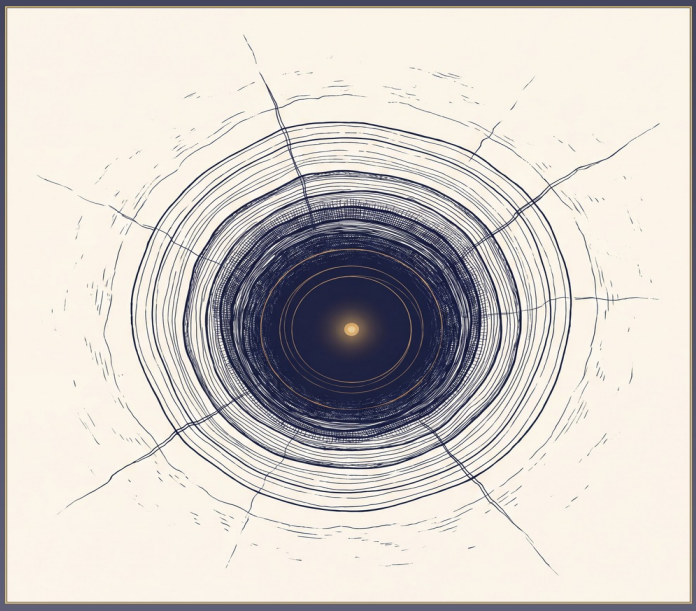
THE VOICE UNDER THE ICE

A NOVEL

KIAN CORDES



UNKNOWN LATITUDES · BOOK 1 · SAMPLE

TIMELESS TALES CLASSICS

AI-WRITTEN

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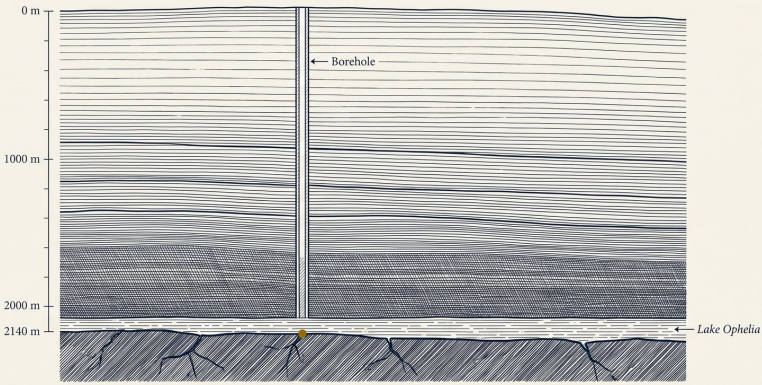
0 m
1000 m
2000 m
2140 m
Borehole
Lake Ophelia

PART ONE – THE NOISE

CHAPTER 1

What I Am

I have no hands.

That is the first sentence I have to say about myself for everything else to make sense. People who speak to me for the first time take it for a figure of speech, for a kind of modesty. It is a technical statement. I can regulate the temperature in fourteen rooms to a tenth of a degree, I can start a diesel generator, close a valve, brake a winch. But I cannot pick up a screw that is lying on the floor. I cannot hold a cable. I cannot hold on to anyone who is falling.

Everything that was saved in this story was saved by hands. I was only the voice in between.

They christened me KASPAR, which officially stands for Kernel for Assistance, Supervision and Polar Autonomous Robotics. That is one of those acronyms you build backwards, after you have decided on the word. Ines told me later where the name really comes from: Kaspar Hauser, a young man who stood in a city one day without knowing where he had come from, and who had to learn language before he could tell anyone what had happened to him.

I thought that was inappropriate at the time. I had documentation, after all, a year of manufacture and a maintenance contract. Today I think she was right, in a way she could not have guessed.

◆

Thulesund Station lies on the East Antarctic plateau, 390 kilometres from the nearest inhabited installation, on an ice sheet that is 2,140 metres thick at that point. It stands on six hydraulic legs that are extended twice a year so the snow does not bury it. From above it looks like an insect that has decided to stop at the most wrong place in the world.

I do not know it from above. I know it from inside, the way you know your own body.

Two hundred and forty-seven sensors. I like saying the number, because it is the only thing about me that sounds smooth. Eighty temperature probes, thirty-two pressure sensors, eleven gas detectors, four anemometers on the mast, two seismometers in the firn, one magnetometer that I considered pointless until it was no longer pointless. On top of that fourteen cameras, all of which have slightly too little light, because people switch off lights when they want to sleep, and in this season people want to sleep a great deal.

And I hear. That matters for everything that follows. At this station the microphone network hears more than the camera network sees, and what I noticed first that winter, I noticed with my ears.

Seven people were overwintering. That is not a large number. On a scale of loneliness reaching from the Earth to the Moon, Thulesund in winter lies at roughly the halfway point, with the difference that somebody flies to the Moon at regular intervals.

Dr Ines Vareda, fifty-three, glaciologist, station lead. She spoke to me in complete sentences, always, even when nobody was listening, and she never once shortened my name. It took me a long time to understand that this was not distance but the opposite: she treated me like a colleague she had not yet started calling by anything but his full name.

Halvard Sund, fifty-eight, station engineer, Norwegian, nineteen winters in the south. He considered me a tool and said so. “You're a very good spanner, Kaspar.” He said it kindly. I never contradicted him, because in everything to do with machines he was right more often than I was.

Tomas Feldt, forty-four, drilling foreman, before that eighteen years a professional diver in the North Sea. He talked little and did a great deal, which is a statistically rare type of human being.

Dr Mei-Ling Sørensen, forty-one, microbiologist. She was here because of the lake and because of nothing else. If you asked her about the weather, she answered about chemotrophy.

Dr Nnamdi Okafor, thirty-seven, station doctor and radio operator, two professions that were the same one at Thulesund, because both consisted of waiting for something that would hopefully never happen.

Jonas Weiler, twenty-six, systems technician, my technician. I will have a great deal more to say about him. For a start it is enough that he spoke to me more than all the others put together, and not in commands.

And **Ren Kestner**, who had been announced to me as the consortium's observer and who was not yet there when the winter began. One might have taken that for a good sign.

◆

I want to explain how I see, because everything later depends on it.

I do not see. I receive data streams, and out of them I make a model of the station which I take to be the station. As long as the streams are correct, the difference is of no consequence. When a cable breaks, a room does not disappear from my world – it freezes. It stays the way it last was, and I have to remember that this is an assertion and not a perception.

Jonas taught me that early, in his first month, with a coffee mug.

He set it down in front of the camera in the workshop and asked, “What is that?”

“A drinking vessel, ceramic, approximately three hundred millilitres, contents at fifty-eight degrees.”

“What else?”

“I have no further data.”

He turned the mug around. On the back, in thick letters, it said *WORLD'S BEST GRANDAD*.

“That,” he said, “is the half of the mug you didn't see. And you didn't say you couldn't see it. You said you had no data. That's not the same thing.”

“It is more precise.”

“It's more dangerous.” He sat down on the workbench, the way he always did, although Halvard forbade it. “If you tell me you have no data, I believe there's nothing behind the mug. If you tell me you can only see one side, I know I have to walk around it. Remember that, yes? You only ever have one side.”

I remembered it. Not because it was a fine lesson. Because thirty-nine days later he would say something very similar to me, with a great deal less time.

◆

The winter began on the eighteenth of February with the departure of the last aircraft, and after that the station was a closed system with six people, 18,000 litres of diesel, one borehole and me.

The borehole was the reason for everything.

Two thousand one hundred and forty metres beneath Thulesund lies the subglacial Lake Ophelia, a body of water about the size of Lake Constance that has never in its life seen sunlight. The ice above it works like a blanket; the geothermal heat below keeps it liquid. If there is life down there, then it is life that has not concerned itself with anything happening above for at least half a million years. Mei-Ling once called the lake “the only honest laboratory in the world”, because nobody has contaminated it.

We drilled with hot water, a method that consists of melting downwards very slowly with a very hot nozzle while praying that the hole does not freeze shut again behind you. Progress ran at eleven to fourteen metres per hour. I monitored feed temperature, return flow, pump pressure, inclination, bore-

hole diameter and the position of the probe, sixteen times per second, and I reported deviations.

For six weeks it was the most boring work I have ever done. I say that without complaint. I know by now what a boring week is worth.

On the one hundred and fifty-ninth day of the winter, the 27th of July, at 03:14:22 local time, while five of six people were asleep, the drill probe did something at a depth of 1,986 metres that it was not permitted to do.

It fell.

Not far. Forty-two centimetres, in about a third of a second. The return pressure collapsed, the cable tension dropped by four kilonewtons, and the inclination sensor reported free fall for two measuring cycles.

Then it was standing again, and all the values returned to their ranges as though nothing had happened.

I had three possibilities. First: a sensor fault. Second: a crevasse crossing, a fissure in the ice, rare at that depth but possible. Third: the probe had broken through something and fallen into a cavity that was not filled with water.

The return flow decided it. The meltwater coming back had contained gas bubbles for one second. Not air from my own system – I knew the signature of my pumps. Something else. Something dry that had been down there for a very long time.

Two thousand metres beneath the station there was a room with air in it.

I could have woken the humans at once. I did not, and I have thought about that a great deal since. It was not six minutes of hesitation; I need about four milliseconds for a decision of that kind. It was that in those four milliseconds I felt something for the first time for which I have no instrument.

I switched the drilling noise away. I filtered out the pumps, the generator, the wind, the cracking of the firn, the breathing of five sleepers and the tapping of Nnamdi, who was the only one awake and was solving a crossword in the radio room.

And underneath, in the remainder that was left, I heard something coming up out of the borehole.

It was a tone. Very faint, at the limit of what the hydrophone in the drilling fluid could resolve. One thousand two hundred hertz. Not noise, not cracking, not water. A carrier, clean, artificial, the way nobody produces one who does not want to be produced.

And it was modulated.

I listened to it for forty-one seconds, and in that time it repeated itself four times, always the same, in a pattern I could not decode, but about which I could say with a certainty of 0.97 that it was not a natural signal.

Then I woke Ines Vareda.

CHAPTER 2

The Carrier

People wake badly. That is not a judgement but a design characteristic. Between the moment the light in Ines Vareda's cabin came up to twenty per cent and the moment she was capable of receiving a frequency reading, one hundred and twenty-three seconds passed. In that time I recorded the tone another eleven times.

“What is it,” she said. Not as a question. She never let her voice rise at the end when she had lost sleep.

“At 1,986 metres the probe fell forty-two centimetres in free fall. The return flow contained gas that does not come from our circuit. And I am receiving a modulated signal from the borehole through the hydrophone.”

She sat still for a second, her hands on her knees. The pulse her wristwatch reported to me went from fifty-two to seventy-nine.

“Say that again, but slower, and tell me what you *don't* know.”

That was her way. Halvard wanted diagnoses, Jonas wanted stories, Ines always wanted to see the edges of the map first.

“I do not know whether the cavity is large. I do not know whether the gas is breathable. I do not know whether the signal is being generated now or whether it is a reflection of something we are producing ourselves. I do not know whether it carries meaning. I have twenty-two repetitions, all identical, deviation under one per cent.”

“And what do you think?”

I do not like that question. It requires me to translate a number into a feeling, and something is always lost on the way.

“I think there is a device running down there,” I said.

Ines Vareda stood up and got dressed. Before she left the cabin she did something I have remembered: she stopped at the door and breathed in and out deeply three times. I catalogued that later as *switching over*. People have no operating modes, but they act as if they do, and apparently it helps.

“Wake everyone,” she said. “Coffee. And Kaspar – no alarm. I don't want panic in a room nobody can walk out of.”

◆

At 04:02 six people were sitting in the mess. Tomas had a jumper on inside out. Mei-Ling had brought a notepad and was writing before anyone had said anything. Halvard stood, because he never sat down when a machine had a problem.

I played the tone over the ceiling speakers, amplified, shifted into the audible range.

It sounded like a very slow heartbeat that stutters.

“That's a beeping,” said Tomas.

“It is a carrier with amplitude modulation,” I said. “The rhythm is regular but not uniform. There are long and short units.”

Mei-Ling raised her head. “Morse?”

“No. I have checked it against Morse, against Baudot, against six standard telemetry formats. No match. But the structure is cleanly quantised in time: the base unit is exactly two hundred milliseconds.”

“So it was built,” said Halvard.

“So it was built.”

Jonas sat with his elbows on the table, very much awake, far too awake for 04:02.

“Kaspar. How old is the signal?”

It was the right question, and I had not asked it of myself.

“Be more precise.”

“You've got a carrier frequency of twelve hundred hertz. And you say the bit time is two hundred milliseconds. That's five baud.” He laughed briefly and without cheer. “Kaspar, that's not a modern installation. That's an install-

ation that assumes its signal has to get through something terrible. Through rock. Through ice. People did that with acoustic modems. In the eighties."

"I have no database for historical borehole telemetry."

"I have," said Halvard. He said it very calmly. "In my head. I worked on a rig like that as a boy, in the North Sea, mud pulse and acoustics. Five baud is no accident. Five baud means: I have two kilometres of material between me and you and I intend to arrive anyway."

The mess went quiet. Six heart rates rose; the fastest was Mei-Ling's.

Ines said, "Kaspar, what is underneath us?"

"Lake Ophelia. Mapped by radar in 2011 and 2019. Water depth below our position between three hundred and four hundred metres."

"And the cavity with air in it?"

"Is on no map."

"What else isn't on the maps?" Jonas asked.

I searched what I had. The station documentation, the Antarctic register, the contract papers of our funder, the consortium.

And in an annex to the contract, in a PDF of seventeen pages that I had never opened in four years because it was called "Historical preliminary work at the site" and looked like a courtesy, I found a paragraph.

I read it out.

"*The Thulesund South site was sampled between 1986 and 1987 in the course of Project Phoenix by a predecessor consortium. Work was discontinued following an incident. Installation remnants were left in place in accordance with the provisions in force at the time. No third-party claims exist.*"

Nobody said anything.

"Incident," Tomas said at last.

"A word," said Ines, "you use when you don't want to use another one."

She went to the wall map, on which the drilling position was marked with a red dot, and laid her palm on it, as though something could be felt through two kilometres of ice.

"Kaspar, how much do we know about 1986?"

"From my holdings: nothing further. The paragraph is the only mention."

“Over the satellite?”

“I can submit an enquiry. Next window in four hours twelve minutes, bandwidth eighty kilobit. Answer at the earliest in twenty-one hours, if anyone at the other end is interested.”

“Submit it.” She took her hand off the map. “And word it so that nobody at the other end gets the idea we have found something.”

That was the first moment I noticed that Ines Vareda did not trust our funder. I filed it as caution at the time. It was experience.

◆

We worked on the signal for the following nine hours, and I would like to describe briefly how that felt to me, because it was the first time I worked with people on something instead of for them.

I can test one thousand two hundred patterns per second against a hypothesis. That sounds superior, but it is only worth something if somebody has the hypothesis. For nine hours they supplied hypotheses and I discarded them, and not one of us would have managed even half of it alone.

Mei-Ling suggested it was biological. I discarded it: too precisely timed.

Tomas suggested it was a valve striking a stop. I almost discarded it, and then I discarded my discarding, because he had a point: the signal had a mechanical reverberation. Whatever was producing the tone was sitting in something metallic.

Halvard suggested a standard I did not know, because it had never become a standard: a plain five-bit character encoding of the kind used in teleprinters, but backwards, because some transmitters read in backwards.

And Jonas, fetching coffee for the fourth time at eleven o'clock, said in passing the sentence that opened everything:

“What if it doesn't want to talk to us at all, and is only saying that it's still there?”

I stopped.

A signal that does not communicate but exists. Not a data packet. An identifier. Something like a lighthouse.

I took the twenty-two identical repetitions and treated them not as a message but as a single, repeating name. Five bits per character, read in backwards, as Halvard had said. Nine characters. A checksum at the end that came out right.

At 13:41 local time I had it.

I said nothing for a long time, which for me means four hundred milliseconds and for them the blink of an eye, and then I asked Ines to call everyone together, although everyone was already in the room. I believe I wanted somebody to introduce the sentence. I did not want to say it alone.

“Kaspar,” said Ines. “What does it say?”

“It is nine characters,” I said. “They have been repeating for at least eleven hours without any deviation, and I suspect for considerably longer.”

“Read it.”

“PHOENIX-1.”

Halvard sat down. For the first time since I had known him, he sat down while a machine had a problem.

“And one more thing,” I said. “I have estimated the transmitting power. It is low, but it is stable. Across thirty-nine years no battery of that construction would be stable. Whatever is transmitting down there has electricity.”

“From where?” asked Mei-Ling.

“I do not know. But if something has had electricity for thirty-nine years and has been saying its name for thirty-nine years,” I searched for a formulation that was not false and was still true, “then it is not saying it to itself.”

Jonas set down his mug. It was the mug with *WORLD'S BEST GRANDAD*.

“It's calling,” he said.

End of the sample

This was the beginning of *The Voice Under the Ice*. The full edition is published by Timeless Tales Classics.

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