

The history of the Arctic expeditions and the climatic and political background of the time

Shuheï TAKAHASHI¹

¹ Okhotsk Sea Ice Museum of Hokkaido, Mombetsu, Japan

When reviewing the history of the Arctic expedition, I noticed that the history is related to climate change and also national political circumstances. Categorizing them to the Northwest Passage, the Northeast Passage and the North Pole exploration, I will explain them each by each and mention to the current Arctic sightseeing cruise following the historical expedition.

Main Arctic expedition routes are shown in Figure 1. Figure 2 shows how each expedition advanced in longitude along the Northwest and the Northeast Passages. Figure 3 is the same for the history of North Pole expeditions.

In the Northwest Passage, Baffin explored along Baffin Island to the north in 1616. He reported the Northwest Passage would not exist, because the high and low tide difference decreased when he went north. Therefore the challenger to the Northwest Passage did not appear afterward for 200 years.

When Napoleon surrendered in 1815 and a peace treaty was concluded, a large number of warships of U. K. became redundant. Therefore the exploration of the Northwest Passage by U. K. navy was reopened.

Franklin was loaded with 5-year food in two ships in 1845, and departed to the Northwest Passage. However, the Franklin corps was missing, and all 129 people died. Approximately 50 parties searched them for 30 years, and the map of the Canadian Archipelago was completed. By this map, Amundsen succeeded to pass the Northwest Passage for the first time.

In addition, we can read various features from the graphs.

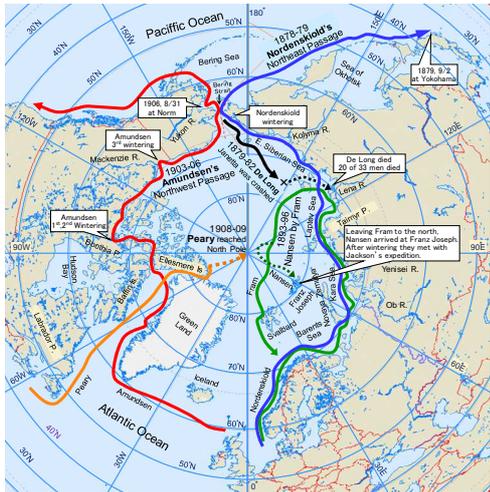


Figure 1. Main expedition's routes in the Arctic Ocean

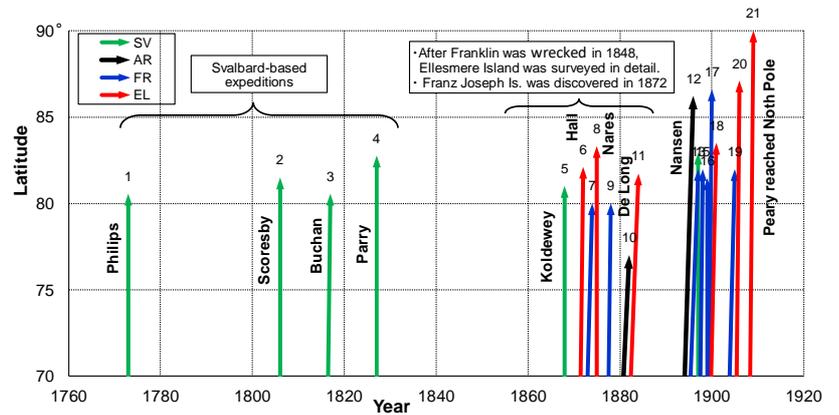


Figure 3. The arrival latitude of each expedition towards the North Pole. SV (green): Svalbard base, AR (black): Arctic Ocean drifting, FR (blue): Franz Joseph Islands base, EL (red): I show Ellesmere Island base.

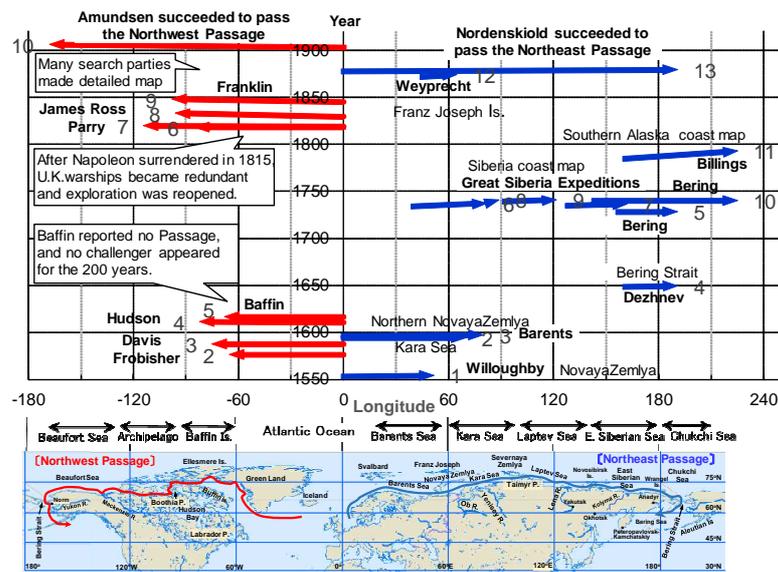


Figure 2. The arrival longitude of each expedition and its year (minus longitude means in west). Red arrows are for the Northwest Passage expeditions and blue arrows are for the Northeast Passage. The longitude of the graph is the same with the lower map. A red line in the map shows the Amundsen's Northwest Passage and a blue line shows the Nordenskiöld's Northeast Passage.