Texts exhibition maps of Lake Geneva

This is not a map

There are thousands of maps that depict Lake Geneva. The exhibition you are about to discover contains about a hundred. Why would anyone want to display 100 maps of the same lake?

A map is a reasonably faithful reflection of the space it represents. But it also reflects its epoch, the map-maker, his concerns and his intentions. A map can let you see where you are, or enable you to plan a route, but it can also serve to claim a territory, to transmit scientific know-how or to attract tourists.

The hundred or so maps presented in this exhibition are all different. Each relates its own history. Each of them is a page in the life of Lake Geneva and in the lives of the people living along it.

In short, this is not an exhibition of maps but the portrait of a lake drawn from some hundred maps.

THE FIRST MAPS

The first maps centred on Lake Geneva appeared at the end of the 16th century. Previously, the lake could be seen on a few rare maps covering far more extensive spaces, in particular in the "Peutinger Table", in Ptolemy's "Geography" or in the "Mapa Mundi" of Beatus de Liébana.

The Peutinger Table

"The Peutinger Table" is probably the oldest map on which Lake Geneva, which it calls "Lake Lausanne", appears. It represents the road network of the Roman Empire in the time of Augustus, who was emperor from 27 BC to 14 AD. It is named after Konrad Peutinger, the owner of the oldest known copy of the map between 1508 and 1547; the copy was made

in the 13th century and is conserved today in the Österreichische Nationalbibliothek in Vienna. Konrad Miller made a facsimile which was published in 1887.

Reproduction of part of the 13th century copy on which Lake Geneva appears.

Miller's original is displayed in the alcove to your left.

Ptolemy's Geography

In the 2nd century AD, the Greek scientist Ptolemy wrote a treatise entitled "Geography", in which he describes both the dry land and the oceans. In addition to the text, the work is composed of a general world map and 26 regional maps. The lake ("*Lemannus*") appears on one of the maps depicting Europe.

Reproduction of a copy made in the 15th century and conserved in the Bibliothèque Nationale de France.

Mapa Mundi

This map was drawn by the Spanish monk Beatus de Liébana around 780 and depicts the three parts of the known world of the time: Africa (below on the right), Asia (above) and Europe (below on the left).

Lake Geneva, in the form of a drop of water, appears in the middle of Europe and can be identified by the Rhône, named on the map.

Reproduction of an 11th century copy conserved in the Bibliothèque Nationale de France.

DEFINING THE CONTOURS

On the earliest maps on which it appears, Lake Geneva looks like a drop of water without a definite shape. Its contours are gradually defined on the maps that depict it from the late 16th century onwards, thanks in particular to the work of Jacques Goulart (map no.7). He took his

inspiration from the maps of Sebastien Münster and Jean du Villard (maps nos.19 and 17) which he improved as a result of observations in situ.

LAKE GENEVA IN THREE DIMENSIONS

From the end of the 18th century, craftsmen initiated the manufacture and marketing of relief maps, especially of Mont-Blanc. Relief maps of Lake Geneva were also created and sold, notably by the painter Léonard Gaudin and the cartographer Charles Perron.

A GRANDIOSE SETTING

In order to embellish his map of Switzerland and its 13 cantons, Johann Jakob Scheuchzer designed a grandiose setting comprising emblematic sites (Rhône Glacier, Gemmipass, Pilatus, Pont du Diable), historical or anonymous characters (William Tell, peasants, craftsmen) and legendary figures (a dragon, cherubs). Since religion was crucial at the time, symbols on the map could identify Reformed or Roman Catholic villages as well as villages where the two cohabited.

LAKE GENEVA UPSIDE-DOWN

The earliest maps that centre on Lake Geneva are surprising today because the lake is depicted "upside-down". This is not of course a mistake but a convention inherited from the Middle Ages when maps were oriented towards Jerusalem – to the south-east with respect to Lake Geneva. In fact, the original sense of the verb "to orient" is "to face East", in the direction of Jerusalem (Oxford English Dictionary).

A rarity among the maps displayed here is no.15 which is oriented to the West and depicts Lake Geneva like a sort of standing stone.

Officers Martine and Panchaud, *Carte du Léman annexée à un rapport de reconnaissance des rives savoyardes commandé par Leurs Excellences de Berne*, 1702, reproduction of the original conserved in the cantonal Archives in Bern.

LAKE GENEVA'S MONSTERS

Lake Geneva is not Loch Ness. Tourists do not frequent its shores in the hope of glimpsing a legendary monster. There are, however, references to a monster in the lake in legends, eyewitness accounts and maps.

The maps on which a monster appears in Lake Geneva date back to the 17th century, a period when cartographers were in the habit of decorating stretches of water with vessels, compass roses and sometimes monsters.

The monster of Lake Lausanne

The most famous legend concerning a monster in Lake Geneva is associated with King Arthur. Merlin in the Book of the Grail tells it like this:

"It came about, on an Ascension Day, that a local fisherman went to Lake Lausanne with his gear and his nets to fish. When he had finished his preparations for casting his nets into the water, he promised Our Lord the first fish he might catch. Once the nets were in the water he brought up a pike certainly worth thirty sols. Faced with such a fine-sized fish he muttered to himself, sly fellow that he was: "God will not get this fish, but He can have the next one". He cast his nets again and took a fish that was even more valuable than the first. When he saw what a fine fish it was, he very much wanted it and told himself that the Good Lord could certainly do without it and that he would definitely give Him the third fish. He cast his nets for the third time and this time caught a small kitten, blacker than a blackberry".

The rest of the story can be summed up as follows: the fisherman took the cat home and fed it so well that it became huge; it strangled him, killed his wife and children and fled into the mountains where it terrorised the population of the region. Putting an end to the atrocities committed by the monster required the intervention of King Arthur himself, warned by Merlin. "Yes, lord, you are needed on the other side of Lake Lausanne. A devil has made its den there, a demon such that neither men nor women dare live in this region. It is destroying the country, killing and massacring all it encounters".

Summoning up his courage, Arthur made his way to the heights of Lake Lausanne to tackle the monster. An epic combat ensued and Arthur was nearly killed when the beast "reared up on its hind legs and leaped at his face, grabbing him with its forepaws". The monster was close to victory at this point since "it caused the blood to fountain out of the king's breast and up from his shoulders". But this was not Arthur's first fight; he managed to get the upper hand and cut off the beast's forepaws; then he sliced open its belly with his sword before cutting off the hind legs and slitting open the body.

King Arthur fighting the Chapalu (the cat fished from Lake Lausanne), detail of a mosaic made around 1165 for the cathedral of Otranto (Apulia region of Italy).

Witness accounts and mysteries

There are a number of witness accounts of a monster that once lived in Lake Geneva. For example, in 1883, three boatmen swore they had seen near Thonon a sort of water serpent more than 12 metres long. Beats were organised, revealing tracks some 7 to 8 centimetres wide leading from the water to the vegetation on the shore.

The drawing presented here, made by the physician and naturalist Louis Jurine, reveals that scientists were intrigued by the legend of the monster of the lake. The drawing is of a gigantic shoulder blade found in the lake in 1814 (the bone drawn on the right to show the scale is the shoulder blade of a horse). Louis Jurine took great care in drawing the bone in question, which we now know comes from a cetacean.

Louise Jurine, *Omoplate trouvée dans le lac de Genève en 1814*, collection Lake Geneva Museum.

THE NAMES OF THE LAKE

Lake Geneva has had many names. They can be found on the maps: lac de Lausanne, lac de Genève, lac Léman, lac de Thonon, lac de Morges, lac d'Evian, and even Lemain Lake (map no.33) and Lehmann's See on a comical map (map no.32).

Of these names "lac de Lausanne" is the oldest (see the first chapter in this room).

Today, "Léman" is the official name of the lake in French, from the "Carte de Dufour", the first official map of Switzerland published between 1845 and 1865 (map no.31).

The Académie française waited until 1923 before replacing "lac de Genève" by "lac Léman".

In English and German, however, "Lake Geneva" and "Genfersee" are the terms used.

LIQUID BORDER

Since the Treaty of Lausanne of 30 October 1564, signed between the Bernese government and the Duke of Savoy, it has been accepted that a border runs through Lake Geneva. Four centuries had to elapse before it could be accurately established. The convention of 25 February 1953 between France and Switzerland made its determination possible.

It is clear from the maps displayed here that the border in the middle of the lake has not been called in question for five centuries. They also show that, in fact, the shores of Lake Geneva have had numerous proprietors (countries, cantons, communities, etc.) and a variety of administrative organisations.

Some of the maps (nos.38, 39, 41 and 43 in particular) were created to consolidate the authority of a State over a territory.

Jacques Goulart, *Lacus Lemanni*, around 1635, collection Lake Geneva Museum The bright colours of this map enable us to identify the proprietors of the lake shores at the time: Switzerland (in pink), Savoy (in yellow), France (in green) and Geneva (red dot).

Pierre-Gilles Chanlaire, Département du Léman, 1798-1801 collection Lake Geneva Museum.

In 1798, Geneva was annexed by Napoleon and became part of France. The town became the *préfecture* and the capital of the Département du Léman; this situation would continue until its liberation in 1813. The pink line drawn on the map is misleading, since it suggests that all of the lake was part of the Département du Léman, when the north bank belonged to the Helvetic Republic and subsequently to the Confederation of 19 cantons.

Chavanne, *Département de la haute Savoie*, 1861, collection Lake Geneva Museum. This map was published a year after Haute-Savoie became French.

Claude Buffier, *Carte de la Suisse et de la Savoye*, 1744, collection Lake Geneva Museum. This map shows us who owned the land along Lake Geneva in the middle of the 18th century: Switzerland, Savoy, France and Geneva.

Jakob Störcklein after a drawing by Louis Francosi Boizot, *Nova Ditionis Bernensis Tabula Geographica Ursi Effigie Delineata*, around 1690, reproduction of the original conserved in the cantonal Archives in Bern.

This map shows the territory of Bern at the end of the 17th century. The bear shape is misleading since it gives the impression that the south bank of Lake Geneva was part of Bernese territory.

P. Legare, *Les quatre bonnes villes du pays de Vaud*, 1679, reproduction of the original conserved in the Bibliothèque de Genève.

It would appear that the author of this Lake Geneva in the shape of a bear intended to denounce Bern's domination rather than celebrate it.

Tomas Schoepf, *Karte des Bernischen Staatsgebietes* (sheets 5 and 6), 1970 facsimile of a 1577-78 original, collection Lake Geneva Museum.

This is probably the oldest map showing the line of the border in the middle of the lake.

Commission frontière franco-suisse, Annex to the 1953 Convention on the Delimitation of the Boundary in Lake Geneva, reproduction of the original conserved in the Swiss Federal Archives.

The border is marked on this map by the red line. The blue line is the theoretical median line, created by linking the centres of some seventy circles drawn on the surface of the lake (see map no.46), which served as a basis for the final line of demarcation.

Commission frontière franco-suisse, Preparatory map for the delimitation of the boundary in Lake Geneva, 1950s, reproduction of a page of the Revue Générale de droit international public (1974).

THE DEPTHS OF THE LAKE

Until the very end of the 19th century, the depths of Lake Geneva remained a mystery. In 1891 André Delebecque published the first bathymetric map of the lake (bathymetry is the measurement of depth). François-Alphonse Forel published his own map the following year (map no.60). Both Delebecque and Forel based themselves on the work of Swiss and French engineers who between 1885 and 1889 made 11,955 soundings (see photo no.48 and the items in the showcase). These enabled it to be determined that the maximum depth of the lake was 309.7 metres between Evian and Lausanne.

Jean-Jacques Rousseau, in 1754, seems to have been the first person to have taken measurements of the depth of the lake, mainly towards Meillerie. In the 1770s, the scientists Jacques-André Mallet, Auguste Pictet and Horace-Bénédicte de Saussure took measurements for their studies of water temperature. The map made by Henri Thomas de la Bèche in 1819, based on some fifty measurements, is very likely the first attempt to map the depths of Lake Geneva overall (map no.53).

Mercator, Lacus Lemanus, 1607, collection Lake Geneva Museum.

The Latin inscription to the left of Coppet states that the lake is so deep that it cannot be measured.

Federal Office of Topography, Jakob Hörnlimann, Paul Etier and their colleagues during a soundings campaign in Lake Geneva, 1889, photo collection swisstopo.

This photograph shows the team who measured the depth of the Swiss sector of Lake Geneva between 1885 and 1889. At least two of the items displayed in the showcase below can be seen in the photograph: the alidade and the sextant (held by the man in the centre of the boat). The work these men did enabled Delebecque and Forel to create their maps (no.59 and no.60).

Henri Thomas de la Beche, *Principales sondes du lac de Genève*, 1819, collection Lake Geneva Museum.

This is probably the first map to give an idea of the depth of Lake Geneva overall.

Charles Perron, *Carte hydrographique provisoire du lac Léman d'après les sondes de De la Beche et de Gosset*, last quarter of the 19th century, collection Bibliothèque de Genève. Charles Perron used the measurements taken by Henri Thomas De la Beche in 1819 (map no.53) and by Philippe Gosset of the Federal Office of Topography in 1873 to create this map.

Before the first maps of the depths of Lake Geneva were published, maps of smaller zones were created, mainly for practical reasons (work or navigation).

Jean-François Doret, *Plan, profils, coupe et tabelle*, 1786, collection Lake Geneva Museum. This document presents the results of the bathymetric studies made at Vevey on 12-13 January 1786. They were made after part of the Rue du Sauveur (today Rue du Lac) subsided on 8 June 1785.

Jean-François Doret, *Coupe géométrique des sondes prises le 28 janvier 1786*, collection Lake Geneva Museum.

This document details the results of the bathymetric study carried out at Vevey on 28 January 1786, following the subsidence of part of the Rue du Sauveur (today Rue du Lac) on 8 June 1785.

André Delebecque, Lac Léman, 1894, collection Lake Geneva museum.

After publishing the first bathymetric map of Lake Geneva in 1891 in the *Annales des ponts* et chaussées de France, Delebecque brought out this map in 1894 and his *Atlas des lacs* français, in which he describes 330 lakes, in 1898.

François-Alphonse Forel, *Carte bathymetrique du Léman*, late 19th century, collection Lake Geneva Museum.

The red lines drawn in by Forel himself represent the profile sections along and across the lake.

Cartographers are not the only people to take an interest in the depths of Lake Geneva.

Divers, archaeologists and engineers have endeavoured to see for themselves what the lake

hides under its surface. These explorers have been variously motivated: by archaeological remains, wrecks, geology, the fauna, etc.

Karl Adolf von Morlot was the first person to dare to venture below the surface of the lake. On 24 August 1854, he went down a depth of 3 metres at Morges. This experience is regarded as the first underwater archaeological excavation in the world. The first divers appeared during the 20th century, followed by the submersibles: AUGUSTE PICCARD (first international tourist submarine which was to take more than 33,000 people to the bottom of the lake in 1964-65), FA FOREL (research submersible, in action from 1978 to 2005), and MIR 1 and MIR 2 (visiting Russian submersibles in Lake Geneva in 2011).

Model representing the volume of water in Lake Geneva, 1998, collection Lake Geneva Museum.

The vertical scale has been magnified in relation to the horizontal scale.

PANORAMAS AND VIEWS FROM THE SKY

Panoramas and views from the sky, whether in drawings or photographs, may, like maps, represent a territory. Map no.65, drawn from the first steamship on Lake Geneva, is an extraordinary document. It is both a map, with its precise outline of the shores and the relief, and a panorama for admiring the landscapes around the lake.

MAPPING HUMAN OCCUPATION

As can be seen from maps no.73 and no.74, the land along Lake Geneva today is heavily populated and urbanised. The maps produced by archaeologists enable us to understand how the shores of the lake were inhabited in the past.

Philippe Rekacewicz, *Rives accessibles et inaccessibles du Léman*, 2017, collection Lake Geneva Museum.

Philippe Rekacewicz began by using the available official statistics to create this map; unfortunately, they are inadequate. To obviate this problem, he made use of the observation of satellite images – an efficient method, but not totally reliable.

Spencer Schien, Lake Geneva, Population Density, 2022.

This map shows population density around lake Geneva and is a reminder that the lake experiences huge pressures as a result of human activities.

Louise Blondel and Alexandre Le Royer, *Plan general des cités lacustres*, 1922, collection Bibliothèque de Genève.

Map created by Louis Blondel, Geneva's first cantonal archaeologist, and the physicist Alexandre Le Royer. They took advantage of an exceptional drop in the level of the lake (approximately 1.50 metres lower than the average) for the observations which made this map possible. The sites of 6 prehistoric villages can be seen as well as the "*ligne des fiches*" (dotted red lines), a row of wooden stakes dating to the 13th century which probably served to prevent boats from berthing.

State of Vaud and Archeodunum, Plan des vestiges de Lousonna-Vidy, 2021.

This plan shows the archaeological remains found at Vidy (a district of Lausanne). They represent different periods, but for the most part date from Roman times. Also shown is the present-day land register so as to clarify where Lousanna was situated in relation to Lausanne today. The lake is shown with two different shades of blue; the darker is the lake as it is now and the lighter blue is the lake in the Roman period. The level of the lake is lower today because it is artificially controlled and also because the area of the land along the lake at Lausanne was increased to 140,000 m² for the National Exhibition of 1964.

MAPPING THE WINDS

Lake Geneva has many winds – varied, sometimes violent, often blowing in suddenly. They are a concern for experienced sailors and a danger for beginners. It is not surprising that specialists have attempted to map them.

The fact that Lake Geneva's winds have picturesque names and individual temperaments has also been an inspiration to artists.

MAPS AND BOATS

Lake Geneva was traditionally sailed without instruments, with the aid of references (high points or churches). Maps intended for navigation on the lake are therefore something recent, unlike navigation on the seas and oceans for which maps have existed for centuries.

It was the development in the 19th century of commercial shipping and later of recreational sailing (excursions and competitions) that led to the production of marine charts for Lake Geneva. They were initially documents for informing travellers and tourists. Later, maps were created to help amateurs to navigate and finally maps to reinforce the safety of those using the lake appeared.

Jacob Deboulianne (attributed to), *Vue du Bateau à vapeur au moment où il arrive sur le filet de pêche appartenant au Sieur DeBoulianne*, 1856, collection Lake Geneva Museum. This map was produced by the fisherman Deboulianne for the proceedings he brought against the owner of the steamship AIGLE, which had ripped away his net. The existing archives unfortunately do not reveal the outcome of the trial.

Aldo Heymoz and Armand Clerc, Sécurité des bateaux, Le Léman: zones de parcours des bateaux, 1977, collection Lake Geneva Museum.

In 1977, the captains Aldo Heymoz and Armand Clerc of the Lake Geneva General Navigation Company (CGN) created a map of Lake Geneva on which they traced the routes taken by the Company's vessels and indicated areas of risk given the number of private craft.

Jean de Bosset (aka Bosco), *Le lac Léman ou lac de Genève*, 1972, collection Lake Geneva Museum.

In 1954, Jean de Bosset drew his first map of the lake of Neuchâtel for recreational sailors. In 1972, he published his first map of Lake Geneva which was followed by a further 12 editions.

André Mercier, Itinéraire suivi lors du Bol d'or 1955, collection Lake Geneva Museum.

André Mercier took part in 40 editions of the Bol d'or. He drew a map of his route for each edition. The maps also feature meteorological observations, notes on other competitors, transit times, etc.

Pierre Bonnet and Emile Lachapelle, *Bol d'or, Service de sécurité*, 1971, collection Lake Geneva Museum.

This map shows the distribution of the sections of the lake that the rescue units had to monitor during the Bol d'or 1971.

WARS AND PEACE

Cartography is essential for the military. Maps enable personnel to take their bearings, to anticipate the difficulties and dangers (but also advantages) of the terrain, to develop strategies and communicate them, etc.

Map no.95, intended for English soldiers during the Second World War, is an example of a map that was indispensable to the military. Maps nos.93 and 94, on the other hand, have no practical use. No.93 testifies to Geneva's system of defence in the 17th century, while no.94 sets out an exercise undertaken by the Swiss army.

As a result of the multiplicity of international conferences organised in Geneva, Lausanne, Nyon, Montreux and Evian, Lake Geneva has been the theatre of numerous peace efforts. There are maps that reflect these events.

Alain Manesson-Mallet, View and plan of Geneva from "Les travaux de Mars ou L'art de la guerre", 1684-85, collection Lake Geneva Museum.

The plan shows Geneva's fortifications as well as the stakes for the chains which allowed the harbour to be closed off.

Journal de Genève, Carte du terrain des manoeuvres du 1er corps d'armée, 1895, collection Lake Geneva Museum.

This map enabled readers of the *Journal de Genève* to follow from a distance the exercise organised by the Swiss army in August-September 1895.

War Office, Sheet 70 Beaune-Evian, 1943, collection Lake Geneva Museum.

This map was produced by the British army during the Second World War when the Savoy bank of Lake Geneva was occupied by the Italian army.

Anonymous, La Clef de la Paix, 1928, collection Lake Geneva Museum.

This illustration, published in the Catholic weekly *Le Pélerin*, is a reminder of the World Disarmament Conference imagined in 1926 and organised in Geneva between 1932 and 1937.

Associated Press, Site of Summit Conference, 1955, collection Lake Geneva Museum. The map was produced by the Associated Press agency on the occasion of the "Big Four"," the summit organised in Geneva with the four great powers: the United States, Russia, Great Britain and France.

LAKE GENEVA AND THE WORLD

Although in comparison with the biggest lakes in the world Lake Geneva is relatively small, it is famous worldwide. This can be explained by the human activities that have taken place along or on it, especially in the domains of the arts and the sciences. It is thus no surprise to find a view of Lake Geneva in the centre of a world map and its outline on a plate enumerating the main lakes and inland seas of the Eastern hemisphere.

MAPS AND ARTISTS

Many authors have endeavoured to describe the characteristic shape of Lake Geneva. Some have compared to a "croissant", others to a "comma", a "banana" or an "azure sickle". Visual artists – a draughtsman and a calligrapher, for example – have also been inspired by its shape. As for F'murr, the cartoonist, he has imagined the story of an airman who gets lost over Lake Geneva despite being in possession of a "Swiss map".

THE SHAPE OF THE LAKE

Lake Geneva's characteristic shape has certainly contributed to its fame, and can be found on postcards, posters, souvenirs, logos (companies, associations, clubs, etc.) and many more images and objects.