

tives: that the cranes load the ship in record speed, and that the hills of iron ore remain evenly distributed throughout the holds. The tall yellow cranes worked with urgency, picking up six or seven tons of ore from the mounds piled on the dock, swinging over the cargo holds, then releasing the ore with a swoosh. As a light rain began to fall, Zakharchenko several times climbed down a rope ladder to the lee side of the ship to check how far it had descended into the water. Each centimetre represented sixty-seven tons; incredibly, this was the only way to measure how much ore the Odyssey had taken on.

High tide was at noon, and the ship could not stay at the pier any longer. At eleven-thirty, the cranes stopped loading, and fifteen minutes later all was done. According to an eyeball measurement of the ship's displacement, taken by both Zakharchenko and a surveyor hired by the Russian company that was shipping the ore, and a somewhat hurried calculation of the water density in the harbor, the Odyssey was now filled with sixty-seven thousand five hundred and nineteen tons of ore: two and a half thousand tons more than the target. The stevedores had underestimated themselves. Those stevedores now ran down to the dock and removed the ship's thick ropes from the bollards; then three small tugboats came alongside the Odyssey, two to push and one to pull the ship into the harbor. That night, as the sun dipped toward the horizon (though it would not set), we entered the Barents Sea. You could tell it was the sea because right away our ship, despite now weighing more than eighty thousand tons, started listing from side to side atop the waves.

Ahead of us, to the north and to the east, the ice was melting. This was normal. At its maximum extent, in mid-March, the ice covers the entire Arctic Ocean and most of its marginal seas for about fifteen million square kilometres, twice the land area of the continental United States. During its minimum extent, around mid-September, the ice cover traditionally shrinks to about half this size.

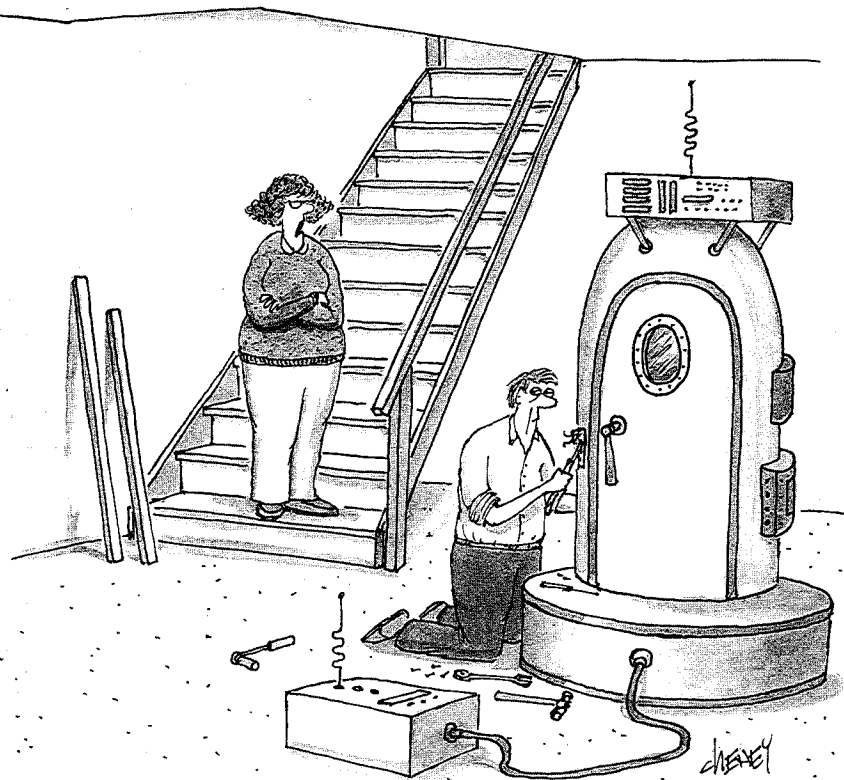
In recent years, it has been shrinking by much more than half. In September of 2007, the ice shrank to 4.3 million square kilometres, the lowest extent in recorded history. In subsequent years, it reached its second-, third-, and fourth-lowest-ever

extents. The thickness of the ice—more difficult to measure but also more telling—is also decreasing, from an average thickness of twelve feet in 1980 to half that two decades later. The primary cause of this decline is warmer air temperature in the Arctic, an area that has been more affected by global warming than any other place on earth.

The estimates vary, but scientists agree that at some point this century the minimum extent, at the end of the summer season, will reach zero. At that point, you'll be able to cross the North Pole in a canoe. But it won't be just you and your canoe, because the resource grabs have already begun. Denmark and Canada are engaged in a territorial dispute over Hans Island, which a recent congressional research report describes as a "tiny, barren piece of rock" between Greenland and Canada's Ellesmere Island, because territorial claims will lead to resource rights. Similarly, Russia has filed a claim with the United Nations that the Lomonosov Ridge, which spans the Arctic underwater from the coast of Siberia to Ellesmere Island, gives Russia rights to the sea above it, including the North Pole. All this is being done in anticipation

of a thaw. Oil companies, armed with new technology and lured by less menacing winter conditions, will be able to establish drilling platforms in latitudes that were previously off limits, and shipping companies will be able to save time and money through the Arctic shortcut. Shell has already announced plans to begin drilling exploratory wells off northern Alaska. Last year, Rosneft, Russia's biggest oil company, signed a joint-venture agreement with ExxonMobil to proceed with oil exploration in the Kara Sea—once called *Maré Glaciale*, the "ice sea." Meanwhile, the Odyssey's trip was a test case for the proposition that the Northern Sea Route, formerly known as the Northeast Passage, could be reliably traversed.

The water of the Barents was a handsome dark blue, the sky was clear, and the temperature outside, though gradually dropping, was a balmy fifty degrees. Captain Shkrebko set our heading east for the southern tip of the archipelago Novaya Zemlya; this put the ship at a better angle to the waves, and it stopped rocking. We were proceeding at an un-



*"And just what are you planning to do with your stupid trans-dimensional one-way escape pod?"*