of the

difficulties presented by the roads, rivers, and country, which is very mountainous, and where there is snow for the most part of the year."

In order to show the relation of the newly discovered bay to the French claims on the south, Champlain brought out in 1613 a new and enlarged edition of the map of 1612.

From Tadoussac, at the mouth of the Saguenay, Champlain and his party proceeded up the St. Lawrence past the island of Orleans to a prominent projecting point near the quarters of Cartier in 1535, where the leader founded the village of Quebec, marked on the map by a citadel and a flag. Here he passed the winter. In the summer of the next year, 1609, he went farther up the St. Lawrence beyond Les Trois Rivieres to the Iroquois River, the present Richelieu, down which he passed with his Indian allies, the *Algommequins* (the Algonquins) and the *Ochatequins* (the Hurons), which tribes were at that time enemies of the Iroquois, to the discovery of Lake Champlain and to the battle with the Iroquois.

After describing the voyage up the Iroquois or Richelieu, Champlain in his text proceeds: "The next day we entered the lake, which is of great extent, say eighty or a hundred leagues long, where I saw four fine islands, ten, twelve, and fifteen leagues long, which were formerly inhabited by the savages, like the River of the Iroquois; but they have been abandoned since the wars of the savages with one another prevail. There are also many rivers falling into the lake, bordered by many fine trees of the same kinds as those we have in France, with many vines finer than any I have seen in any other place; also many chestnut-trees on the border of this lake, which I had not seen before. There is also a great abundance of fish, of many varieties. . . .

"Continuing our course over this lake on the western side, I noticed, while observing the country, some very high mountains on the eastern side, on the top of which there was snow. I made inquiries of the savages whether these localities were inhabited, when they told me that the Iroquois dwelt there, and that there were beautiful valleys in these places, with plains productive in grain, such as I had eaten in this country, together with many kinds of fruit without limit. They said also that the lake extended near mountains, some twenty-five leagues from us, as I judge. I saw, on the south, other mountains, no less high than the first, but without any snow. The savages told me that these mountains were thickly settled, and that it was there we were to find their enemies; but that it was necessary to pass a fall in order to go there (which I afterwards saw), when we should enter another lake, nine or ten leagues long. After reaching the end of the lake, we should have to go, they said, two leagues by land, and pass through a river flowing into the sea on the Norumbegue coast, near that of Florida, whither it took them only two days to go by canoe, as I have since ascertained from some prisoners we captured, who gave me minute information in regard to all they had personal knowledge of, through some Algonquin interpreters, who understood the Iroquois language."

In this description it is easy to recognize the Green Mountains of Vermont, in the mountains to the east of the lake, but difficult to understand the reference to snow on the mountains in the middle of the summer. It has been suggested that the snow was white limestone. The mountains on the south are the Adirondacks; the falls are the narrows at Ticonderoga; the other lake, Lake George; and the river flowing to the south, the Hudson.

Concluding his description of the famous battle with the Iroquois, which took place near Crown Point, Champlain says, "After feasting sumptuously, dancing and

singing, we returned three hours later, with the prisoners. The spot where this attack took place is in latitude 43° and some minutes, and the lake was called Lake Champlain."

The Indian appreciation of the strategic position of Lake Champlain is brought out by the name which they gave to it, "*Caniaderiguarunte*" [the lake that is the gate of the country].

In the year 1611 Champlain started the settlement of Montreal on the deserted site of the once flourishing Indian village of *Hochelaga*, discovered by Cartier in 1535. Inasmuch as Champlain did not ascend the St. Lawrence beyond the La Chine Rapids among the islands above Montreal, it must be concluded that for his data concerning the *Lac Contenant 15 journees des canaux des sauvages* [Lake Ontario], he is depending on the tales of the Indians. The *grand lac contenant 300.lieux de long* is still more mythical. The *lac des irocois* extending south through *contres des yrocois* may be Lake Oneida, misplaced.

Only *Quebec, po Royal*, and *Ile de sable*, the graveyard of the Atlantic, south of Cape Breton Island, are marked by flags as the seat of French habitations. Montreal, though located, has no flag.

There will be noticed on the map, further, as throwing light on the life of the Indians in America in the early part of the 17th century, the universal primeval forest pictured everywhere; the huts of the natives, the long houses of the Iroquois in New York and the houses of the same style in Canada and Labrador and those of another style in the upper left-hand corner of the map; the fur-bearing animals, *castor* (the beaver), *rat mique* (the mink), *martre* (the martin), and *rubachis* (the lynx [?]) ; the porcupine, wolf, polar bear, and moose; the various kinds of fish, *chien de mer* (dogfish), *gros chabes* (bull fish), *ballaine* (whale), *molue* (cod), *lou marin* (seal), *bar* (bass), *chaousarou* (gar pike), *chirgon* (sturgeon) and *siguenoc* (horse shoe crab); the following fruits and nuts: *alix* (?), *la forme des sitroulas* (summer squash), *astemara* (?), prune (plum), *cachy* (?), *groiselle rouge* (red currant), *chataigne* (chestnut), *pis que penay* (?), *rasstns de sortes* (grapes), and *feves de brasil* (beans); also hickory nuts, strawberries, raspberries, acorns, hazel nuts, crab apples, and bunch berries. It is difficult to account for the absence of Indian corn and tobacco from this enumeration, for it is known from Champlain's narrative that he was acquainted with both these American products; and the contemporary map of the same regions by Champlain's companion, Lescarbot, contains a pictorial representation of both.

Le Grand ban, which is southeast of Newfoundland, is the seat of the cod fishery, familiar to all Frenchmen. Lescarbot, companion of Champlain, describes it in the following language: "Before going on, I wish to explain this word 'Bank,' the meaning of which is perhaps troubling some of my readers. The word is sometimes applied to a sandy bottom where there is little water, or which is left dry at low tide. Such places are fatal to ships which run foul of them. But the bank of which we speak is a chain of mountains seated in the deepest depths of the ocean, and lifting their tops to within thirty, thirty-six, or forty fathoms of the surface. This bank is held to be two hundred leagues long, and eighteen, twenty, or twenty-four broad. Once past it there is no bottom on either side until land is reached. When the ships have reached it, the sails are furled, and the crews, as I have said, fish for green cod, of which I shall speak in my last book. To please the reader, I have marked it on my map off Newfoundland with dots, which is all one can do to represent it. A similar phenomenon is found in the lake of Neuchatel in Switzerland, where the fishermen fish in six fathoms of water, beyond which they find no bottom."

Monsieur Denys, in his *Description Geographique*, in a striking description of the fishing industry of the banks, says that it is "necessary to know that the Grand Bank is rarely without a mist or fog, which sometimes is so thick that one cannot see from one end of the ship to the other. It is this which obliges them to take precaution to avoid shipwreck .... When one goes upon the Grand Banks or into New France in the month of May, June, or July, it is necessary to keep good watch every night. If a ship were to run against an iceberg she would break to pieces as if she had struck against a rock, and there is no salvation in such accidents, . . . Sometimes there occurs so great a number, following one after the other, being all controlled by the same wind, that it is found by ships making for land after dry fish who have met with them [that they extend] a hundred and fifty leagues in length or even more."

The two inscriptions, the one in the upper left-hand corner of the map, and the other in the upper right-hand corner, read as follows: *I have made this map for the greater convenience of the majority of those who navigate these coasts, since they sail to that country according to the compasses arranged for the hemisphere of Asia. And if I had made it like the small one, the majority would not have been able to use it, owing to their not knowing the declination of the needle. Observe that on the present map north northeast stands for north, and west northwest for west, according to which one is to be guided in ascertaining the elevation of the degree of latitude, as if these points were actually east and west, north and south, since the map is constructed according to the compasses of France, which vary to the northeast.*

Detail: "Grand Lac Contenant", "Lac Contenant" [Lake Huron?], Lake Iroquois, Lac de Champlain and Niagara Falls

C. ecconte non
ganonsha hongnon
hontaguenay
Lac Contenant 15 Iournees
des canaux des sauuages.
contres des
lac des wyroi

Carte geographique de la Nouvelle Franse en son vray meridiein. Faictte par le Sr Champlain, Cappine. por le Roy en la marine – 1613.

While back in France in the summer of 1613, Champlain had an engraving made of a second version of a general map that he had begun the previous year, which he also published in his 1613 book. In that map, he incorporated his most recent geographic findings, including the Ottawa River, which he was the first to depict. His depiction of Hudson Bay was deliberately inspired by a map of Henry Hudson's voyages. Interestingly there is no clear evidence of any of the Great Lakes on this map. Only a lake labeled *Lac de Champlain* that equates to the present-day Lake Champlain in Vermont.

Detail: Lake Champlain

Samuel de Champlain's Carte de la Nouvelle France (1632)

In 1632, Champlain published his last major map of New France, which was included in his final book, *Les Voyages de la Nouvelle France occidentale, dicte Canada*. He had been living in France for nearly three years, having been driven out of Quebec by the Kirke brothers in 1629. This updated map contains little new information verified by Champlain himself, as his own explorations came to an end in 1616. He based the revised version on the invaluable information conveyed to him by others, chief among them Étienne Brûlé. Nevertheless, this map represents an important milestone in the history of North American cartography and was widely used by other mapmakers.

There are two versions of this map. Among the differences between them are the representation of *Bras d'Or Lake* or a chain of mountains on Cape Breton Island. In what would be his last map, Samuel de Champlain sought to bring together his personal observations, accounts from aboriginals, and pieces of information provided by other European explorers and cartographers into one map. In doing so, Champlain summarized his life's work and created the most comprehensive cartographic representation of the Great Lakes area in his day. This map depicts North America from Virginia to Newfoundland to northwestern Ontario. Given that Champlain retired from exploring in 1616, the personal observations he drew from came from his Ottawa River and Lake Huron expeditions in 1613 and 1615, respectively. It was the first time all of the Great Lakes (except Michigan) are represented. This map, the last and greatest produced by Champlain, was the prototype of later European maps for nearly a century. It summarizes the information he gathered in his career as intrepid, tireless explorer, brilliant navigator, and expert cartographer.

For the western and northern areas, beyond his own travels, he is less accurate, although the information and misinformation he gathered from questioning of Indians and from reports of his fur traders was stimulating and valuable. There is a growing but confused knowledge of the Great Lakes: '*Lac St Louis*' is Ontario; for '90' [Niagara Falls] he has a note, '*Waterfall ... of great height, where many kinds of fish are stunned in descending*'; the two small lakes above '*La nation neutre*' are Erie; '*Mer douce*' combines Georgian Bay and Huron; '34' [Sault Ste. Marie] he says flows from '*another extremely large lake*', which he calls *Grand Lac* [Superior]. Lake Champlain, which he discovered, he puts too far east of the Hudson, which he did not reach.

Detail: Great Lakes "Grand Lac", "Mer douce" and "Lac St Louis"

This fourth and last of the great maps of New France by Champlain dates from the end of his career. Together the four maps show the successive stages in the development of the author's geographical knowledge of America. That of 1607 includes the coast of what is now known as New England, that of 1612, making a wider sweep to the west, adds the delineation of the St. Lawrence River and of Lake Ontario, that of 1613 brings into view the scene of Hudson's discoveries in the north, and this of 1632 includes the whole of New France in the north.

In 1615, accompanying an exploring and military expedition of the Indians, north of the St. Lawrence, Champlain passed up the Ottawa River to Lake Nipissing and thence by the French River and by "several little falls by land and water," over a line of portages faintly traced on the map, to *Lake Attigouautan*, the modern Lake Huron, called by its European "discoverer" at the time *Mer douce* [Fresh Water Lake]. Champlain found the country along the east side of the lake relatively unattractive, and food difficult to obtain; but for the blueberries and strawberries, the party would have been reduced to suffering. The lake itself abounded in fish. The route of this expedition from the St. Lawrence to Lake Huron was the later fur traders' route to Lake Superior and the far west till the days of steam navigation.

The party next struck inland to the southeast till they came to the northeastern shores of the present Lake Ontario, Champlain's *Lac St. Louis*, which, he says, "is the entrance to the great river St. Lawrence," in 43° north latitude; and thence, along the eastern shores of this lake, and up the Oneida River and Lake Oneida, they passed to the attack on the Iroquois a few miles south of Lake Oneida.

Champlain was the first white man who is known to have reached lakes Huron, Ontario, and Oneida. For the "*Lac contenant 15 journees des canaux des sauvages*" and for "*Lac des Irocois*" on his earlier maps, he was evidently depending on the Indians.

The map of 1612 locates a *sault* at the western end of Lake Ontario, which can be nothing else than Niagara; and in the map of 1632 Champlain locates the falls again, describing the phenomenon as "a fall of water at the end of the Falls of St. Louis, very high, in descending which many kinds of fish are stunned." It would appear from the proper location of the falls on the map that in this statement the word *Falls* in the phrase, *Falls of St. Louis*, is a slip for *Lake*. Cartier, almost a century earlier, had heard rumors of the falls. The *Relation* of 1647-48 speaks of them as a "waterfall of a dreadful height." Probably the first pictorial representation of Niagara is given by Hennepin.'

Grand lac, Lake Superior, which, together with Lake Huron, it took thirty days to cross in a canoe, is now on the map probably for the first time.

Champlain's map of 1632 makes Lake Michigan only a *Grande riviere quivient du midy*.

To Champlain in 1632 Lake Erie is but a strait or connecting river leading from the upper lakes to Niagara Falls, Lake Ontario, and the St. Lawrence. It is not known what European first saw the waters of this lake. Sanson, the map-maker, who in his map of Canada, 1656, represents Lake Erie much after the fashion of the maps of the present day, probably relied on a short description of the lake in the *Relation* of 1647-48.

The *Relation* of 1662-63 contains a description of the natural features of the St. Lawrence River and of the surrounding country.

A Jesuit *Account of the Earthquake in New France, 1663*, contains the following description of Quebec: "As, however, the natural strength of that fortress is worthy to be known, and as it commends most highly the foresight of him who first selected a place and seat for the French Colony and founded the Citadel, I have concluded that a Topographical description of the city, apart from the body of the narrative, ought not to be omitted; and I trust that it will not be displeasing. Quebec, therefore, is the Key to North America, and as I have said, a very firm bulwark of New France, because it is first a rock, secondly a Height, Thirdly a promontory; and, lastly, because it is fortified by two rivers in a manner of a trench and a moat. The rock serves as a very solid base for the citadel and town founded upon it, and prevents them from being washed away by the waves or undermined by sappers. The Height offers a steep and arduous ascent, almost unscalable by enemies. The promontory, jutting out into the river Saint Lawrence, forms a secure haven for Our own ships, but a dangerous port for those of an enemy; for cannons, on the level space at the base of the cliff, and in the Citadel above, can protect or defend our ships and hinder the others from approaching or passing. For from the mouth of the river, that is, for a distance of three hundred and sixty miles, the shores are not within cannon range of each other; here, for the first time, one bank defends the other. Finally, the river Saint Lawrence on the east and south, and the Saint Charles, the other river, flowing into the St. Lawrence on the north, form as it were a moat and a wall. From these points it is evident how great is the Natural strength of the Citadel, and the stability of the town. "

"For the plainer and more ample understanding of what we shall relate here, it will not be out of place to mention that Quebec, so is the principal town of the French colony called in *New France*, was before our arrival on these shores, a wooded and uncultivated piece of land without a name, as is, at present, all that surrounding region peopled by barbarians, which, on account of its numerous hills, is called *Montagne*, the inhabitants being called *Montagnais*. To guard this town from the incursions of enemies, a Citadel has been erected on the steep and commanding crest of the Rocky height. It is very well fortified by both nature and artifice, and is the residence of the Governor and the garrison, being the strongest bulwark of that part of West or North America. So much concerning the situation and nature of the place."

From year to year the *Relations* contain numerous references to the great hope of all mariners and explorers of the time, that somewhere a short way to China and the east might be found. The French were fired by the same ambition, as were the English, the Dutch, and the Danes.

Joan Blaeu's Nova totius terrarum orbis tabula (1648)

Detail: what appears as Lake Ontario and a speculative Sea of Verrazano or Western Sea

Similar representation on Frederick De Wit/Giuseppe Longhi's 1680 world map

Novissima et accuratissima totius Americae Descriptio per N. Visscher. 1658 (#477)

This is a circa 1677 example of Nicolas Visscher's 1658 map of America. Depicting all of the New World, including part of the Atlantic coasts of Europe and Africa, and a scattering of Pacific Islands, this map enjoyed a long print run and was copied by several competing Dutch publishers. The map itself is cartographically based on information drawn from the 1648 Joan Blaeu world map shown above. Thus, Visscher's map was a conduit for Blaeu's American geography to spread throughout the map publishing world. By far this map's most striking cartographic elements deal with its unusual treatment of North America, with California represented as an island, the Great Lakes rendered as a single body of water open to the west, and the *Strait of Anian* appearing far to the north.

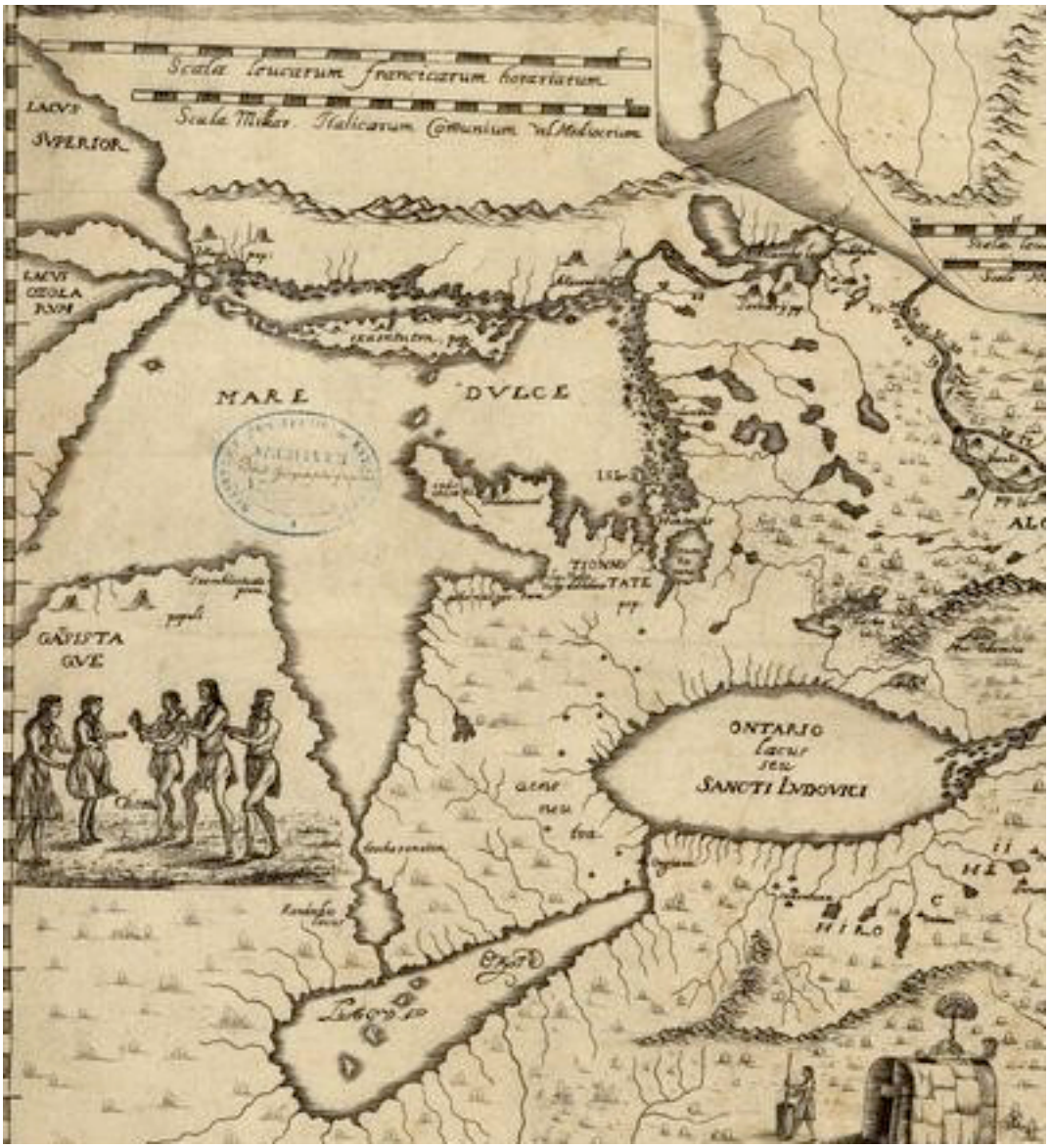
Visscher's rendering of the Great Lakes as a single body of water open to the west is one of the clearest borrowings from the younger Blaeu's 1648 wall map. It represents one of the first depictions of any lake associated with the Saint Lawrence River. It shares with the Blaeu the text originally appearing on the 1611 Jodocus Hondius wall map of the world, in relation to the *Sea of Verrazano*:
Lacus iste quantum ex accolis college potuiy trecenta ut minimum miliaria en longitudinem pateat ['This lake, as far as can be learned from the inhabitants, stretches at least three hundred miles in length'].

The *Sea of Verrazano* was a 16th century speculative body of water extending to the Pacific through the center of North America. Blaeu appears to have conflated this

fictional sea with reports of the Great Lakes, and Visscher here presents Blaeu's interpretation in full. Later iterations of this map would see this great inland sea replaced by a more sophisticated rendering of the Great Lakes, drawn largely from French sources.

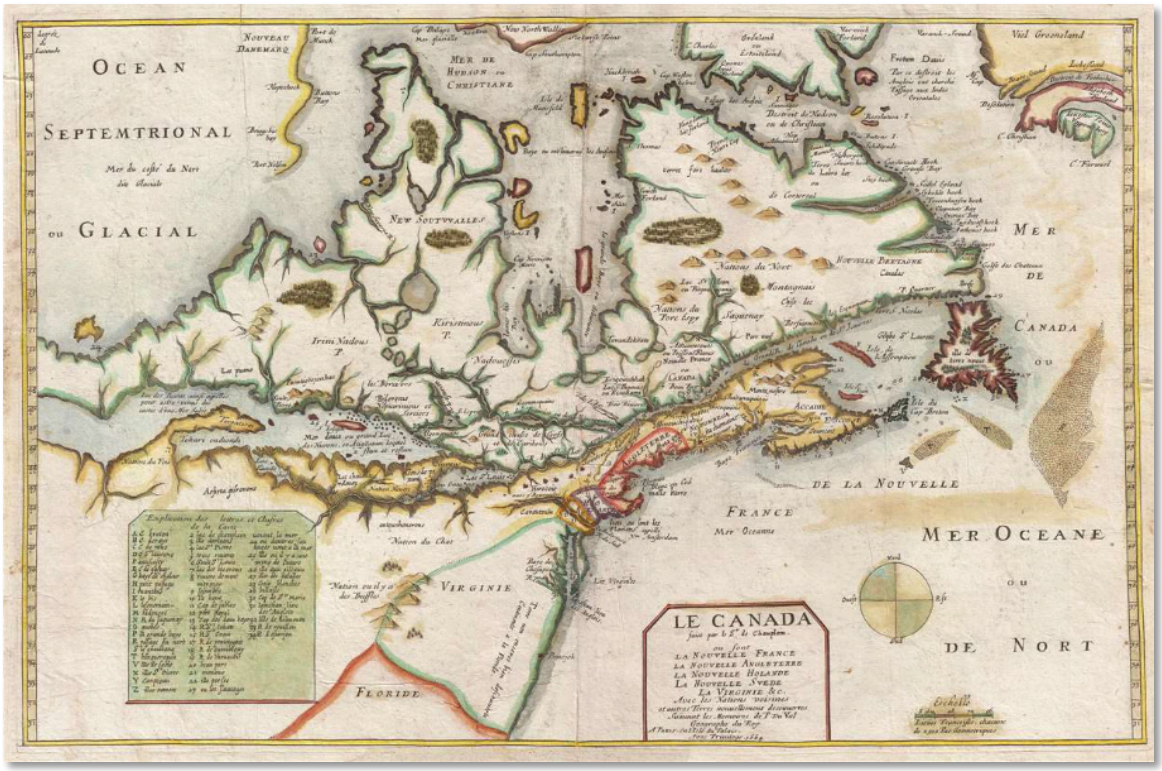
Novae Franciae accurata delineatio, 1657, Francesco Giuseppe Bressani

This 1657 map, entitled *Novae Franciae accurata delineatio* [An accurate depiction of New France], is attributed to the Jesuit Francesco Bressani (1612-72), who was sent as a missionary to the Huron Indians in 1642. In 1653 he published in his native Italy an account of his stay in New France in which he announced the impending publication of a map, also based on his time in North America. The map shown here, from the National Library of France, is one of only two known copies of Bressani's map. It represents the Great Lakes region with remarkable accuracy. An inset map at the top center shows the Huron country. The map also contains illustrations related to Bressani's mission and intended for the edification of the faithful. In the lower right is a scene of the martyrdom in 1649 of priests Jean de Brébeuf and Gabriel Lalemant. In the upper left is a portrait of an Indian family in prayer. Illustrations on the map depict Indian villages, a canoe, animals and hunting, and other scenes. The Dutch and English colonies of *New Amsterdam* and New England are indicated by their Latin names, *Novum Belgium* and *Nova Anglia*. Scale is given in French leagues and Italian miles. The map is from the collection of the geographer Jean-Baptiste Bourguignon d'Anville (1697--1782). It was given to King Louis XVI in 1782 and deposited in the National Library of France in 1924.



Detail: Lacus Superior, Lacus Ozolarum, Mare Dulce [Huron], Ontario lacus seu Sancti Ludovici and Lac Erie

NOVVM BELGIVM
Manhatæ arx Belgarum
NOVA SVECIA
Andastes
VIR
QI
NIA
Chesapeac Freti



Le Canada faict par Sr. de Champlain ou son La Nouelle France, La Nouvelle Angletrre, La Nouvelle Hollande, La Nouvelle Svede, La Virginie…1664, Pierre Du Val

Ostensibly, this is the second edition of Pierre Du Val's map, *Le Canada*, but hidden within this map is one of the great historic maps - Samuel de Champlain's unpublished map of 1616 exhibiting a missing link between Champlain's cartography of 1612 and 1632. The map constitutes the first appearance of Lake Huron and Ontario on a printed map and the first appearance of the route to the Ottawa River. This map was initially believed to be a historical map issued by Du Val in 1653 to illustrate Champlain's voyages.

Champlain returned to Paris from his last and greatest voyage of discovery in September of 1616. As on his return from previous voyages, Champlain immediately prepared a map and ordered it engraved, most likely by the house of Melchior Tavernier, in anticipation of the publication of his discoveries in *Voyage et descouvertures faites en Nouvelle France*. This book was ultimately published in 1619, but did not contain the present map. Why the map was not published as intended unclear, but its suppression may have been related to political and/or economic maneuverings in France. The map plate subsequently fell into the hands of Pierre Du Val. Melchior Tavernier's estate was liquidated in 1640, so Du Val may have acquired the plate anytime between then and 1653.

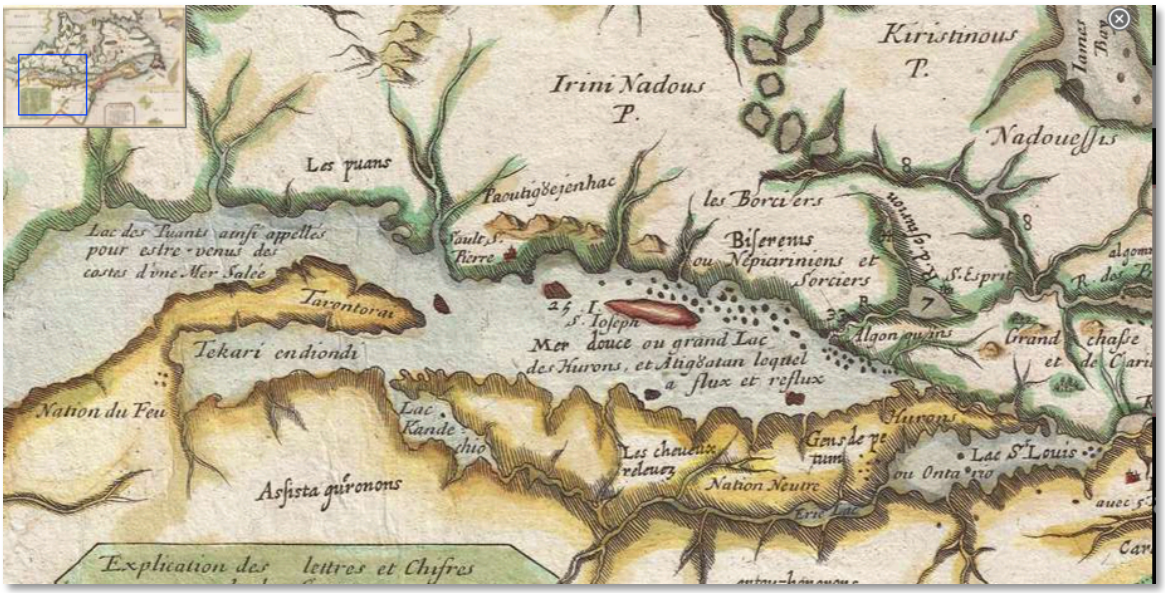
Cartographically the map is derived partially from Champlain's map of 1612, but is more ambitious in scope and augmented by new information from his epic voyage of

1615-1616. Champlain, arriving in Quebec in the Spring of 1615, agreed to accompany his Indian allies into Huron Territory to encourage their support for a campaign against the Iroquois. They traveled some 700 miles deep into territory not recorded before, going up the Ottawa River and across to Georgian Bay on Lake Huron, a.k.a. *Mer Douce*. From there they worked their way down to Lake Ontario, *Lac St. Louis,* and into Iroquois territory, At a place near present day Lake Oneida they fought an inconclusive battle with the Onondaga Indians. Unfortunately, Champlain suffered a serious injury to his leg and had to be carried for a number of days. None of the Indians were willing to accompany him back to Montreal so he spent the winter with them. During this time he explored even further west along the southeastern shore of Lake Huron.

The scope of the map being far greater than Champlain's earlier map, the present map extends from an embryonic mapping of the Great Lakes to Greenland, and from the upper Hudson Bay to the Chesapeake Bay, Virginia and even Florida. It is, notably, the earliest map to incorporate John Smith geography, other than Smith's 1612 original, in regard to the Chesapeake Bay. Champlain also exploits Dutch cartography in the vicinity of New York and New Jersey identifying *Les Flamans* or Dutch presence, information that would have been known to very few given that their occupation of this region only dates to 1614. Du Val incorporates additional information in 1653 by identifying both *New Amsterdam* and *New Sweden*.

The treatment of the Great Lakes is of substantial interest, this being the first printed map to identify both Lake Huron and Lake Ontario. Huron is here identified as *Mer Douce* or *Grand Lac des Hurons*, in reference to the local Huron tribe, allies of the French. Lake Ontario is named *Lac St. Louis.* Lake Erie appears via a river connection just southeast of Ontario, but is vastly undersized. A note in the western part of Lake Huron points to a saline sea far to the west. What this may refer to is unclear, as it is unlikely that the Huron had any inkling of the Great Salt Lake or the Pacific Ocean. A narrow isthmus separates Huron from a great glacial sea to the north leads to speculation that this map also be the first indication of Lake Superior on a map.

The map identifies the important fisheries of Grand Banks, one of the driving economic forces leading to the development of European colonies in New England and Canada. It also notes Hudson Bay in far greater detail than most previous maps. Frobisher Strait incorrectly penetrates Greenland and the true Frobisher Bay, although not was yet known as such, is identified as *Varwick Forland.* In the bottom right quadrant, a table identifies some 58 locations via alpha-numeric reference points on the map.



Lac des Puants [Michigan], Mer douce on Grand Lac des Hurons, Lac Kandechio, Lac St Louis on Ontario, and Lac Erie

From Pierre DuVal's Carte Universelle du Monde, 1679 with Lac Superieue, Lac des Puans, Mer Douce, Lac Louis, Lac Erie (#486)

America Septentrionalis, 1626, Joannes Janssious

One of the most important early maps of North America, drawing heavily from the Briggs map of 1625. An unnamed lake still feeds a *Rio de Norto* flowing southwest into the Sea of Cortez. The Gulf of Mexico and Florida are based upon Hessel Gerritsz map of 1631. The east coast draws from a number of sources. Jamestown is shown. *Novum Belgium* is unlike prior maps between the Delaware and Hudson, being greatly elongated. *New Amsterdam* is not shown, but Ft. Orange is located. The place-names in New England are based upon John Smith's map of 1616. The Gulf of St. Lawrence appears to follow De Laet. The map is richly decorated with ships, sea monsters and animals in the interior parts of North America. As can be seen below, there is a hint of Lake Ontario or Lake Erie, here labeled *Lac Iroquois.*

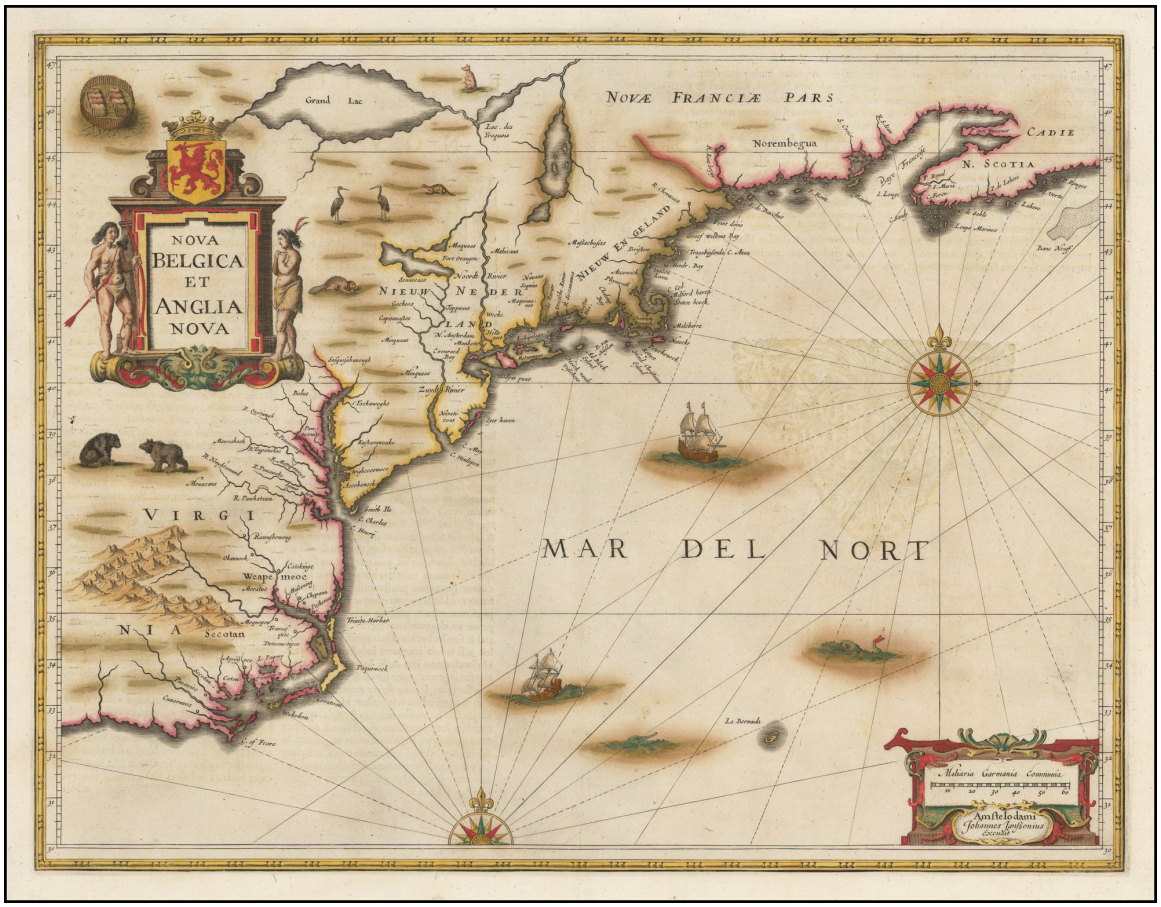
This is the first Dutch atlas map of North America, and the first Dutch atlas map to show California as an island. In this instance, the model is the outline published on Henry Briggs's map of 1625. Jansson's map shows detail of Canada borrowed from Samuel de Champlain's map of 1613, indicating the St Lawrence and Lakes Ontario, Oneida and Champlain, but omitting those lakes which would later appear on maps as Lakes Huron and Erie. Hondius' map of Virginia and Florida published in 1606 provided the detail for the Southeast, while the Gulf region shows a vast network of

rivers foreshadowing the Mississippi-Missouri system, a notion copied in later years by Sanson in 1650.

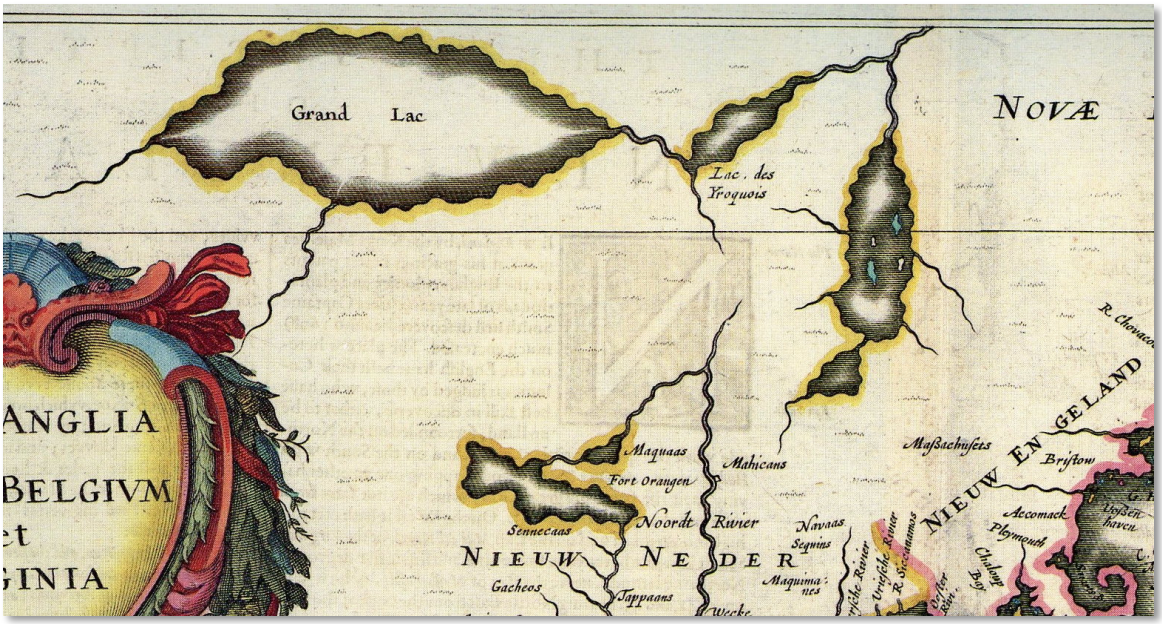
Important as this map is in its cartographic detail, the decorative appeal of Jansson's work is heightened by the inclusion of numerous small illustrations of native fauna: buffalo, caribou, Arctic foxes, polar bears, to take a few examples, while the title-cartouche shows the figures of Floridan and Virginian Indians drawn from the de Bry Great Voyages series of the 1590s.

Lac Iroquois {Lake Erie? or Ontario?} and a small version of Lake Ontario or Lake Champlain?

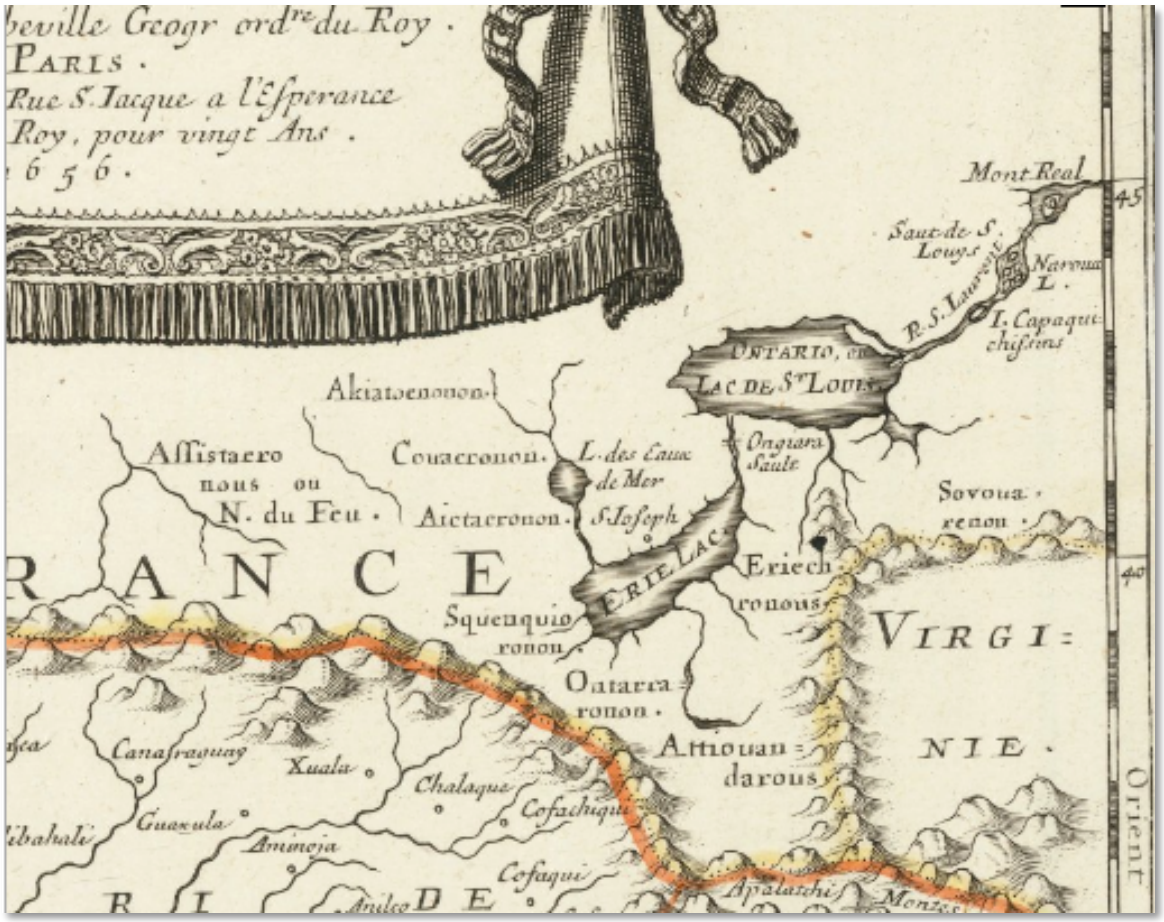
Two maps by Jansson both published at Amsterdam in 1636: '*America Septentrionalis*' (above) and '*Nova Anglia Novum Belgium et Virginia* (below)'. The discrepancies between the Great Lakes area in these two maps issued in the same year by the same cartographer illustrate how far removed from notions of scientific cartography were most of the products of this period. More surprising is the fact that later cartographers often ignored the more authoritative maps of Champlain and his Jesuit successors in favor of one or other of Jansson's representations.



1640 map by Jan Jansson of Nova Belgica et Anglia Nova showing only one "Grand Lac" and Lac des Yroquois and an unnamed lake [Champlain]



Le Nouveau Mexique et La Floride…1656, Nicolas Sanson



Detail: Sanson here displaying only two of the five lakes, Erie and Ontario Lac de St Louis

Amérique septentrionale, Nicolas Sanson, 1650

One of the earliest depiction of the actual Great Lakes: Lac Superieur, Lac des Puans [Michigan], unamed [Huron and Erie} and Ontario L.de S.t Loys. Note the "open-ended" nature of Lac Superieur and and orientation of Lac des Puans [Michigan] indicating the honesty of the cartographer.

The Great Lakes are presented in an embryonic form: the Lakes Michigan and Superior extend westward indefinitely suggesting that the cartographer was uncertain as to the actual size/shape of the lakes and that they may in fact connect to the unexplored Pacific Northwest coast. Of the five lakes, only Lake Erie is unnamed - though it is repressed with a close approximation to accuracy. On the eastern Seaboard New York or *New Amsterdam,* is presented as an island well offshore. Plymouth and St, Augustine are also identified.

Le Canada ou Nouvelle France &c. Ce qui set les plus advance vers le Septenrion est tier de dives Relations des Anglois, Danois &c. . . . 1656 Nicolas Sanson

This map integrally shaped the cartography of the region for the next century, and was the first to label Lake Erie by that name. The map depicts Labrador and the territories of New France, including Canada and the Great Lakes, in addition to the colonies of Virginia and Florida. It shows a detailed depiction of the entire drainage basin of the Great Lakes and St. Lawrence River. The map is bordered by a neatline identifying latitude and longitude, and the title cartouche is embroidered with wreaths that contain roses in the center. The map is based on the *Jesuit Relations* and shows an accurate course of the St Lawrence and the Great Lakes in more or less their proper locations.

Sanson created this map as an improvement upon a previous map of North America from 1650, titled *"Amerique Septentrionale."* While Sanson made few changes to his depiction of the northern waters, he employed greater detail in his depiction of Hudson Bay. Additionally, Sanson improved his delineation of the eastern coast in the new map. He introduced Long Island and corrected his depictions of *New Amsterdam*

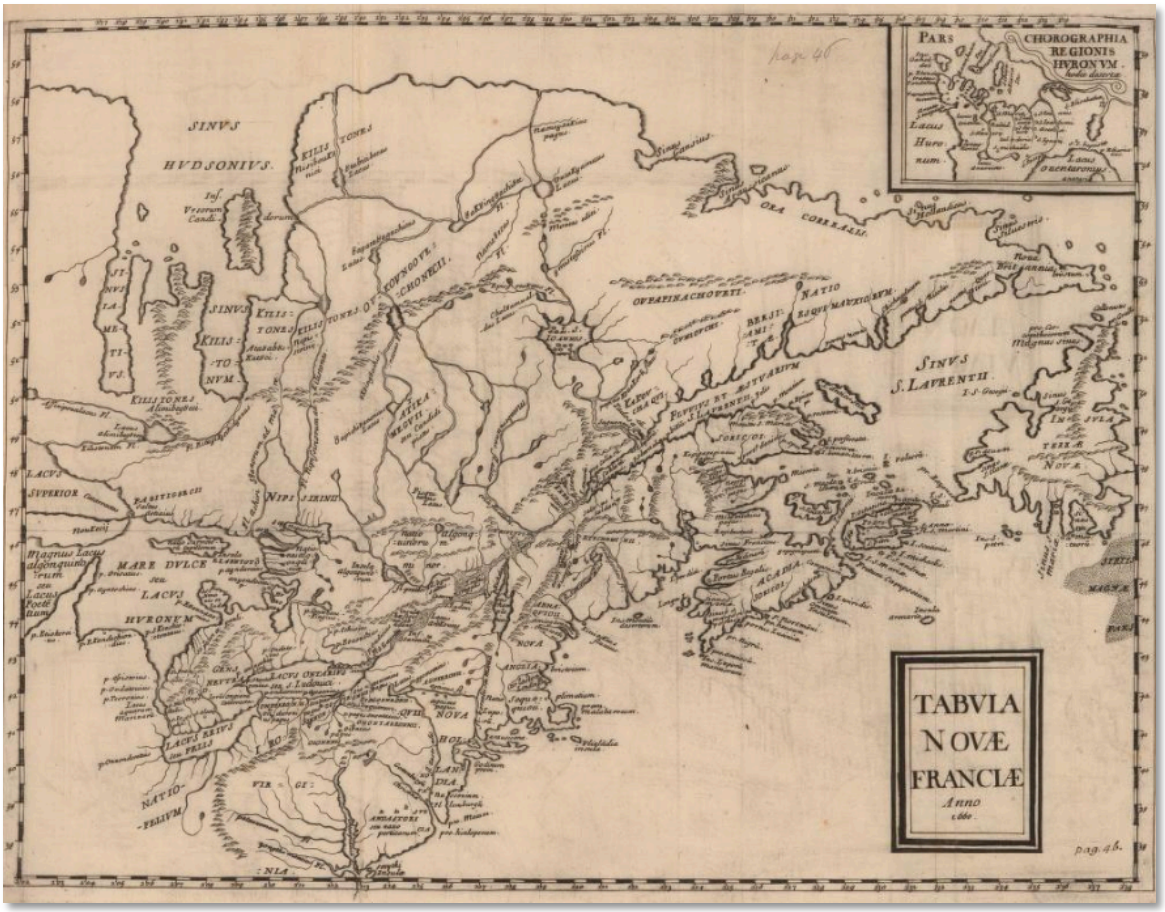
and the Delaware River. *"Mont Real,"* or Montreal, and Quebec are also clearly identified in the map.

Detail: Lac Superieur and Lac de Puans [Michigan] are "open ended"; Karegnon DI [Huron] L. Erie du Chat and Ontario eu Lac de St Louys are all connected by waterways

Sanson's map was the first to use the name *Lake Erie* for a *Great Lake*. While Europeans began mapping the Great Lakes region in the 16th century, and as been shown, early maps were largely based upon the accounts of Native Americans and used a variety of toponyms. Working on behalf of the French crown, Samuel de Champlain participated in the first great mapping effort of the Great Lakes in the early 17th century, gathering local accounts and drafting maps.

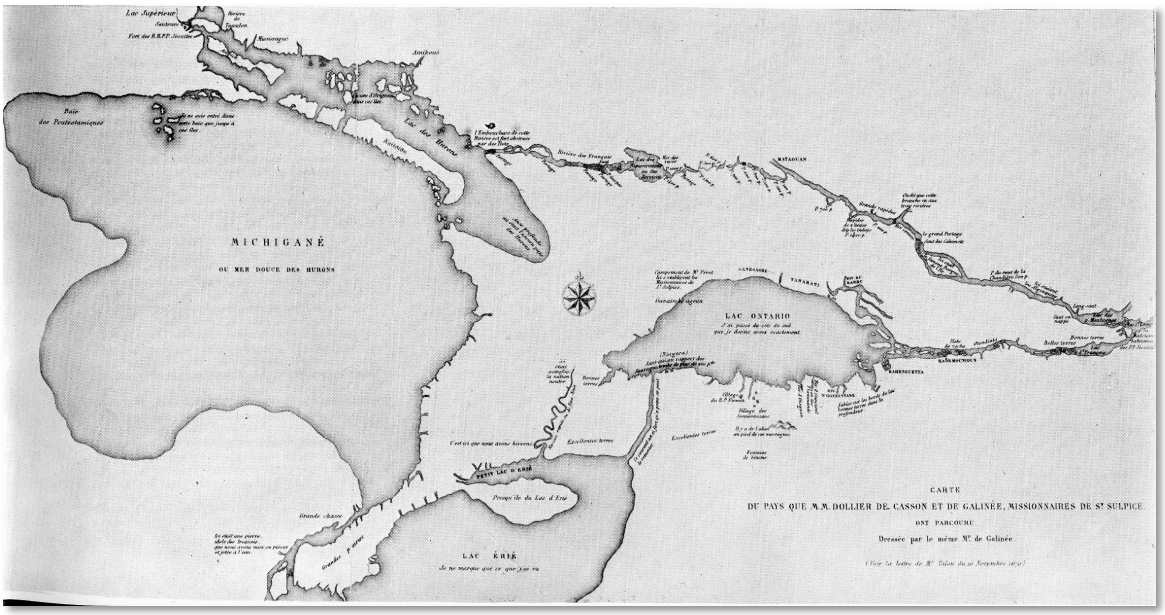
By 1643, Jean Boisseau, a contemporary of Sanson as well as an engraver and cartographer, denoted one of the Great Lakes as *Derie*. Here, Sanson identifies it as *L. Erie, ou du Chat*. The latter part of the toponym refers to what Sanson supposedly thought of as the "panther-like qualities" of the local Native American population. Sanson's map remained predominant for the century after its publication, although his delineation of Lake Erie was superseded in 1703 with the publication of Guillaume de *L'Isle's Carte du Canada*.

Two maps by Nicolas Sanson d' Abbeville: '*Amerique Septentrionale*', 1650 and '*Le Canada, ou Nouvelle France*', 1656. In these maps by Sanson, heavily dependent on Jesuit reports, all five of the Great Lakes are shown for the first time. Between them, the two maps represent the first major advance on Champlain's map of 1632, and they were reprinted many times, in German and Dutch, as well as French, editions. Erie appears as '*Erie ou Du Chat*' ('*Lac Derie*' had been applied by the French cartographer Boisseau in 1643 to one part of the stretch of water north of the Neutral Nation shown on Champlain's map); the names *Superieur* and *Ontario* are used for the first time; the northwestern extremity of Lake Michigan, '*Lac des Puans*' or Lake of the Smells (Green Bay), is shown, although it is not differentiated from Lake Michigan; and the true shape of Lake Huron begins to emerge. Farther south the maps are less impressive. They still reflect the 16th century conviction that the rivers emptying into the Gulf of Mexico flowed from a crescent-shaped range of mountains running from Florida to Texas, an error that for long hindered any realistic assessment of the probable length and course of the Mississippi. Note, however, the unusual orientation of Lake Michigan [*Lac de Puans*], probably gathered from Barthelemy Vimont's travels of 1642 in an east to west direction along the northern shores of the lake. Many other names here are Indian in origin.



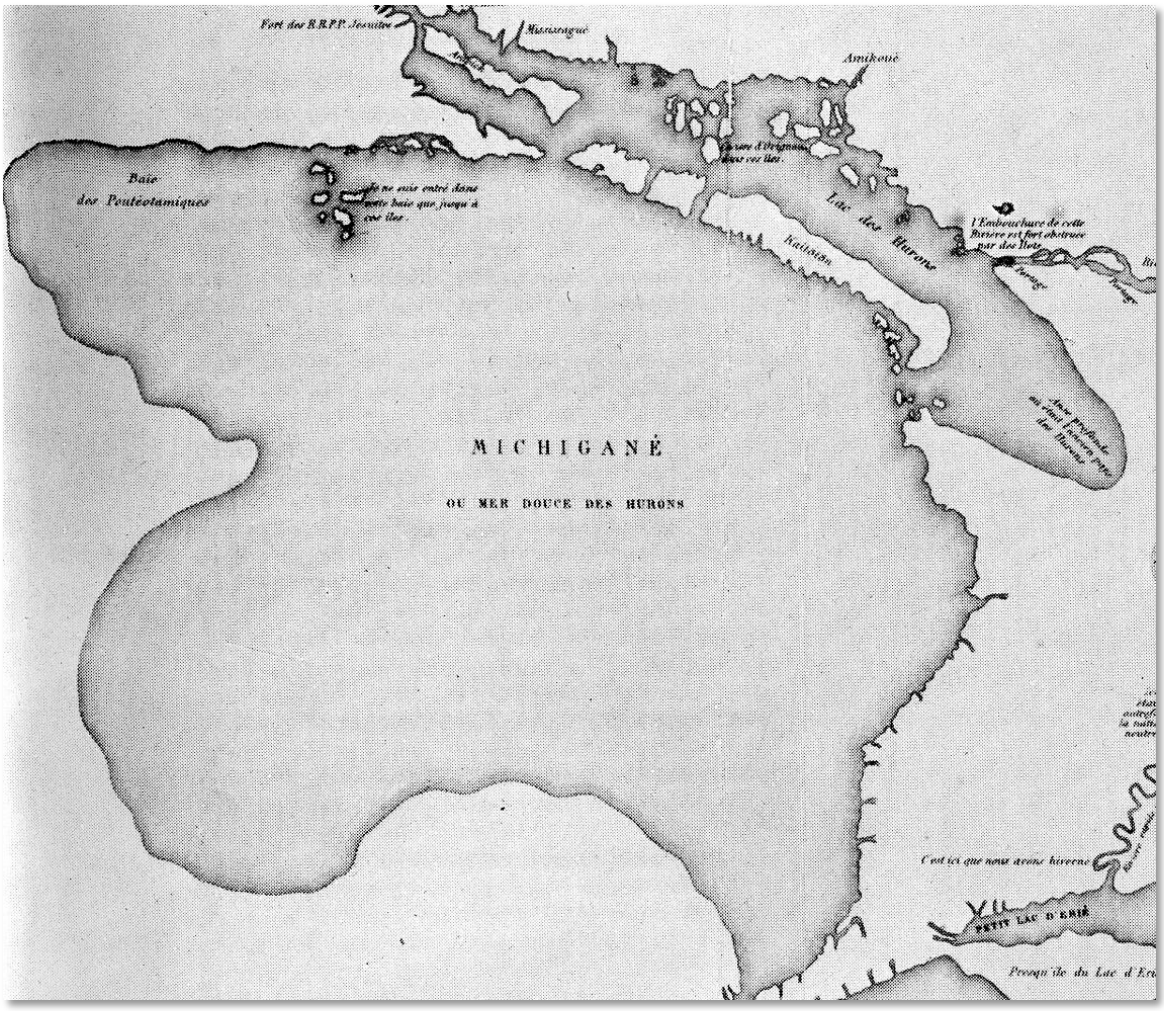
Tabvla Novae Franciae, 1660

Detail: Lacus Superior, Magnus Lacus Algonquin seu Lacus Foetetium, Mare Dulce seu Lacus Huronum, Lacus Erius seu Felis, Lacus Ontarius seu S. Ludouici

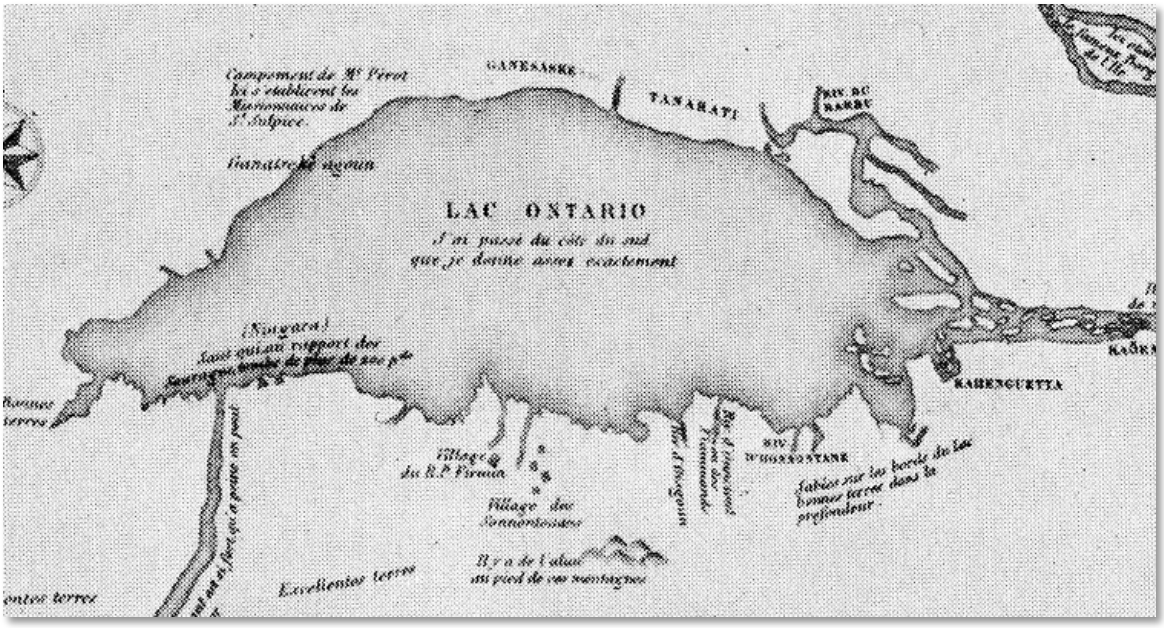


Map of the Upper Lakes, by Brehant de Galinee, 1670. Reduction in Faillon, Histoire de la Colonie Prancaise en Canada, III, 1685. (reproduction)

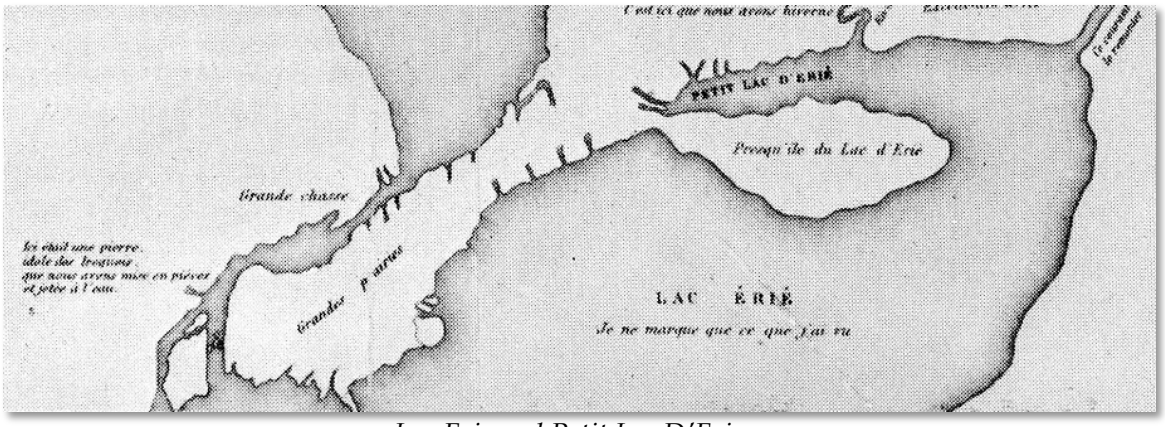
Brehant de Galinee's rudimentary map-making skill was one reason why he accompanied the Sulpician expedition of 1669-70 that made a pioneering journey to the Upper Lakes, and whose members became the first known Europeans to winter on Lake Erie. For all its inaccuracies and omissions, the map (the original of which is lost) represents a conscientious attempt to draw from actual observation the Upper Lakes, until this time laid down on the maps mainly from report. Galinee wrote afterwards, probably to the intendant, Jean Talon: '*Everybody desired me to make the map of our journey, which I have done accurately enough; however, I recognise rather serious faults in it still. which I will correct when I have time .... I have marked in it nothing but what I saw. Thus you will find only one side of each lake, since their width is so great that one cannot see the other*'. Galinee drew the south shore of Lake Ontario, the north shore of Lake Erie, the east and north shores of Lake Huron, and the portage route from Sault Ste Marie to Montreal by way of Lake Nipissing and the Ottawa River. The north shore of Lake Ontario and some of the other details in regions not traversed by Galinee were presumably added by another hand.



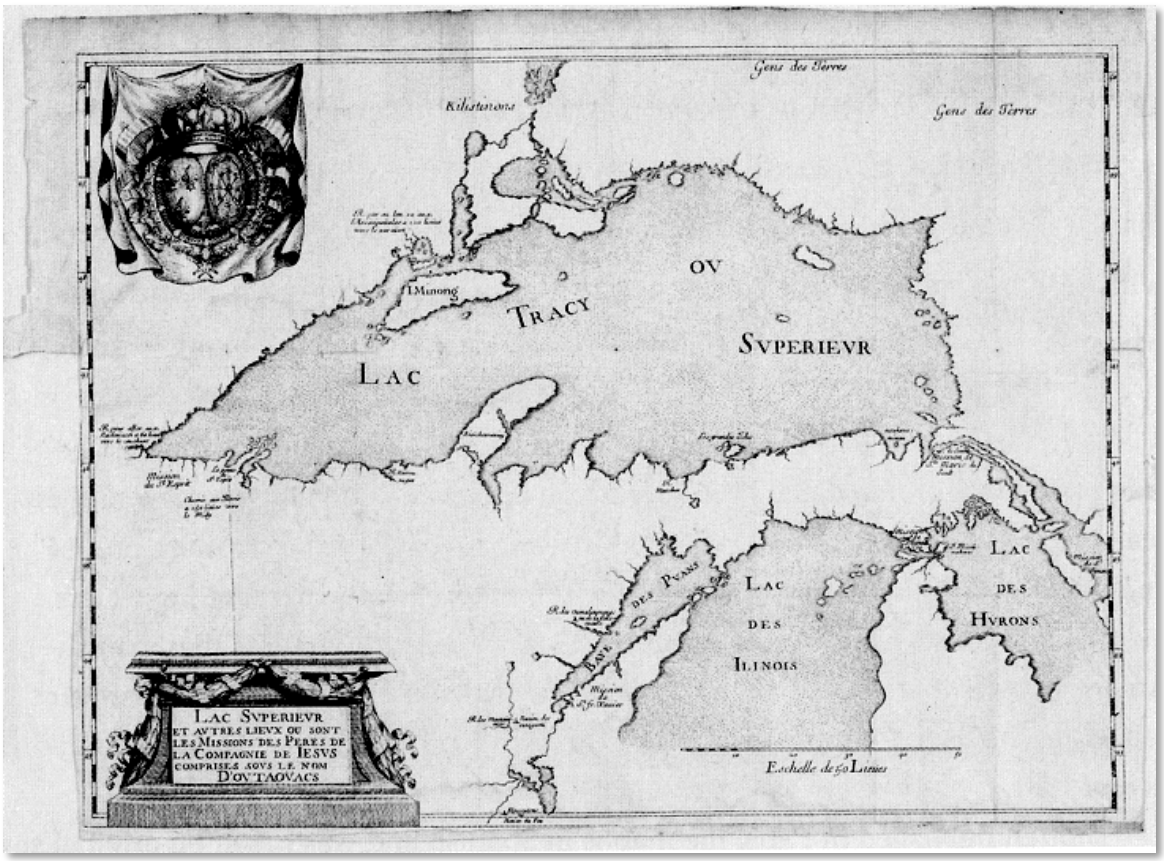
Detail: Michigane ou Mer Douce des Hurons and Lake des Hurons



Lac Ontario and Niagara Falls



Lac Erie and Petit Lac D'Erie



Lac Superieur Et Autre Lieux Ou Sont Les Missions Des Peres De La Compagnie De Iesus ....

by C, Dablon/C. Allouz 1672

Map of the Great Lakes, including Lac Tracy ou Superieur, Lac des Ilinois, and Lac des Hurons, showing the locations of Jesuit missions. Geographical elements include the locations of native American settlements and tribes, as well as a scale. Decorative elements include the French royal coat of arms of Henri IV.

This Jesuit map of the Great Lakes, 1672, in terms of accurate observation and careful draughtsman ship, is one of the most impressive produced of any area of New France in the 17th century. Its delineation of Lake Superior and the northern parts of Lakes Michigan and Huron was not to be surpassed until the detailed surveys of the 19th century, and for the first time the western parts of the Great Lakes appear in a form not far removed from that shown on a modern map. It was the first map, for example, to distinguish between Lake Michigan and Green Bay ('*Baye des Puans*'],

Made by the Jesuits, this map of Lake Superior, the Upper Lake, first appeared in the *Relation des Missions aux Outaouaes, des annees 1670 & 1671*, written by Father Claude Dablon, the Superior of the Jesuit Missions in New France.

The name *Outaouaes*, used in the title of the map, was applied to "all the savages of those regions although of different nations, because the first to appear among the French were the Outaouacs."

Father Dablon's *Relation* is an interesting commentary on the map.

"By glancing, as one can, at the Map of the lakes, and of the territories on which are settled most of the tribes of these regions, one will gain more light upon all these Missions than by long descriptions that might be given of them. The reader may first turn his eyes to the *Mission de Ste. Marie du Sault*, three leagues below the mouth of Lake superior. He will find it situated on the banks of the river by which this great Lake discharges its waters, at the place called the Sault, very advantageous in which to perform Apostolic functions, since it is the great resort of most of the Savages of these regions, and lies in the almost universal route of all who go down to the French settlements. It was also on this spot that all these lands were taken possession of in his Majesty's name, in the presence and with the approval of fourteen Nations who had come hither for that purpose. "

"Toward the other end of the same lake is found the *Mission du St. Esprit* covering both the district known as *Chagaouamigong* point, and the neighboring Islands. Thither the Outaouacs, with the Hurons of Tionnontate, repair in the seasons suitable for fishing and for raising Indian corn. It will be easy to recognize the rivers and routes leading to various Nations, either stationary or nomadic, located in the vicinity of this same lake, who are somewhat dependent on this Mission of saint Esprit in the matter of trade, which draws them to our Savages' abode. For it is a Southward course that is taken by the great river called by the natives Missisipi, which must empty somewhere in the region of the Florida sea, more than four hundred league: hence. Fuller mention will be made of it here. after. Beyond that great river lie the eight Villages of the Ilinois, a hundred leagues from saint Esprit point; while forty or fifty leagues Westward from the latter place is found the Nation of the Nadouessi, very populous and warlike, and regarded as the Iroquois of these regions, waging war, almost unaided, with all the other tribes hereabout. Still farther away is situated another Nation, of an unknown tongue, beyond which, it is said, lies the Western sea. Again proceeding toward the West-Northwest, we find the people called *Assinipoualac*, constituting one large village, or, as others say, thirty small villages in a group, not far from the North sea, two weeks' journey from the above-named Mission of saint Esprit. "

"Finally, the *Kilistinons* are dispersed through the whole Region to the North of this Lake Superior, possessing neither corn, nor fields, nor any fixed abode; but forever wandering through those vast Forests, and seeking a livelihood there by hunting. There are also other Nations in those districts, for that reason called 'the peoples of the Interior,' or of the North Sea."

"The reader will also be enabled - on his journey, so to speak - to note all the places on this Lake where copper is said to be found. For, although at present we have no very definite knowledge on the subject, because no thorough surveys have been made, yet the slabs and huge lumps of this metal which we have seen, each weighing a hundred or two hundred livres, and much more; that great rock of copper, seven or eight hundred livres in weight, seen near the head of the Lake by all who pass; and, furthermore, the numerous pieces found at the water's edge in

various places,-all seem to force upon us the conviction that somewhere there are parent mines which have not yet been discovered."

(In Reuben Gold Thwaites, Ed., "The Jesuit Relations and Allied Documents." Cleveland, I896-I90I; LV, 94)

The stories of the finding of copper upon the shores and in the waters of Lake Superior greatly increased the interest of the French in the Northwest. Besides these discoveries recorded by Father Dablon, Allouez reported that he often found "at the bottom of the water pieces of pure copper of ten and twenty pounds' weight," and related that the Indians said "that the little nuggets of copper which they find at the bottom of the water in the lake, or in the rivers emptying into it, are the riches of the gods who dwell in the depths of the earth."

"After surveying this entire Lake Superior, together with the Nations surrounding it,? continues Father Dablon's *Relation*, "let us go down to the *Lac des Hurons*, almost in the middle of which we shall see the *Mission de St. Simon*, established on the Islands which were formerly the true country of some Nations of the Outaouacs, and which they were forced to leave when the Hurons were ravaged by the Iroquois. But since the King's Arms have compelled the latter to live at peace with our Algonquins, part of the Outaouacs have returned to their country; and we at the same time have planted this Mission, with which are connected the peoples of Mississague, the Amicoues, and other circumjacent tribes, to whom we have proclaimed the Faith, baptizing many of their children and adults."

"Toward the south, on the other side of the Lake, are the territories formerly occupied by various Nations of the Hurons and Outaouacs, who had stationed themselves at some distance from one another, as far as the famous Island of *Missilimakinac*. In the neighborhood of this island, as being the spot most noted in all these regions for its abundance of fish, various Peoples used to make their abode, who now fully intend to return thither if they see that peace is firmly established. It is for this reason that we have already begun there to found the *Mission de St. Ignace*; this was done during the past winter, which we spent there. . . . "

"Finally, between this *Lac des Ilinois* and Lake Superior is seen a long bay called the *Baye Des Puans*, at the head of which is the *Mission de Fr. Xavier*; while at its entrance are encountered the Islands called *Huron*, because the Hurons took refuge there for some time, after their own country was laid waste. In one of them especially is found a kind of Emerald or diamond, some white and others green. Still farther Northward may be seen a stream of no great size, to which is given the name of copper river, from a lump of metal that we saw there, weighing more than two hundred Iivres."

The *Relation* of Father Dablon gives also interesting descriptions of the principal missions.

Missilimakinac, where Marquette founded *La Mission de St. Ignace*, in 1670, "is an Island of note in these regions. It is a league in diameter, and has such high, steep rocks in some places that it can be seen at a distance of more than twelve leagues. It

is situated exactly in the strait connecting the Lake of the Hurons and that of the Ilinois, and forms the key and the door, so to speak, for all the peoples of the South, as does the Sault for those of the North; for in these regions there are only those two passages by water for very many Nations, who must seek one or the other of the two if they wish to visit the French settlements. This circumstance makes it very easy both to instruct these poor people when they pass, and to gain ready access to their countries. "

"This spot is the most noted in all these regions for its abundance of fish, since, in Savage parlance, this is its native country. No other place, however it may abound in fish, is properly its abode, which is only in the neighborhood of Missilimakinac."

From this *Mission of St. Ignace*, Marquette set out with Joliet, in 1673, on their memorable voyage of discovery down the Mississippi River and here three years later his body was brought for its final burial.

Mission de St. Simon, on the Lake of the Hurons, is described as follows: "War and peace gave birth to this Mission, the war waged by the people called *Nadouessi*, who drove the Outaouacs from *La pointe du St. Esprit*, where they lived; and the peace with the Iroquois, which permitted them to return to their own country. A part of the Outaouacs, who last summer separated from the rest, betook themselves to the Island called *Ekaentouton*, lying in the middle of the Lake of the Hurons, as to their former country.

"The chief man of this new Colony asked us at the same time for one of our Fathers, to plant the Faith in that new settlement. To that duty was assigned Father Louys Andre, who went up to those regions this year, and has there carried on a number of temporary Missions, which have borne fruits commensurate with the hardships which he has suffered-as may be gathered from his own account of each separate Mission."

"Among the Islands of Lake Huron this [*Ekaentouton* or *Manitoulin* Island] is the fairest and largest, being at least forty leagues long, and from ten to twenty broad. It would be difficult to find a finer country for comfortable settlement. Its soil seems excellent, the country being intersected by frequent streams, dotted with numerous Lakes, and surrounded by many bays abounding in fish. The island is readily found in Lake Huron, as it occupies its center, and attracts attention above all the others by its size."

Mission du St. Esprit, at the western extremity of Lake Superior, was founded as early as 1665 by Father Allouez, who here heard tales from the Indians of the great river to the west, the "Missisipi."

"These regions of the North," says Father DabIon's *Relation*, "have their Iroquois, as do those of the South. They are a certain people called the Nadouessi, who, as they are naturally warlike, have made themselves feared by all their neighbors; and, although they use only bows and arrows, they yet handle them with such skill and readiness as to fill the air with shafts in an instant, especially when, like the

Parthians, they face about in their flight; for then they discharge their arrows so rapidly as to render themselves not less formidable when fleeing than when attacking."

"They live near and on the banks of that great rivet called Missisipi, of which further mention will be made. They comprise no fewer than fifteen Villages of considerable size, and yet know not what it is to till the soil for the purpose of sowing seed. They are content with a kind of marsh rye which we call wild oats, which the prairies furnish them naturally, they dividing the latter among themselves, and each gathering his own harvest separately, without encroaching on the others. "

"They are sixty leagues from the head of Lake superior in a Westerly direction, and well-nigh in the center of the Nations of the West, with all of whom they are at war, in consequence of a general League formed against themselves as against a common foe."

Mission de St. Fr. Xavier was founded in 1670 by Allouez among the Pottawattamies at the southern end of the *Baye Des Puans*, so named from the mistranslation of the aboriginal name of the Winnebago Indians living upon its shores, which meant "ill smelling or dirty water." "This bay," says Marquette "bears a name which has a meaning not so offensive in the language of the savages; for they call it *la baye sallee* rather than *Baye Des Puans* .... This led us to make very careful researches to ascertain whether there were not some salt-Water springs in This quarter, as there are among the hiroquois, but we found none. We conclude, therefore, that This name has been given to it on account of the quantity of mire and Mud which is seen there, whence noisome vapors Constantly arise, Causing the loudest and most Continual Thunder that I have ever heard." This bay was also known to the French as *Grande Baye*, which the English corrupted into *Green Bay,* its present name.

"This Mission," says the *Relation of I670-71*, "embraces eight different Nations, or even more, if we include some unsettled tribes which sustain relations to it. The first to receive our attention, and the best instructed in the faith, are the people living at the head of the Bay commonly called *des Puans*. This name, which is the same as that given by the Savages to those who live near the sea, it bears perhaps because the odor of the marshes surrounding this Bay somewhat resembles that of the sea; and, besides, there can hardly be more violent blasts of wind on the Ocean than are experienced in this region, accompanied by very heavy and almost continual thunder."

The earliest appearance of Lake Superior, or "Upper Lake", is on Champlain's map of 1632, where it is crudely represented by the name *Grand Lac*, with a note appended that the Indians reported that it took thirty days in a canoe to cross *Mer Douce* [Lake Huron] and this "*autre grandissime lac*." Two years later Nicolet was the first European to see its waters, but he turned south after reaching Sault Ste. Marie, and crossed Lake Michigan and Green Bay. In 1641, Raymbault and Jogues, two

French Jesuits, were at the Sault, where they heard rumors, "of another great lake that commences above the Sault." They did not go beyond. The *Relation of 1647-48* contains the name "*Lac Superieur*," probably the first use of this term in literature. Radisson and Grosseilliers, in the course of their explorations in the Northwest between 1658 and 1660, visited the lake and brought back word of its wide expanse.

The *Relation of 1669-70* speaks of the lake as follows: "This Lake has almost the form of a bent Bow, more than a hundred and eighty leagues long; the South side serves as its string, and the arrow seems to be a great Tongue of land projecting more than eighty leagues into the width of the Lake starting from this same South side, at about its middle."

"The North side is frightful, by reason of a succession of Rocks which form the end of that prodigious Mountain-chain which, beginning beyond Cap de Tourmente, below Quebec, and continuing as far as this point, over a distance of more than six hundred leagues in extent, finally comes and loses itself at the end of this Lake."

"It is clear almost throughout and unencumbered with Islands, which are ordinarily found only toward the North shores. This great open space gives force to the winds, and they stir it up with as much violence as the Ocean."

The *Relation of 1669-70* also describes the outlet of Lake Superior into Lake Huron:

"What is commonly called the Sault is not properly a Sault, or a very high waterfall, but a very violent current of waters from Lake Superior, which, finding themselves checked by a great number of rocks that dispute their passage, form a dangerous cascade of half a league in width, all these waters descending and plunging headlong together, as if by a flight of stairs, over the rocks which bar the whole river. "

"It is three leagues below Lake Superior, and twelve leagues above the Lake of the Hurons, this entire extent making a beautiful river, cut up by many Islands, which divide it and increase its width in some places so that the eye cannot reach across. It flows very gently through almost its entire course, being difficult of passage only at the Sault."

Rene Menard, two years later, perished in the effort to establish a Jesuit mission upon the southern shore of Lake Superior. Menard's attempt was renewed in 1665 by Claude Allouez, who joined a party of Indian fur traders returning to their villages upon the shores of the lake. The party passed through the Sault Ste. Marie, which Allouez described as "a half-league of rapids that are encountered in a beautiful river which unites two great lakes-that of the Hurons and Lake Superior," and came out upon the waters of the lake, "which," says Allouez in his journal, "will henceforth bear Monsieur de Tracy's name in recognition of indebtedness to him on the part of the people of those regions." The reference is to the successful expedition into the Mohawk country, led by Alexander de Prouville, the Marquis de Tracy, in 1666, which caused the Iroquois to maintain peace with the French for twenty years.

This peace encouraged the exploration of the Northwest.

In the *Relation of 1670-1* Father Claude Dablon wrote that a map had been drawn by two Fathers, "*of considerable intelligence, much given to research, and very exact, who determined to set down nothing that they had not seen with their own eyes.*" The Jesuits involved were probably Dablon himself, and Father Claude Allouez. Dablon later continued "*By glancing, as one can, at a Map of the lakes, and of the territories on which are settled most of the tribes of these regions, one will gain more light upon all these Missions than by long descriptions that might be given of them.*"

This is one of the rarest and most accurate maps relating to the Great Lakes from the early period of the mapping of the region. Most of the information for the map came from the explorations of the Jesuit missionary, Father Claude Allouez. He was posted at the Jesuits' Lake Superior mission in 1665 and two years later traveled to Lake Nipigon and in 1669 to the Green Bay-Lake Winnebago area of Wisconsin. It was most likely Father Claude Dablon who compiled the map based on these explorations and probably on other information gathered from fur traders and local natives. Based in Sault Ste. Marie, Dablon had had some training as a geographer. The map appeared in one of the so-called *Jesuit Relations.* These were internal publications of the Jesuit order, in which missionaries in the field reported to their superiors. Having been a part of a very limited publication of this kind accounts for the map's great rarity. The map notes the locations of all Jesuit missions to date, which extended at the time to the western shore of Lake Superior and southwest to Green Bay. In the upper left are the conjoined arms of France and of Navarre.

Nouvelle decouverte de plusieurs nations dans la Nouvelle France en l'année 1673 et 1674 by the French Jesuit priest Louis JolietAs he was returning to Montreal after having explored the Great Lakes and the Mississippi River, Joliet lost all of his records when his boat overturned in the St, Lawrence River within sight of Montreal. Shortly afterwards, he drew this map from memory.

Detail: Lac Superieur, Lac des Illinois ou Missihiganin, Lac Huron, Lac Erie and Lac Frontenac ou Ontario.
Most of the lakes are mis-shapen due to the rather crude nature of the overall map.

This *New Discovery of Many Nations in New France*, a map of the Mississippi by its French discoverer, is a photographic reproduction of Joliet's beautiful original manuscript, which is one of the most valued possessions of the John Carter Brown Library.

Joliet's letter to Frontenac, inscribed in the vignette of the map, is as follows:

To Monseigneur, Count Frontenac, Counselor of the King, Governor, and Lieutenant General for his Majesty in Canada, Acadia, Newfoundland, and in the country of New France:

I take pleasure in presenting to you this map which will enable you to understand the location of the rivers and lakes on which one travels through Canada or North America, which is more than I ,200 leagues from the east to the west.

That great river beyond Lake Huron and Illinois, which bears your name, the River Buade [or Mississippi], since it was discovered in these last two years, I673 and I674, as the result of the first orders you gave me as you entered on the government of New France, flows between Florida and Mexico, and on its way to the sea runs through the most beautiful country imaginable. I have seen nothing in France so beautiful as the abundance of fine prairies, and nothing so pleasant as the varieties of the groves and forests, where one can pick plums, pomegranates, lemons and several small fruits which are not found in Europe. In the fields quails arise; in the woods parrots are seen; and in the rivers one catches fish which cannot be identi fied by taste, shape or size.

Iron mines and reddish rocks, never found except with copper, are not rare; likewise slate, saltpetre, coal, marble, and alloys of copper. The largest pieces of copper that I saw were as large as a fist and free from impurities. It was discovered near the reddish rocks, which were much like those of France, and numerous.

All the savages have wooden canoes, fifty feet and more in length; they do not care for deer as food, but they kill buffalo, which roam in herds of thirty or fifty. I have myself counted four hundred on the banks of the river; and turkeys are extremely common.

They harvest Indian corn generally three times a year, and they have water melons for refreshment from the heat, since there is no ice and very little mow.

One of the great rivers running into the Mississippi from the west gives a passage into the Gulf of California {Mer Vermeille}. Isaw a village which is only five days' journey from a tribe which trade with the natives of California. If I had arrived two days earlier, I could have talked to those who had come and brought four hatchets as a present.

The description of everything could have been seen in my diary if the good fortune which attended me all through the journey had not failed me a quarter of an hour before arriving at the place from which I had departed. I had escaped the dangers from the savages, I had passed forty rapids and was about to land with all possible joy over the success of such a long and difficult undertaking, when my canoe was overturned and I lost two men and my chest, in sight of and at the doors of the first French houses that I had left nearly two years before. Nothing is left to me but my life, and the desire to use it for whatever will please you.

Monseigneur, your humble and obedient serv-
ant and subject, - Joliet.

Under strict instructions from the governor, Frontenac, Joliet had reached Mackinac, early in December, 1672, where he found Father Marquette in charge of the Jesuit Mission of St. Ignace. Wild stories of a great western river stirred both men. Marquette gives the following account of the inception of the voyage: "The Father had long premeditated this Undertaking, influenced by a most ardent desire to extend the Kingdom of Jesus Christ, and to make him Known and adored by all the peoples of that country. He saw himself, As it were, at the door of these new Nations when, as early as

the year 1670, he was laboring in the Mission at the point of st. Esprit, at the extremity of lake superior, among the Outaouacs; he even saw occasionally various persons belonging to these new peoples, from whom he obtained all the Information that he could. This induced him to make several efforts to commence this undertaking, but ever in vain; and he even lost all hope of succeeding therein, when God brought about for him the following opportunity.

"In the year 1673, Monsieur the Count De Frontenac, Our Governor, and Monsieur Talon, then Our Intendant, Recognizing the Importance of this discovery,- either that they might seek a passage from here to the sea of China, by the river that discharges into the Vermillion, or California Sea; or because they desired to verify what has for some time been said concerning the 2 Kingdoms of Theguaio And Quiuira, which Border on Canada, and in which numerous gold mines are reported to exist, these Gentlemen, I say, appointed at the same time for This undertaking Sieur Jolyet, whom they considered very fit for so great an enterprise; and they were well pleased that Father Marquette should be of the party.

They were not mistaken in the choice that they made of Sieur Jolyet, For he is a young man, born in this country, who possesses all the qualifications that could be desired for such an undertaking. He has experience and Knows the Languages . . . possesses Tact and prudence ... has the courage to dread nothing. "

"When the Illinois come to La Pointe," wrote Marquette, "they pass a large river almost a league wide. It runs north and south, and so far that the Illinois . . . have never yet heard of its mouth; they only know that there are very great nations below them .... This great river can hardly empty in Virginia, and we rather believe that its mouth is in California."

Marquette joined Joliet, and after five others had been added to the party, all set out in two birch canoes on May 17, 1673, to the discovery of the new waterway.

Crossing Lake Michigan and Green Bay, called "*Baye des Puans*" and "*Grande Baye*" by the French, and corrupted by the English into the present form, they ascended the Fox River to the portage, now marked by a government canal and by a monument to Marquette, leading to the headwaters of the *Riviere miskonsing*, or Wisconsin River. Here they heard stories from the Indians of the terrors which they would encounter: 'horrible monsters," says Marquette, "which devoured men and canoes together; that there was even a demon, who was heard from a great distance, who barred the way, and swallowed all who ventured to approach him."

Undeterred, they followed the Wisconsin to its mouth, now marked by a monument to Marquette at *Prairie du Chien*, and "safely entered the Missisipi on the seventeenth of June." Floating down the river with the current, seeing "monstrous fish" in the water and "wild cattle," buffaloes, on the banks, they came to a village of "*Illinois*" on the west side on the "*Pekitanoui*" [Muddy] river, the Indian name for the Missouri. "I hope by its means," wrote Marquette, "to discover the Vermillion or California Sea." Joliet gives no name to this river, but locates on its banks the "*Messouri*" Indians.

"Pekitanoui is a river of Considerable size," says the original account, "coming from the Northwest, from a great Distance; and it discharges into the Missisipi. There are many Villages of savages along this river, and I hope by its means to discover the Vermillion or California sea. "

"Judging from The Direction of the course of the Missisipi, if it Continue the same way, we think that it discharges into the mexican gulf. It would be a great advantage to find the river Leading to the southern sea, toward California; and, As I

have said, this is what I hope to do by means of the Pekitanoui, according to the reports made to me by the savages. From them I have learned that, by ascending this river for 5 or 6 Days, one reaches a fine prairie, 20 or 30 Leagues Long. This must be crossed in a Northwesterly direction, and it terminates at another small river, on which one may embark, for it is not very difficult to transport Canoes through so fine a country as that prairie. This 2nd River Flows toward The southwest for 10 or 15 Leagues, after which it enters a Lake, small and deep, which flows toward the West, where it falls into The sea. I have hardly any doubt that it is The vermillion sea, and I do not despair of discovering It some day, if God grant me the grace and The health to do so, in order that I may preach The Gospel to all The peoples of this new world who have so Long Groveled in the darkness of infidelity."

Near the present-day Alton, Illinois, the voyagers saw two painted monsters, high up on the rocks by the river side. Some twenty leagues farther south "we found ourselves at a river called ouaboukigou." This name appears on the maps of Joliet and Marquette as *Ouabouskigou*, which the French later wrote "*Ouabache*" and the English "*Wabash*," the name for the lower Ohio and the modern Wabash rivers. Below the Wabash on the left bank, they saw indications of deposits of iron ore, which Joliet marks on his map. When they reached Akansea (downstream people), opposite the mouth of the Arkansas River, which Joliet calls *Riviere Basire*, after a French fur-trader at Montreal, they were near the site where De So to died in 1542.

Here Marquette wrote: "After attentively considering that we were not far from the gulf of Mexico, the basin of which is at the latitude of 31 degrees and 60 minutes [sic.], while we were at 33 degrees and 40 minutes, we judged that we could not be more than 2 or 3 days' journey from it; and that, beyond a doubt, the Missisipi river discharges itself into the florida or Mexican gulf, and not to The east in Virginia, whose sea coast is at 34 degrees latitude, which we had passed, without, however, having as yet reached the sea, or to the west in California because in that case our route would have been to the west or to the west southwest, whereas we had always continued It toward the south."

Having accomplished the main purpose of their expedition, the probable solution of the problem concerning the outlet of the Mississippi, and fearing to hazard their discovery by falling into the hands of hostile Indians or still more hostile Spaniards, at its mouth, they resolved to return.

"We therefore reascend the Missisipi, which gives us much trouble in breasting its currents." When they reached the mouth of the Illinois, which Joliet calls on his map *Riviere de laDivine, ou L'Outrelaize*, to do honor to the wife of Frontenac and to one of her intimate friends, Mlle. d'Outrelaize, they followed it and the Des Plaines River to the Chicago pottage, and passing *Mons Joliet*, which still retains the name, reached *Lac des Illinois ou Missihiganin*. They arrived at the mission of St. Francois Xavier on the *Bay des Puans*, or Green Bay, at the end of September, having traveled in canoes some twenty-five hundred miles, in four months.

Marquette remained at Green Bay, while Joliet spent the winter at Sault St. Marie, and reached Quebec the following summer. While passing through the Lachine Rapids above Montreal, his canoe capsized, and the box containing his papers and map was lost, as he himself says in the legend of the map. The original report by Marquette and a map in his handwriting were preserved at Quebec till about 1842, when they were deposited in the College of Ste. Marie, at Montreal, where they now are.

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By his narrative Marquette has reaped more glory from the expedition than Joliet, who was the leader in command. The loss of his records and diary was a cruel blow to the latter. Marquette's original account may be found in Kellogg's *Early Narratives of the Northnoest* as well as in the *Jesuit Relations*.

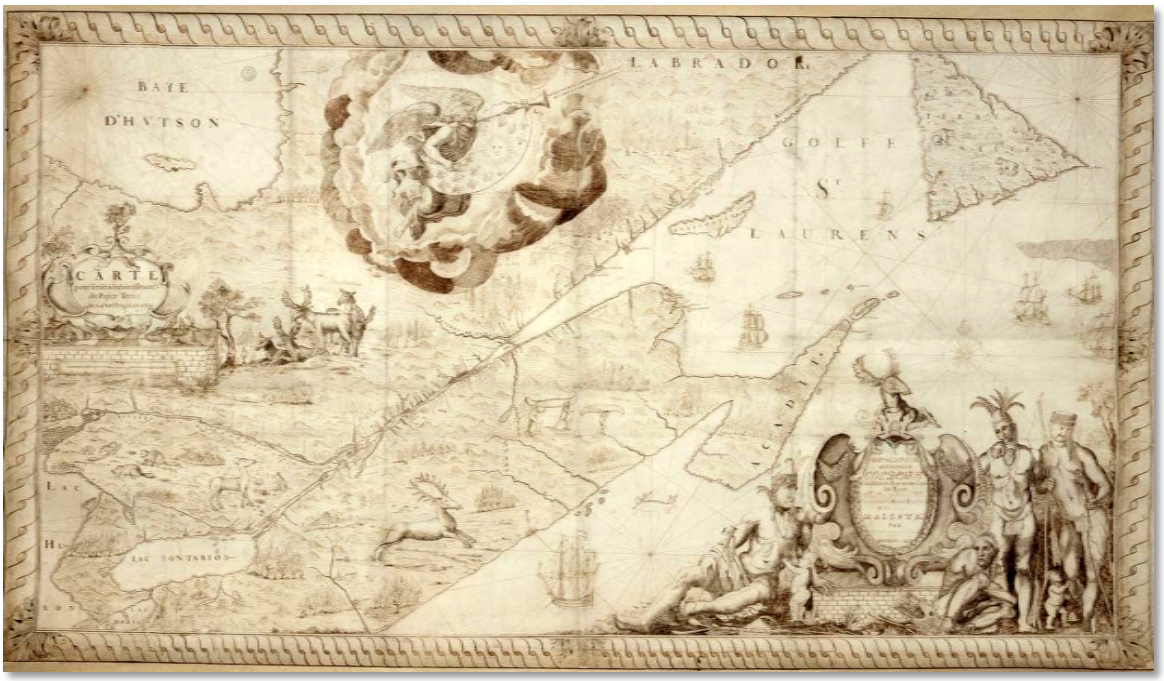
The map here reproduced, was drawn from memory by Joliet after the loss of his papers. It was unknown in modern times till Gabriel Gravier brought it to light in 1879. It was reproduced in *Revue de Geographie*, February, 1880, and in the *Magazine of American History* in 1883. Three other less interesting maps are ascribed to joliet."

It will be noted that on the map Joliet names the Mississippi *Riviere de Buade*, in honor of Louis de Buade, Comte de Frontenac. When he fell out with Frontenac, he changed the name of the river to "*Riviere Colbert*" and the name of the country west of *Lac de Illinois* from *La Frontenacie* to "*La Colberie.*" In his map Marquette has "*R. de la Conception*" in place of Joliet's *Riviere de Buad*e, but in his text he continually uses the form "*Missipi*" of the Indian name *Mitchisipi*, "the great river." The first use of the name in the *Jesuit Relations* occurs in 1666, in Father Allouez's account of his journey to Lake Superior, in which he speaks of the "*Messipi*," but there is evidence of the discovery of the river by Radisson in 1659.

The Gulf of California appears in the southwest as the *Mer Vermeille*, or Vermillion Sea, by which one could go to Peru, Japan, and China. It owes its name to its supposed resemblance to the Red Sea.

Carte de l'Amerique Septentrionale Depuis I'embouchure de la Riviere St. Laurens jusques au Sein Mexique, 1675

This map is unsigned, although historians attribute its creation to a military engineer in the service of Frontenac, governor general of New France. The connection to Frontenac is assumed from the naming of the Mississippi River, "Riviere Buade," after the family name of Frontenac and in designating the surrounding area,"'La Frontenacie," Furthermore, the name of the Arkansas River, "Riviere Bazire," refers to the Canadian merchant who supported Frontanac's scheme to construct a fort on Lake Ontario. Harrisse attributes the map to Hugues Randin de Buily who was involved in Frontenac's plan to build a fort on Lake Ontario. According to Jean Lelanglez much of the geographical information in this map was based on the expedition map of Louis Joliet, lost when the boat that Joliet was in overturned on the St. Lawrence River.



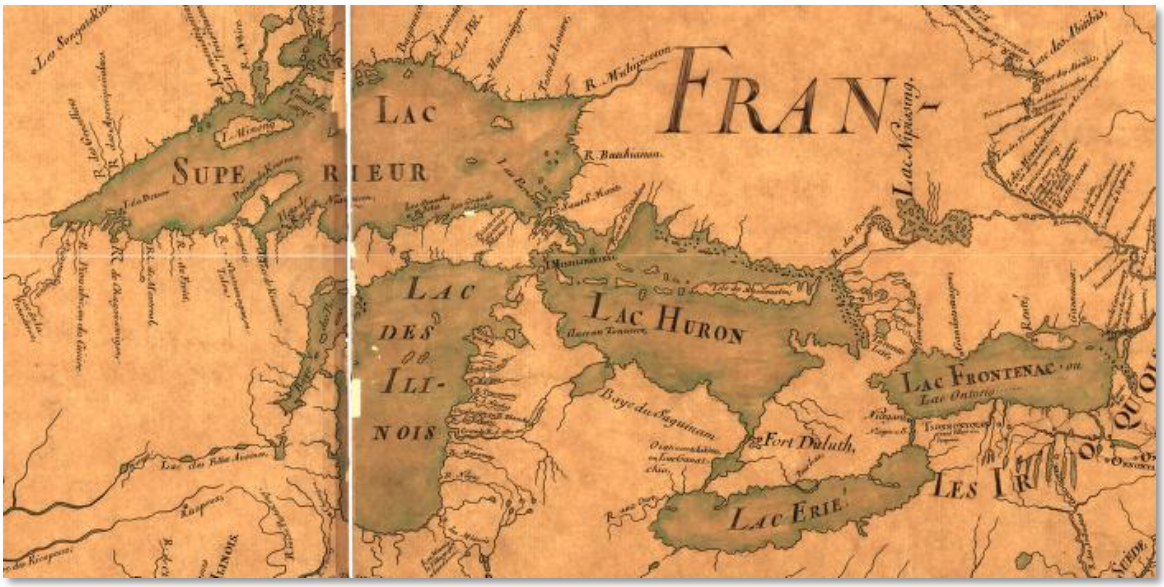
Carte pour seruir à l'éclaircissement du Papier Terrier de la Nouvelle-France
[Map for the Clarification of Land Titles in New France], 1678

This large illustrated map by Jean-Baptiste Franquelin (1651--after 1712), later the royal hydrographer in Quebec, shows the French presence in the Saint Lawrence valley and Atlantic Canada in 1678. For 20 years from the early 1670s, maps by Franquelin accompanied reports to France sent by the highest officials in its American territories. This map was dedicated to Jean-Baptise Colbert (1619-83), minister of finance under King Louis XIV, who was interested in the colonization of New France. The map includes illustrations of the animals, plants, and people of this part of North America. The drawings of the animals are not very accurate, but bear, beaver, and moose are clearly recognizable. Lake Erie and Lake Ontario are shown, along with parts of Lake Huron and Hudson's Bay. Settlements along the Saint Lawrence River are indicated by name, and *Acadia* [present-day Nova Scotia], Labrador, and Newfoundland are prominently marked. Scale is in French leagues, a unit of measurement that varied over time, and is approximately 1:1,630,000. Notwithstanding Colbert's interest, France had only limited success in settling its vast North American colony. Unlike the English, the French did not migrate in large numbers to New France because of urban poverty or religious persecution, and the monarchy did not show much interest in supporting settlement over the long term.

Detail: Lac Huron, Lac Herye, Lac Ontario

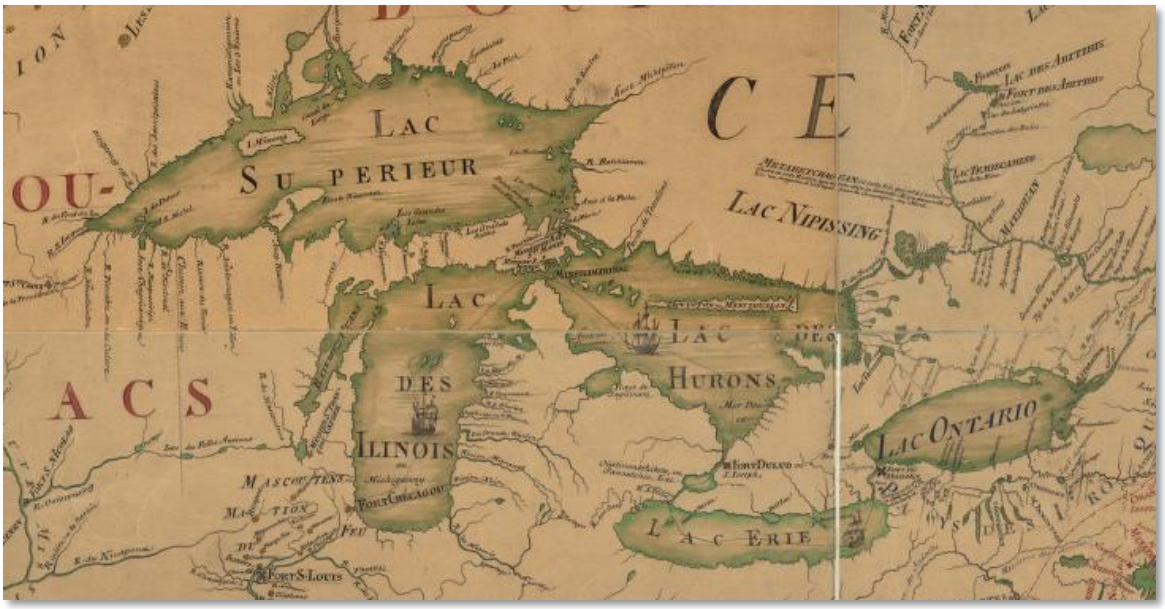
Carte de la Nouvelle France et de la Louisiane Nouvellement decouverte, 1683
Lac de Conte ou Superieur, Lac Dauphin ou Illionois, Lac D'Orleans ou Hurons, Lac de Conty ou Erie, L. Frontenac, Louis Hennepin

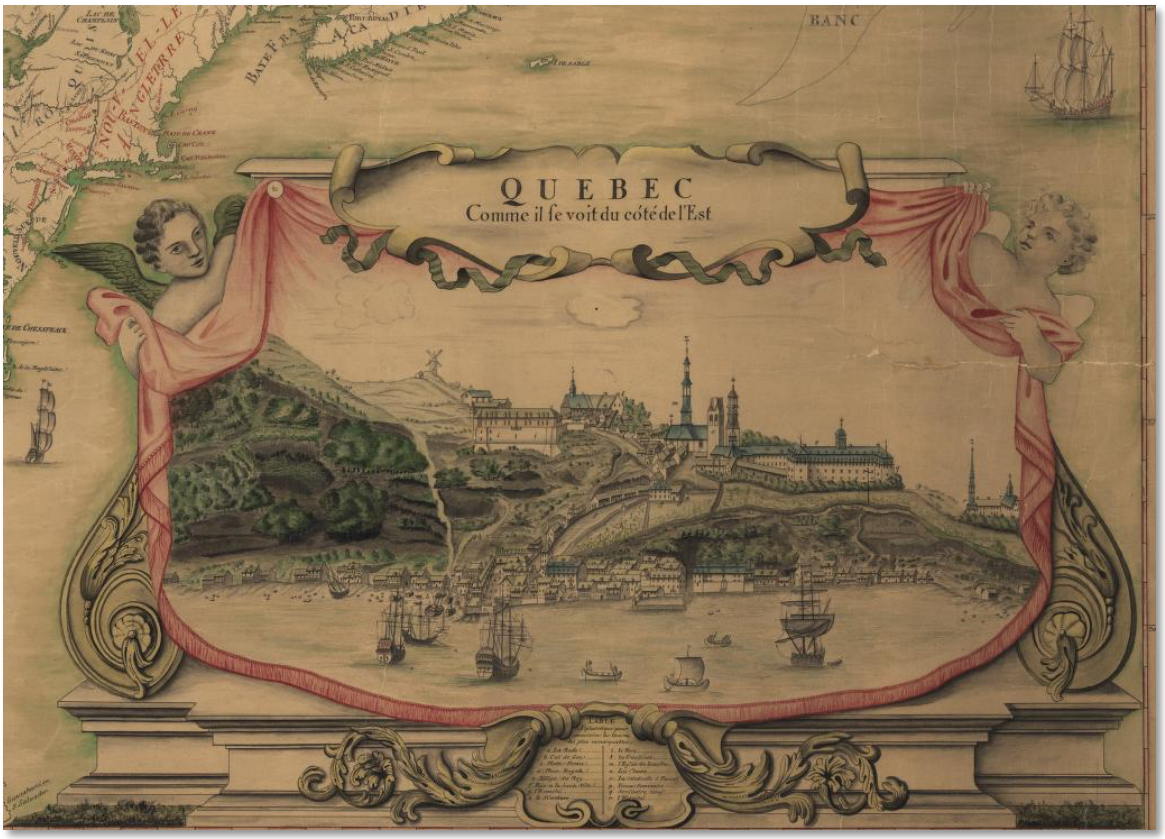
Amérique septentrion.lle [i.e. septentrionale] : composée, corigée, et augmẽtée, sur les iournaux, mémoires, et observations les plus justes qui en ón'etes.tes en l'année 1685 & 1686, par plusieurs particuliés by Jean Baptiste Louis Franquelin, 1685
Note the teribly mis-shapened Mississippi River and
the numerous large lakes north and west of Lac Superieur



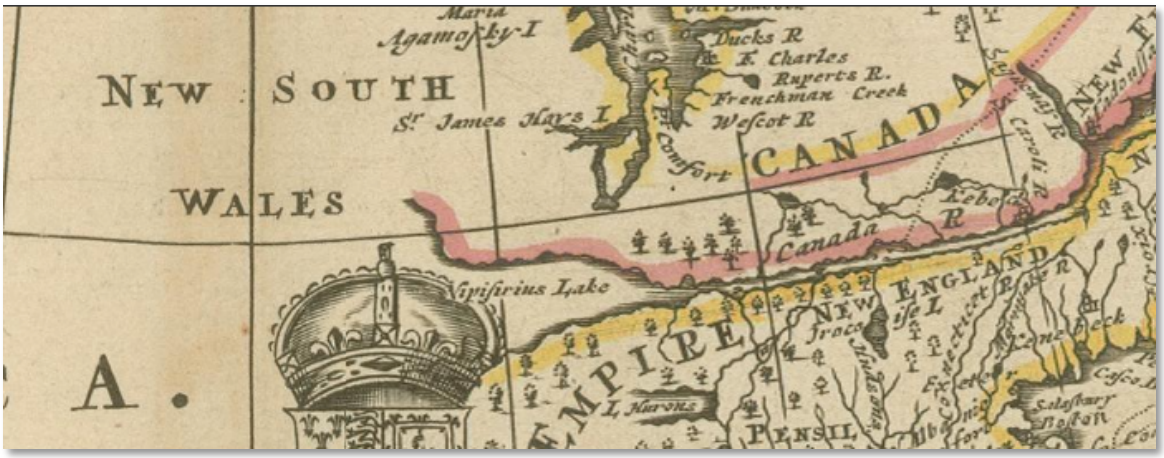
Detail: Lac Superieur, Lac des Ilinois, Lac Huron, Lac Erie, Lac Frontenac ou Lac Onterio

Carte de l'Amerique Septentrionnale : depuis le 25, jusqu'au 65⁰ deg. de latt. & environ 140, & 235 deg. de longitude / par Iean Baptiste Louis Franquelin, hydrographe du roy, à Québec en Canada. Copied between 1909 and 1910 from the original 1688 ms. in the Archives du dépôt des cartes et plans de la marine


LAC
SUPERIEUR
LAC NIPISSING
LAC
DES
ILINOIS
LAC
DES
HURONS
LAC ONTARIO
L'ACADIE
LAC ERIE


BANC
QUEBEC
Comme il se voit du côté de l'Est

Part of the A New Mapp of America Devided ..., 1687
Map of North and South America with the northern part of North America unfinished and Great Lakes missing. California is shown as an island.



Detail: Nipisirius Lake [Ontario?] Note that not all cartographers had access to the latest discoveries as shown on previous, earlier maps of the Great Lakes

La Louisiana, Parte Settentrionale, Scoperta sotio La Protettione di Luigi XIV, 1696
by Vincenzo Coronelli (#488)

Coronell''s map of the northern part of the huge French trans-Appalachian territory of Louisiana gives a remarkably accurate outline of the Great Lakes for its time. It is regarded as the best separate map of the five lakes published during the 17th century. It was based on the reports of French fur-traders and missionaries, such as the Jesuit fathers Simon Ie Moyne and Brehaut de Galinee, and such printed maps as Jean-Baptiste-Louis Franquelin's map of 1681 or the so-called *Jesuit Relations'* map of 1672, which mapped Lake Superior in considerable detail.

The upper reaches of the Mississippi are here named as *F. Colbert, o Mechissipi*, the name *Mechissipi* being derived from an Indian name used by Jacques Marquette in the text of his diaries of the explorations in 1672-1673. Farther south, below the Wisconsin River (here shown as *R. Ouisconsing*) is a short note stating that on 17 June 1673, Marquette and his companion Louis Jolliet were the first Europeans to sail into the Mississippi from the Wisconsin.

Although Coronelli's map is less decorative than many of its contemporaries, it is a much more important and informative map than most of its period. The Venetian cartographer and monk Vincenzo Coronelli noted the close geographic link between the "western lakes" and the Mississippi, illustrating it as a thick, axial artery in his 1688 map "*Parti Occidentale du Canada ou de la Nouvelle France.*" Here, all of the Great Lakes are more accurately defined. Tendrils from the Illinois River and the "*Chekagou*" River get close enough to kiss, but don't quite consummate the deal. When it was completed in 1848, the Illinois-Michigan Canal linked the two rivers, setting the stage for Chicago late-19th century rise as one of the world's fastest-growing cities.

Partie Occidentale du Canada au de la Nouvelle France ... 1688 by V. Coronelli and J.B. Nolin

Both geographically and aesthetically, this is an unquestioned high point in the cartography of the Great Lakes. As map historian R. V. Tooley points out, "it was the best representation of the Great Lakes, particularly Lake Superior, that was printed up to that date." Specifically, a number of place names for example, appear for the first time on a printed map, as well as a number of Indian tribal names and their approximate geographical locations. Moreover, with its dramatic imagery of frontier scenes, the map is certainly one of the most beautiful, acquirable works to focus on the Great Lakes. The map's cartography is remarkably accurate and detailed considering that, at the time, the area depicted was in the process of being explored, primarily by the French. This reflects Coronelli's favored position in the court of Louis X that gave him access to the freshest geographic information as it arrived in Paris. Coronelli gained his privileged status by producing for the monarch pair of enormous globes - fifteen feet in diameter; the globes were a source of considerable prestige for the French king *(see #488)*.

Information based on the explorers Marquette, Joliet, and La Salle can be seen on both the map and in the many notes pointing out geographic features, settlements, forts and Indian villages. Some notes also provide commentary on the Indian tribes encountered. Much of the map is also derived from a manuscript work by Franquelin, who was based in Quebec and served as a kind of clearing-house for geographic information from explorers and missionaries. He produced several large, manuscript maps that collated information from these disparate sources.

Detail: L. Tracy o Superiore, L. Degli Ilinoi o Michigani, L. de Puants, L. Degli Huroni, Lago Erie, and L. Frontenac

This Coronelli-Nolin map is also significant for shifting the focus from the eastern seaboard to the American interior, which was very unusual for period. This change in focus reflects a shift in French imperial policy which in this period was directed to the expansion of control of the fur trade and to contest Spanish claims in the North American southwest.

An impressive and scarce 1692 map of North America issued by Alexis-Hubert Jaillot on a massive scale. The map covers all of North America and Central America from Baffin Bay to the Spanish Main. The map extends westward to past an insular California to include *Terre de Iesso* (a speculative mapping of Hokkaido) and eastwards past the Azores to include the British Isles. Jaillot derived this expanded format map from the earlier work of Nicholas Sanson. In addition to its remarkable presentation of California, this map also offers a very ephemeral perspective on the Great Lakes. While all five lakes are present, Lake Superior and Lake Michigan (*Lac des Puans*) are open at their westernmost extremes, thus illustrating the primitive sate of exploration in the region as well as the high hopes of European monarchs that one of these lakes may provide a passage to the Pacific and the lucrative markets of Asia. Like Huron is identified according to its original Huron-Petun (*Wyandot*) name, *Karegnondi* ['Big Lake'].

The Mississippi River, here identified a *Chucagua*, a term derived from the journals of the De Soto expedition, is relocated well to the East - a major advancement over previous maps. Jaillot's reasoning behind this relocation is unclear but may have been influenced by reconnaissance associated with the recently returned expedition of Jacques Marquette and Louis Jolliet.

In Spanish Florida, which extends north to include most of the American Southeast, *Lake Apalache* or the '*Great Freshwater Lake of the American Southeast*' is noted. This lake, first mapped by De Bry and Le Moyne in the mid-16th century, is a mis-mapping of Florida's Lake George. While De Bry correctly mapped the lake as part of the River May or St. John's River, subsequent navigators and cartographers in Europe erroneously associated it with the Savannah River, which instead of flowing south from the Atlantic (like the May), flowed almost directly from the Northwest. *Lake Apalache* was subsequently relocated somewhere in Carolina or Georgia, where Jaillot maps it and where it would remain for several hundred years.

Irinnadeus
LAC SUPERIEUR
Attiouandarons
Nation du Feu
Ontario
Bersamites
Le SAGUENAY
Attiquamegue

Amerique Septentrionalis Carte d'un tres grand Pays entre le Nouveau Mexique et la Mer Glaciace Dediee a Guilliaume IIIe. Roy de La Grand Bretagne Par le R. P. Louis de Hennepin Mission: Recol: et Not: Apost: Chez c. Specht a Utreght 1698.

This is a map that fundamentally impacted the cartographic history of America, this is the 1698 Friar Hennepin map of North America. Covering all of North America from the equator to the arctic, this map is remarkable on a number of levels including its depiction of California as an island, the addition of *Terre de Iesso* in the extreme northwest, the presence of *Lake Apalache* in the southeast, the inclusion of *Lake Parima* and *El Dorado* in South America, and the suggestion of a Northwest Passage. However, it is best known for its remarkable and highly influential rendering of the Great Lakes and the Mississippi Valley.

In 1679 the French lord René-Robert Cavelier de La Salle set out from Fort Frontenac, on Lake Ontario, to explore the Great Lakes and eventually make his way into the Mississippi River. La Salle was of the belief that the Mississippi connected to other water routes that would eventually lead to the Pacific. His scribe and chronicler on this expedition was a Dutch friar of the Franciscan Recollect order, Antoine Louis Hennepin. Hennepin, who had a passion for '*pure and severe virtue*' and La Salle, who had a passion for '*moral weaknesses*' never quite saw eye to eye. Nonetheless, the expedition sailed (and were the first to do so) through Lake Ontario, Lake Erie, and Lake Huron into Lake Michigan, then followed the St. Joseph River to what is today South Bend Indiana, where they constructed Fort Crevecoeur, present day Peoria, Illinois. At

this point the explorers parted ways with La Salle returning on foot to Frontenac to resupply and Hennepin continuing onward via the Illinois River to the Mississippi.

Hennepin attempted to explore southwards towards the mouth of the Mississippi but, in his own words, '*the nations did not give us the time to navigate up and down this river.*' Instead he traveled northward past St. Anthony Falls and modern day Minneapolis to *Lac des Issatis* [Leech Lake], a source of the Mississippi. From here Hennepin attempted a return to Fort Crevecoeur, but was instead captured by a band of wandering Sioux indians who took him to the Mille Lacs region of Minnesota, near Lake Superior. Hennepin remained in Sioux custody until the adventurer Daneil Greysolon Delhut, who had negotiated a peace treaty with the Sioux, ransomed him.

Hennepin and La Salle never met again. La Salle went on to explore the length of the Mississippi, named Louisiana, claimed it for France, and established a short lived colony near Matagorda Bay, Texas. Hennepin, who had enough adventure, returned to France where he published an enormously popular book, *Description de la Louisiane*. This book featured a map that depicted a speculative course of the Mississippi, but did not suggest any exploration of the southward path of the River beyond it conjunction with the Illinois.

Douglas Volk painting of Father Hennepin at Saint Anthony Falls.

Ten years later La Salle was been assassinated in modern day Texas by Pierre Duhaut. Meanwhile, Hennepin, perhaps seeing an opportunity for self-aggrandizement, fled to England (it is William III of England who's arms appear in the title cartouche of this map) where he published another book, *Nouvelle Decouverte d'un tres grand Pays Situe dans L'Amerique* and another map – this one. In his second major work Hennepin suggested that, for fear of La Salle, he had hidden the full extent of his explorations:

> This is where I would like all the world to know the mystery of this discovery that I have hidden until now so as not to inflict sorrow on Sieur de La Salle, who wanted all the glory and secret knowledge of this discovery for himself alone. This is why he sacrificed several persons to prevent them from publishing what they had seen and from foiling his secret plans.

In his second enormously popular work, Hennepin claimed that he had explored the full length of the Mississippi before La Salle. Hennepin's fanciful and inaccurate account of this voyage as well as his claim of discovering the mouth of the Mississippi have been refuted as spurious by Andrew Ellicott and others. The simple fact is, despite his claims, Hennepin did not have enough time to navigate the length of the Mississippi. Most likely Hennepin drew the details of his narrative from the work of the missionaries

Jacques Marquette and Louis Joliet, who had been active in the region several decades earlier.

Though partially fictional, Hennepin's narratives were enormously popular and influential. Firstly, they established that the Mississippi did indeed flow into the Gulf of Mexico. Secondly, Hennepin mapped the course of the Mississippi far west of its actual location, putting its mouth somewhere near modern day Corpus Christi, Texas. This was a curious choice for, even La Salle, who founded a colony on Matagorda Bay, knew to look for the Mississippi to the east. Nonetheless, Hennepin maps the mouth of the Mississippi to the west of La Salle's colony; a decision would ultimately expand the French claims in Louisiana dramatically. Though the mouth of the Mississippi was finally discovered in 1699 by Pierre Le Moyne d'Iberville, the French maintained their claim to the enormous Louisiana. Over one hundred years later, when the fledgling United States acquired the vast Louisiana Territory from Napoleon Bonaparte, Hennepin's map and La Salle's claims prompted some to suggest that Louisiana included (or at least should have) Texas, leading to the Mexican-American war and the U.S. Annexation of Texas.

Hennepin's representation of the Great Lakes is also a significant advance over that of the 1650 map by Sanson (*shown above*). The lakes are slowly beginning to take on a somewhat realistic form though territorially are significantly larger than life. Hennepin was a major proponent of the idea that a navigable water route to the Pacific was available via the inland waterways. On this map he suggests two such routes, one up the Missouri and then down the Tecon into the Gulf of California and another via the *Mer Glacial* and the Hudson Bay.

Detail of the Great Lakes on Hennepin' 1698 map: Lac Superieur, Lac Illinoir, Lac d' Erie ou du Chat, Lac Ontario ou Fontenac

Naturally, French and British mapmakers tended to reflect their nation's outlook on the issues related to North America, and this led to what has been called a "cartographic war." This notion consists of the idea being that the maps for each side made claims promoting their colonies while diminishing the other country's colonies. The idea is that each side was '*flying the flag*'; reflecting national pride. However, the "cartographic war" was much more than this and the story is worth examining closely.

Maps were one of the few ways European powers could establish their claims to territory. In the wilderness of North America, with relatively few settlements at the edges of the territories, the location of a border was often not marked in any way in the physical world. A line drawn on the map might be the only physical manifestation of a border. Sometimes, maps created the territories more so than any action on the ground.

Borders depicted on maps could have a reality beyond simply a line drawn on paper. Printed maps have an aura of legitimacy. If a feature is "on the map" the tendency is usually to accept it as real. If a particular borderline was not questioned, then this could be taken as *de facto* evidence of its acceptance. Also, treaties often referred back to previous political situations, and what was shown on maps was sometimes the only way that this could be determined.

Besides their reifying power concerning borders, maps also had a considerable influence on public opinion. For instance, they could stir up the public if citizens thought another country was taking away their land, stiffening their resolve to resist any diminishing of the territory as shown on a map. The public's attitude could in turn influence the government, so maps did sometimes have an effect on government decisions.

For all these reasons, the "cartographic war" which raged in the first part of the 18th century is best seen as a non-military, but still significant part of the conflict between France and Great Britain.

A 1697 map of North America by Louis Hennepin shows La Salle's exploration of the Mississippi River, which he places too far to the west.

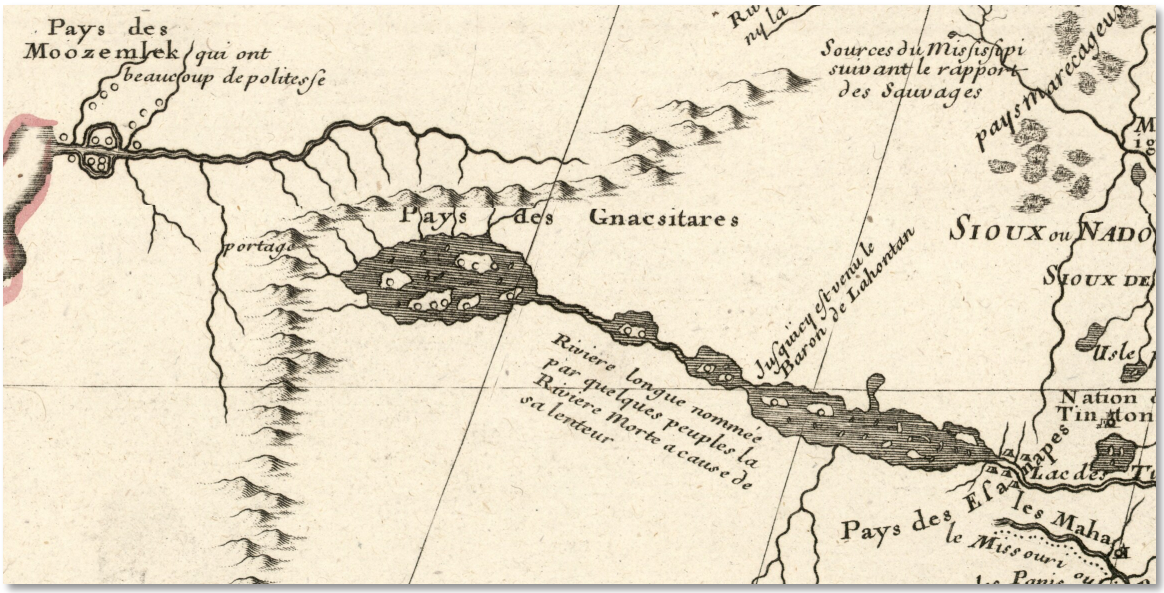
Detail: Lake Superieur, Lac des Ilinois (and the Baye de Puans), Lac d' Erie ou du Chat, and Lac Ontario ou de Fontenac

1699 map of North America, America borealis by Heinrich Scherer (#492) 1699

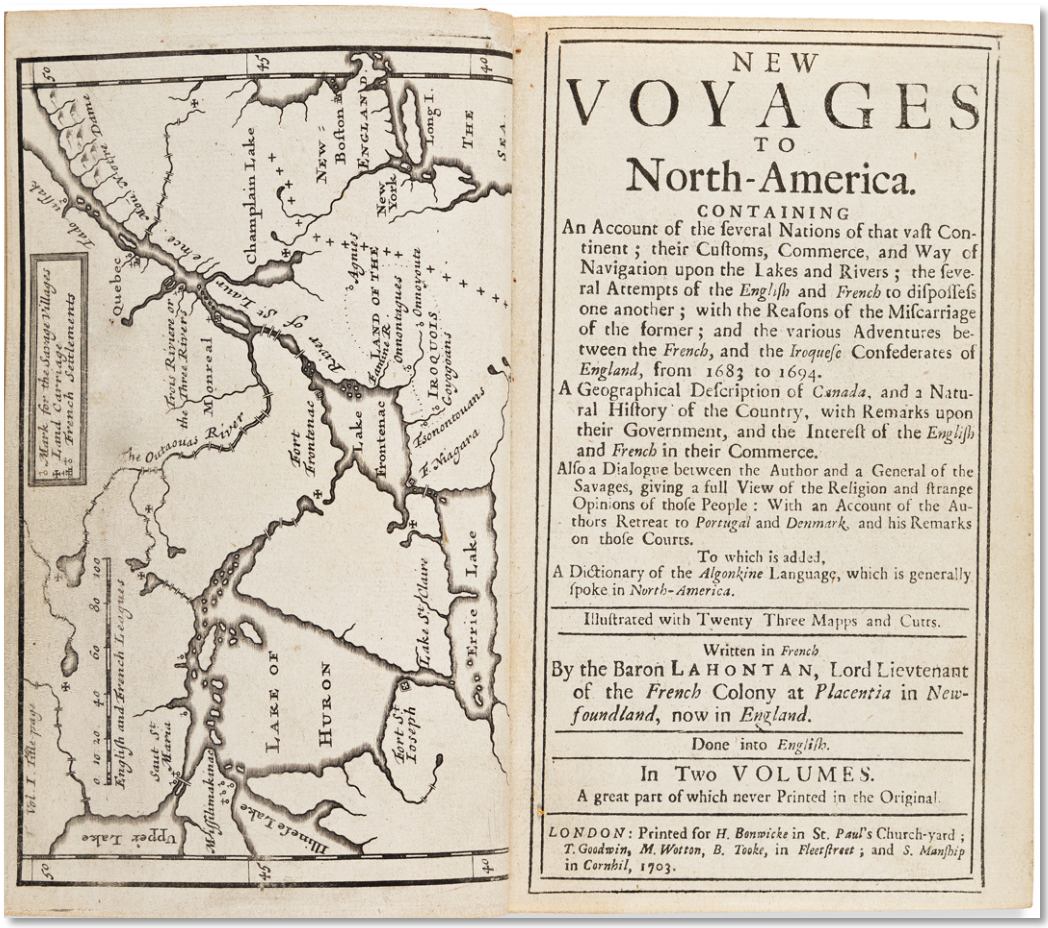
Carte Du Canada au De La Nouvelle France ... Chez l'Auteur Rue des Cannettes prez de St. Sulpice, 1703 by G. Delisle

This map provided one of the best delineation of its period of the Great Lakes and has been noted by R.V. Tooley as the first map to include Detroit only two years after the founding of that village by Cadillac. Although Delisle depicts Baron Louis-Armand de Lom d'Arce de Lahontan's fictional "*Riviere Longue*" to the west and indicates the point at which his journey was supposed to have ended and where his secondhand reports from natives began, Delisle himself is skeptical: "*Unless the Seigneur de Lahonton has invented all of these things, which is difficult to resolve, he being the only one who has penetrated this vast land.*" The map also includes a note referring to a large body of salt water to the west " ... *sur la quelle ils navigant avec de grands bateaux*" -a possible, early reference to the Great Salt Lake or a tantalizing hint of an easy passage to the Pacific.

Detail: Great Lakes



Detail: Riviere Longue



NEW
VOYAGES
TO
North-America.

CONTAINING

An Account of the ſeveral Nations of that vaſt Continent; their Cuſtoms, Commerce, and Way of Navigation upon the Lakes and Rivers; the ſeveral Attempts of the *Engliſh* and *French* to diſpoſſeſs one another; with the Reaſons of the Miſcarriage of the former; and the various Adventures between the *French*, and the *Iroqueſe* Confederates of *England*, from 1683 to 1694.

A Geographical Deſcription of *Canada*, and a Natural Hiſtory of the Country, with Remarks upon their Government, and the Intereſt of the *Engliſh* and *French* in their Commerce.

Alſo a Dialogue between the Author and a General of the Savages, giving a full View of the Religion and ſtrange Opinions of thoſe People: With an Account of the Authors Retreat to *Portugal* and *Denmark*, and his Remarks on thoſe Courts.

To which is added,

A Dictionary of the *Algonkine* Language, which is generally ſpoke in *North-America*.

Illuſtrated with Twenty Three Mapps and Cutts.

Written in *French*

By the Baron LAHONTAN, Lord Lieutenant of the *French* Colony at *Placentia* in *Newfoundland*, now in *England*.

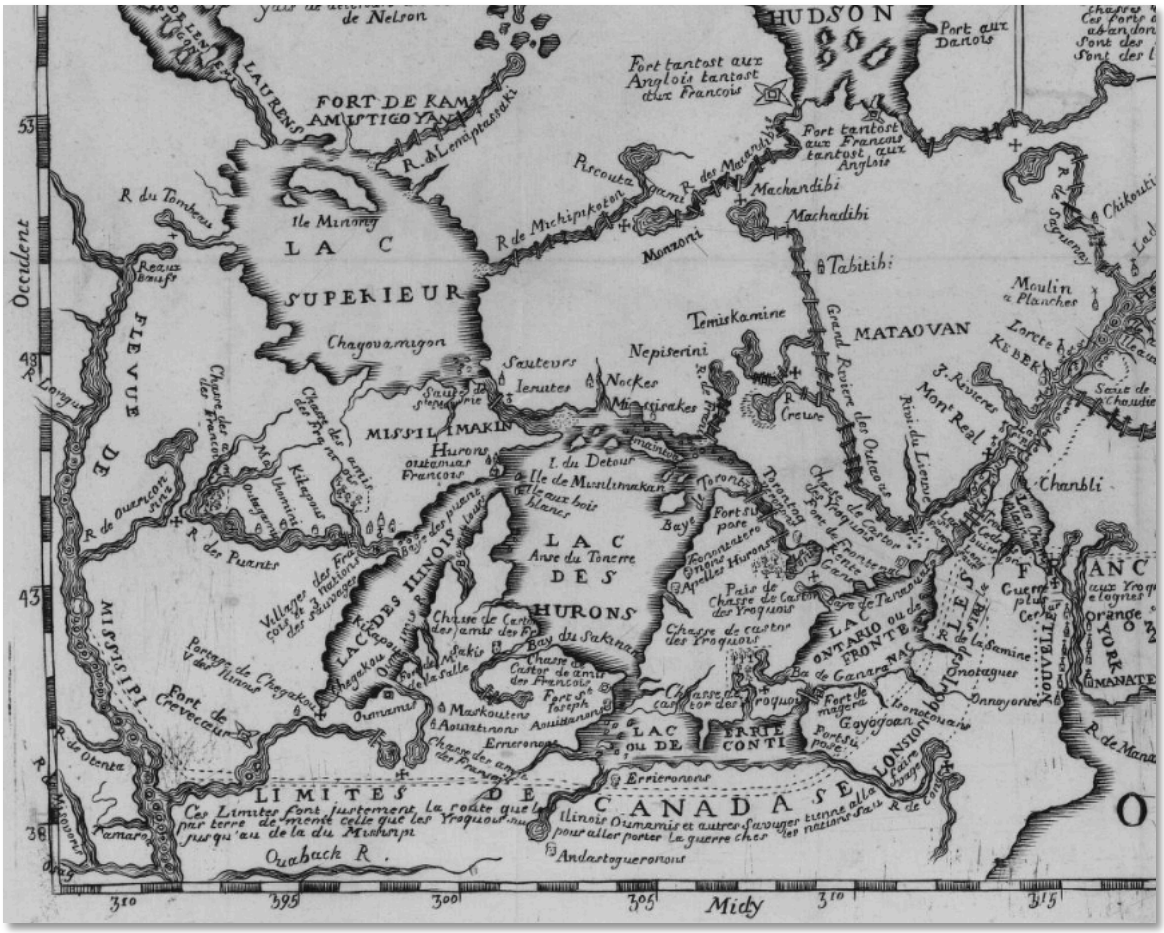
Done into *Engliſh*.

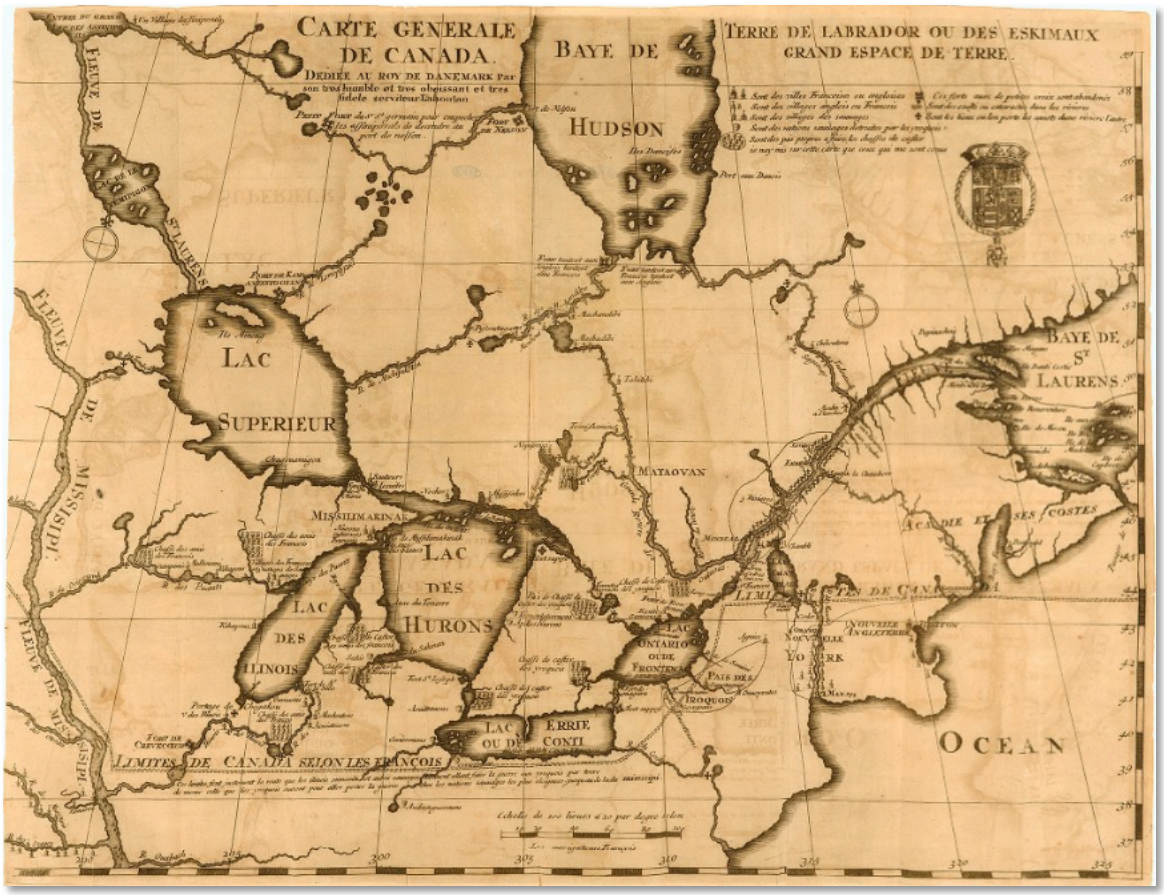
In Two VOLUMES.

A great part of which never Printed in the Original.

LONDON: Printed for *H. Bonwicke* in St. *Paul's* Church-yard; *T. Goodwin*, *M. Wotton*, *B. Tooke*, in *Fleetſtreet*; and *S. Manſhip* in *Cornhil*, 1703.

New Voyages to North America by Baron Lahontan, 1703


HUDSON
Port aux Dartois
Fort tantost aux Anglois tantost aux Francois
FORT DE KAMANISTIGOYAN
R. d'Lemaptastegi
Fort tantost aux Francois tantost aux Anglois
Piscouta
R. des Mataouas
Machandibi
Machadibi
R du Tombeau
Ile Minong
L A C
R de Michipikoton
Monzoni
Tabitibi
SUPERIEUR
Moulin a Planches
Temiskamine
Grand Riviere des Outaouas
MATAOUAN
Nepiserini
Sauteurs
Nockes
Mississirakes
Creuse
Mont Real
Chambli
MISSILIMAKIN
Hurons
I. du Detour
Ile de Missilimakinak
Ile aux bois blancs
Toronto
Bay
Fort du Portage
L A C
Anse du Tonerre
DES
HURONS
Chasse de castors des Yroquois
Bay du Sakanan
Chasse de Castor de amis des Francois
Fort de Frontenac
Fort de la Famine
Onontaguez
Onnoyoure
Fort de magara
Gayogoan
Portage
Maskoutens
Aouastinons
Aouistarons
Errieronons
LAC ou DE CONTI
LAC ERIE
Ilinois Otamamis et autres Sauvages tiennent allié pour aller porter la guerre chez les nations sauvages
Andastoguerronons
LIMITES DE CANADA SE
Ces Limites sont justement la route que les Yroquois font par terre de ce costé cy jusqu'au de la du Missisipi
Ouabache R.
Kamaro
Fort de Crevecœur
Portage de Chegagon
Chegakau
Kilapous
Ouinipegon
Ouinemis
Mascoutens
Aouastinons
Errieronons
Chasse des amis des Francois
Villages des Francois et des 3 nations sauvages
Chasse de Castor des amis des Fr
Chasse des Francois
Chasse des amis des Francois
Chasse des Francois
Chasse des Francois
Chasse



Carte Générale de Canada, 1703

Map of Canada and the Great Lakes from Acadia and the mouth of the Saint Lawrence River to the upper Mississippi River and the Grand Lac des Assinipoval. Includes a mythical river to the Pacific. Also includes locations of falls in the rivers, portage areas, and locations of Indian and English villages

Lac Superieur, Lac des Ilinois, Lac des Hurons, Lac Errie ou de Conti, Lac Ontario ou de Frontenac

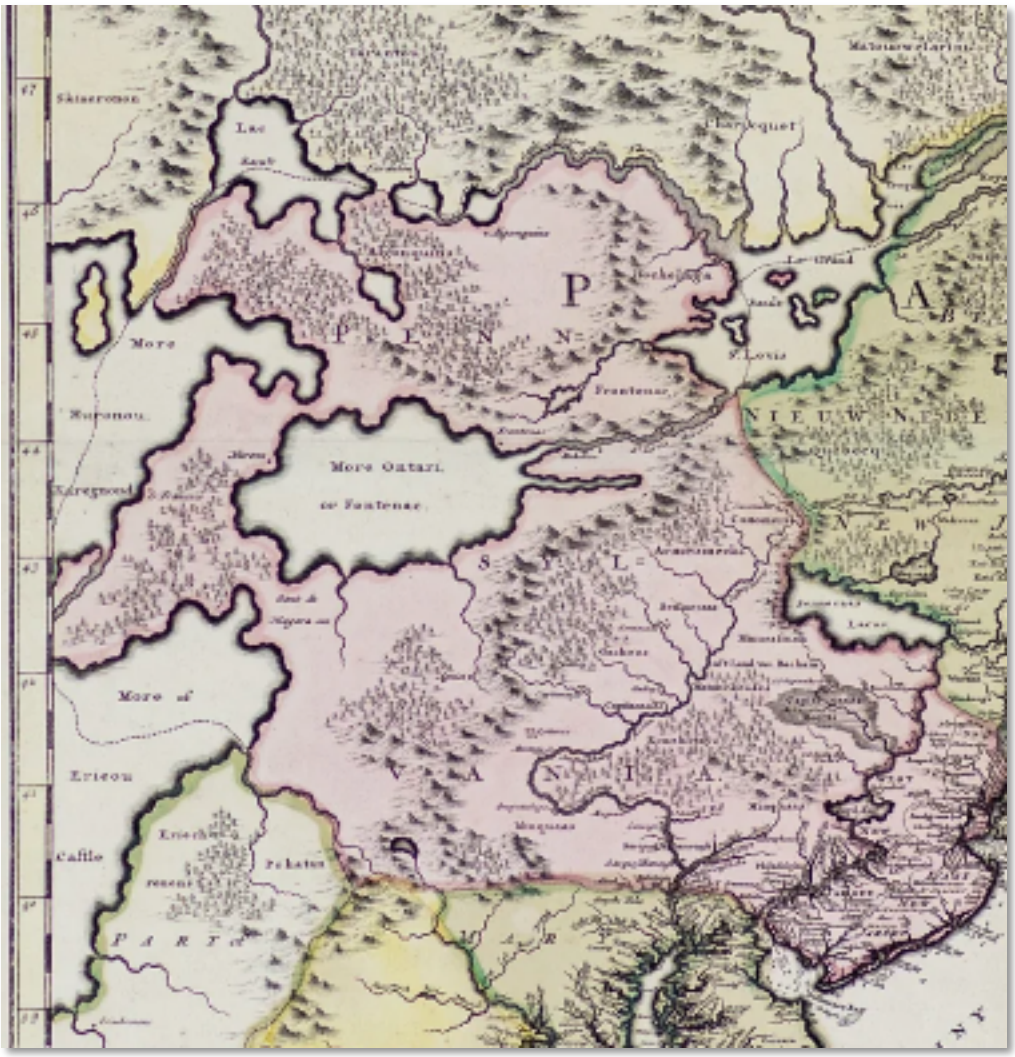
Canada of Nieuw Vrankryk Getrokken uit verscheide Fransche, Engfesche, en Hollandsche Beschryvingen enz. Door N. Sanson, d'Abb'. Geogr. ordre. du Roy, 1705

Detail: Lac Superieur, Lac des Puans, Lac Karegnondi, L. Erie du Chat, Ontario L. S. Loys

A New Map of North America. According to the Newest Observations, 1708, by Herman Moll

From Totius Americae Septentrionalis et Meridionalis, 1710

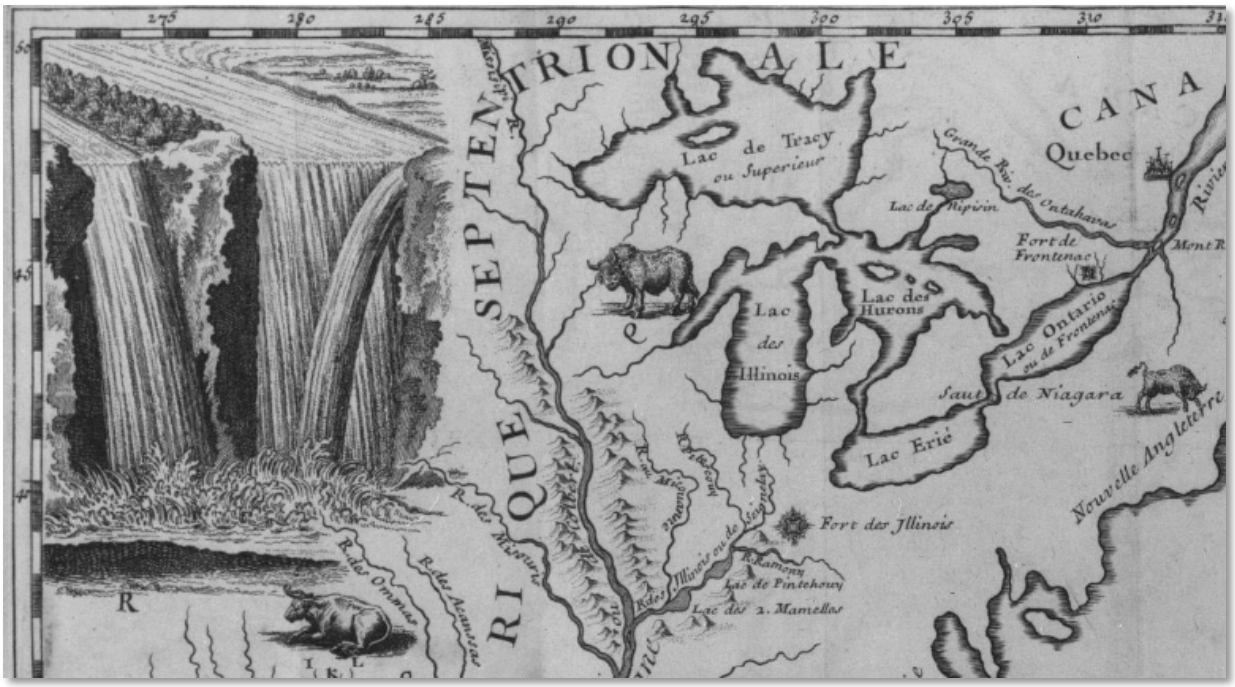
Nova Tabula Geographica Complectens Borealigrem Americae Partem: Canada, Nova Francia...
Nicolas Visscher and Peter Schenk Jr, 1710



Detail of Lake Huron, Erie and Ontario

A Map of New France Containing Canada, Louisiana &c. In North America. According to the Patent granted by the King of France to Monsieur Crozart, dated the 14th of Sept 1712 by Herman Moll

Carte nouvelle de la Louisiane, et de la Riviere de Missisipi , .. 1713
Map showing eastern part of North America to the northern part of South America, Cartographic elements include degrees of latitude and longitude, sea banks, topographical details, the locations of rivers and forts, and compass rose. Decorative elements include ships, image of Niagara Falls, and buffalo. Decorative cartouche contains two native Americans holding a buffalo skin, club, and bow. Items in the image are lettered for identification in key at right.


TRION ALE
RIQUE SEPTEN
CANA
Lac de Tracy ou Superieur
Quebec
Grande Riv. des Ontaharas
Lac de Nipirin
Fort de Frontenac
Lac des Hurons
Lac des Illinois
Lac Ontario ou de Frontenac
Saut de Niagara
Lac Erié
Nouvelle Angleterre
Fort des Illinois
R. des Illinois ou de Seignelay
R. des Miamis
R. des Outagamis
R. des Ouinipegon
Lac des 2. Mamelles
R

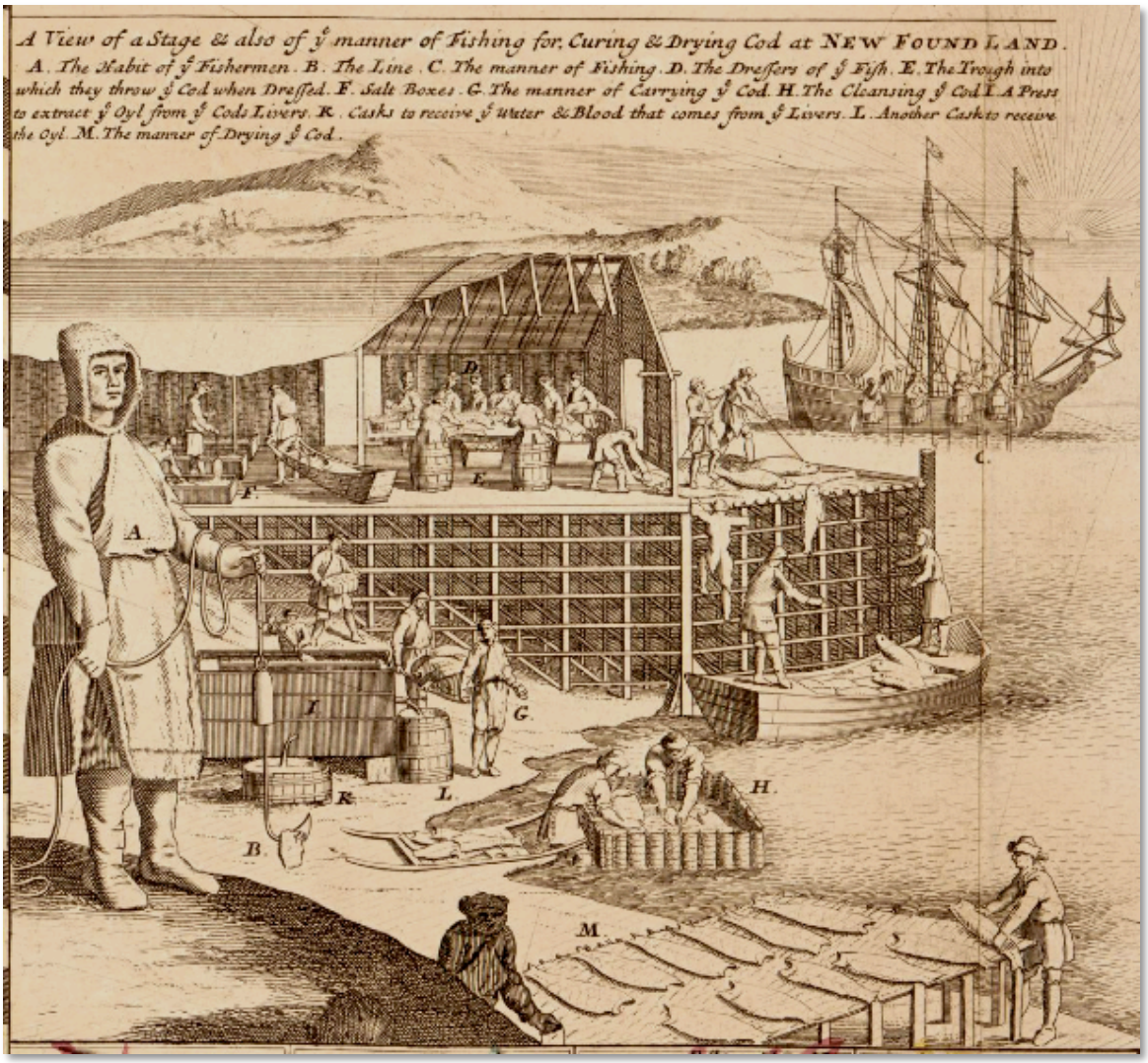
The St Lawrence River and Lake Ontario, 1715, by Herman Moll
It was issued just two years after the Treaty of Utrecht as a statement of the British view of her colonies as determined by that treaty. In the north it shows the British colonies as extending all the way north to the St. Lawrence River and up to the Great Lakes as far as Lake Erie and inset of Niagara Falls. In the north it shows the British colonies as extending all the way north to the St. Lawrence River and up to the Great Lakes as far as Lake Erie. The colony of Carolina, which has its own inset, is shown extending south to just a bit above St. Augustine.

Detail: Part of Huron Lake, Frontignac Lake [Ontario] and Erie Lake

For all its geopolitical significance, this map is most commonly known as the *"Beaver Map"* on account of the large view of Niagara Falls at right center. The view depicts the Falls in the background, with the fore- and middle ground occupied by dozens of industrious beavers, working *"with great order and wonderfull Dexterity."* The image is not original to Moll, who adapted it from Hennepin's *Nouvelle decouverte d'un tres grand Pays Situé dans l'Amérique* (1697), by way of de Fer's *Carte de La Mer due Sud / Carte de La Mer du Nord* (1713). The beaver was an appropriate image for North American maps for two reasons: the animal's important to the fur trade and its industrious nature. Just as many early map cartouches illustrated America as the land of wealth and opportunity, Moll's depiction of the *Industry of ye Beavers* also related to promoting settlement in America.

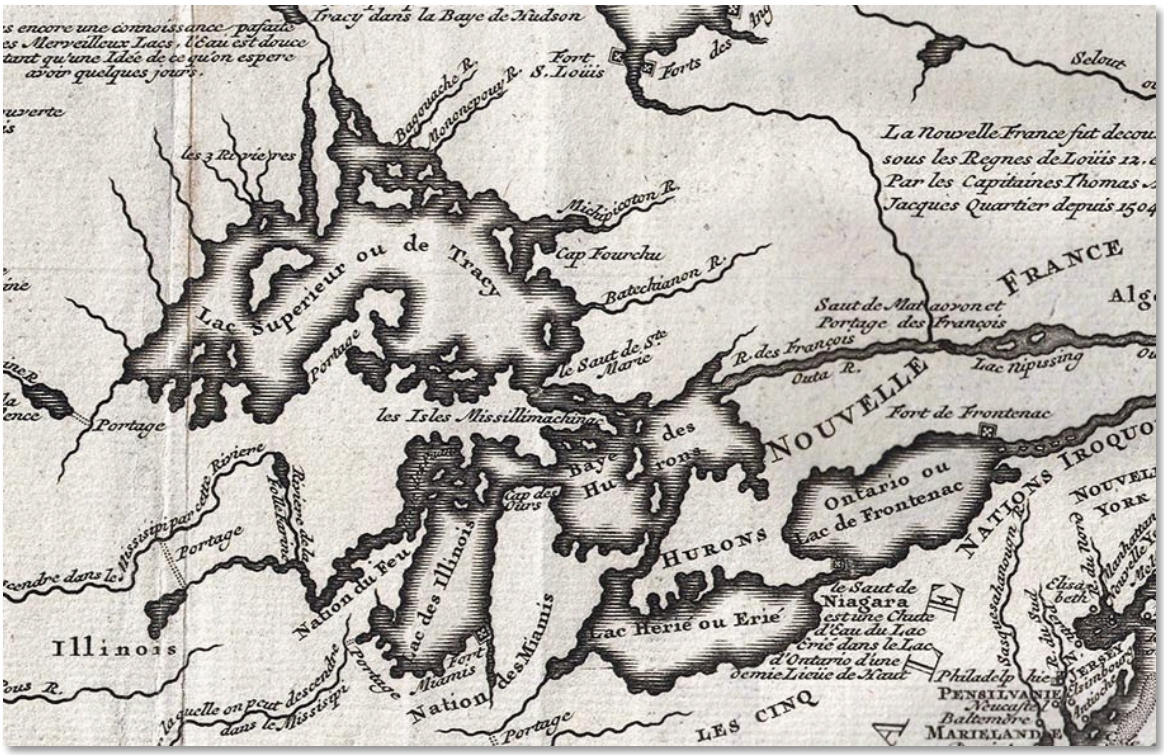
This map of North America, according to ye newest and most exact observations is most humbly dedicated by your Lordship's most humble servant Herman Moll, geographer, 1715

UPPER LAKE
OUTAOUACS
CANADA or
HURON LAKE
ILINESE LAKE
FRANCE
Erie Lake
Ontario L.
Toronto L.
Toronto Bay
Bay of Tanaouate
Canarase Bay
Lake St. Clare
Missilimakinac
Michipicoten
Piscou
Abitibis
Fort Abitibis
Kaquinagamick L.
Nepissirni
Trois Rivers
Monreal and Isle
Quebec
Lorette
Kiaonam
I. du Montreal
St. Michel French House
Parisien R.
Jesuits House
Nokes
Outaouas
Villages of French Missionaries and Hurons
Mallominis
Kikapous
Land Carriage of Cheka kou
Land Carriage of St. Ouyskonsinc
Mask outens
Aoniatinonis
Onondagues
Onneyouts
Goyogoans
Tsonontouans
Frontenac
Fort Frontenac
Quente
Canous
Onnontag
Onnontague
Onniasont L.
Oniasontke
St. Jerome
Panimaha R.
Ilinese
I. of Rancontre
Puants R.
Fal of Kikalin
Sand R.
Sagui
Bar. Bay
Theonontate R.
Perray R.
North Mountains
Alempigon L.
Minong I.
Rupert's R.
Nemisco L.
Necoubaouis
Palistakaouy
Moose R.
Outabitibi R.
French R.
Capt. James's Winterd
Hudsons Winterd
Outaouas R.
Toronto R.
Missilimakinac I.
Detour
I. Blancs
Portage
Ance au Tennere
Ance de la Cloche
Ance de la Grande Pinette
Ance de la Petite Pinette
Ance de la Famine
Ance de la Roche
Ance de la Prairie
Ance de la Chaudiere
Ance de la Cedre
Ance de la Pruche
Ance de la Grande Roche
Ance de la Petite Roche
Ance de la Famine



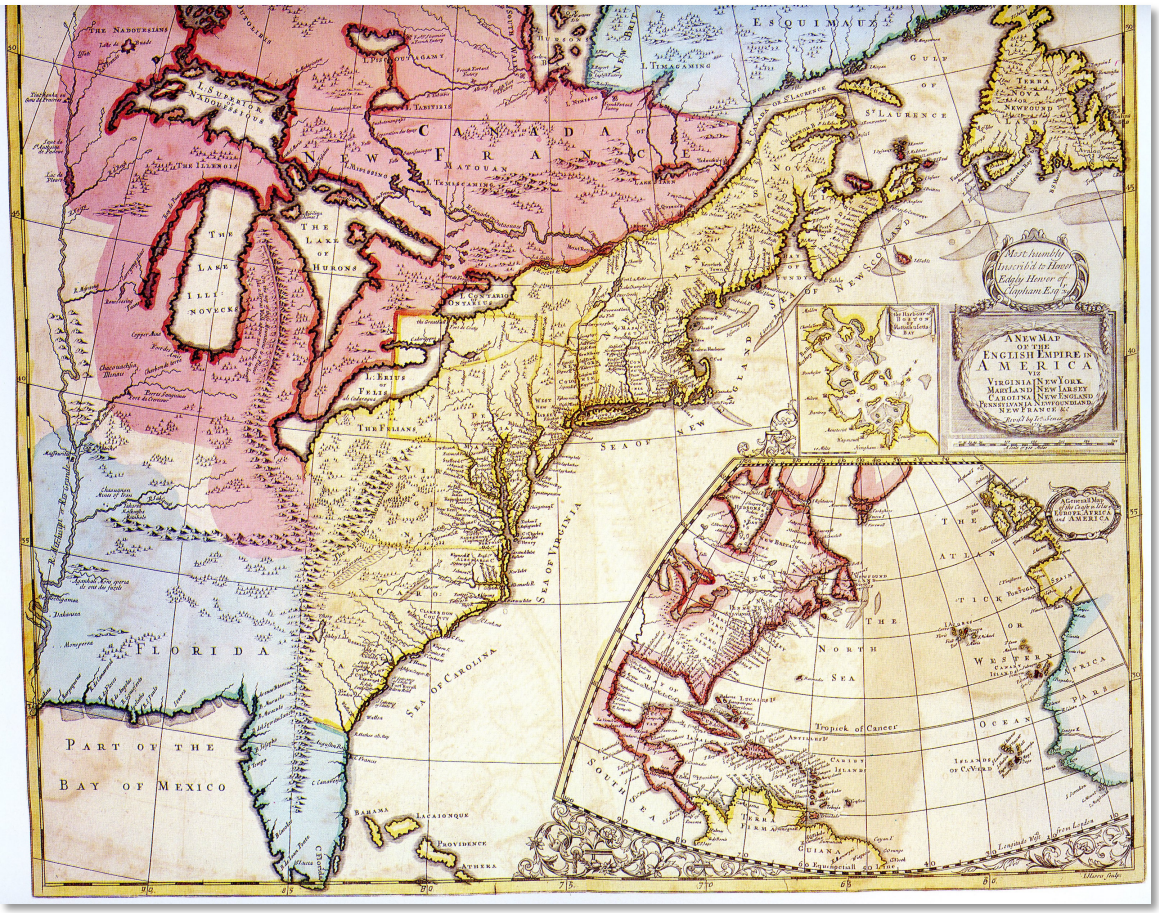
A view of a stage & also of ye manner of fishing for, curing & drying cod at New Foundland.

World map, 1719, by Henri Chatelain (#513)



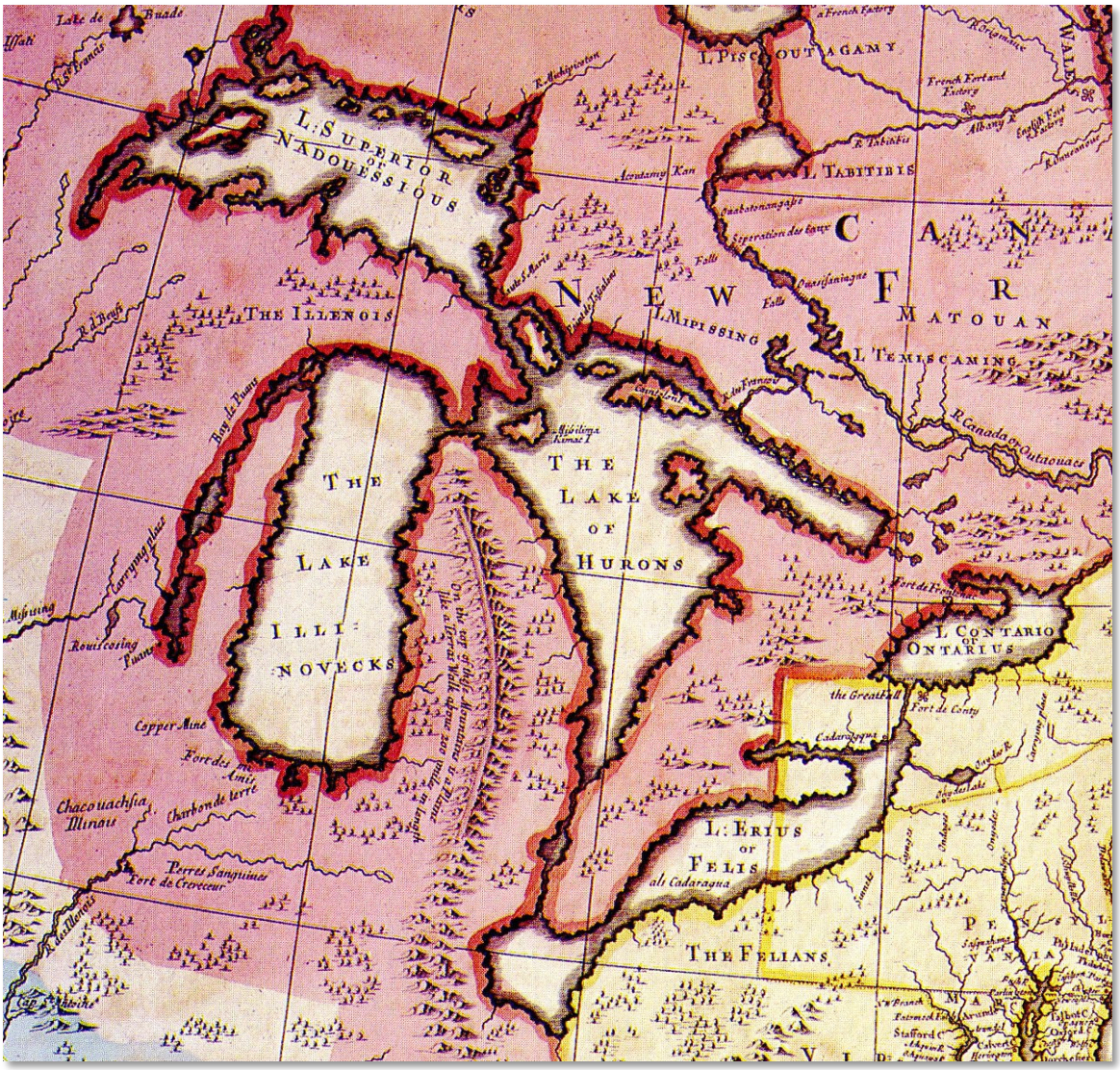
Detail: Lac Superieur ou de Tracy, Lac des Illinois, Baye des Hurons, Lac Herie ou Erie and Ontario ou Lac de Frontenac

Niagara Falls and beaver activity

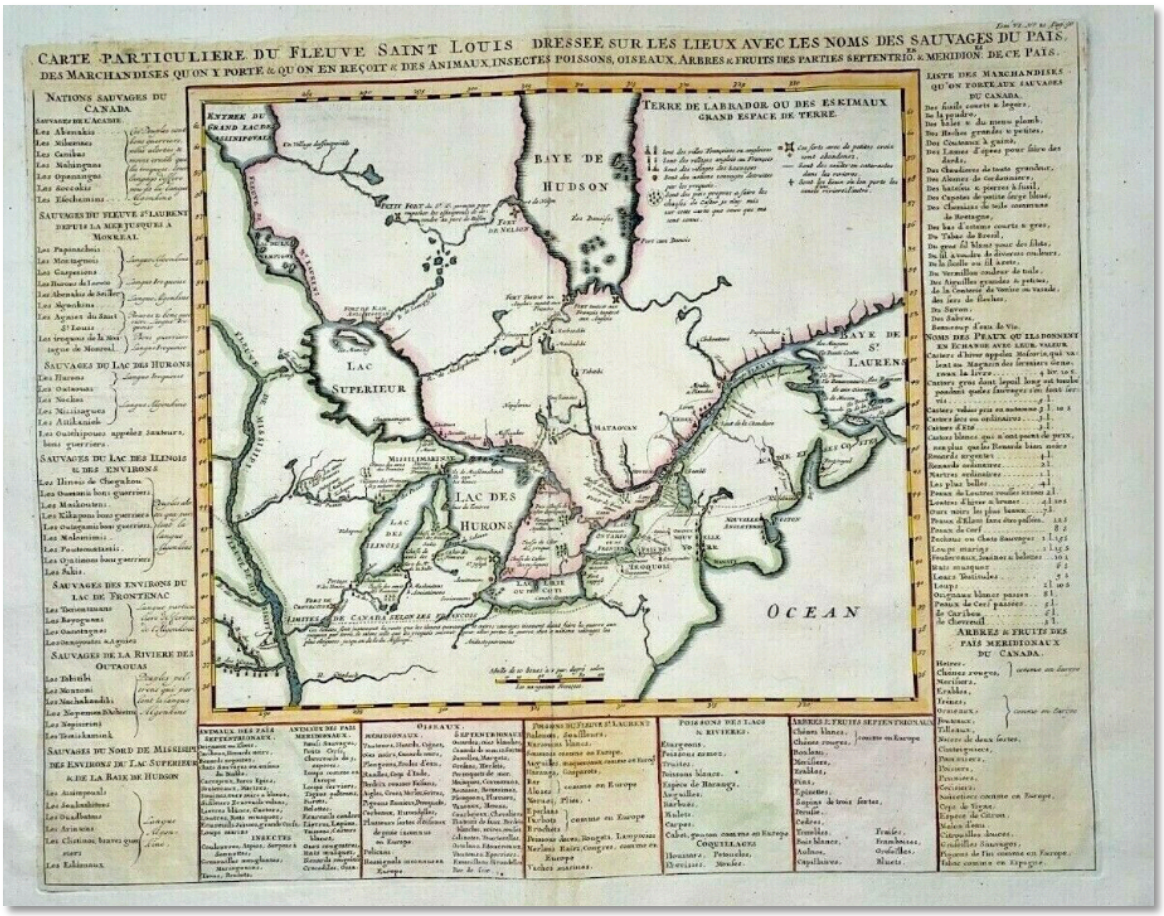


A New Map of the English Empire in America viz Virginia Maryland Carolina New York New Iarsey New England Pennsylvania Newfoundland New France &C, Reois'd by I0. Senex 1719.

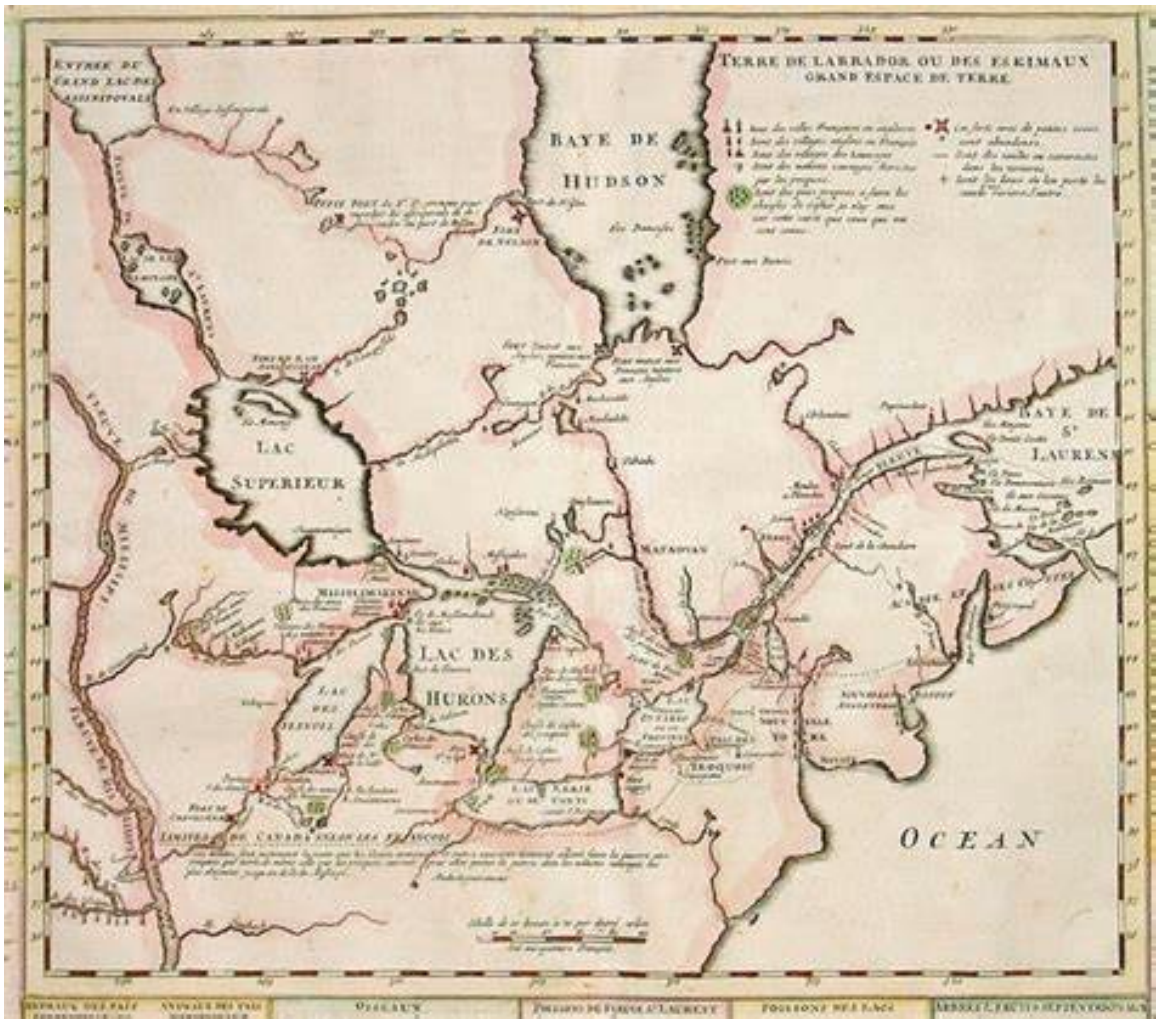
Engraved by John Harris and published in this form in John Senex's *New General Atlas*, this map covers the greater part of North America east of the Mississippi, extending from Hudson Bay to the Gulf of Mexico. Senex's map has impressive origins. It makes available, almost unchanged, the map by Robert Morden and Christopher Browne, 1695(?), which itself closely follows a yet earlier map, that by Richard Daniel, of 1679. Like other maps of its kind, coverage extends to show interesting information beyond the area immediately called for by the title: in this case the Great Lakes as well as the Carolina and Florida regions. In the case of the Great Lakes, in central Michigan, there appears a long range of entirely fictitious mountains, connecting across the area of present-day Ohio with the Appalachians -'*On the top of those Mountains is a Plaine like a Terras walk above 200 miles in length*' - *a* '*geographical monstrosity*' followed as late as the early 19th century by some mapmakers. Other information shown borrows from the 1672 *Jesuit Relation* map and other maps of French origin. Note the unusual toponyms for the five Great Lakes.



Detail: L. Superior or Nadouessious, The Lake Illinovecks, The Lake Hurons, L. Erius or Felis and L. Contario or Ontarius



Carte Particuliere de Fleuve Saint Louis Dressee Sur Les Lieux Avec Noms des Sauvages 1719, by Henri Chatelain



Detail: Carte Particuliere de Fleuve Saint Louis Dressee Sur Les Lieux Avec Noms des Sauvages 1719, by Henri Chatelain

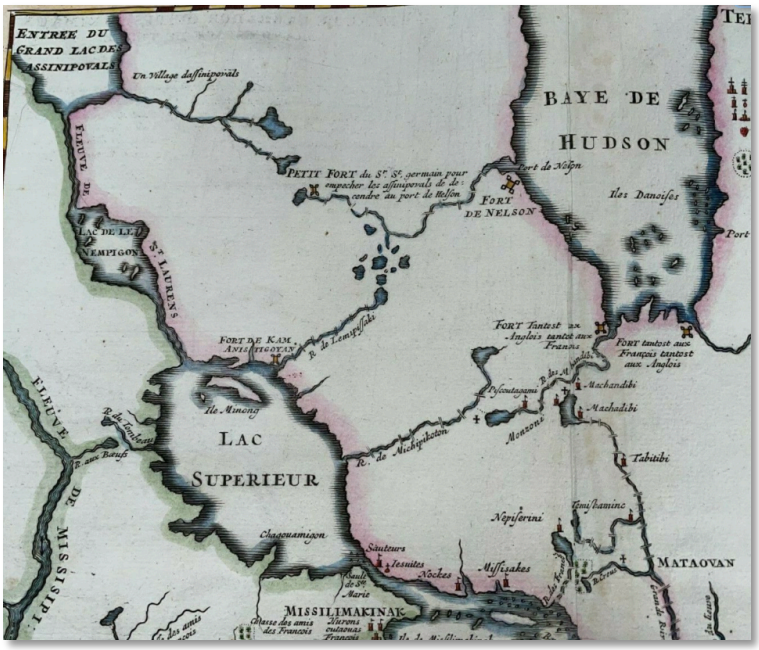
A remarkable map of the Great Lakes, Canada and the course of the Mississippi, extending south to the Missouri River. It is one of the best maps containing early locations of the various French Missions, Forts, as well as French and Indian settlements during the period. It also illustrates significant river crossing locations, portages and other essential travel information in the region. The search for the water route to the Pacific is still very much alive, in the reports of this map, although no definitive route is shown as clearly open.

The map provides one of the most interesting depictions of the Upper Mississippi River during the time period, derived from Jolliet's rare map and report. In 1663, the French embarked on a westward expansion policy, initially focused on locating the Mississippi River, whose existence was known through Indian reports. Louis Jolliet, a fur trader and explorer, and Jacques Marquette, a Jesuit father led an overland expedition to the west, which left Green Bay in May 1673.

After following the courses of the Fox and Wisconsin Rivers, the expedition reached the upper Mississippi. Continuing south, they discovered the mouths of the Missouri, Ohio, and Arkansas Rivers. On the return trip, they found a short cut to Lake

Michigan by following the Illinois and Des Plaines Rivers to a portage at present-day Chicago. Several manuscript maps survive based on the discoveries of Jolliet and Marquette, with this first printed version being adapted for inclusion in Thevenot's *Recueil des Voyages* (Paris, 1681). Thevenot's map shows for the first time on a printed map the Mississippi and its tributaries north of the Arkansas based on first-hand observation. The depiction of the river between the Arkansas and the gulf is based on speculation. It was also the first map to include the place name *Michigan* or *Mitchigami*. The present map extends south to the Ouabach River.

Detail: Lac des Ilinois [Michigan], Lac des Hurons, Lac Erie ou de Cotti, Lac Ontario ou de Frontenac



Detail: Lac Superieur and Baye de Hudson

Many Indian tribes are named and some early French forts in Illinois and Indiana, including Ft. Sakis, St Francis Xavier Fort, Fort of the Miamis, St Ionace Fort, Fort Pontchetrain, Ft St . Joseph, Ft. Sandoski, le Rocher Fort, and others are displayed. While the map was published in London, its source is an amalgam of French and English data, most notably Bellin's map of the Great Lakes and Mitchell's map of North America.

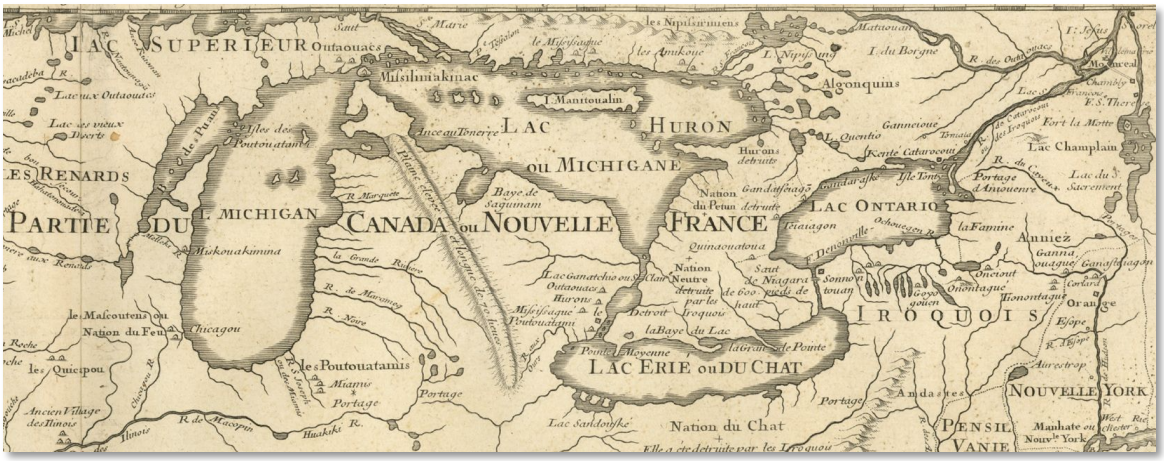
Amplissimae Regionis Mississipi Seu Provinciae Ludovicianae A R.P. Ludovico Hennepin Francisc Miss In America Septentrionali Anno 1687, 1720

The map is notable for being based upon the reports of Louis Hennepin, the French Jesuit missionary who explored the upper Mississippi and Great Lakes regions in the late 17th century.

Great Lakes: Lac Superieur, Lac des Ilinois, Lac Huron Michigane, Lac Erie ou Du Chat, and Lac Fontenac ou Ontario

Niagara Falls

Carte du la Louisiane, 1718, by Guillaume Delisle

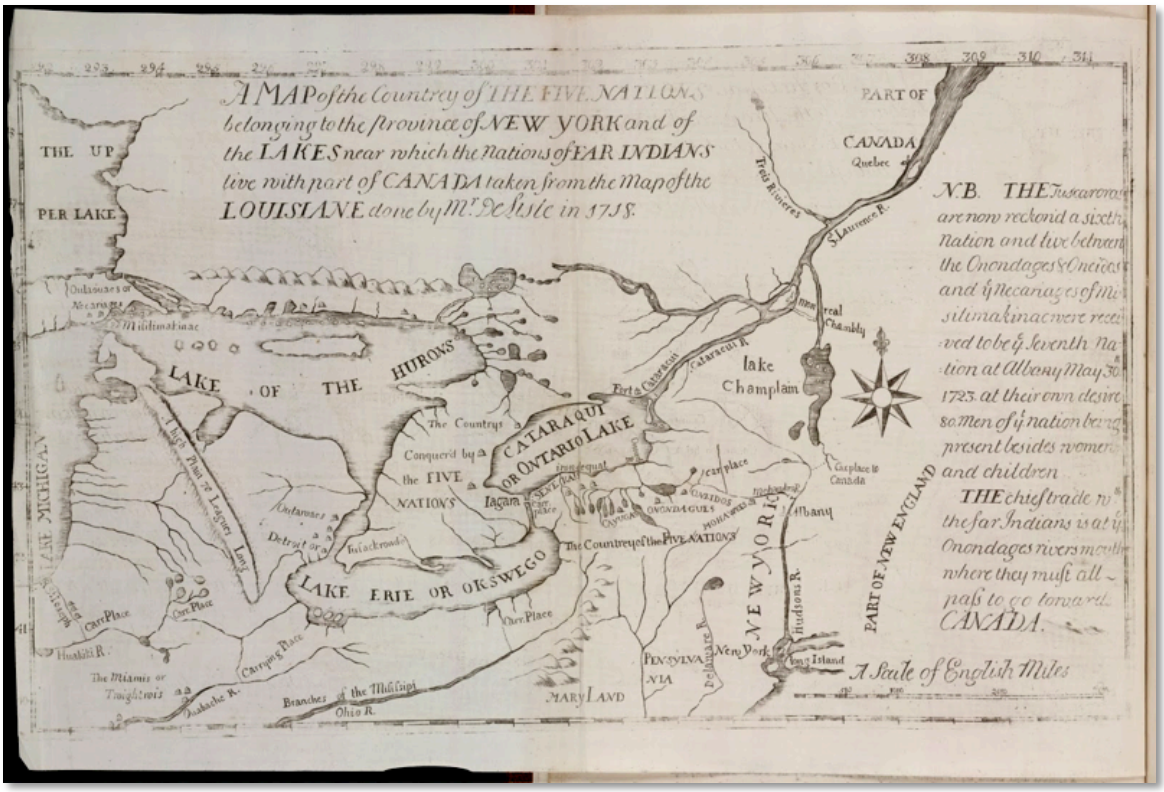


On this map Delisle moved the British border well south and east of the Great Lakes and the St. Lawrence River. He also claimed that Carolina was named after Charles IX of France and settled originally by the French, in effect claiming that region for France as well. This map provoked considerable consternation in Great Britain. Because Delisle was the Premier Géographe du Roi, that is geographer to the King, his maps were regarded as semi-official, reflecting the views of the French government. "Lake Ilinois" is now labeled "Lake Michigan."

A New Map of the North Parts of America claimed by France, 1734, Herman Moll

The publication of Delisle's map provoked Herman Moll to issue a new map of North America to highlight the "Incroachments" shown on Delisle's map, as a warning to the British of what the French were doing. A note on the map explained that: "*All within the Blew Colour of this map, shews what is Claim'd by France...According to a French Map published at Paris with the French King's Privelege. The Yellow Colour what they allow ye English.*" Moll concluded that "*any body may see how much they [that is the French] would Incroach &c.*"

Detail: Great Lakes "Upper Lake [Superior]. Ilinese Lake or Michigan, Huron Lake, Ierie Lake or Chat [Erie] and Frontenac Lake or Ontario"

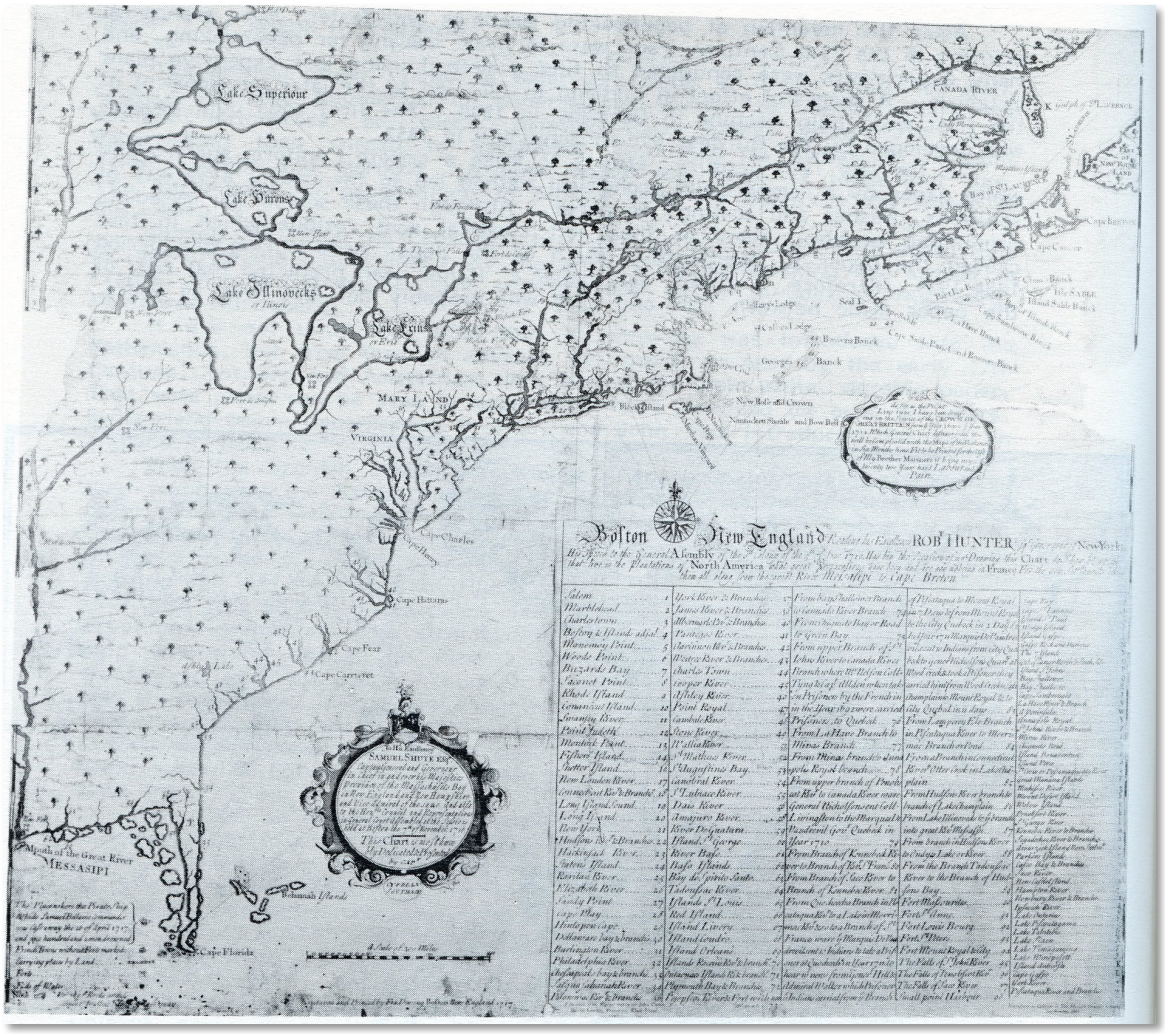


Based upon the Delisle map of 1718 showing "The Upper Lake, Lake of the Hurons, Lake Michigan, Lake Erie or Okswego, and Cataraqui or Ontario Lake

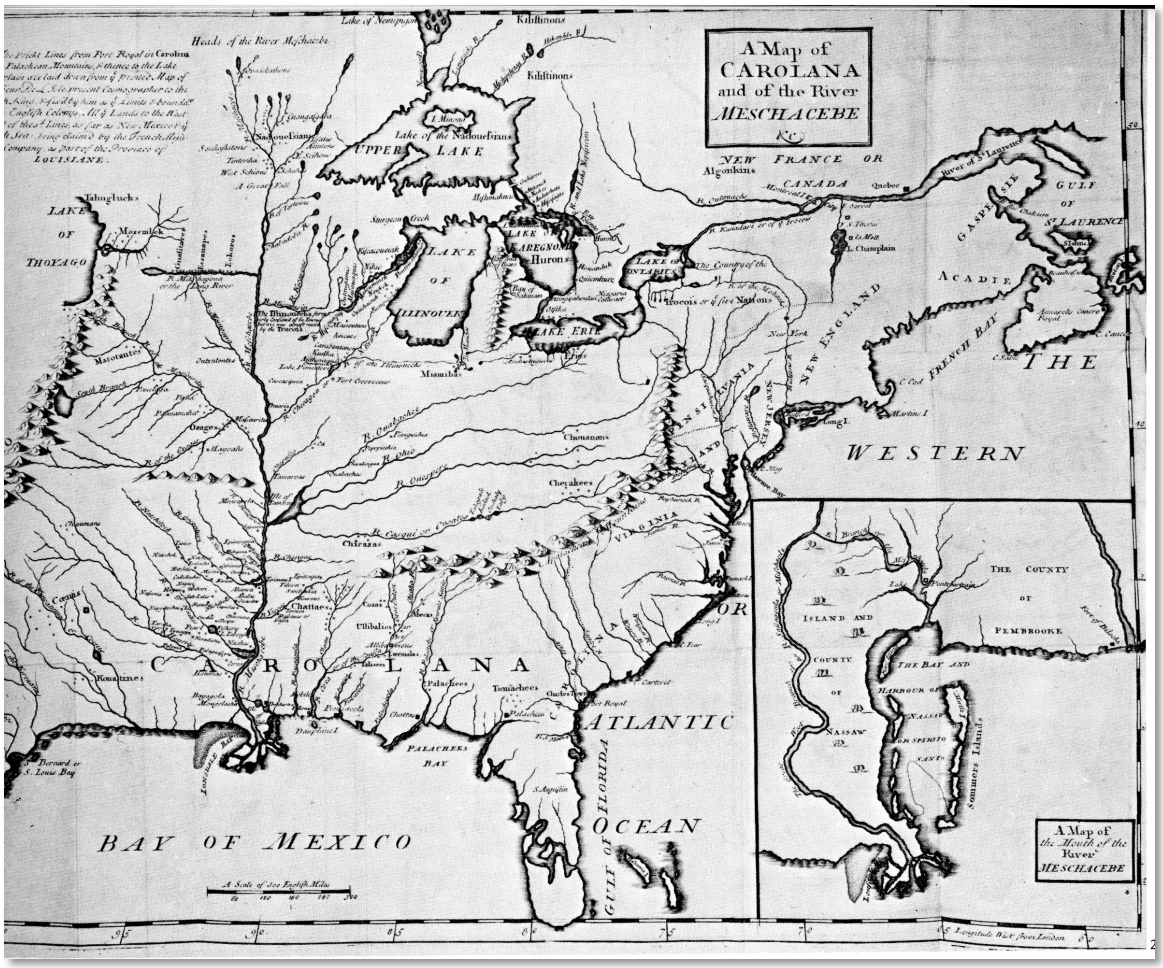
The New York officials were particularly upset about the French cartographic claims, as much of the land they considered to fall within their jurisdiction was usurped in Delisle's map. Governor William Burnet wrote to the Board of Trade that *"I observe in the last Mapp published at Paris with Privilege du Roy par M. de Lisle in 1718…that they are making encroachments on the King['s] territories…"* Many of the British claims around the Great Lakes were based on their long standing relationship with the Iroquois, especially concerning the treaties which they believed gave them the rights to the Iroquois lands. This British position was reinforced by a clause in the *Treaty of Utrecht* that stated that the Iroquois were British subjects. In 1724, Cadwallader Colden, the Lieutenant Governor of the colony, issued the map above to show how the region around the Great Lakes belonged to New York through their treaties with the Five Nations.

The British government felt the need for better maps, so it ordered the Lords Commissioners of Trade and Plantations, more commonly called the Board of Trade, to send a circular letter on this point to the Governors of the various colonies. The Board was the primary policy-making and administrative agency for the British colonies and in 1719 it sent the following instructions:

"It being necessary for H.M. Service and for the benefit of the Plantations, that the limits or boundaries of the British Colonies on the Continent of America, should be distinctly known and marked out, more particularly so far as they may border on the settlements made by the French or any Foreign Nations, we desire you to send us, as soon as possibly can, the best informations [sic] you can get upon your Government, together with a chart or map, and the best accounts and vouchers you can obtain to support the same…."

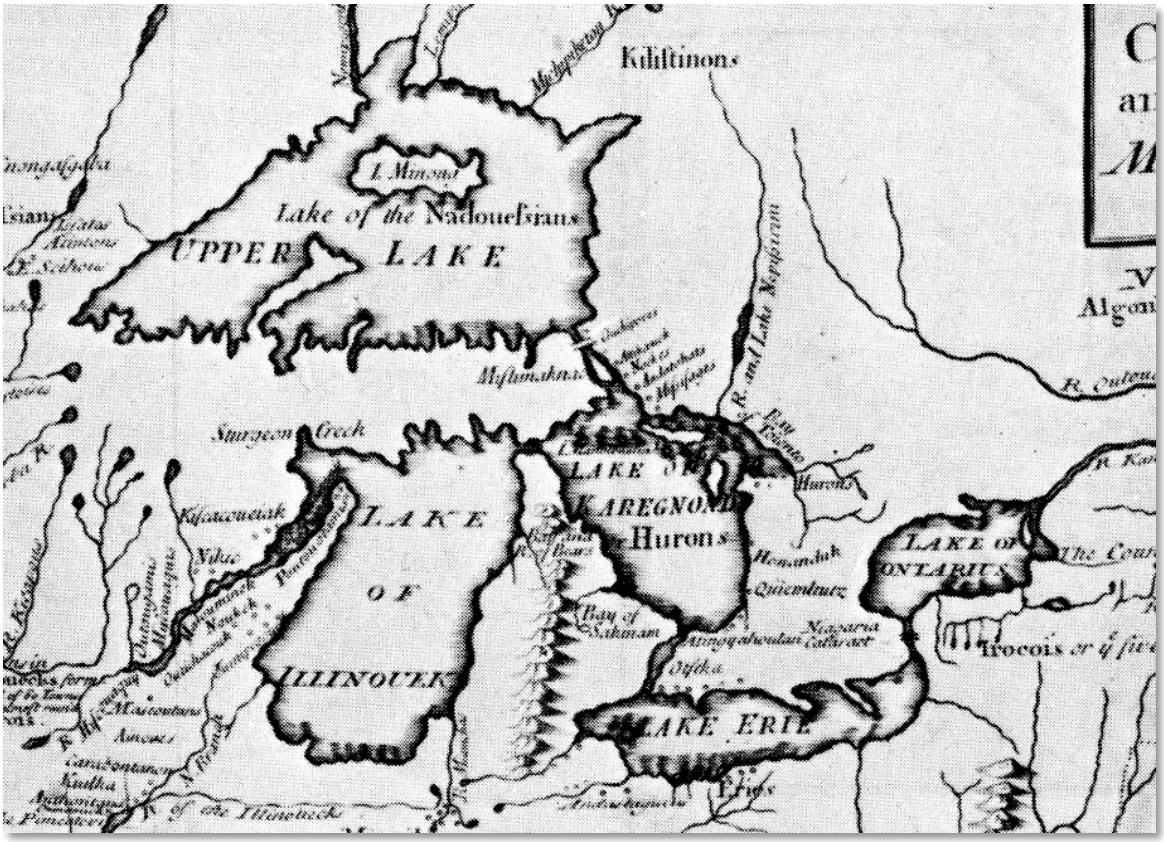


Map by Robert Hunter, Governor of New York, ca. 1730
Badly mis-shaped Great Lakes

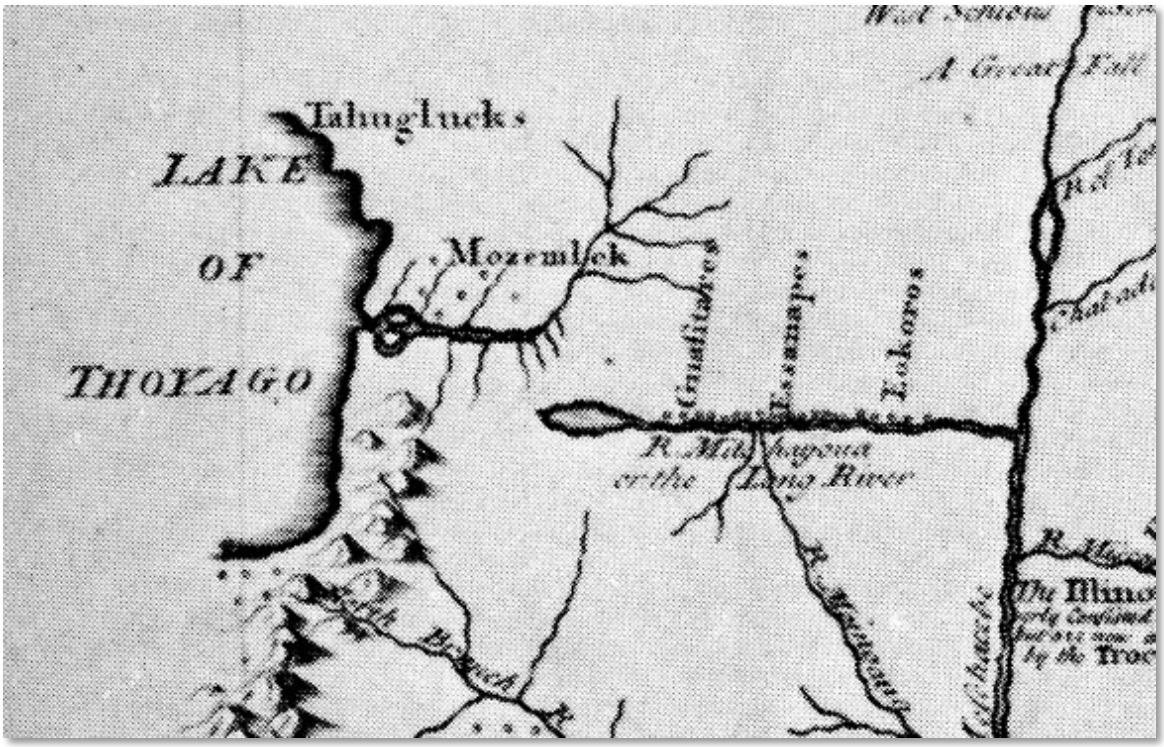


'*A Map of Carolana and the River Meschacebe*', *1722, from Daniel Coxe.*

This map and the work in which it appears present the claims of Dr Daniel Coxe, (1640-1730), physician to Charles II and to Queen Anne, to *Carolana*, the territory granted by Charles I to Sir Robert Heath in 1629. The King with his council had voided Sir Robert's *Carolana* charter when he made the 1663 Carolina grant to eight Lords Proprietors; but Dr Coxe, who had extensive and determined colonial plans, raised legal questions after he had acquired the earlier 'rights' about 1692. Coxe's map is based on French and British maps, with additional information gathered for him by English colonials. He left the boundaries of *Carolana* undefined; diplomatically Coxe wished to avoid conflict with the established coastal settlements of Carolina. He placed the Overhill (or Over-the-Hill) Cherokee Country on the Little Tennessee to the west of Virginia instead of in Southeast Tennessee and South Carolina. Four rivers, possibly the Miami, Ohio, Cumberland, and Tennessee, empty into a great (non-existent) lake before flowing into the Mississippi. 'So Bernard or S. Louis', site of La Salle's abortive colony on Matagorda Bay, is placed far to the west on the Gulf. The geography of the northwest corner is highly imaginative; west of Lahontan's *River of the West*, beyond the mountains, is a non-existent *Lake of Thoyago*. East of the Mississippi in the inset are the proposed counties of Nassau and Pembroke.
How much actual exploration Dr Coxe promoted is unknown; but he stimulated continued English interest in the land beyond the Appalachians.



Detail: Upper Lake (Lake of the Nadouebians), Lake of Illinouek, Lake Karegnond de Hurons, Lake Erie, Lake of Ontarius



A Map of the British Empire in America with the French and Spanish Settlements adjacent thereto by Hen. Popple, 1733 (#531)

This effort resulted in a number of new maps being sent to the Board from the colonies. As the maps arrived in London, an assistant clerk to the Board, Henry Popple, compiled a general map of the "*British Empire in America*" with the Board's "approbation." As he stated on the map:

"*great care has been taken by comparing all the maps, charts, and observations that could be found, especially the authentick records and actual surveys transmitted to their Lordships by ye governors of the British Plantations and others to correct ye many errors committed in former maps.*"

Issued in 1733, Popple's production was a huge and detailed map that represented the best British mapping of the continent to date. The Board of Trade initially seemed impressed, writing to the Lords of Treasury that "*Mr. Henry Popple having with great care and Diligence drawn a Map of the British Empire in America, which,*

from the assistance he has had, from the best Charts and actual Surveys, is rendered infinitely more complete than any other now extant."

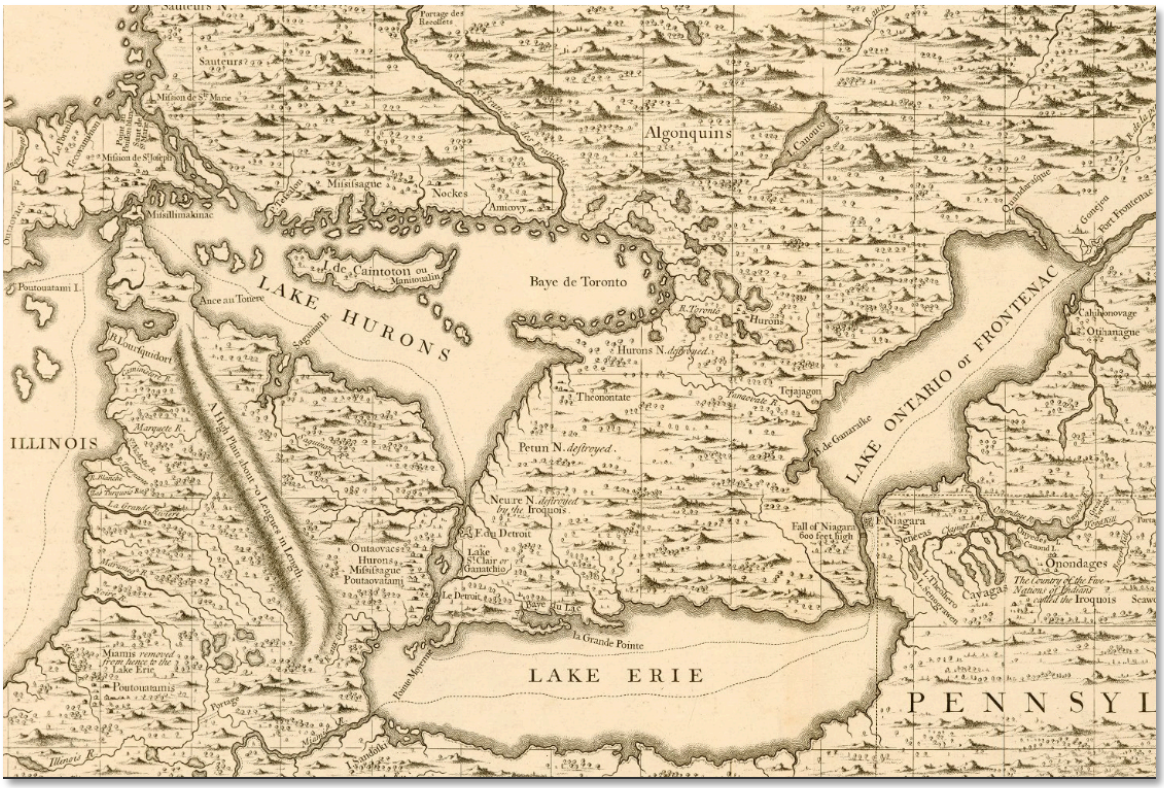
Not only was the map detailed and based on the "best Charts and actual Surveys," but it exhibited an expanded view of British holdings in America compared to Delisle and Moll. Nova Scotia is depicted as extending north all the way to the St. Lawrence River, and New York and Pennsylvania are shown reaching to the Great Lakes, while North and South Carolina are clearly depicted as British colonies.

Detail: Lake Superiour, Lake Illinois, Lake Huron, Lake Erie and Lake Ontario or Frontenac

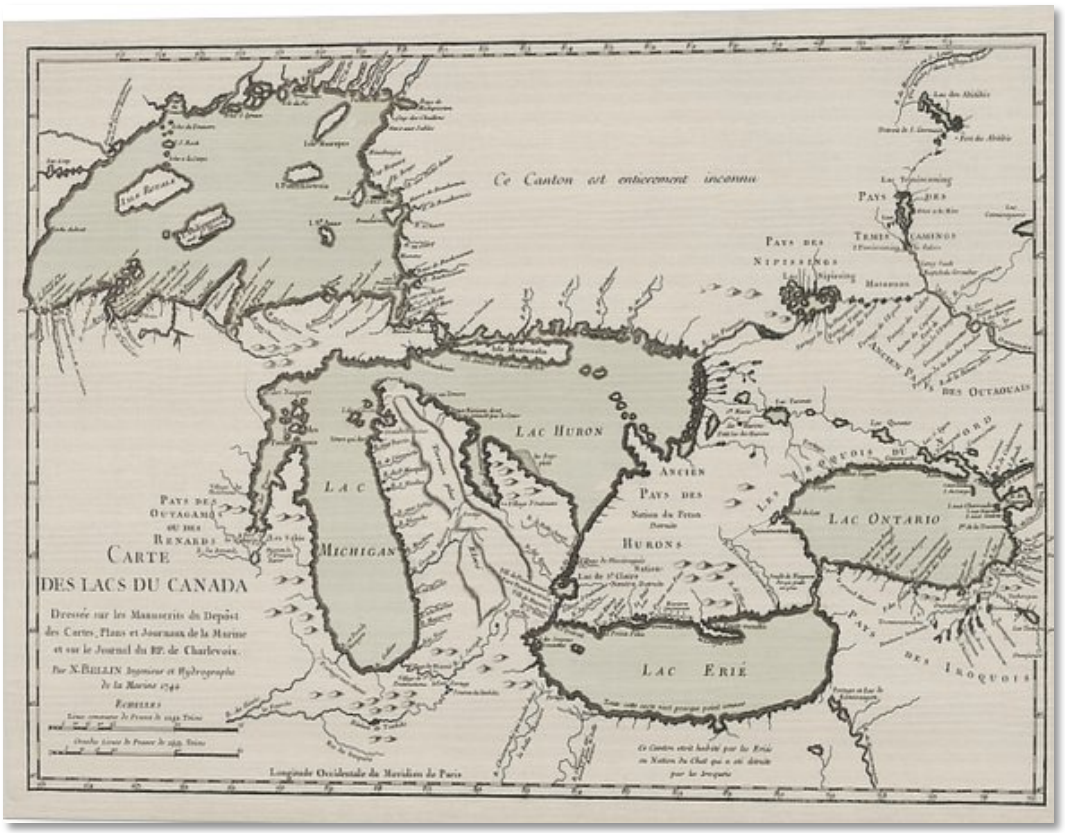
However, British critics soon appeared and Popple was criticized for relying too much on French maps for his sources and for not taking a strong enough position relative to the extent of the British colonies. For instance, though New York and Pennsylvania reach the Great Lakes, Fort Niagara, on the eastern side of the Niagara River, is shown as part of French Canada. In 1738, Cadwallader Colden, clearly referring to the Popple map, wrote that *"The English maps are such servile copies of the French that they mark out the boundaries between the English and French with the same disadvantage to the English as the French do."*

This detailed map illustrates the growth of knowledge about the interior of northeast America by the first third of the 18th century. There is much information given of places and Indians in the areas of the Great Lakes, as a result of trading expeditions from New York. It still contains many geographical inaccuracies that do not appear on French maps of the same period, errors such as the southwest-northeast alignment of

Lake Ontario. In 1733 the British were still some way behind the French in their knowledge of the interior.



Part of a 20-sheet map of the Great Lakes, 1740 showing Niagara Falls



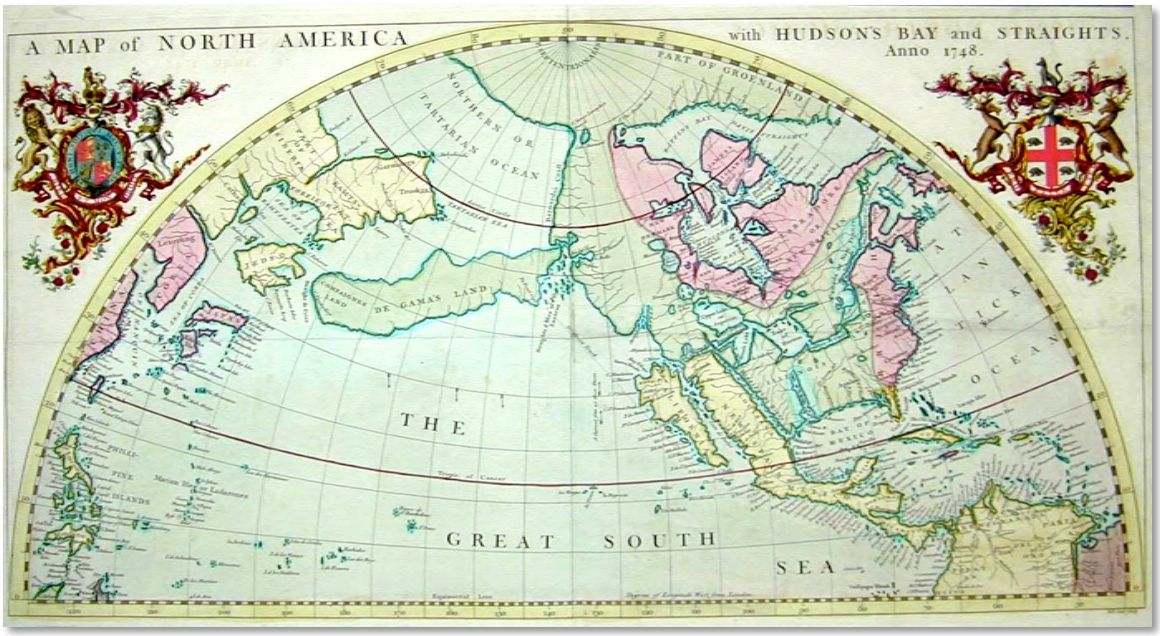
Maps of the Great Lakes, 1742, 1755 and 1757 by Nicolas Bellin
"Lake Ilinois" is now again labeled "Lac Michigan"

Jacques Nicolas Bellin Carte des Lacs du Canada dressee sur les Mcnuscrits du Depost des Carles, Plans et [ournaux dw la Marine el sur le' Journal du RP, de Charlevoix. 1744

This map, by the famous French map and chart maker Jacques Nicolas Bellin, was published in 1744 in Fr Pierre Francois-Xavier de Charlevoix's *Histoire et description generale de La Nouvelle France*, which is one of the best 18th century descriptions and accounts of North America,

Charlevoix travelled to Canada in 1720 to inspect the Jesuit missions there. He journeyed throughout New France and Louisiana and down to the Gulf of Mexico via the Illinois and Mississippi Rivers in 1721-1722. He described in his work the possibilities and great beauty of the land he saw, especially near Natchez, mentioning such products as cotton, indigo and tobacco.

Bellin had access to official journals, sketches, maps and charts of the earlier explorers, using such sources with great care and discrimination to produce some of the finest mapping of French America available in the 18th century.

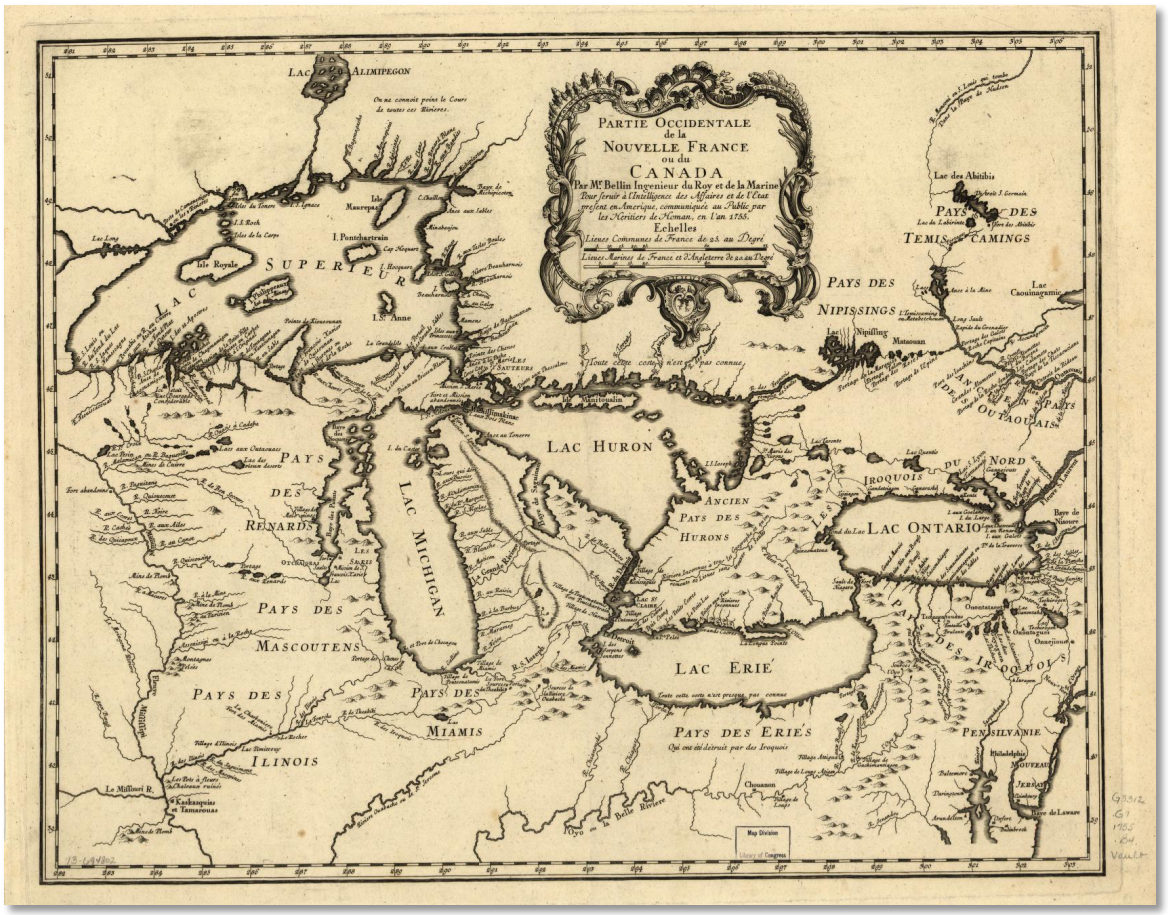


A Map of North America with Hudson Bay and Straits, 1748, Richard William Seale

The main cause of this issue was the controversy concerning the alleged neglect of the Hudson Bay Company to further the exploration for a North-West Passage. Arthur Dobbs was the leader of this opposition, and he hoped by proving the neglect, to see the company loose its privileges under the charter. Middleton, formerly a servant of the Company, had been sent to find the Passage, but had returned beaten, with the firm conviction that even if the passage did exist, it was impractical. This was in 1741-42. Dobbs, still unshaken, formed a company, which, with the thought of rights of exclusive trade, sent out the Dobbs Galley and the California in 1746. In October 1747, the two vessels returned to the Thames, the expedition a failure. In the following year the opposition to the company resulted in the Parliamentary Inquiry into the rights and working of the Company's charter. This map was part of the Company's case. There is no doubt that Seale, the engraver, executed the work according to the idea of the Company's officers, rather than following the true lines of geographical knowledge, which was available even in Middleton's map. Either the Company was very ignorant, or ready to connive at producing a fraudulent map. Around the Bay there is no outlet of any kind, and Sir Thomas Lancaster's Sound is located on the western side of the continent. The obvious intention of the map was to prove that the Passage went by way of the St. Lawrence, through the Great Lakes to Machilmakinac, where a junction was formed with the Long River of La Hontan, which gained by a portage across an isthmus, another portage from Tahnglak of La Hontan reached the Western Sea. In the Pacific the northern land seen by Vasco de Gama is shown touching the North-West coast, and there is shown De Fonte's track going in the direction of Alaska. It is a brilliant piece of geographical imagination, and yet the coastlines and locations of the Bay are correct.

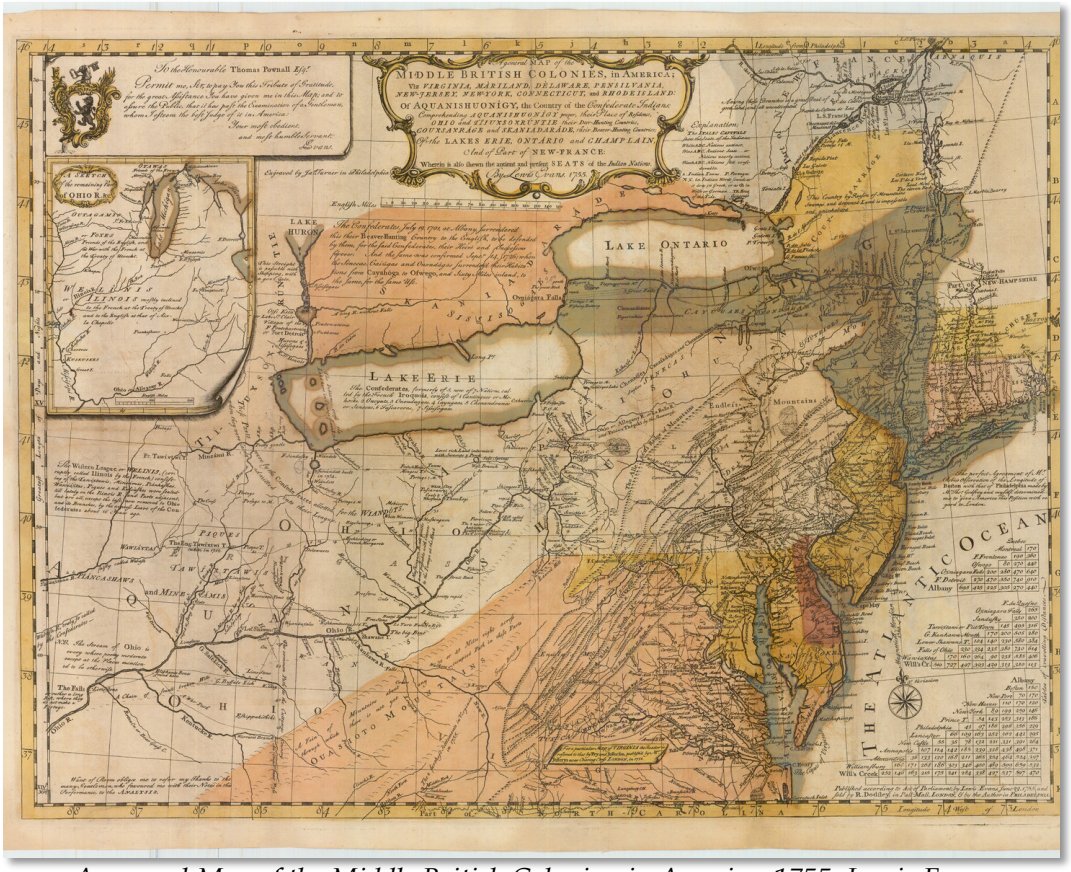
CARTE DES
LACS DU CANADA
Pour servir a l'Histoire Generale
des Voyages
Echelle
LAC
SUPERIEUR
LAC HURON
LAC MICHIGAN
Tom. XV.
N°. 2.

The Great Lakes on the 1750 "New Map of North America by Robert Sayer



Partie occidentale de la Nouvelle France ou du Canada, 1755, Jacques Nicolas Bellin

This detailed map of the Great Lakes region of western "*New France*" by Jacques Nicolas Bellin was published by the Heirs of Homan in 1755, shortly before the outbreak of the *Seven Years' War*, the conflict that resulted in the transfer of New France to British hands. Bellin was just one representative of a greater movement by French royal and military cartographers in the 18th century to map New France using the knowledge possessed by Native Americans. This map shows details not only of the Canadian waterways, but also of military, trade, and territorial information pertaining to the indigenous populations who lived in the vast territory. As most of this land was uncharted wilderness at the time, the alliance of the French with the Iroquois and Algonquian peoples proved essential to the mapping of sparsely populated or unsettled inland territories. The maps were used by fur trappers, Jesuit missionaries, explorers, and by the military in the final "*French and Indian Wars*" against the British, a struggle to retain Canada as a French territory that ultimately proved unsuccessful. Prepared with the aid of the Jesuit explorer Pierre de Charlevoix, this map at last established the true configuration of the Great Lakes.



A general Map of the Middle British Colonies, in America, 1755, Lewis Evans

Lewis Evans' *A General Map of the Middle British Colonies*, along with the maps of Henry Popple (1733) and John Mitchell (1755), is considered the most important and influential American map of the 18th century. Printed by Benjamin Franklin in Philadelphia in 1755, the Evans is the only map of the three to have been published in America by an American. Both Evans' and Mitchell's maps were intended to spur western expansion into the Trans-Allegheny, Ohio Valley, and regions westward, in response to French encroachments.

Evans' map provided the best early depiction of the

Ohio Country while documenting the competing British, French, and Native American claims in a region destined to be the flashpoint of the French and Indian War. In this regard, it is of particular note for treating the Iroquois Confederacy as a geopolitical power in its own right, with its own internal political structure, territory (here known as "*Aquanishuonigy*"), and diplomatic interests.

One of the few great maps of the colonial period, Evans's work was the product of extensive geographical, scientific and political study and insight. In 1750 Evans, who had been north to Onondago with John Bartram in 1743, was commissioned by the assembly of Pennsylvania to produce a map of the province. He took four years to draw up the surveys, the work being done in secret because of French interest in the region. The map was published in 1755 together with an analysis written by Evans in which he described the face of the country in considerable detail and accuracy. In this he stressed the need for permanent settlements in the border areas rather than posts established by itinerant traders. The map itself has been classed as being far superior to the other English maps of the period, and was long used as an authority for settling boundary disputes. The most striking contribution to cartography is found in the region of the Ohio, the delineation of which was based on information gained by George Croghan in his various expeditions to the west.

The text in Lake Erie reads: formerly of five now seven Nations called by the French Iroquois consists of 1. Caningaes or Mohocks 2. Onoyuts 3. Onendagaes 4. Carnagaes 5. Chenandoanes or Senecas 6. Tuscaroras 7. Sifsissegaes

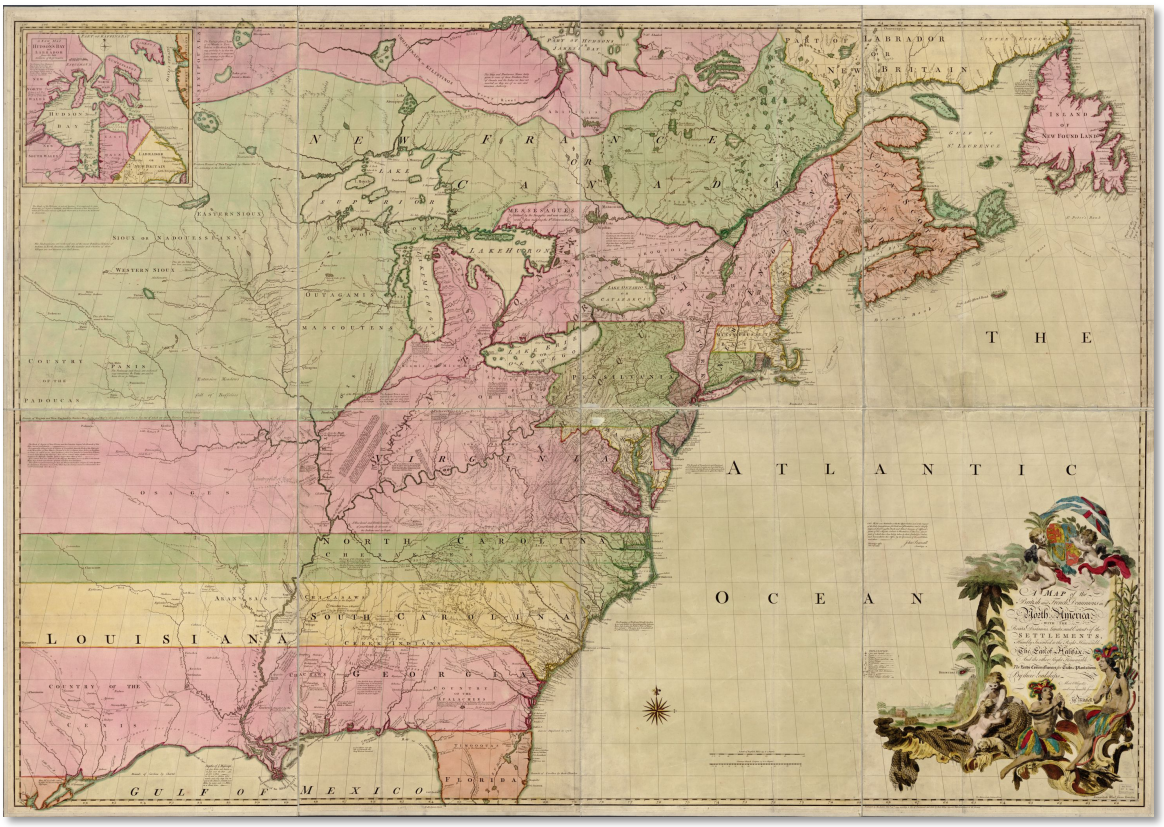
This map first appeared in 1755 to illustrate an essay, *An Analysis of the Middle British Colonies,* printed by Benjamin Franklin at Philadelphia, with contemporary printings in London. It also saw service in numerous later atlases, considerably revised, up to as late as 1814. Evans shows the British Colonies and the Ohio valley. His map rivaled John Mitchell's famous map of 1755 in its authority. Evans himself wrote in 1756: "Although we have many copies of Mitchell's map, nobody pretends to look into them for any places in our borders.'"

In 1750, Lewis Evans was commissioned by the Philadelphia Assembly to survey and map the region. Because of rival claims by France to this part of North America, particularly in the Ohio valley, much of his work had to be done in secret. It took Evans four years to complete his task. Publication, together with his essay, took place in 1755. In the *Analysis*, Evans underlined the necessity of permanent settlements in the border areas rather than mere trading posts in order to establish and uphold the legitimacy of any British claims.

Evans' map, in all its various forms, has been hailed as superior to English maps of the time, and was quoted as an authority in boundary disputes. It contributed in no small measure to informed knowledge of the Ohio region.

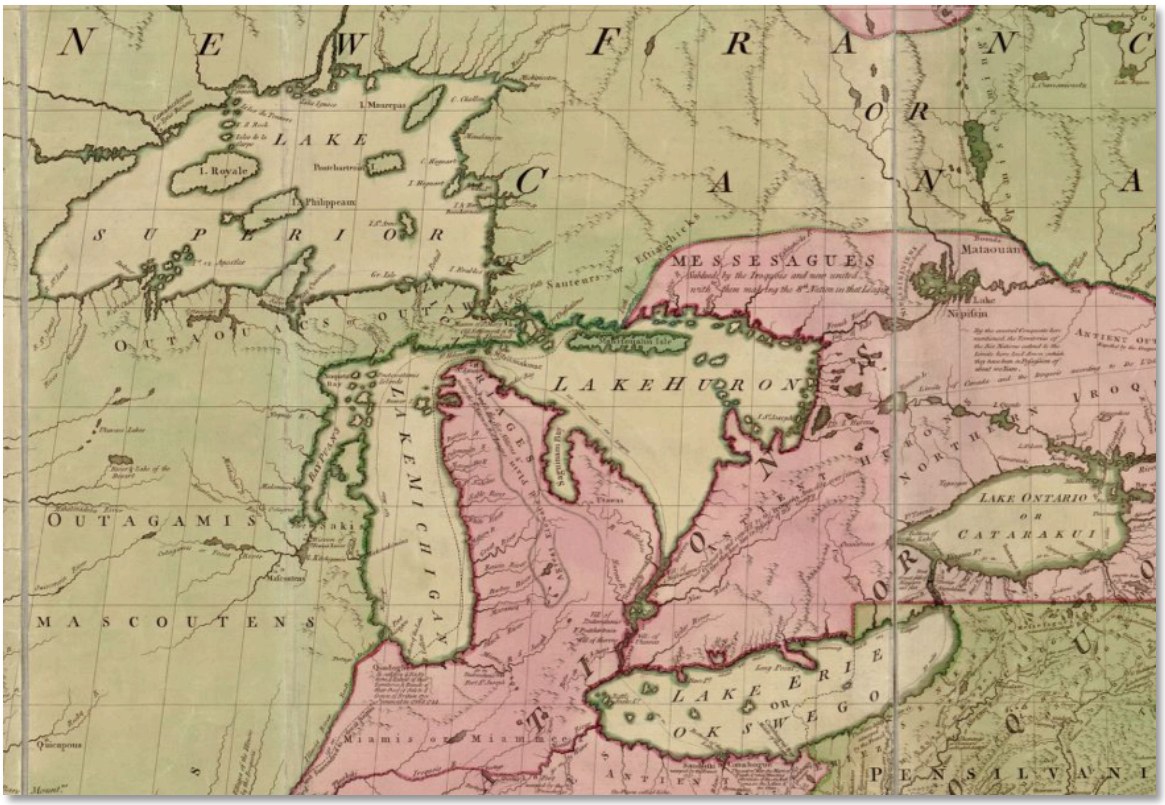
Map of the Five Great Lakes with Part of Pensilvania, New York, Canada and James' [Hudson's] Bay Territories & c., 1755

Interesting map of the Great Lakes region, extending west to the Upper Mississippi Valley and *Lake Missisagan* or *Buade* and to James Bay, showing the region at the start of the French & Indian War.

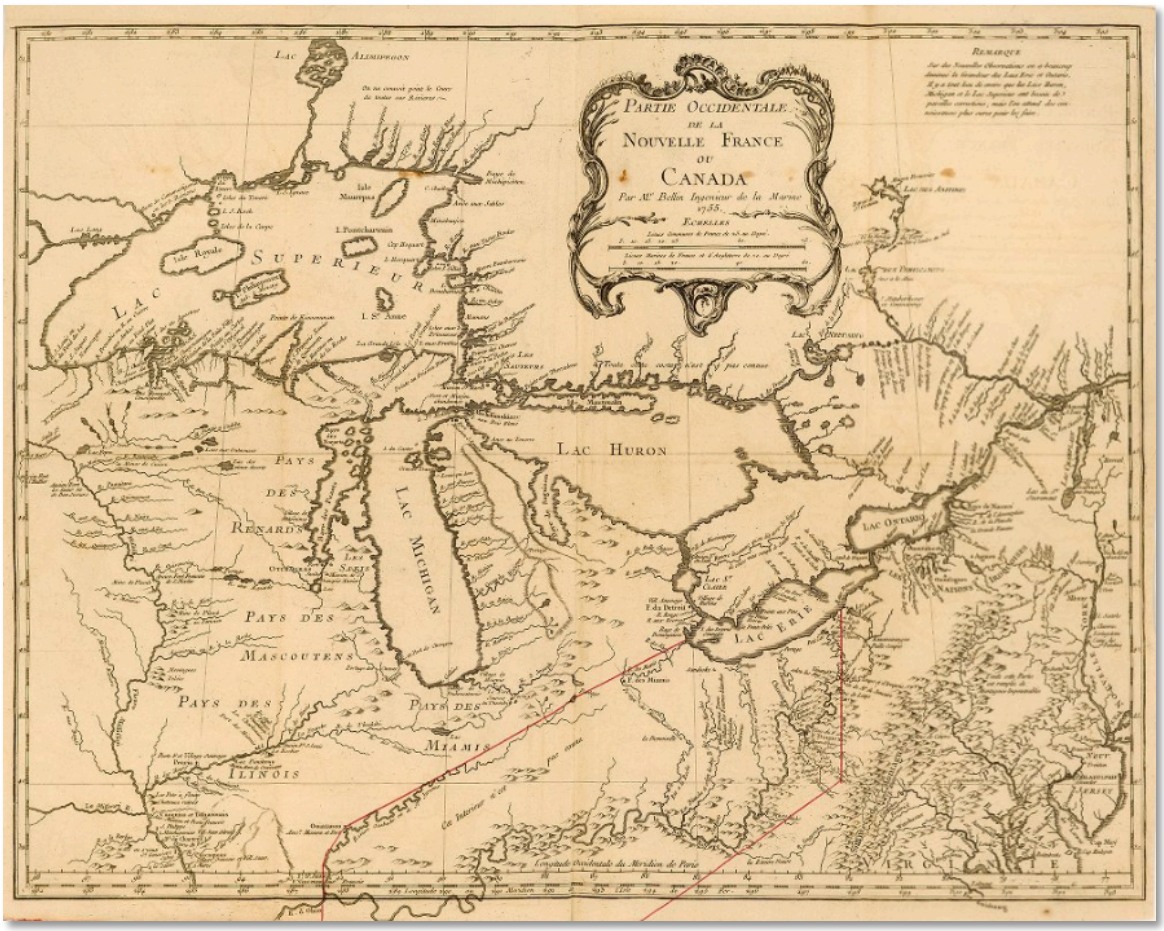


A Map of the British and French Dominions in North America, 1755, John Mitchell

Mitchell's *Map of the British and French Dominions in North America . . .* is widely regarded as the most important map in American History. Prepared on the eve of the French & Indian War, it was the second large format map of North America printed by the British and included the best up to date information of the region. Over the next 200 years, it would play a significant role in the resolution of every significant boundary dispute involving the northern border of the then British Colonies and later the United States. It was also the map-of-record at the birth of the United States and continued in this role through several decades in the early life of the country.



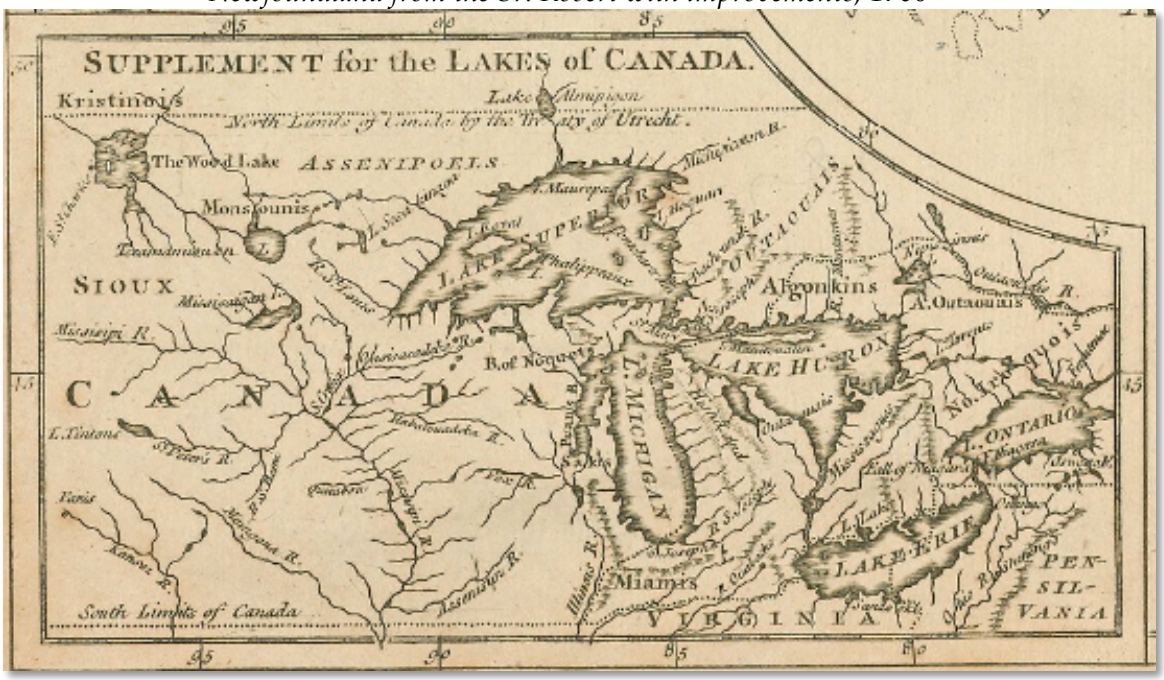
Detail: Lake Superior, Lake Michigan, Lake Huron, Lake Erie or Okswego, and Lake Ontario or Catarakui

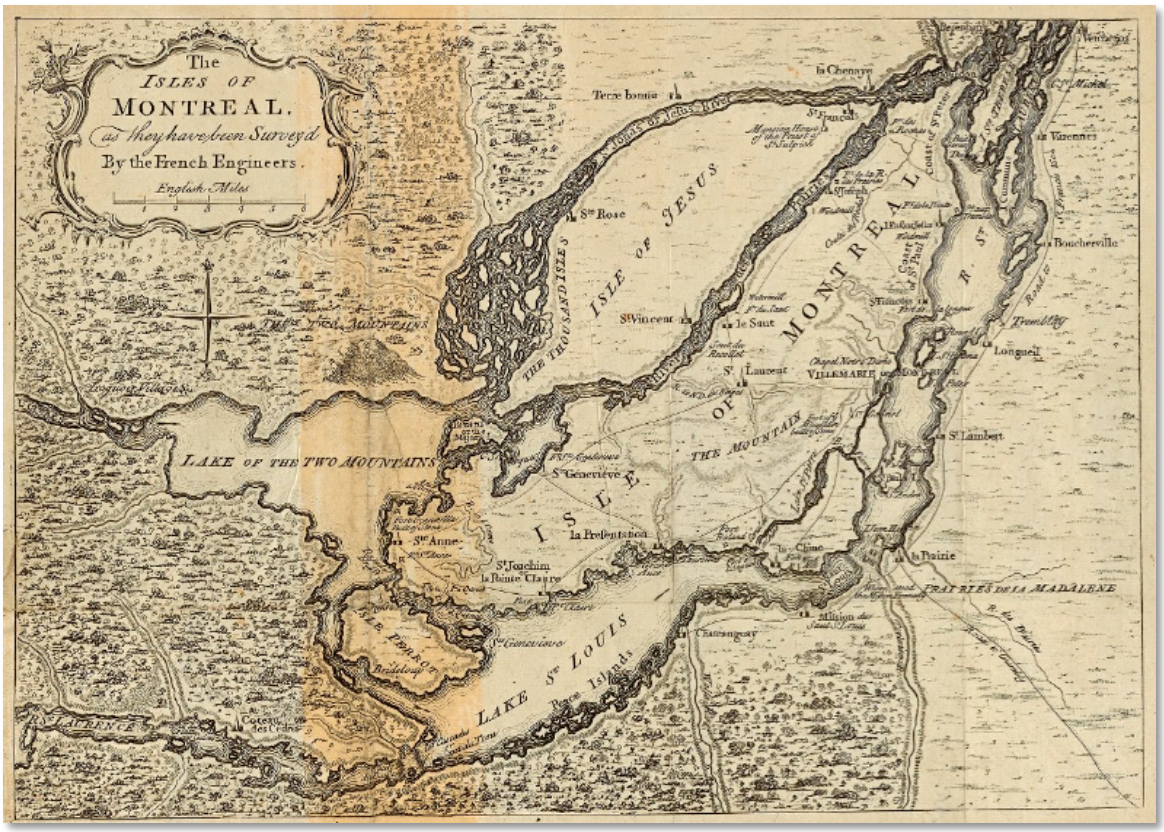


Partie Occidentale de la Nouvelle France ou Canada, 1755
Map of the Great Lakes. Cartographic elements include degrees of latitude and longitude, scales, locations of rivers, lakes, settlements, native American tribes, forts, and mines. Includes comments on certain territories. Note on map reports of the diminution in size of Lakes Erie and Ontario and suggests that the other lakes may also have to be corrected.

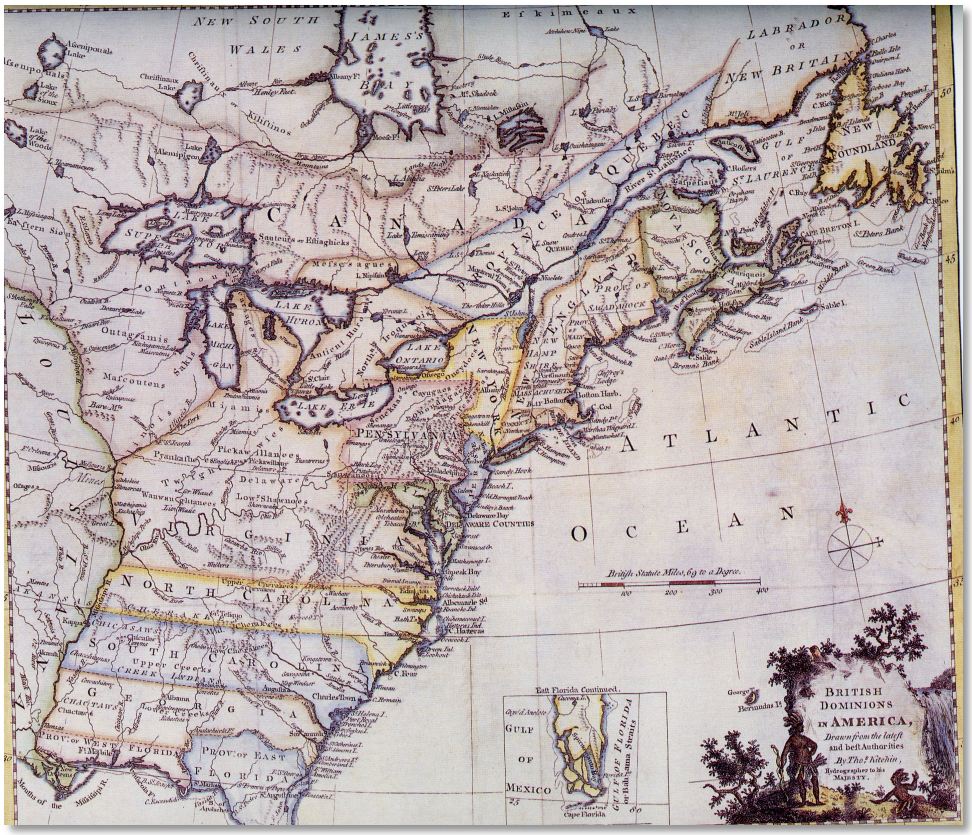
Carte du Canada et de la Louisiane qui forment la Nouvelle France et des colonies angloises ou sont representez les pays contestez by Jean Baptiste Nolin, 1756

A new map of Canada, also the north parts of New England and New York with Nova Scotia and Newfoundland from the Sr. Robert with improvements, 1760





The Isles of Montreal as they have been survey'd by the French engineers, 1761
Detail: Lake of the Two Mountains, Lake St Louis



Thomas Kitchin's British Dominions in America, 1770

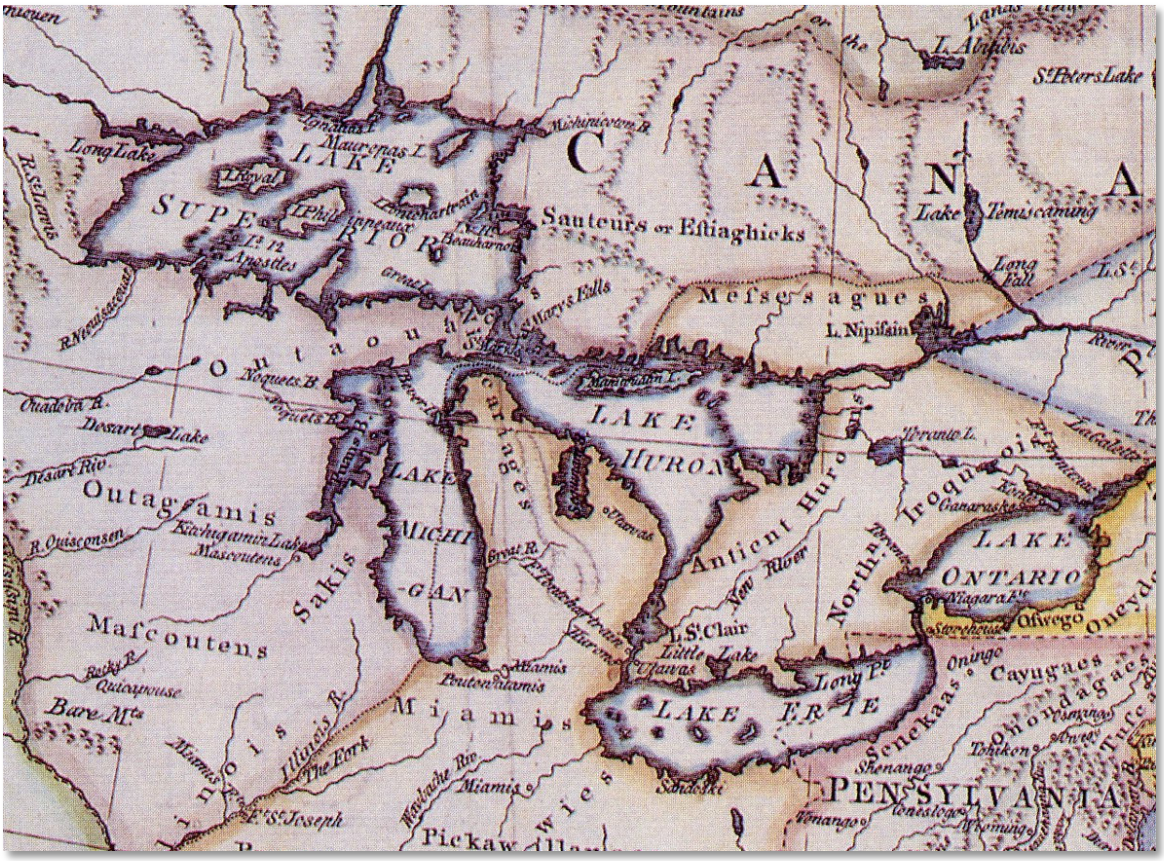
This map is based largely on Kitchin's *A New and Accurate Map of the British Dominions in America*, published in 1763. It is here presented in the form published in Guthrie's *New Geographical Grammar*, showing the extent of the British claims in North America east of the Mississippi- - hereby relegating the French claims in Louisiana to the relatively insignificant portion across the river, as this map would appear to show it.

Territorial disputes between England and France over their respective American claims and colonies finally came to a head during the 1750s, but a commission held in Paris in 1763 came to nought, having had to be abandoned during 1755 when the two countries became engaged in war in North America.

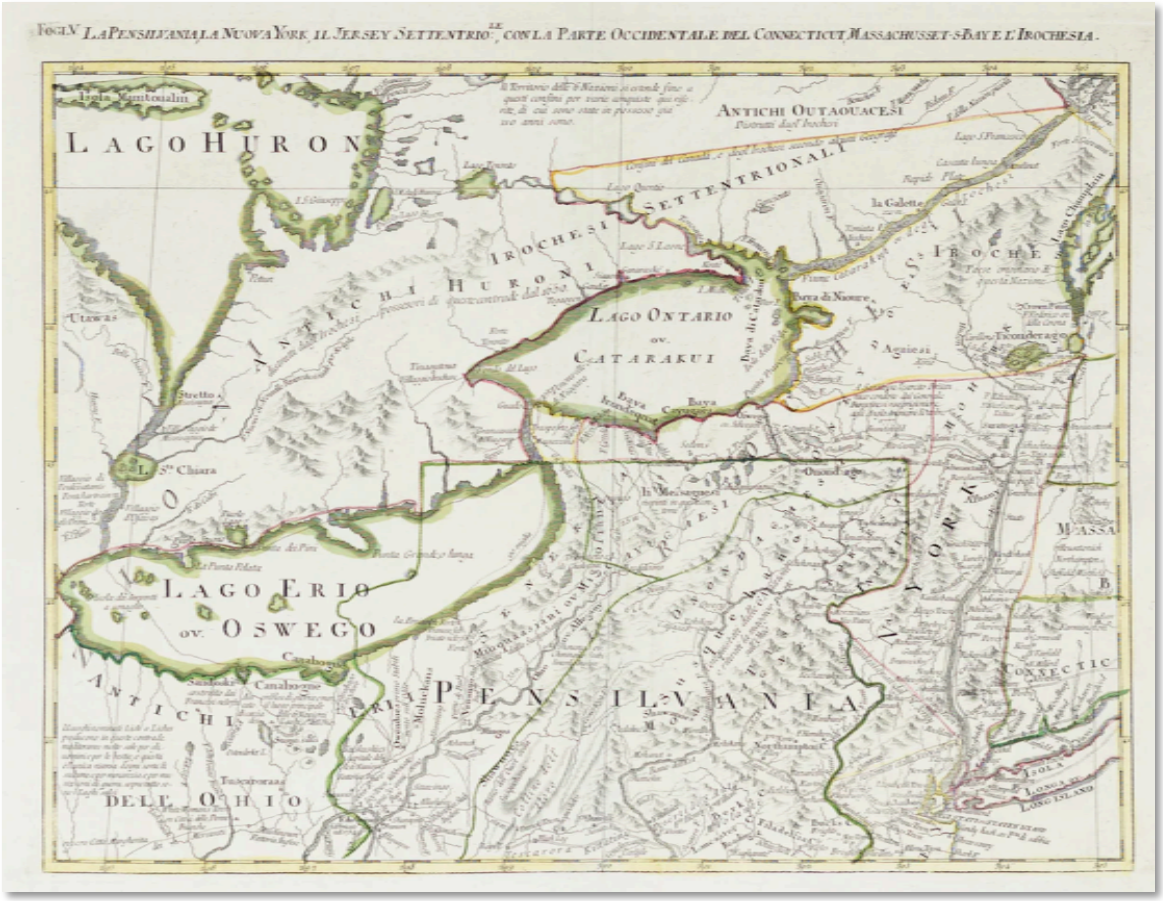
The province of Quebec is here shown within the boundaries declared in 1763 after England came into the possession of French Canada by the *Treaty of Paris* of that year, as well as the former Spanish settlements in Florida - here shown as *East* and *West Florida*.

Here, *East Florida* extends far to the north of the 31° parallel. This boundary was the subject of a separate dispute between Britain and Spain, Florida reverting to Spain once more in 1783.

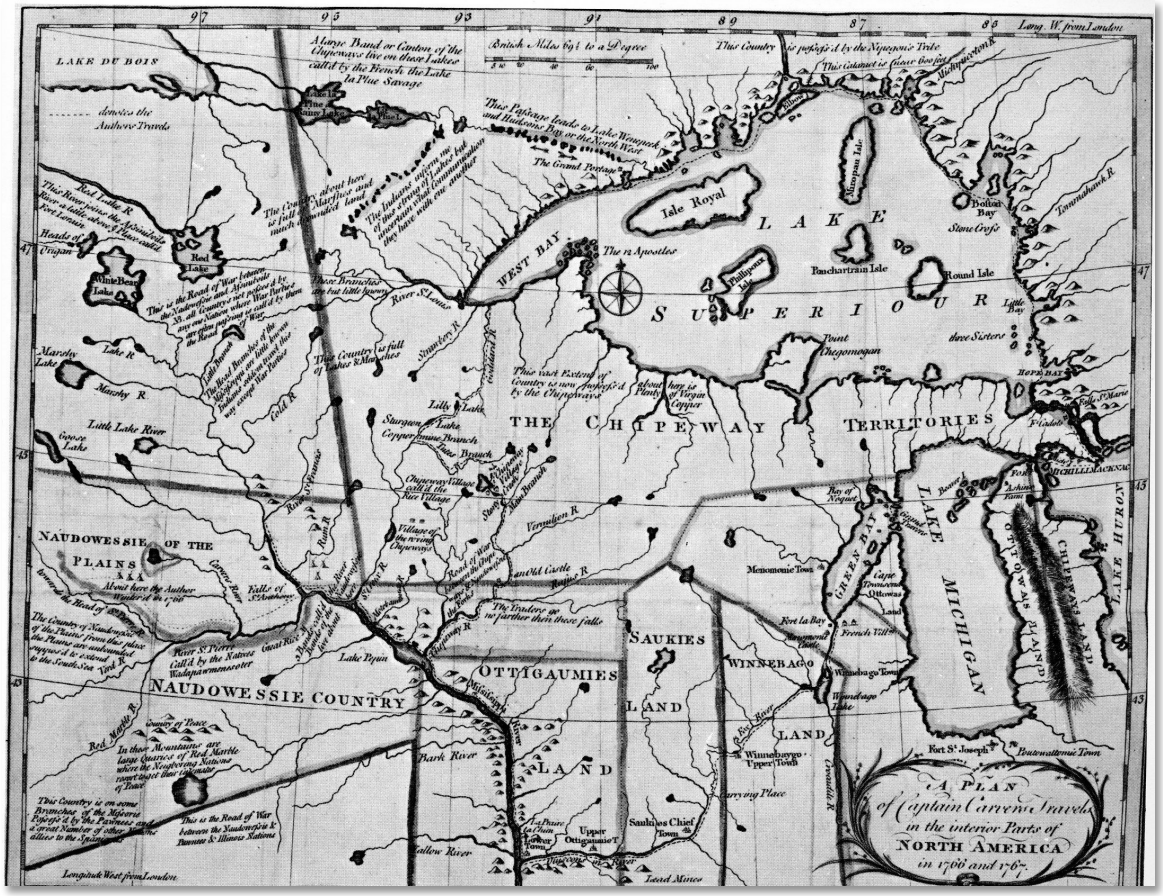
Note also the names and locations of many Indian tribes and nations, particularly in the south and west, away from the more populated areas of European settlement.



Detail: Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario, all labeled as we are accustomed today.



il Jersey Settentriole: con la parte occidentale del Connecticut, Massachussets-bay e l'Irochesia. Venice, Antonia Zatta, 1778.



A plan of Captain Carvers Travels in the interior Parts of North America in 1766 and 1767, from Jonathan Carver, Travels through the interior parts of North-America, 1778.

Map of the northwest parts of the United States of America, 1785

Gli Stati Uniti dell' America delineati sulle ultime Osservazioni. Primo Foglio che comprende inoltre Parte del Canada, 1797, Giavonni Maria Cassini

From Geographicus.com: A 1797 Cassini map of the Western Great Lakes and the surrounding regions. Centered on Lake Superior, the map depicts from the Mississippi River to the eastern limits of Lake Huron and from an apocryphal lake, *Cristinesi*, to the central part of Lake Michigan, roughly in the vicinity of modern day Milwaukee. The Post-Revolutionary War borders of the United States and Canada are noted. Being a somewhat large-scale production, the map offers information, including the deportment of American Indian tribes and villages.

The four fictional islands in Lake Superior are present. Laid down by Jacques-Nicholas Bellin in his influential 1744 map, these apocryphal islands include: *Philippeux*, *Pontchartrain*, *Maurepas*, and *St. Anne*, They were invented three years earlier by the French historian and traveler Charlevoix, then subsequently immortalized by his cartographer Jacques-Nicholas Bellin. The islands were intended to honor Charlevoix's personal patron, the Count of Maurepas, Jean-Frederic Phelypeaux. The largest of the three islands, *Philippeaux*, is named directly after the count. The second largest island, *Pontchartrain*, refers to Phelypeaux's family estate. The third island, which may in fact be a mis-mapping of the factual State Islands, is named after the count's seat, *Maurepas*. The fourth and smallest of the islands, *St. Anne*, references the count's patron saint. Charlevoix described the islands as being rich in minerals leading numerous explorers to search for them in vain. Bellin dutifully introduced the four islands to his map, and such was his influence that they were subsequently copied by most subsequent cartographers, including John Mitchell in his seminal 1755 wall map of North America, The highly regarded Mitchell map was used in negotiating the 1783 Treaty of Paris that

formally concluded the American Revolutionary War. Therein, the apocryphal *Philippeaux* was assigned as a marker for the new United States - British America border thus setting the stage for later political strife. Cartographically, Cassini derived this map from the 1778 Zatta 12-sheet revision and expansions of the John Mitchell's seminal 1755 map of the eastern part of North America, Cassini published six maps of United States regions based upon Zatta's work, of which this is map no. 1. This work was published in Cassini's 1797 *Nuovo Atlante Geografico Universale*.

Canada by John Tallis, 1850

The exploration and mapping of the five Great Lakes extended two hundred years and exhibited several interesting name changes. The initial exploration was centered on finding a "shortcut" waterway to the Asia (Pacific Ocean). The French explorers and missionaries were the initial cartographers of this region. On early maps of the region various toponyms were assigned to these lakes over this early period:

Lake Superior was also labeled the *Upper Lake*, *Grand Lac, L. Tracy o Superiore, Conde,* and *Nadouessious*

Lake Michigan was initially labeled *Lake Illinois/Ilinois* and *Lac des Puans/Puants*, Dauphin, and *Lac des Illinois ou Missihiganin*

Lake Huron was also labeled *Lac Contenant*, D'Orleans, *Mare Dulce/Mer Douce, Karegnondi, Grand Lac des Hurons,* and *Michigane ou Mer Douce des Hurons*

Lake Erie was also called *Lake Okswego, Lac Herye* and *Lac Erie du Chat, Lac de Conty* and *L. Erius or Felis*
Lake Ontario was also known as *Lake Frontenac/Fontenac*, *Lac St. Louis, Catarakui/Cataraqui, Ontario lacus seu Sancti Ludovici*, *L. Contario or Ontarius* and *Lac Iroquois*

The region was claimed off/on by both France and Britain and, of course, the local Native American tribes who already occupied the region. Today, all of the lakes, except Lake Michigan, are shared by the United States and Canada.

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Lake Huron
Lake Area | 23,000 square miles = 59,600 km²
Deepest Point | 750 feet = 229 meters
Lake Volume | 850 cubic miles = 3,540 km³
Shoreline | 3,827 miles = 6,157 km
Lake Ontario
Lake Area | 7,340 square miles = 18,960 km²
Deepest Point | 802 feet = 244 meters
Lake Volume | 393 cubic miles = 1,640 km³
Shoreline | 712 miles = 1,146 km
Lake Superior
Lake Area | 31,700 square miles = 82,100 km²
Deepest Point | 1,332 feet = 406 meters
Lake Volume | 2,900 cubic miles = 12,100 km³
Shoreline | 2,726 miles = 4,385 km
Lake Michigan
Lake Area | 22,300 square miles = 57,800 km²
Deepest Point | 924 feet = 282 meters
Lake Volume | 1,180 cubic miles = 4,920 km³
Shoreline | 1,638 miles = 2,633 km
Lake Erie
Lake Area | 9,910 square miles = 25,700 km²
Deepest Point | 216 feet = 64 meters
Lake Volume | 116 cubic miles = 484 km³
Shoreline | 871 miles = 1,402 km
Minnesota
Wisconsin
Michigan
Illinois
Indiana
Ohio
Pennsylvania
New York
Thunder Bay, Ont
Duluth
Green Bay
Milwaukee
Chicago
Lansing
Detroit
Toledo
Cleveland
Buffalo
Niagara Falls
Rochester
Toronto, Ont
The Great Lakes
•Superior• Michigan • Huron • Ontario • Erie
The Great Lakes system contains more than six quadrillion gallons of fresh water (6' followed by fifteen zeros). This ranks third only to the polar ice caps and Lake Baikal of Siberia. Also, the lakes contain roughly one-fifth of the world's fresh water supply. If the water of all of the lakes were emptied onto the 48 contiguous states and distributed evenly the water would submerge the entire country under nine and a half feet of water. The Great Lakes total shoreline would span nearly half the circumference of Earth. The population density along the shoreline and the basin constitute one out of ten people in the U.S. Population and nearly one in three of the Canadian population at thirty-one percent.