Mary R. Tahan * Cornelia Lüdecke

STRANDED AT THE TOP OF THE WORLD

A Story of Exploration and Heroic Rescue in the Arctic

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Cover image: Photo from Arve Staxrud's rescue expedition, in search of Herbert Schröder-Stranz's expedition, on Spitsbergen in 1913; the crossing of a glacier crevasse. Photographer: Arve Staxrud; Source/Owner: Svalbard Museum

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In memory of Olga Rosette Karam Tahan.

To K.A. and Catherine.

In memory of Bernhard Fritscher.

And in memory of the seven German expeditioners who disappeared and the one Norwegian expeditioner who died in Svalbard in 1913.

And finally, for all the animals who have aided humans—at home and on the ice.

Preface: A Tale of Ambitious Exploration and Heroic Rescue in the Arctic

This book tells the story of the Norwegian Captain Arve Staxrud's Rescue Expedition of 1913 that searched for and successfully rescued members of the German Lieutenant Herbert Schröder-Stranz's expedition of 1912 to Spitsbergen (today called Svalbard). It is the first book to portray the Staxrud expedition in detail and combine the chronological events of both the Staxrud and Schröder-Stranz expeditions as well as the concurrent rescue expeditions that failed. The story follows the overland ice, fjord, and glacier crossings of Staxrud and his expedition members to reach the German expedition vessel *Herzog Ernst* where it lay locked in the ice in Treurenberg Bay and to find the stranded members who had gone separate ways across the ice in West Spitsbergen and who had disappeared in Northeast Land. It recounts the adversities and adventures of both the rescuers and those who hoped to be rescued. And it examines the controversial personalities and methodologies involved in both enterprises, including the ambitious and unprepared Schröder-Stranz, and the organized and at times criticized Staxrud.

A brief summary of this story had been featured in author Mary R. Tahan's previous book *Roald Amundsen's Sled Dogs: The Sledge Dogs Who Helped Discover the South Pole*, and the events were further documented in her sequel book *The Return of the South Pole Sled Dogs: With Amundsen's and Mawson's Antarctic Expeditions*, including the tale of the two sled dogs Lussi and Storm from Roald Amundsen's Norwegian Antarctic Expedition of 1910–1912 (the South Pole Expedition) who participated in the Staxrud Expedition dispatched to search for and rescue Schröder-Stranz. This new account features a wider documentation and expanded version of the story, incorporating details written by Tahan and co-author Cornelia Lüdecke, who has also written about Schröder-Stranz in previous publications, including *Wissenschaft, Abenteuer und Prestige—Deutscher Brennpunkt in Spitzbergen in der Vorkriegszeit 1910–1914*.

Recent research conducted for this book has resulted in the discovery of interesting new information that sheds light on the Staxrud Rescue Expedition's impact on later search-and-rescue expeditions in Spitsbergen/Svalbard. The new information also provides further insight about the inner workings of the Schröder-Stranz expedition.

The Staxrud rescue expedition with the *Hertha*, under the leadership of trail-blazing topographer and surveyor Arve Staxrud, was composed of Norwegian officers and crew, local overwintering experts and trappers, Sámi reindeer herders (reindeer walkers), trained and experienced sledge dogs, and sledge-pulling draft reindeer, all of whom conducted an extensive overland and sea search-and-rescue operation among the frozen icefields, fjords, and glaciers of Spitsbergen, to find and save the German officers, scientists, and marine artist, as well as the Norwegian sailors and crewmembers, of the Schröder-Stranz expedition aboard the *Herzog Ernst*. The Staxrud rescue expedition crossed the length of West Spitsbergen four times, in two separate journeys, using sled dog teams during both journeys, as well as sledge-pulling reindeer during the first journey, to reach the iced-in Schröder-Stranz ship and the Swedish Arc-of-Meridian hut in Treurenberg Bay, where some of the expeditioners were stranded, and to endeavor to reach Northeast Land where Schröder-Stranz himself and three of his companions, along with their dogs, had attempted to sledge across the ice and had disappeared.

Information incorporated into the book includes how the Schröder-Stranz expedition materialized and came to be in Spitsbergen at such an unusually late time of year and how the Staxrud expedition was formed, planned, and expertly carried out. It also includes the attempts and failures of other rescue expeditions to find and save the Schröder-Stranz expedition members—failures which sometimes endangered the lives of the very people whom the rescuers were seeking to save, and failures which also necessitated the rescue of the would-be rescuers. And it includes how previous German expeditions had conducted forays into the Arctic, how the Germans had used Spitsbergen as a staging ground and as preparatory fieldwork for launching expeditions to Antarctica, and how subsequent rescue missions and expeditions in Svalbard were strengthened and better-strategized due to the successes and results of the Staxrud rescue mission and based on the Staxrud expedition's effective performance.

A description of the use of animals in both the Norwegian and German expeditions and in the search-and-rescue efforts conducted by Staxrud is included, demonstrating the crucial role that sled dogs and draft reindeer performed in preserving human lives and in aiding those expedition members who sought to rescue the stranded expeditioners. The role of animals as life-sustainers and as nutrition for the marooned expeditioners is analyzed as well in terms of the Polar bears, Arctic foxes, and wild reindeer that were hunted and consumed by the stranded men as well as by the rescue expedition members.

The activities and presence of Sámi in the rescue efforts also are featured in the story, depicting the important part they played in acting as guides and reindeer walkers and in providing expert assistance that was vital to both the rescuers and the rescued expedition members.

This is the story of a group of people who were stranded on a group of islands in the Arctic Ocean—islands that themselves seem isolated in the middle of the ocean at the top of the world, north of Norway, and south of the North Pole. It is the story of how the men and dogs of an Arctic expedition became victims of the uninformed ambitions of their leaders and how some of them were saved by a humble

and unassuming interspecies rescue mission made up of men, dogs, and reindeer, who found some of the stranded expeditioners and brought them home.

Most of the documentation contained in this book is based on original source material including letters, telegrams, and reports written by Staxrud, newspaper interviews with Staxrud, diaries and recollections written by members of Staxrud's expedition and Schröder-Stranz's expedition, first-hand account books and reports written by members of Schröder-Stranz's expedition, official reports from Norway and Germany, and correspondence written by influential personalities affiliated with the organization of the rescue expedition. These letters, diaries, articles, and reports have been translated from their respective Norwegian and German languages into English.

The sources researched and utilized include original unpublished documents and original photographs housed in archives at several institutions, including the National Library of Norway in Oslo; the Norwegian Polar Institute in Tromsø; the Svalbard Museum in Svalbard; the Gazert Estate, Volkert Gazert, in Partenkirchen; the Herzog Ernst II estate in Mauritianum, Altenburg; the Drygalski estate, Thomas Mörder, in Feldkirchen-Westerham; the Schröder-Stranz Estate, Leibniz Institute for Regional Geography, in Leipzig; the Ritscher estate, Leibniz Institute for Regional Geography, in Leipzig; and the Ritscher Estate, Cornelia Lüdecke, in Munich. The sources also include original research conducted by Mary R. Tahan regarding the history and biographies of the South Pole Expedition sled dogs.

The Staxrud rescue mission of 1913 brought together humans and animals in an organized, engaged, and well-prepared expedition that sought not to seek fame but to seek and save lives who were at risk in the Arctic. Though lesser known in the annals of history, this diverse expedition exemplified cooperation and concern for life—worthy traits and actions to study and spotlight, especially in light of how world events continued to unfold after the expedition and through today. It is hoped that this documentation and telling of the true tale, as featured in this book, will bring more recognition to this portion of history and will inspire a closer look at the remarkable actions of these human and animal actors in the Arctic.

Vancouver, BC, Canada — Mary R. Tahan
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The authors would like to state that this has been a very positive, productive, and special collaboration, working together and using Norwegian and German sources to tell the little-told tale about a rescue mission comprised of humans and animals who cooperated to rescue members of an ambitious but poorly-planned expedition and who persevered in order to save and preserve lives and thus honor the importance of life.

Contents

About the Authors

Mary R. Tahan is a writer, producer, and documentarian, with a professional background in journalism and marketing. She has authored journal articles and historical books and produced and directed documentary films. Her articles, lectures, and presentations focus on Antarctica, the "Heroic Age of Antarctic Exploration," and the mid-twentieth century, as well as the Arctic region, and cover many countries. As part of her research on Polar exploration, Mary R. Tahan traveled to Antarctica by invitation of the Dirección Nacional del Antártico (Instituto Antártico Argentino), where she was awarded an art residency to live and work on the Antarctic continent. There she performed on-site photography and videography of the Antarctic landscape, wildlife, animals, and historical sites, as well as conducted interviews with scientists and curators. Her research has also taken her to Argentina, Norway, France, Russia, the USA, Australia, Canada, and England, where she has visited significant sites and also interviewed descendants of the early explorers of the Arctic and Antarctic. She has presented her work at The Scientific Committee on Antarctic Research (SCAR) and the Encuentro de Historiadores Antárticos Latinoamericanos (Meeting of Latin American Antarctic Historians) conferences, as well as at Centro Austral de Investigaciones Científicas del Consejo Nacional de Investigaciones Científicas y Técnicas (CADIC-CONICET). She was a featured speaker at the *Visions on Antarctica* Fundación PROAntártida International Symposium, is a member of the SCAR Standing Committee on the Humanities and Social Sciences (SC-HASS), and was nominated as Honorary Historian for the Argentine Navy.

Mary R. Tahan's previous books include *Roald Amundsen's Sled Dogs: The Sledge Dogs Who Helped Discover the South Pole*; *The Return of the South Pole Sled Dogs: With Amundsen's and Mawson's Antarctic Expeditions*; and *The Life of José María Sobral: Scientist, Diarist, and Pioneer in Antarctica.*

Cornelia Lüdecke is a meteorologist, an expert on German polar history, and a retired professor of history of natural sciences from the University of Hamburg. She has written 22 books and 195 papers focusing on the history of geography, polar research, meteorology, and oceanography. She gained practical experience during meteorological expeditions on aircraft in the Alps and the Northern Territories (Australia) as

well as on the research vessels *Gauss III* and *Meteor II* in the German Bight and the Atlantic. Later, she accompanied an expedition to Svalbard on board the *Maria S. Merina* as polar historian, where she visited the remains of Polhem, Treurenberg Bay, and Schröder-Stranz's last camp. Currently she is lecturing about polar expeditions on board cruise ships to the Arctic and Antarctic. Since 1991, she has been leading the German History of Polar Research Working Group. She also chaired the German History of Meteorology Specialist Group (1995–2018). In addition, she was Vice President (2001–2006) and President (2006–2009) of the International Commission on History of Meteorology. In 2004 she founded the Action Group on History of Antarctic Research for The Scientific Committee on Antarctic Research, which was transformed into the SCAR Standing Committee on the Humanities and Social Sciences (SC-HASS), which she co-led until 2021. She also served as Vice President of the International Commission on the History of Oceanography (2012–2021). She received the Reinhard Süring Medal in 2010 and the Paulus Award in 2019, both from the German Meteorological Society. In 2012 she became a corresponding member of the International Academy of the History of Science in Paris.

Cornelia Lüdecke's previous books include *Germans in the Antarctic*, *The Third Reich in Antarctica*, *Erkundung der Arktis im Dienste der Wettervorhersage*, and *Amundsen—ein biographisches Portrait.*

Chapter 1
Introduction: Norwegians and Germans in Spitsbergen (Svalbard)

Prologue: The Meeting in Tromsø—Fridtjof Nansen and Alfred Ritscher (August 5, 1913)

The esteemed Northern explorer Fridtjof Nansen, formulator of the ice drifting method of ship travel near the North Pole, mentor to South Pole explorer Roald Amundsen, designer of the rounded vessel *Fram*, and trusted global diplomat with stellar scientific background and reputation, stepped off the steamer in Tromsø, Norway and went about completing the final tasks of preparation prior to undertaking the major portion of his travel northward (Nansen, 1914; Tahan, 2019, 2021).

He had left Christiania (Kristiania, today: Oslo) a few days prior, on August 2, 1913, traveling by train to Trondhjem (Trondheim), then boarding a transit steamer to Tromsø, where he arrived on a rainy midday on the 5th of August (Nansen, 1914, 1–8). The famous Norwegian figure was due to depart again that very evening, on the steamer *Correct*, embarking on a journey to Siberia to establish a trade route between Europe and Russia—specifically North Norway and the interior of Siberia—by way of the Arctic Ocean's Kara Sea, through which the great explorer himself had once sailed, and by way of the mouth of the Yenisei River.

In the midst of his preparations in Tromsø, a message was delivered to him, requesting that the respected explorer visit Alfred Ritscher, the young German captain of the ill-fated Schröder-Stranz expedition who had survived an unimaginable ordeal in Spitsbergen (today: Svalbard) and who now lay convalescing at the Catholic hospital in Tromsø, having lost his foot as a result of the tragic events (Nansen, 1914, 8–10). Ritscher's injuries had led to the amputation of half of his right foot as well as the large toe of his left foot and the two leading joints of his small finger on his right hand (Ritscher, 1916, 28).

Herbert Schröder-Stranz's expedition, in which Ritscher had participated, had ventured north to Spitsbergen the previous summer of 1912 and, by autumn, had found itself in dire straits (Nansen, 1914, 8–10). Nansen himself had helped to coordinate a rescue operation for the German expedition, resulting in a relief expedition

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organized and led by the Norwegian captain Arve Staxrud and dispatched the ensuing spring. Now, on this day, Nansen graciously accepted the invitation to meet with this survivor, and visited him at his bedside. He marveled at the young individual's perseverance in survival and his forthrightness about the lack of experience which had led the Schröder-Stranz enterprise to the disaster it had encountered. For the young captain candidly admitted to his visiting guest that the German expeditioners' inexperience and lack of knowledge were two factors that had led to decisions which later proved to be unwise and that were the source of the predicament in which Ritscher now found himself. All of the expeditioners had suffered. Eight men had died, and only seven had survived. The young captain now reclined in his hospital bed, injured, thoughtful, and wishing to return to Spitsbergen to retrieve his rescued ship, the ship that had been imprisoned in the ice as a result of the hasty and ill-timed voyage.

It was the draw of the North, the draw of the ice that drew some people to their misfortune and to their deaths, thought the Norwegian explorer Nansen after his meeting with the young German (Nansen, 1914, 10). Inexperience and lack of knowledge only compound the already adverse conditions that await a traveler in the Arctic. The older gentleman walked away from the young captain pondering *what if*—What if he, Nansen, had been able to stop the German expedition in time, to have helped them avoid the tragedy that eventually befell them. After all, he had been sailing in his small yacht *Veslemøy* on a scientific cruise in that very same area north of Spitsbergen and Hinlopen Strait during the very same time that the German expedition had been there—in August of 1912. Maybe a fortuitous encounter would have changed the course of events? If only he had had an opportunity to advise the expedition men on the *Herzog Ernst*, maybe they would have all lived to tell the tale? But fog had been prevalent in that area at that moment of time, recalled Nansen, and the two vessels surely must have passed one another unknowingly.

They must have passed one another literally like two ships proverbially passing in the night.

And so it was. It was too late to go back, impossible to travel back in time. What had happened, had already happened. It had occurred in the far North, on the group of islands that reside in the Arctic Ocean, situated at the top of the world, nearly halfway between northern Norway and the North Pole. It had happened here, in the extreme Arctic archipelago that was Spitsbergen.

The Archipelago in the Arctic Ocean: "No Man's Land" (June 1596)

The first documented sighting of the archipelago in the Arctic Ocean was made in June 1596 by the Dutch sailor Willem Barentsz (ca. 1550–1597), a navigator who led an expedition from Amsterdam in search of the Northeast Passage (Rabot, 1919; Rudmose Brown, 1919; Svalbard Museum/Willem Barentsz; Berg, 2020). The

voyage was Barentsz's third attempt to establish a trade route in the North Sea area for the Dutch, having previously traveled in 1594 and 1595.

This third expedition comprised two ships, and Barentsz sailed on the ship captained by Jacob van Heemskerck, while the second ship was captained by Jan Cornelisz Rijp. Rather than finding a sea route along the north, the expedition came upon land—first, Bear Island (Bjørnøya), at the southern vicinity of the group of islands, and then, further north, up to nearly 80º N, the mass of land that was part of the Spitsbergen (Svalbard) archipelago. This land, described as mountainous and covered with sharp peaks, was given the name Spitsbergen. And the first mapping of it was created and subsequently introduced to The Netherlands in 1597 by the returning members of the expedition led by Barentsz, who himself had died on the return journey while overwintering in Novaja Zemlja.

Situated approximately 600 miles south of the North Pole and 400 miles north of the northern coast of Norway, and comprising two large islands—West Spitsbergen and Northeast Land—as well as many smaller islands, the Spitsbergen archipelago covers approximately 25,000 square miles along the Arctic Ocean; as far as was known then and today, there were no indigenous peoples who resided there (Rudmose Brown, 1919).

It is as though, in modern terms, the archipelago were a veritable miniature Antarctica existing in the vast Arctic Ocean, in that there were no inhabitants. Indeed, it would subsequently become known as *terra nullius* (no one's land) or "no man's land" – but that designation was not just for the lack of people but rather for the lack of sovereign rule or territorial claim or imposed laws (Berg, 2020; Rudmose Brown, 1919). The Arctic was connected, however, by the group of countries and territories surrounding the Arctic Circle, including Norway, Greenland, and Russia, and the knowledge that Barentsz's expedition brought back about Spitsbergen's presence elicited further investigation and an excited rush for living resources. Soon humans were attracted to the abundant wildlife in the Spitsbergen area—not for observation, but for consumption. The 1600s and 1700s were filled with waves of hunters and trappers who sailed from Europe and Scandinavia and Russia, hunting and depleting the walrus, whale, and seal populations on and around the islands, as well as hunting polar bears, foxes, and reindeer in the area (Rabot, 1919; Rudmose Brown, 1919; Svalbard Museum/The Pomors). These hunters and fur trappers were meeting the brisk demands of an economy back home and supplying popular animal products as well as the initial products of a burgeoning whale oil industry.

The Run for Resources: Whaling, Hunting, Touring, and Mining (Seventeenth Century–Twentieth Century)

Serious whaling ensued and became an international enterprise in Spitsbergen during the early seventeenth century and the eighteenth century, beginning in the fjords among the islands and along the coast and spreading out to the sea around the

archipelago (Svalbard Museum/Whaling; Berg, 2020). As of the end of the eighteenth century and the beginning of the nineteenth century, a near-extinction of the whales in the area had unfortunately resulted. The ceaseless and merciless massive large-scale hunting of the whale, which had destroyed the population and nearly consumed the entire existence of this mammal, was finally at an end in this region.

But the hunt for animals did not cease. In the twentieth century, tourists from different parts of the world, armed with money and more, now joined the fray, flocking to the archipelago and taking cruises along the coast and the fjords, sailing on ships from where some of these summertime vacationers would leisurely shoot at polar bears as they spotted them along the way, or hiking through the valleys where they would happily shoot a multitude of reindeer for gleeful sport, leaving behind their carcasses strewn across the ground (Berg, 2020; Rudmose Brown, 1919). Perhaps this, too, was an early form of trophy hunting.

Hunting as a means of living and as a vocation was taken up by certain individuals—hunters and trappers—who would overwinter on the archipelago, spending 10 to 11 months on the islands hunting, shooting, capturing, and trapping as many animals as they could to take back home (Svalbard Museum/Trapper Life). The targets of their long stays and physical endeavors were the fur and/or meat or body parts of foxes, polar bears, walruses, seals, birds, and reindeer. Norwegian overwintering hunting and trapping expeditions began in 1795 and continued in the early 1800s—the first of which, in 1795/1796, included Russians who helped and trained the Norwegian expedition members. Over the years the number of hunters increased, and a system of essential hunter's cabins and hunter's huts was established, as well as a network of animal traps devised. The type of prey dictated the method used to incapacitate and kill the animals. The round-the-clock daylight of the summer constituted the majority of the hunting activity timeframe. Many of the overwinterers who faced danger, winter's darkness, isolation, and extreme elements in order to hunt, came from Norway's mainland, including Hammerfest, Tromsø, and the northern coast.

The hunting of whales, walruses, and Arctic animals, which had begun at the beginning of the 1600s, had caused the convergence of English, Dutch, Norwegians, Danish, Spaniards, French, Germans, and Russians, in the Far North. They would be joined by Americans.

At the end of the nineteenth century, coal was found on Spitsbergen and brought renewed attraction from all parts of the globe. In 1899, the Norwegian ice pilot and captain Søren Zachariassen (also spelled Zakariassen)[1] (1837–1915) shipped a major load of coal from Spitsbergen to the mainland of Norway—it was the first such commercial shipment and was sold successfully (Svalbard Museum/Mining; Stenersen, 1988; Norsk Polarhistorie.no/Søren Zachariassen). The pursuit of natural mineral resources accelerated at this time. Just as whale oil had attracted sailors, now fossil fuel drew entrepreneurs. John Munro Longyear (1850–1922), an American mining businessman originally from Lansing, Michigan, visited Spitsbergen in 1901, and established the Arctic Coal Company in 1906. The mining company,

[1] Zachariassen is the spelling used in the text throughout this book.

located in Advent Bay in the settlement Longyear City, later would be purchased by the Norwegian company Store Norske Spitsbergen Kulkompani—Great Norwegian Spitsbergen Coal Company—in 1916 (Svalbard Museum/Mining; Rudmose Brown, 1919; Longyear Museum; National Mining Hall of Fame; Berg, 2020). Other mineral mining companies founded on the archipelago included the Englishman Ernest Mansfield's Northern Exploration Company. The establishment of the American coal company and similar companies, with their civilian infrastructures and Norwegian labor forces, marked the advent of mineral mining enterprises on Spitsbergen during the twentieth century and the rise of mining activity. It was a veritable coal rush in the wild, wild north.

A Taste for Scientific Exploration: Norwegians, Swedes, and Britons (During the 1800s)

Meanwhile, scientific interest in Spitsbergen was sparked among many, including notable British explorers and expeditions, and was pursued quite strongly and intensely by several Swedish explorers and expeditions.

It is reported that one of the first Norwegian expeditions to Spitsbergen for scientific purposes was undertaken by Professor B. M. Keilhau (Balthazar Mathias Keilhau [1797–1858]) of the University of Christiania, in 1827, during which he studied the geology, paleontology, and botany of the islands (Rabot, 1919; Committee to Norske Geografiske Selskap 18 March 1913). It is also reported that Norwegian hunters stalking walrus and seal populations geographically explored the land and waters of the islands during the mid and latter part of the 1800s, venturing out from western Spitsbergen—where the numbers of their prey had dramatically decreased due to their extreme hunting—and traveling further eastward and northward to Northeast Land, which is the second and the northernmost of the two largest islands within the archipelago.

When the Swedish scientist and explorer Adolf Erik Nordenskiöld (1832–1901) planned his expedition from Spitsbergen (Svalbard) toward the North Pole to take place in 1872–1873, it would be the first overwintering in this area (Nordenskjöld, 1880, 154–241). Due to an infectious canine disease at the time, there were not enough dogs from Greenland available for the sledge trip from his planned wintering station on Parryøya (Parry Island), one of the Seven Islands (Sjuøyane) in northern Svalbard. Alternatively, he now wanted to use reindeer as draft animals, for the first time. The reindeer also presented the added advantage of serving as an excellent meat reserve for the men in case of food shortage.

Nordenskiöld set out from Tromsø on July 21, 1872, with two ships carrying the wintering crew of 22 individuals as well as the provisions and wood for the wintering station. Dense drift ice prevented them from advancing as far as Parryøya. When they turned back, they met a Norwegian ship whose crew informed them of very unfavorable ice conditions in northern and eastern Spitsbergen. In consequence of this

situation, Nordenskiöld's expedition retreated to Fair Haven in northeast Spitsbergen. On August 13, their third ship arrived there with 40 reindeer accompanied by four Sámi to care for the reindeer,[2] and with 3000 sacks of reindeer moss and coal. On August 17, a Norwegian fishing steamer passed by, having previously been trapped by ice in Liefde Bay for three weeks. Ice conditions seemed to be very bad in that year.

Later the Englishman Benjamin Leigh Smith (1828–1913) visited them on his way back from a hunting trip, having previously been stranded in Wijde Bay for five weeks (Nordenskjöld, 1880, 166; Capelotti, 2013, 82–83). Before Leigh Smith continued on his trip, he assured Nordenskiöld "that he wanted to be one of the first to find them the next year" (Nordenskjöld, 1880, 166). He already suspected that they would get into trouble.

Nordenskiöld turned a deaf ear to all warnings and continued his expedition north with two ships, but encountered drift ice already at a latitude of 80° 5′ N, so they had to turn back without success. Eventually, they reached Mosselbukta (Mossel Bay), where they set up their winter quarters and named their dwelling hut after their expedition ship Polhem. Three days later, the third expedition ship arrived with the reindeer moss and reindeer, who were now released to forage on land under the care of the Sámi. During a violent storm, all three ships were caught in the bay and later were trapped by the ice. Now 67 persons had to spend the winter together. By reducing the available provisions to 2/3rd portions, the food supplies would last just until April 1873, when new provisions were to arrive from Sweden.

During another strong storm, the 40 reindeer ran away to seek shelter in the mountains. Only one reindeer returned later. As a result, the expedition plan for a long sledge trip north had to be abandoned and, in addition, an important food source was lost. Due to insufficient food and the absence of hunting game, more and more cases of scurvy occurred during the winter. Nevertheless, a variety of scientific measurements were performed during the wintering.

On April 24, 1873, Nordenskiöld finally set out on his journey north with ten companions and a reindeer sledge and two other manhauled sledges. After running out of reindeer moss, they slaughtered their reindeer, who had proved to be a very useful draft animal. The reindeer's meat was a welcomed change to the daily pemmican. On May 16, the men finally reached Parryøya, their originally planned starting point. So that the "effort and work already used would not be entirely lost," Nordenskiöld chose for the return trip a route around the east coast of Northeast Land, which he wanted to map for the first time. When it became apparent that there was open water along the east coast, they could not continue their exploratory tour with the sledges. Nordenskiöld rescheduled again and steered his way south on June 1, where they came ashore Northeast Land at about 28°E and became the first to successfully cross the inland ice to Wahlenberg Bay.

[2] A. E. Nordenskiöld used the at-that-time contemporary term "Laplanders"; this term is no longer in use and will not be used in this book, as the proper name is Sámi, and therefore Sámi is the name used throughout this book text.

In the meantime, those who stayed behind fought scurvy but were not able to obtain much fresh meat by hunting. On June 13,[3] a steamer unexpectedly appeared in Mosselbukta. It was Benjamin Leigh Smith, who had guessed that he would find Nordenskiöld's expedition at that place (Capelotti, 2013, 103–106). As announced earlier, he brought plentiful provisions, such as "fresh potatoes, preserved vegetables, soups and preserved meats of various kinds, … citron juice, wine, tobacco, etc." (Nordenskjöld, 1880, 234) for the emaciated and sick men. The expedition doctor expressed it in these words: "To this help, which came just in time, we owe the salvation of several lives" (Nordenskjöld, 1880, 234).

On June 29, Nordenskiöld's group returned safely to Polhem. On the same day, the two supply ships left their anchorage for the voyage home. After further explorations, *Polhem* returned to Tromsø on August 6. Had Nordenskiöld taken seriously the warnings about the poor ice conditions, the expedition might have been more successful. However, he was able to demonstrate the usefulness of reindeer for sledging in the far north, and he was the first to describe the inner ice cover of Northeast Land. He also left his wintering hut Polhem and the unused bags of reindeer moss for later expeditions. In addition, his expedition served as important preparation for Nordenskiöld's great Northeast Passage navigation of 1878–1879.

Following Nordenskiöld's expedition on Spitsbergen, a cooperative scientific expedition to measure an arc of meridian in high latitudes was initiated at the end of the nineteenth century. The arc of meridian measurement expeditions were conducted jointly by Swedes and Russians, simultaneously in the north and south of Spitsbergen, respectively, and took place from 1898 to 1902 (Rudmose Brown, 1919). Both expeditions established overwintering huts: the Swedish in Treurenberg Bay and the Russian at the entrance of Hornsund. The facilities were not demolished after the return of the expeditions and therefore could be used later on.

Nordenskiöld's expedition employing reindeer, and the Swedish-Russian arc of meridian measurement expedition, would later have a direct and unforeseen effect on stranded members of a German expedition in 1912, and on the Norwegian rescue expeditioners who sought to save them in 1913. These events will unfold later in this narrative.

The Time for Topography: Surveying and Geology in the Far North (1906)

Up until the beginning of the twentieth century, the archipelago that was considered *terra nullius* also contained land that was *terra incognita*, as little was known about the archipelago's interior (Rabot, 1919).

Serious undertaking of topographical and geological surveying of Spitsbergen by Norwegians began in 1906 and continued beyond that year.

[3] Nordenskiöld's report incorrectly states July 12 (Nordenskjöld 1880, 233).

Prince Albert I of Monaco (1848–1922) financed and conducted the first such survey in 1906, enabling the Norwegian army cavalry captain Gunnar Isachsen (1868–1939), via an oceanographic cruise on the prince's yacht *Princess Alice*, to lead an expedition, consisting of a group of Norwegian researchers, to survey the land along West Spitsbergen over two consecutive summers—in 1906 and 1907 (Committee to Norske Geografiske Selskap 18 March 1913; Rudmose Brown, 1919; Rabot, 1919; Hoel, 1933; Stenersen, 1988). Working with Isachsen on this first expedition was a Norwegian lieutenant named Arve Staxrud (1881–1933), who employed a new method of photogrammetric surveying, and who led sledging journeys across the ice (Hoel, 1933; Stenersen, 1988) (Fig. 1.1). It was the first detailed mapping, geographical exploration, and geological study of a contiguous area in the interior of Spitsbergen, and the results were significant and received considerable response.

Norway's government took up the cause in 1909 and initiated a grant that funded Isachsen to conduct another expedition in 1909–1910 (Committee to Norske

Fig. 1.1 Captain Arve Staxrud, in a portrait by Anders Beer Wilse, date given 1911. *Photographer* Anders Beer Wilse; Source/Owner: Norsk Folkemuseum/National Library of Norway

Geografiske Selskap 18 March 1913; Norwegian Polar Institute/History; Rabot, 1919). It was an expanded affair that included additional scientists making a detailed survey of the northwest area of Spitsbergen, again led by Isachsen, and it incorporated travel by dog sledge (Rabot, 1919). The 1910 expedition again included the topographer Staxrud (Hoel, 1933; Stenersen, 1988). In 1911 and again in 1912, as part of what now became Norway's new state-supported Spitsbergen surveying and research program, the Norwegian geologist Adolf Hoel (1879–1964) and Captain Arve Staxrud led surveying expeditions to record the topography and geology of a now extended area of the western side of Spitsbergen (Committee to Norske Geografiske Selskap 18 March 1913; Rabot, 1919; Hoel, 1933). At the recommendation of Hoel and Staxrud, a committee was formed by the Norwegian Geographical Society in 1911 to administer the Spitsbergen expedition accounts (Stenersen, 1988).

Thus, detailed mapping of Spitsbergen's interior, specifically the inner districts of West Spitsbergen, was performed at this time by Norwegians, under the leadership of Adolf Hoel and Arve Staxrud, and under the auspices of state-financed surveys authorized by Norway's parliament (Committee to Norske Geografiske Selskap 18 March 1913; Rudmose Brown, 1919). It was the dawn of a new age of scientific exploration in the rugged Arctic frontier (Stenersen, 1988). These investigative surveying missions would be carried on annually, and would eventually help position Norway as the likely sovereign of these Arctic islands—a feat later accomplished in 1920 with the signing of the Svalbard Treaty (Norwegian Polar Institute/History).

The Telegraph Station: Communicating with the Outer World (1911–1912)

When the American journalist Walter Wellman (1859–1934) tried to fly to the North Pole with a dirigible from Danskøya in 1906, he sent the first wireless message from Spitsbergen (Svalbard) to *The Chicago Record-Herald* on July 24, 1906 (Capelotti, 1999, 71).

In the year 1911, Norway established the first permanent means of wireless communication between Spitsbergen and the outside world, by constructing a radio telegraph station in Green Harbour under the auspices and administration of the Norwegian state (Rudmose Brown, 1919; Norsk Polarhistorie.no/Spitsbergen Radio). Thus, for the very first time, overwinterers, explorers, and workers could communicate with the mainland of Norway and therefore send and receive news to and from the rest of the world south of the Arctic. The telegraph station in Green Harbour became a center of operations in Spitsbergen and would factor into the events of 1912 and 1913 quite significantly. By August 1912 it would be able to receive telegrams from Advent Bay, where a smaller telegraph station was erected by the Arctic Coal Company (Dole, 1922, vol. 2: 136–137), thus enabling intra-island communication. The Green Harbour telegraph station's existence also further strengthened

Norway's candidacy for sovereignty over the islands—sovereignty which would take effect when the Svalbard Treaty went into force in 1925.

But for now, as of 1912, the Spitsbergen land still belonged to no one, and continually attracted a small group of mining entrepreneurs, coal laborers, hunters/trappers, and scientific researchers who came to work on the islands, and whose activities came under no law or rule, and no jurisdiction.

With the stage set thusly at the end of the nineteenth century and the beginning of the twentieth century, into this timeframe entered the German exploration expeditions onto the Spitsbergen scene, seeking to combine science, sport, and surveillance through their own personal interactions with the icy Arctic archipelago—the archipelago that presented boundless potential, and that was known as Spitsbergen.

Unpublished Sources and Original Material

Committee Letter to Norske Geografiske Selskap, 18 March 1913, Letter from Committee to Norske Geografiske Selskap board, 1913_03_18_Brev_til_Norske_Geografiske_Selskap, Library Archives, Norwegian Polar Institute, Tromsø.

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References

Berg, R. (2020). The Svalbard "Channel", 1920–2020—A geopolitical sketch. In Weber, J. (Eds.), *Handbook on geopolitics and security in the Arctic. Frontiers in international relations* (pp. 303–321). Cham: Springer. https://doi.org/10.1007/978-3-030-45005-2_18

Capelotti, P. J. (1999). *By airship to the North Pole: An archaeology of human exploration*. New Brunswick, New Jersey, and London: Rutgers University Press.

Capelotti, P. J. (2013). *Shipwreck at Cape Flora: The expeditions of Benjamin Leigh Smith, England's forgotten Arctic explorer*. Calgary: University of Calgary Press.

Dole, N. H. (1922). *America in Spitsbergen: The Romance of an Arctic Coal-Mine*. In Two Volumes. Boston: Marshall Jones Company. Volume II. Facsimile reprint by Scholar Select.

Hoel, A. (1933). Arve Staxrud. In *Norsk Geografisk Tidsskrift [Norwegian Journal of Geography], 4*(6), 345–346. https://doi.org/10.1080/00291953308622018

Longyear Museum. John Munro Longyear. https://www.longyear.org/learn/pioneer-index/longyear-john-m/ and https://www.longyear.org/learn/research-archive/john-longyear-landlooker-from-michigan/. Accessed April 13, 2022.

Nansen, F. (1914). *Through Siberia, the land of the future*, (A. G. Chater, Trans.). New York: Frederick A. Stokes Company; London: William Heinemann. Digitized by Google. https://books.google.com. Accessed August 4, 2014.

National Mining Hall of Fame & Museum. John Munro Longyear. https://www.mininghalloffame.org/hall-of-fame/john-munro-longyear. Accessed April 13, 2022.

Nordenskjöld, A. E. (1880). *Die Nordpolarreisen Adolf Erik Nordenskjöld's 1858 bis 1879*. Leipzig: F.A. Brockhaus.