

Unveiling Frozen Lands and Seas: Nineteenth Century Mapping of the Arctic

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Abstract:

The exploration of polar regions during the nineteenth century benefitted from increased accessibility due to a slight but steady rise of Arctic temperatures since the end of the Little Ice Age (15th-18th centuries) and the freeing of human and material resources following the defeat of Napoleon Bonaparte at Waterloo in 1815. These developments enabled the heydays of Arctic discovery expeditions with a gradual unveiling of polar regions on maps and charts.

This paper takes a view on the progress of Arctic cartography through the lens of a third novelty that emerged during that century: Periodicals as vehicles of information and means of public pressure by an increasingly influential European bourgeoisie. A case is made that the emerging popular and (later) scientific journals served as transmission belts between the public and explorers / governments that decisively pushed forward Arctic exploration since the 1810s. It was through map adorned journal articles that a broader public obtained first current and visualized representation of the mysterious polar land and sea scapes, long before such research took the form of more in-depth memoirs and book volumes.

The paper demonstrates the reporting progress of cartographic representation of the Arctic by using German geography journals as the national case study. Examples are taken from *Neue Allgemeine Geographische Ephemeriden*, *Zeitschrift für Erd-, Völker- und Staatenkunde*, and, most prominently, *Mittheilungen aus Justus Perthes' Geographischer Anstalt*, the journal of noted cartographer August Petermann, the spiritus rector of German polar exploration. Map samples to indicate the regional map progress are on the Northwest Passage (1810-1850s), the Northeast Passage (1820-1880s), and the quest for the Pole itself (1850-1900s).

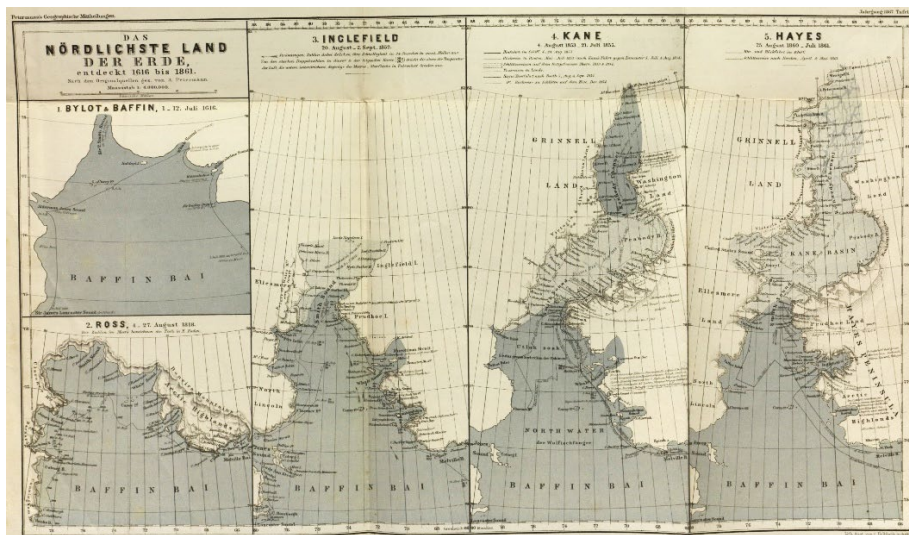


Figure 1. Time series visualization of exploration progress from Baffin Bay into Smith Sound, 1616 – 1861

(*Mittheilungen aus Justus Perthes' Geographischer Anstalt*, Vol. 13 [1867]).