### The glacier views of Jean-Antoine Linck – a milestone for the Mont Blanc glacier history from the 18th to the 19th century

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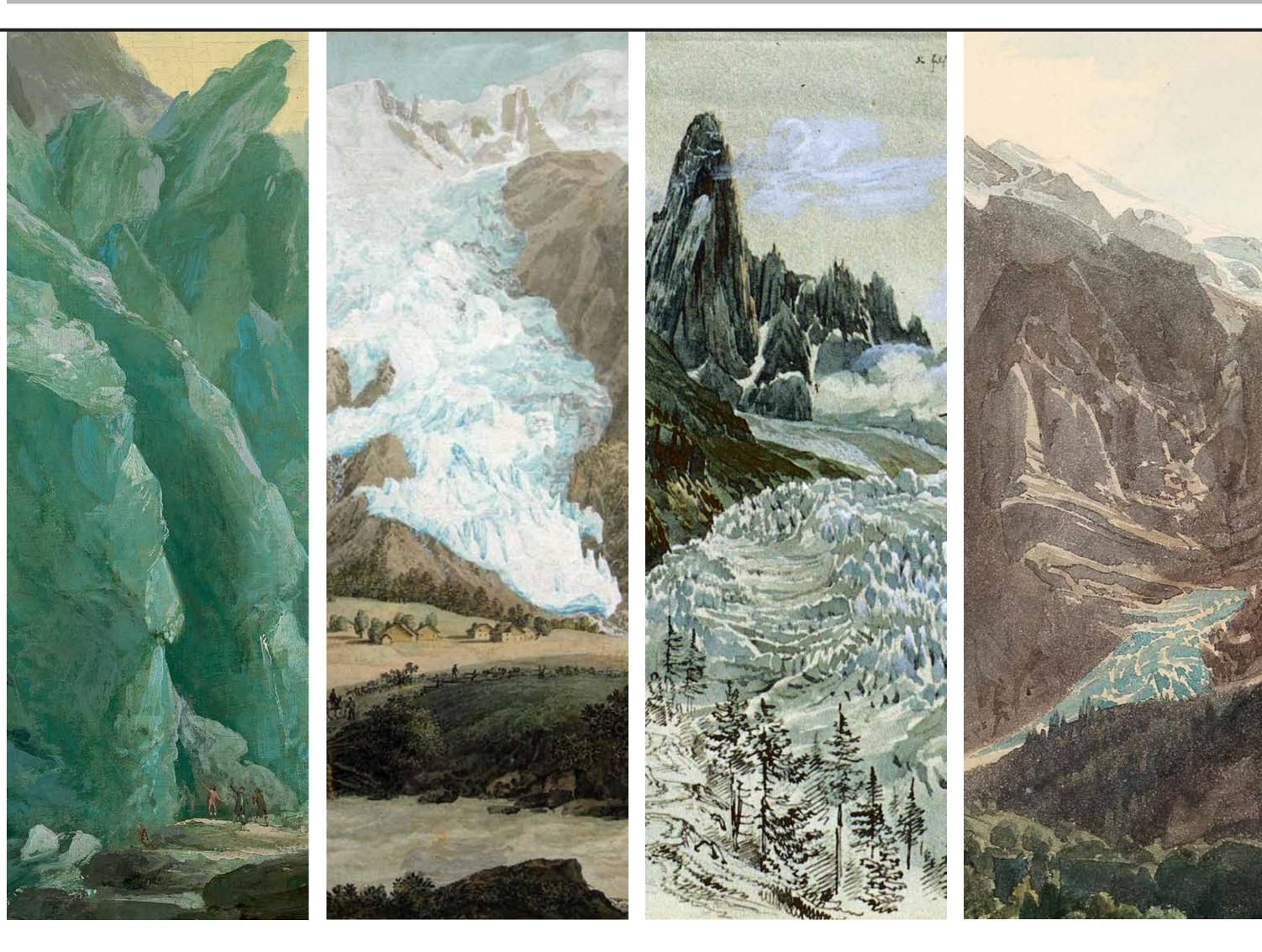
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# Cumulative length changes for selected Alpine glaciers 1535–2021 with a special view on J.-A. Linck 1790–1820/22 Upper Grindelwald Glacier Year AD Data: S. U. Nussbaumer, P. Imhof.

#### Reference and further reading:

Nussbaumer, S. U. and H. J. Zumbühl (2023): The glacier views of Jean-Antoine Linck – a milestone for the Mont Blanc glacier history from the 18th to the 19th century. Journal of Alpine Research, 111-2, doi:10.4000/rga.12235.



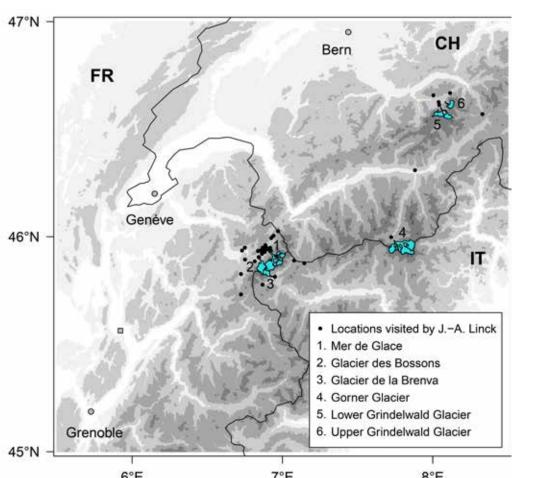
#### Context

Interdisciplinary approaches are needed to reconstruct the behaviour of glaciers beyond the beginning of systematic measurements. Especially for time period of the Little Ice Age (LIA), historical documents have been used to successfully reconstruct former glacier extents at well-documented sites. This includes the Mont Blanc area that has become popular since the mid-18th century. Parallel to the scientific studies influenced by Marc Théodore Bourrit and Horace-Bénédict de Saussure, also poets, writers, artists, and other scientists found new sources of inspiration in those mountains.

Among these, a very prominent artist was Jean-Antoine Linck [2], born in Geneva on 14 December 1766, to whom we owe the greatest number of unique glacier views. Since 1789, Linck drew mainly Alpine landscapes from Savoy to St Gotthard, covering a period from the late 1780s to 1820/22. His special preference were the ice regions, which he drew with alpinistic daring and naturalistic correctness. This makes him not only the artistically most important practitioner of mountain painting in the Genevese school at that time, but also a pioneering artist of the scientifically verifiable representation of high mountain areas.

The map to the right gives a geographical overview of the (known) glacier artworks by Jean-Antoine Linck.





#### Jean-Antoine Linck and the glacier evolution from c. 1790 to 1820/22

Linck's preferred medium was gouache, but many pencil sketches are preserved, too. Linck subtly used the etching technique to create easily reproducible plates in large format, which are then hand-coloured with gouache and watercolour. This technique allowed him to create numerous reproductions of the same view, while still giving them a unique and original aspect. He was thus able to meet the demands of a growing number of customers who wished to take home the memory and views of the regions they visited. From a perspective of glacier history, in particular for the Mont Blanc area, the work of Jean-Antoine Linck is indispensable since it provides a differentiated view of glacier development of the Mer de Glace and other glaciers (cf. Figure above) from the end of the 18th century until around 1820.

An important document is Linck's watercolour showing the retreated Glacier des Bois at the end of the 18th century [3]. It shows the terminus of the Mer de Glace highly debris-covered and seriously melted back, nearly 600 m behind the LIA maximum position, but still reaching down to the plain. Dead ice and ponds are formed in front of the snout. The glacier is exactly drawn with white, blue, and green colours that set a contrast to the surrounding terrain. On the left, the Côte du Piget hill and parts of the lateral/terminal moraine can be seen. Coarse blocks indicate a frontal moraine that is burst by the Arveyron river. Only a few years later, Linck produced a watercolour and gouache drawing, showing the front of the Glacier des Bois with a different view [4]. This detailed drawing reveals the re-advane of the glacier, with a highly crevassed surface and with the snout partly caved in.

Around the same time, a stunning novelty shows the Glacier des Bossons at two points in time: As a keen observer of glaciers, Linck is probably the first artist to show a glacier advance with the help of two realistic and accurate views from the same position; one as the glacier retreats [5] and the other as it advances [6]. This quasi-scientific approach by Linck, far ahead of the times, would not be taken up again with the worldwide movement of glacier observations that emerged in the second half of the 19th century.

#### Alpine glacier landscapes from idealistic-realistic to romantic-realistic to

photo-realistic

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We owe our knowledge of the appearance of LIA glaciers with their advancing, paw-like ice fronts, steep ice cliffs and glacier snouts above all to four outstanding landscape artists who created a large number of high-quality glacier views. Glacier landscapes are particularly "real natural landscapes".

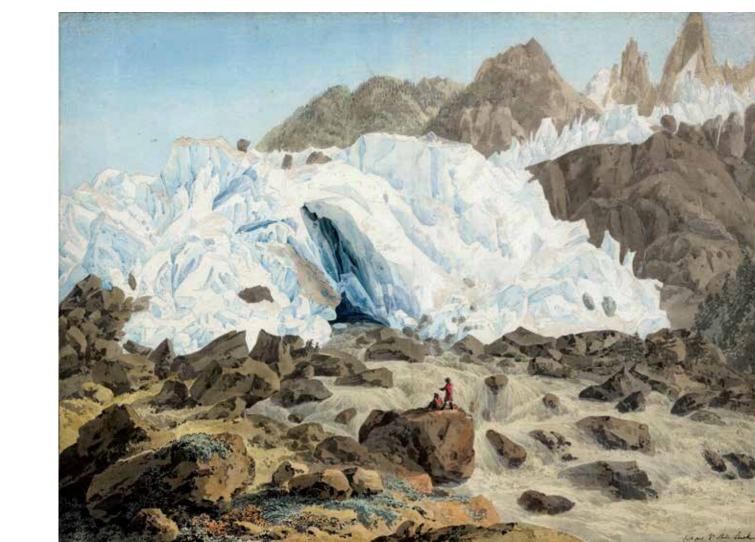
Idealized-realistic glacier landscapes were created by the Swiss Caspar Wolf (1735–1783), who is probably the most important pioneer of the depiction of Alpine high mountains in the late 18th century. On probably eight journeys from 1774 to 1778/79, he made about 200 oil paintings and other studies (61 glacier views).

From the end of the 18th century, romantic-realistic glacier landscapes were created by Jean-Antoine Linck (1766–1843). Linck studied nature as it is and hence renewed in some way the approach by Caspar Wolf. These illustrations introduced the realistic representation of the high mountains into the iconography of Genevese painting and thus led to a new kind of landscape painting.

Samuel Birmann (1793–1847), the great master of topographical landscape art from Basle, is a second artist to whom we owe a wealth of romantic-realistic views. His 100 glacier views created between 1814 and 1835, mostly watercoloured pencil-pen nature studies, represent the culmination of landscape depictions of the Romantic period.

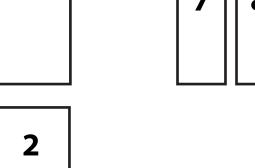
Finally, almost photo-realistic glacier landscapes were produced by the Austrian **Thomas Ender** (1793–1875), probably the most important landscape painter and great master of his time in the Eastern Alps. It was reality that Ender sought as a true teacher, the infinite variety of free nature and its forms and beauties, which he studied in every detail.





## Figure captions







- Masterpiece of glacier and landscape representation of the Mer de Glace in 1799 seen from Le Chapeau (drawing by J.-A. Linck, private collection)
- Portrait of J.-A. Linck by J. Hornung (Bibliothèque de Genève). Retrating Glacier des Bois with quite small extent at the end of the 18th
- Very fine watercolour drawing by Linck showing the advance of the Glacier des Bois at the beginning of the 19th century (private collection).
- Glacier des Bossons by J.-A. Linck (drawings, private collection).
- Glacier des Bossons drawn around its 19th century maximum by J.-A. Linck (private collection).
- Upper Grindelwald Glacier by T. Ender probably 1854 (private collection)
- century (drawing by J.-A. Linck, Musée d'ethnographie, Genève). [5],[6] Stunning representation of the retreating and advancing tongues of the Steep front of the Lower Grindelwald Glacier painted by C. Wolf in 1774 and/or 1776/77 (Museum Oskar Reinhart, Winterthur). Glacier des Bois drawn by S. Birmann in 1823 (Kunstmuseum Basel).



