



MAGAZINE

Face-to-Face

Following a subtle trail of artifacts, a Canadian archaeologist searches for a lost chapter of New World history.

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20 MIN READ

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Something about the strange strands didn't fit. Patricia Sutherland spotted it right away: the weird fuzziness of them, so soft to the touch.

The strands of cordage came from an abandoned settlement at the northern tip of Canada's Baffin Island, far above the Arctic Circle and north of Hudson Bay. There indigenous hunters had warmed themselves by seal-oil lamps some 700 years ago. In the 1980s a Roman Catholic missionary had also puzzled over the soft strands after digging hundreds of delicate objects from the same ruins. Made of short hairs plucked from the pelt of an arctic hare, the cordage bore little resemblance to the sinew that Arctic hunters twisted into string. How did it come to be here? The answer eluded the old priest, so he boxed up the strands with the rest of his finds and delivered them to the Canadian Museum of Civilization in Gatineau, Quebec.

Years passed. Then one day in 1999 Sutherland, an Arctic archaeologist at the museum, slipped the strands under a microscope and saw that someone had spun the short hairs into soft yarn. The prehistoric people of Baffin Island, however, were neither spinners nor weavers; they stitched their clothing from skins and furs. So where could this spun yarn have come from? Sutherland had an inkling. Years earlier, while helping to excavate a Viking farmhouse in Greenland, she had seen colleagues dig bits of similar yarn from the floor of a weaving room. She promptly got on the phone to an archaeologist in Denmark. Weeks later an expert on Viking textiles informed her that the Canadian strands were dead ringers for yarn made by Norse women in Greenland. “That stopped me in my tracks,” Sutherland recalls.



Daring Viking seafarers used ships like this modern replica to reach the New World in their search for furs, walrus ivory, and trading partners—which they may have found in the native Dorset people.

The discovery raised tantalizing questions that came to haunt Sutherland and drive more than a decade of dogged scientific sleuthing. Had a Norse party landed on the remote Baffin Island coast and made friendly contact with its native hunters? Did the yarn represent a key to a long lost chapter of New World history?

Viking seafarers were the explorers par excellence of medieval Europe. Crafting sturdy wooden sailing ships that inspire awe even today, they set sail from their Scandinavian homeland hungering for land, gold, and treasure. Some voyaged west to what is now Scotland, England, and Ireland in the eighth century, bringing death by the sword in raids immortalized in medieval manuscripts. Many turned to foreign commerce. As early as the ninth century Viking merchants nudged eastward along the shores of the White and Black Seas and navigated the shoals of eastern European rivers. They founded cities on major Eurasian trade routes and bartered for the finest wares from the Old World—glassware from the Rhine Valley, silver from the Middle East, shells from the Red Sea, silk from China.

The most adventurous set their courses far west, into the treacherous fogbound waters of the North Atlantic. In Iceland and Greenland, Viking colonists carved out farming settlements and filled storehouses with Arctic luxuries destined for European markets, from walrus ivory to spiraling narwhal tusks that were sold as unicorn horns. Some chieftains, fearless in the face of the unknown, pressed farther west, navigating through iceberg-strewn waters to the Americas.



Donny Pitseolak patrols for polar bears on the shores of Baffin Island, where archaeologists have discovered cordage made the Viking way and other evidence of European contact.

Sometime between A.D. 989 and 1020, Viking seafarers—perhaps as many as 90 men and women in all—landed on a Newfoundland shore and raised three sturdy halls and an assortment of sod huts for weaving, ironworking, and ship repair. In the 1960s a Norwegian adventurer, Helge Ingstad, and his archaeologist wife, Anne Stine Ingstad, discovered and excavated the overgrown ruins of this ancient base camp at a place called L’Anse aux Meadows. Later, Canadian archaeologists found iron ship rivets and other artifacts from what appeared to be a Viking shipwreck off the coast of Ellesmere Island. But in the years that followed, few other traces of the Vikings’ legendary exploration of the New World came to light—that is, until Patricia Sutherland came along.

In the soft morning light on Baffin Island, Sutherland and her field crew wind single file down a rocky footpath into a green hollow known as Tanfield Valley. The high wind of the previous evening has died, and the heavy clouds have cleared, leaving blue sky along the rugged coast that Viking seafarers once called Helluland—“stone slab land.” Long before the Vikings arrived, the area’s ancient inhabitants built a settlement here, at a site known today as Nanook.

As Sutherland clammers down the hill, she scans the shoreline warily for polar bears. The coast is clear this morning, and as she crosses between two freshwater ponds, she marvels aloud at the valley’s thick, spongy moss. “It’s full of greenery, full of turf for making buildings,” she says. “It’s the greenest valley in the area.”

Sutherland, now a research fellow at the University of Aberdeen, smiles at the perfection of it all. Below us lies a protected cove, a natural harbor for an oceangoing Viking ship. Along some boggy patches in the valley, an oily-looking microbial slick suggests the presence of bog iron, the ore that Viking smiths worked expertly. But as Sutherland scrambles up a small rise to the excavation, her high spirits evaporate. Eight inches of muddy water from the previous night’s storm flood the pits. Draining them will require hours of bucket brigades and pumping. “We’re running out of time here,” she snaps.



Unearthing what she believes to be a Viking outpost, archaeologist Patricia Sutherland (in orange jacket) and her colleagues work in Baffin Island's Tanfield Valley, which offered turf for sod shelters and a harbor for ships.

With her silver-gray curls, girlish voice, and diminutive five-foot-nothing frame, Sutherland seems an unlikely expedition leader. But the 63-year-old archaeologist is a rolling storm in camp. She is the first up each morning and the last to crawl into a sleeping bag at night. In between she seems to be everywhere—flipping pancakes, making lunches for Inuit elders, checking the camp's electric bear fence. She makes nearly every decision, whether large or small. Just three months earlier she underwent major shoulder surgery; after four weeks of excavation her left arm is so swollen that she tucks it into a sling.

But Sutherland is nothing if not determined. In 1999 the discovery of the yarn sent her back to the storage rooms at the Canadian Museum of Civilization. She began scrutinizing artifacts that other archaeologists had dug from sites of Arctic hunters known today as the Dorset, who ranged the eastern Arctic coast for nearly 2,000 years until their mysterious disappearance in the late 14th century. Poring over hundreds of presumably Dorset artifacts, often under a microscope, Sutherland discovered more pieces of spun yarn that had come from four major sites—Nunguvik, Tanfield Valley, Willows Island, and the Avayalik Islands—scattered along a thousand miles of coastline, from northern Baffin Island to northern Labrador. Sutherland also noticed something decidedly odd about the collections from these sites. Teams working there had turned up numerous pieces of wood, despite the fact that the landscape is treeless tundra. To Sutherland's astonishment, she discovered fragments of what seemed to be tally sticks, used by Vikings for recording trade transactions, and spindles, which might have been for spinning fibers. She also noted scraps of wood with square nail holes and possibly iron stains. One was radiocarbon-dated to the 14th century, toward the end of the Norse era in Greenland.



Did Vikings use these notched sticks to record trade transactions? Patricia Sutherland thinks so.

The more Sutherland sifted through the old Dorset collections, the more evidence she found that Vikings had come to these shores. While examining the stone tools, she discovered nearly 30 traditional Norse whetstones, standard gear for Viking men and women. She also found several Dorset carvings of what looked to be European faces, with long noses, prominent eyebrows, and possibly beards.

All these artifacts pointed strongly to friendly contact between Dorset hunters and Viking seafarers. But to gather more clues, Sutherland needed to excavate, and Tanfield Valley seemed the most promising of the four sites. In the 1960s American archaeologist Moreau Maxwell had dug part of a peculiar stone-and-turf structure there. The ruins, he later wrote, were “very difficult to interpret,” but he finally concluded that wandering Dorset hunters had built some sort of house there. Sitting in her office, surrounded by trays of Viking artifacts, Sutherland found that hard to believe. The Dorset had built snug homes the size of an average modern bedroom. The house in Tanfield Valley, one wall of which measured more than 40 feet long, would have been much, much larger.

On a cold Arctic afternoon Sutherland hunches over a square of earth inside the mysterious stone ruins. With the tip of her trowel she loosens a small piece of whale bone. Lifting the piece free, she brushes away the dirt,

revealing two drill holes. The Dorset had no drills—they made holes by gouging—but Viking carpenters stowed augers in their tool chests, and they often drilled holes for wooden dowels used to fasten pieces of wood together.

Sutherland slips the find into a plastic bag. Earlier archaeologists, she explains, excavated extensively in the ruins, so she and her colleagues must work like forensic investigators, searching for minute, overlooked clues that could shed light on Tanfield Valley's occupants. In sediments taken from inside the walls, for example, Sutherland spied several tiny pelt fragments. Expert analysis later revealed that they belonged to an Old World rat species, most probably the black rat, which must have reached the Arctic by ship.





Skillfully working walrus ivory, Dorset artists portrayed the mysteries and wonders of their remote Arctic world, from wandering polar bears (right) to what may be the face of a European visitor (left). Carvings on a piece of antler (above) present a study in contrasts: One...

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The ruins have yielded other clues that aren't so subtle. One team member excavated a whalebone shovel closely matching those found in Greenland's Viking settlements. It's "the exact size and material as the spades used to cut sod for houses," notes Sutherland. And that makes a lot of sense. Sutherland and her colleagues found remnants of turf blocks—a material the Vikings used to build insulated walls—and a foundation made of large rocks that appear to have been cut and shaped by someone familiar with Norse stone masonry. The overall size of the structure, the type of walls, and a drainage channel lined with stones resemble features of Viking buildings in Greenland. One area still has the telltale reek of a latrine. Along the floor, a team member excavated hand-size clumps of moss, the Viking equivalent of toilet paper. "The Dorset people were never in places long enough to build a toilet structure," says Sutherland.

But why would restless Vikings stop long enough to build on this blustery corner of Helluland? What treasures did they seek?

Toward the end of the ninth century a wealthy Viking trader arrived at the court of King Alfred the Great in England. An effusive man dressed in rich, foreign attire, Ohthere told of a long voyage he had taken to the coast of the White Sea, where northerners known as the Sami had furnished him with rare Arctic luxuries, from otter and marten furs to bushels of soft bird down. Then the Viking trader presented the king with walrus ivory that

could be carved into gleaming chess pieces and other exquisite works of art.



Lacking bows and arrows and living in small bands, Dorset hunters, like the one shown in this carving, likely posed little threat to the Vikings. Eventually (and mysteriously) the Dorset disappeared.

Ohthere was not the only Viking merchant who catered to the European appetite for fine goods from the frozen north. Each spring, men from Greenland's Western and Eastern Settlements went north to a rich coastal hunting ground known as Nordsetur. Camping along the shore, these medieval Greenlanders pursued walrus and other Arctic game, filling their boats with skins, furs, ivory, and even live polar bear cubs for trade abroad. Just two or three days west of Nordsetur, across the choppy waters of the Davis Strait, lay another, potentially richer Arctic treasure-house: Helluland. Its glacier-topped mountains loomed forbiddingly, but its icy waters teemed with walruses and narwhals, and its lands abounded with caribou and small fur-bearing animals.

The Viking seafarers who explored the North American coast a thousand years ago likely searched, as Ohthere did, for trading partners. In Newfoundland, a region they called Vinland, the newcomers met with a hostile reception. The aboriginal people there were well armed and viewed the foreigners as intruders on their land. But in Helluland small nomadic bands of Dorset hunters may have spotted an opportunity and rolled out the welcome mat. They had few weapons for fighting, but they excelled at hunting walruses and at trapping fur-bearing animals, whose soft hair could be spun into luxurious yarn. Moreover, some researchers think the Dorset relished trade. For hundreds of years they had bartered avidly with their aboriginal neighbors for copper and other rare goods. "They may have been the real entrepreneurs of the Arctic," says Sutherland.

With little to fear from local inhabitants, Viking seafarers evidently constructed a seasonal camp in Tanfield Valley, perhaps for hunting as well as trading. The area abounded in arctic fox, and the foreigners would have had two highly desirable goods to offer Dorset hunters for their furs: spare pieces of wood that could be carved and small chunks of metal that could be sharpened into blades. Trade in furs and other luxuries seems to have flourished. Archaeological evidence suggests that some Dorset families may have prepared animal pelts while camping a short stroll away from the Viking outpost.

Thirteen years ago, when she first spotted the curious strands of cordage, Sutherland could never have envisioned a small Viking trading post standing on the coast of her beloved Arctic. But for Sutherland much work remains. Only a small fraction of Tanfield Valley has been investigated,

and Sutherland’s remarkable findings—new evidence of friendly contact between Viking seafarers and aboriginal North Americans, and the discovery of what is probably the earliest European fur trade in the Americas—have stirred intense controversy among many of her colleagues. Archaeology is all about interpreting the evidence. As with the discovery of L’Anse aux Meadows decades ago, the fight for acceptance will be hard and long. But Sutherland is determined to prove the doubters wrong.

She pulls the mosquito netting over her face and resumes digging. “I think there is more to dig here, absolutely,” she says with a smile. “And we are going to find much more.” 🟡

Vancouver-based Heather Pringle writes about archaeology for a variety of publications. David Coventry last photographed [Panama’s golden chiefs](#).

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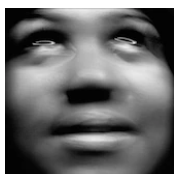


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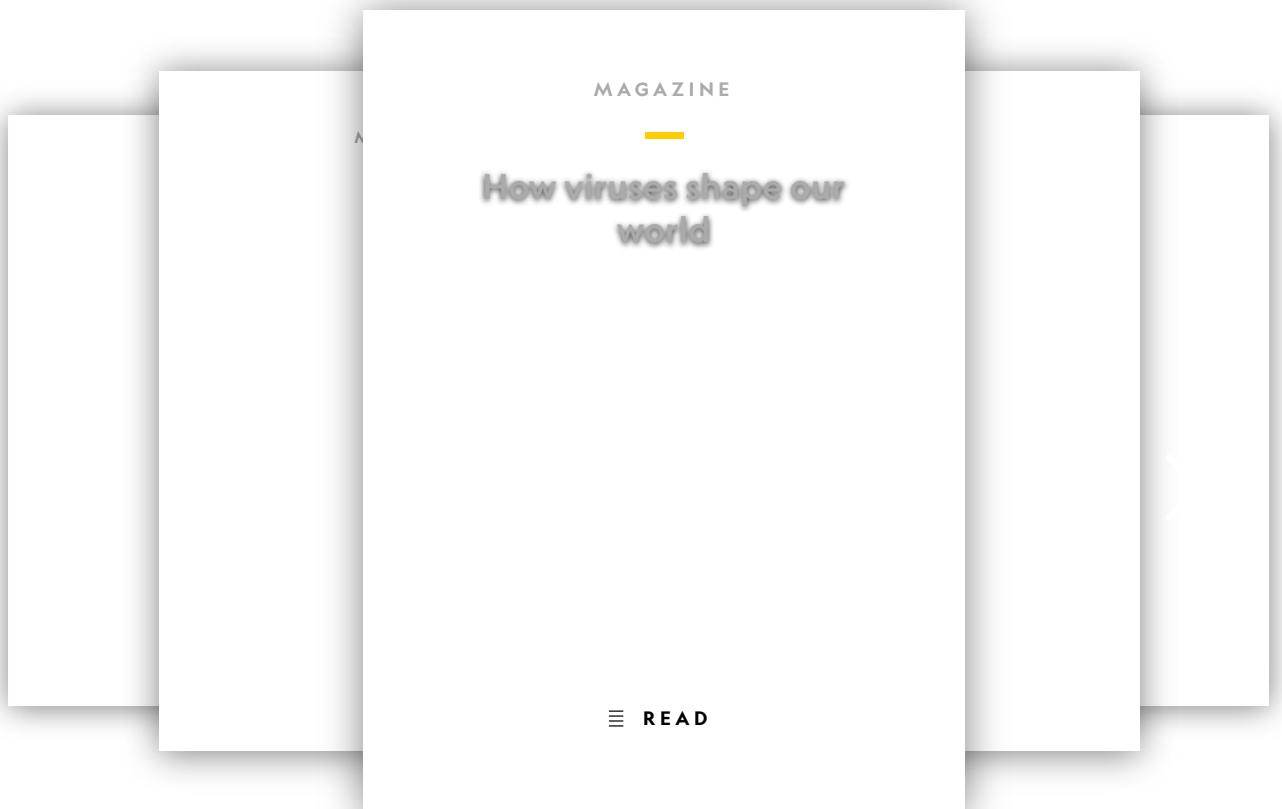
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