a martian romance KIM STANLEY ROBINSON

Kim Stanley Robinson sold his first story in 1976, and quickly established himself as one of the most respected and critically acclaimed writers of his generation. His story "Black Air" won the World Fantasy Award in 1984, and his novella "The Blind Geometer" won the Nebula Award in 1987. His first novel, The Wild Shore, was published in 1984, and was quickly followed up by other novels such as Icehenge, The Memory of Whiteness, A Short, Sharp Shock, The Gold Coast, and The Pacific Shore, and by collections such as The Planet on the Table, Escape from Kathmandu, and Remaking History.

Robinson's already-distinguished literary reputation took a quantum-jump in the decade of the '90s, though, with the publication of his acclaimed "Mars" trilogy —Red Mars, Green Mars, and Blue Mars; Red Mars won a Nebula Award, both Green Mars and—Blue Mars won Hugo Awards, and the trilogy has been widely recognized as the genre's most accomplished, detailed, sustained, and substantial look at the colonization and terraforming of another world, rivaled only by Arthur C. Clarke's The Sands of Mars.

The "Mars Trilogy" will probably associate Robinson's name forever with the Red Planet, but it was not the first time he would explore a fictional Mars; Robinson visited Mars in several stories of the '80s, including the memorable novella "Green Mars," which detailed the first attempt to climb Olympus Mons, the tallest mountain in the solar system. The bittersweet and evocative story that follows is a direct sequel to "Green Mars" —and at a tangent to the history of Martian settlement as it ultimately developed in the "Mars Trilogy." In it, he takes us to a bleak and wintry Mars where the terraforming effort has gone disastrously wrong, and a group of old friends set sail in an iceboat across the frozen seas of the once-Red Planet, many years after their first epic journey, hoping to touch the sky one last time. . .

Robinson's latest books are the novel Antarctica, and a collection of stories and poems set on his fictional Mars, The Martians. His stories have appeared in our First, Second, Third, Fourth, Fifth, Sixth, and Ninth An-nual Collections. He lives with his family in California.

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lileen Monday hauls her backpack off the train's steps and watches the train glide down the piste and around the headland. Out the empty station and she's into the streets of Firewater, north Elysium. It's deserted and dark, a ghost town, everything shut down and boarded up, the residents moved out and moved on. The only signs of life come from the westernmost dock: a small globular cluster of yellow streetlights and lit windows, streaking the ice of the bay between her and it. She walks around the bay on the empty corniche, the sky all purple in the early dusk. Four days until the start of spring, but there will be no spring this year.

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She steps into the steamy clangor of the hotel restaurant. Workers in the kitchen are passing full dishes through the broad open window to diners milling around the long tables in the dining room. They're mostly young, either iceboat sailors or the few people left in town. No doubt a few still coming out of the hills, out of habit. A wild-looking bunch. Eileen spots Hans and Arnold; they look like a pair of big puppets, discoursing to the crowd at the end of one table — elderly Pinocchios, eyes lost in wrinkles as they tell their lies and laugh at each other, and at the young behemoths passing around plates and devouring their pasta while still listening to the two. The old as entertainment. Not such a bad way to end up.

It isn't Roger's kind of thing, however, and indeed when Eileen looks around she sees him standing in the corner next to the jukebox, pretending to make selections but actually eating his meal right there. That's Roger for you. Eileen grins as she makes her way through the crowd to him.

"Hey," he says as he sees her, and gives her a quick hug with one arm.

She leans over and kisses his cheek. "You were right, it's not very hard to find this place."

"No." He glances at her. "I'm glad you decided to come."

"Oh, the work will always be there, I'm happy to get out. Bless you for thinking of it. Is everyone else already here?"

"Yeah, all but Frances and Stephan, who just called and said they'd be here soon. We can leave tomorrow."

"Great. Come sit down with the others, I want some food, and I want to say hi to everyone."

Roger wrinkles his nose, gestures at the dense loud crowd. This solitary quality in him has been the cause of some long separations in their relationship, and so now Eileen shoves his arm and says, "Yeah yeah, all these people. Such a crowded place, Elysium."

Roger grins crookedly. "That's why I like it."

"Oh of course. Far from the madding crowd."

"Still the English major, I see."

"And you're still the canyon hermit," she says, laughing and pulling him toward the crowd; it is good to see him again, it has been three months. For many years now they have been a steady couple, Roger returning to their rooms in the co-op in Burroughs after every trip away; but his work is still in the back country, so they still spend quite a lot of time apart.

Just as they join Hans and Arnold, who are wrapping up their history of the world, Stephan and Frances come in the door, and they hold a cheery reunion over a late dinner. There's a lot of catching up to do; this many members of their Olympus Mons climb haven't been together in a long time. Hours after the other diners have gone upstairs to bed, or off to their homes, the little group of old ones sits at the end of one table talking. A bunch of antique insomniacs, Eileen thinks, none anxious to go to bed and toss and turn through the night. She finds herself the first to stand up and stretch and declare herself off. The others rise on cue, except for Roger and Arnold; they've done a lot of climbing together through the years, and Roger was a notorious insomniac even when young; now he sleeps very poorly indeed. And Arnold will talk for as long as anyone else is willing, or longer. "See you tomorrow," Arnold says to her. "Bright and early for the crossing of the Amazonian Sea!"

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The next morning the iceboat runs over ice that is mostly white, but in some

patches clear and transparent right down to the shallow seafloor. Other patches are the color of brick, with the texture of brick, and the boat's runners clatter over little dunes of gravel and dust. If they hit melt ponds the boat slows abruptly and shoots great wings of water to the sides. At the other side of these ponds the runners scritch again like ice skates as they accelerate back up to speed. Roger's iceboat is a scooter, he explains to them; not like the spidery skeletal thing that Eileen was expecting, having seen some of that kind down in Chryse —those Roger calls DNs. This is more like an ordinary boat, long, broad, and low, with several parallel runners nailed fore-and-aft to its hull. "Better over rough ice," Roger explains, "and it floats if you happen to hit water." The sail is like a big bird's wing extended over them, sail and mast all melded together into one object, shifting shape with every gust to catch as much wind as it can.

"What keeps us from tipping over?" Arnold asks, looking over the lee rail at the flashing ice just feet below him.

"Nothing." The deck is at a good cant, and Roger is grinning.

"Nothing?"

"The laws of physics."

"Come on."

"When the boat tips the sail catches less wind, both because it's tilted and because it reads the tilt, and reefs in. Also we have a lot of ballast. And there are weights in the deck that are held magnetically on the windward side. It's like having a heavy crew sitting on the windward rail."

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This first day out is clear, the royal blue sky crinkling in a gusty west wind. Under the clear dome of the cockpit it's warm, their air at a slightly higher pressure than outside. Sea level is now around 300 millibars, and lowering year by year, as if for a great storm that never quite comes. They skate at speed around the majestic promontory of the Phlegra Peninsula, its great prow topped by a white-pillared Doric temple. Staring up at it Eileen listens to Hans and Frances discuss the odd phenomenon of the Phlegra Montes, seaming the north coast of Elysium like a long ship capsized on the land; unusually straight for a Martian mountain range, as are the Erebus Montes to the west. As if they were not, like all the rest of the mountain ranges on Mars, the remnants of crater rims. Hans argues for them being two concentric rings of a really big impact basin, almost the size of the Big Hit

itself but older than the Big Hit, and so mostly obliterated by the later impact, with only Isidis Bay and much of the Utopian and Elysian Seas left to indicate where the basin had been. "Then the ranges could have been somewhat straight-ened out in the deformation of the Elysium bulge."

Frances shakes her head, as always. Never once has Eileen seen the two of them agree. In this case Frances thinks the ranges may be even older than Hans does, remnants of early tectonic or proto-tectonic plate movement. There's a wide body of evidence for this early tectonic era, she claims, but Hans is shaking his head: "The andesite indicating tectonic action is younger than that. The Phlegras are early Noachian. A pre-Big Hit big hit."

Whatever the explanation, there the fine prow of rock stands, the end of a steep peninsula extending straight north into the ice for four hundred kilometers out of Firewater. A long sea cliff falling into the sea, and the same on the other side. The pilgrimage out the spine to the temple is one of the most famous walks on Mars; Eileen has made it a number of times since Roger first took her on it about

"That's not nothing," Eileen protests. "That's three things."

"True. And we may still tip over. But if we do we can always get out and pull it back upright."

They sit in the cockpit and look up at the sail, or ahead at the ice. The iceboat's navigation steers them away from the rottenest patches, spotted from satellites, and so the automatic pilot changes their course frequently, and they shift around the cockpit when necessary. Floury patches slow them the most, and over these the boat sometimes decelerates pretty quickly, throwing the unprepared forward into the shoulder of the person sitting next to them. Eileen is banged into by Hans and Frances more than once; like her, they have never been on iceboats before, and their eyes are round at the speeds it achieves during strong gusts over smooth ice. Hans speculates that the sandy patches mark old pressure ridges, which stood like long stegosaur backs until the winds ablated them entirely away, leaving their load of sand and silt behind on the flattened ice. Roger nods. In truth the whole ocean surface is blowing away on the wind, with whatever sticks up going the fastest; and the ocean is now frozen to the bottom, so that no new pressure ridges are being raised. Soon the whole ocean will be as flat as a table top. Forty years ago, sometimes with him, sometimes without. When they first came they looked out on a blue sea purled with Whitecaps. Seldom since has it been free of ice.

He too is looking at the point, with an expression that makes Eileen think he might be remembering that time as well. Certainly he would remember if asked; his incredible memory has still not yet begun to weaken, and with the suite of memory drugs now available, drugs that have helped Eileen to remember quite a bit, it might well be that he will never forget anything his whole life long. Eileen envies that, though she knows he is ambivalent about it. But by now it is one of the things about him that she loves. He remembers everything and yet he has remained stalwart, even chipper, through all the years of the crash. A rock for her to lean on, in her own cycles of despair and mourning. Of course as a Red it could be argued he has no reason to mourn. But that wouldn't be true. His attitude was more complex than that, Eileen has seen it; so complex that she does not fully understand it. Some aspect of his strong memory, taking the long view; a determination to make it well; rueful joy in the enduring land; some mix of all these things. She watches him as he stares absorbed at the promontory where he and she once stood together over a living world.

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How much he has meant to her through the years has become beyond her ability to express. Sometimes it fills her to overflowing. That they have known each other all their lives; that they have helped each other through hard times; that he got her out into the land in the first place, starting her on the trajectory of her whole life; all these would have made him a crucial figure to her. But everyone has many such figures. And over the years their divergent interests kept splitting them up; they could have lost touch entirely. But at one point Roger came to visit her in Burroughs, and she and her partner of that time had been growing distant for many years, and Roger said, I love you Eileen. I love you. Remember what it was like on Olympus Mons, when we climbed it? Well now I think the whole world is like that. The escarpment goes on forever. We just keep climbing it until even-tually we fall off. And I want to climb it with you. We keep getting together and then going our ways, and it's too chancy, we might not cross paths again. Some-thing might happen. I want more than that. I love you.

And so eventually they set up rooms in her co-op in Burroughs. She continued to work in the Ministry of the Environment, and he continued to guide treks in the back country, then to sail on the North Sea; but he always came back from his treks and his cruises, and she always came back from her working tours and her vacations away; and they lived together in their rooms when they were both at home, and became a real couple. And through the years without summer, then the little ice age and the crash itself, his steadfast presence has been all that has kept her from despair. She shudders to think what it would have been like to get through these

years alone. To work so hard, and then to fail...It's been hard. She has seen that he has worried about her. This trip is an expression of that: Look, he said once after she came home in tears over reports of the tropical and temperate extinctions — look, I think you need to get out there and see it. See the world the way it is now, see the ice. It's not so bad. There have been ice ages before. It's not so bad.

And as she had been more and more holing up in Burroughs, unable to face it, she finally was forced to agree that, in theory, it would be a good thing. Very soon after that he organized this trip. Now she sees that he gathered some of their friends from the Olympus Mons expedition to help entice her to come, perhaps; also, once here, to remind her of that time in their lives. Anyway it's nice to see their faces, flushed and grinning as they fly along.

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Skate east! the wind says, and they skitter round Scrabster, the northeastern point of Elysium, then head south over the great plate of white ice inserted into the incurve of the coast. This is the Bay of Arcadia, and the steep rise of land backing the bluffs is called Acadia, for its supposed resemblance to Nova Scotia and the coast of Maine. Dark rock, battered by the dark north sea; sea-cliffs of bashed granite, sluiced by big breakers. Now, however, all still and white, with the ice that has powdered down out of the spray and spume flocking and frosting the beach and the cliffs until they look like wedding cake ramparts. No sign of life in Acadia; no greens anywhere in sight. This is not her Elysium.

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Roger takes over the sailing from Arnold, and brings them around a point, and there suddenly is a steep-walled square island ahead, vivid green on top —ah. A township, frozen here near the entrance to a fjord, no doubt in a deep channel. All the townships have become islands in the ice. The greenery on top is protected by a tent which Eileen cannot see in the bright sun. "I'm just dropping by to pick up the rest of our crew," Roger explains. "A couple of young friends of mine are going to join us."

"Which one is this?" Stephan inquires.

"This is the Altamira."

Roger sails them around in a sweet curve that ends with them stalled into the wind and skidding to a halt. He retracts the cockpit dome. "I don't

intend to go up there, by the way, that's an all-day trip no matter how you do it. My friends should be down here on shore to meet us."

They step down onto the ice, which is mostly a dirty opaque white, cracked and a bit nobbled on the surface, so that it is slippery in some places, but mostly fairly steady underfoot; and Eileen sees that the treacherous spots stand out like windows inlaid in tile. Roger talks into his wristpad, then leads them into the fjord, which on one steep side displays a handsome granite staircase, frost lying like a fluffy carpet on the steps.

Up these stairs Roger climbs, putting his feet in earlier bootprints. Up on the headland over the fjord they have a good view over the ice to the township, which is really very big for a manufactured object, a kilometer on each side, and its deck only just lower than they are. Its square tented middle glows green like a Renais-sance walled garden, the enchanted space of a fairy tale.

There is a little stone shelter or shrine on the headland, and they follow the sidewalk over to it. The wind chills Eileen's hands, toes, nose and ears. A big white plate, whistling in the wind. Elysium bulks behind them, its two volcanoes just sticking over the high horizon to the west. She holds Roger's hand as they ap-proach. As always, her pleasure in Mars is mixed up with her pleasure in Roger; at the sight of this big cold panorama love sails through her like the wind. Now he is smiling, and she follows his gaze and sees two people though the shelter's open walls. "Here they are."

They round the front of the shrine and the pair notices them. "Hi, all," Roger says. "Eileen, this is Freya Ahmet and Jean-Claude Bayer. They're going to be joining us. Freya, Jean-Claude, this is Eileen Monday."

"We have heard of you," Freya says to her with a friendly smile. She and Jean-Claude are both huge; they tower over the old ones.

"That's Hans and Frances behind us, down the path there arguing. Get used to that."

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Hans and Frances arrive, then Arnold and Stephan. Introductions are made all around, and they investigate the empty shrine or shelter, and exclaim over the view. The eastern side of the Elysian massif was a rain shadow before, and now it bulks just as black and empty as ever, looking much as it always has. The huge white plate of the sea, however, and the incongruous square of the *Altamira*; these are new and strange. Eileen has never seen

anything like it. Impressive, yes; vast; sublime; but her eye always returns to the little tented greenhouse on the township, tiny stamp of life in a lifeless universe. She wants her world back.

On the way back down the stone stairs she looks at the exposed granite of the fjord's sidewall, and in one crack she sees black crumbly matter. She stops to inspect it.

"Look at this," she says to Roger, scraping away at rime to see more of it. "Is it lichen? Moss? Is it alive? It looks like it might be alive."

Roger sticks his face right down into it, eyes a centimeter away. "Moss, I think. Dead."

Eileen looks away, feeling her stomach sink. "I'm so tired of finding dead plants, dead animals. The last dozen times out I've not seen a single living thing. I mean winterkill is winterkill, but this is ridiculous. The whole world is dying!"

Roger waggles a hand uncertainly, straightens up. He can't really deny it. "I suppose there was never enough sunlight to begin with," he says, glancing up at their bronze button of light, slanting over Elysium. "People wanted it and so they did it anyway. But reality isn't interested in what people want."

Eileen sighs. "No." She pokes again at the black matter. "Are you sure this isn't a lichen? It's black, but it looks like it's still alive somehow."

He inspects some of it between his gloved fingers. Small black fronds, like a kind of tiny seaweed, frayed and falling apart.

"Fringe lichen?" Eileen ventures. "Frond lichen?"

"Moss, I think. Dead moss." He clears away more ice and snow. Black rock, rust rock. Black splotches. It's the same everywhere. "No doubt there are lichens alive, though. And Freya and Jean-Claude say the subnivean environment is quite lively still. Very robust. Protected from the elements."

Life under a permanent blanket of snow. "Uh huh."

"Hey. Better than nothing, right?"

"Right. But this moss here was exposed."

"Right. And therefore dead."

They start down again. Roger hikes beside her, lost in thought. He smiles: "I'm having a déjà vu. This happened before, right? A long time ago we found some little living thing together, only it was dead. It happened before!"

She shakes her head. "You tell me. You're the memory man."

"But I can't quite get it. It's more like déjà vu. Well, but maybe...maybe on that first trip, when we first met?" He gestures eastward — over the Amazonian Sea, she guesses, to the canyon country east of Olympus. "Some little snails or some-thing."

"But could that be?" Eileen asks. "I thought we met when I was still in college. The terraforming had barely started then, right?"

"True." He frowns. "Well, there was lichen from the start, it was the first thing they propagated."

"But snails?"

He shrugs. "That's what I seem to remember. You don't?"

"No way. Just whatever you've told me since, you know."

"Oh well." He shrugs again, smile gone. "Maybe it was just a déjà vu."

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Back in the iceboat's cockpit and cabin, they could be crowded around the kitchen table of a little apartment anywhere. The two newcomers, heads brushing the ceiling even though they are sitting on stools, cook for them. "No, please, that is why we are here," Jean-Claude says with a big grin. "I very much like to be cooking the big meals." Actually they're coming along to meet with some friends on the other side of the Amazonian Sea, all people Roger has worked with often in the last few years, to initial some research on the western slope of Olympus —glaciology and ecology, respectively.

After these explanations they listen with the rest as Hans and Frances argue about the crash for a while. Frances thinks it was caused by the rapid brightening of the planet's albedo when the North Sea was pumped out and

froze; this the first knock in a whole series of positively reinforcing events leading in a negative direction, an autocatalytic drop into the death spiral of the full crash. Hans thinks it was the fact that the underground permafrost was never really thawed deeper than a few centimeters, so that the resulting extremely thin skin of the life zone looked much more well-established than it really was, and was actually very vul-nerable to collapse if attacked by mutant bacteria, as Hans believes it was, the mutations spurred by the heavy incoming UV—

"You don't know that," Frances says. "You radiate those same organisms in the lab, or even expose them in space labs, and you don't get the mutations or the collapses we're seeing on the ground."

"Interaction with ground chemicals," Hans says. "Sometimes I think everything is simply getting salted to death."

Frances shakes her head. "These are different problems, and there's no sign of synergistic effects when they're combined. You're just listing possibilities, Hans, admit it. You're throwing them out there, but no one knows. The etiology is not understood."

This is true; Eileen has been working in Burroughs on the problem for ten years, and she knows Frances is right. The truth is that in planetary ecology, as in most other fields, ultimate causes are very hard to discern. Hans now waggles a hand, which is as close as he will come to conceding a point to Frances. "Well, when you have a list of possibilities as long as this one, you don't have to have synergy among them. Just a simple addition of factors might do it. Everything having its particular effect."

Eileen looks over at the youngsters, their backs to the old ones as they cook. They're debating salt too, but then she sees one put a handful of it in the rice.

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In the fragrance of basmati steam they spoon out their meals. Freya and Jean-Claude eat seated on the floor. They listen to the old ones, but don't speak much. Occasionally they lean heads together to talk in private, under the talk at the little table. Eileen sees them kiss.

She smiles. She hasn't been around people this young for a long time. Then through their reflections in the cockpit dome she sees the ice outside, glowing under the stars. It's a disconcerting image. But they are not looking out the win-dow. And even if they were, they are young, and so

do not quite believe in death. They are blithe.

Roger sees her looking at the young giants, and shares with her a small smile at them. He is fond of them, she sees. They are his friends. When they say good-night and duck down the passageway to their tiny quarters in the bow, he kisses his fingers and pats them on the head as they pass him.

The old ones finish their meal, then sit staring out the window, sipping hot chocolate spiked with peppermint schnapps.

"We can regroup," Hans says, continuing the discussion with Frances. "If we pursued the heavy industrial methods aggressively, the ocean would melt from below and we'd be back in business."

Frances shakes her head, frowning. "Bombs in the regolith, you mean."

"Bombs *below* the regolith. So that we get the heat, but trap the radiation. That and some of the other methods might do it. A flying lens to focus some of the mirrors' light, heat the surface with focused sunlight. Then bring in some nitrogen from Titan. Direct a few comets to unpopulated areas, or aerobrake them so that they burn up in the atmosphere. That would thicken things up fast. And more halocarbon factories, we let that go too soon."

"It sounds pretty industrial," Frances says.

"Of course it is. Terraforming is an industrial process, at least partly. We forgot that."

"I don't know," Roger says. "Maybe it would be best to keep pursuing the biological methods. Just regroup, you know, and send another wave out there. It's longer, but, you know. Less violence to the landscape."

"Ecopoesis won't work," Hans says. "It doesn't trap enough heat in the bio-sphere." He gestures outside. "This is as far as ecopoesis will take you."

"Maybe for now," Roger says.

"Ah yes. You are unconcerned, of course. But I suppose you're happy about the crash anyway, eh? Being such a red?"

"Hey, come on," Roger says. "How could I be happy? I was a sailor."

"But you used to want the terraforming gone."

Roger waves a hand dismissively, glances at Eileen with a shy smile. "That was a long time ago. Besides, the terraforming isn't gone now anyway," gesturing at the ice, "it's only sleeping."

"See," Arnold pounces, "you do want it gone."

"No I don't, I'm telling you."

"Then why are you so damn happy these days?"

"I'm not happy," Roger says, grinning happily, "I'm just not sad. I don't think the situation calls for sadness."

Arnold rolls his eyes at the others, enlisting them in his teasing. "The world freezes, and this is not a reason for sadness. I shudder to think what it would take for you!"

"It would take something sad!"

"But you're not a red, no of course not."

"I'm not!" Roger protests, grinning at their laughter, but serious as well. "I was a sailor, I tell you. Look, if the situation were as bad as you all are saying, then Freya and Jean-Claude would be worried too, right? But they're not. Ask them and you'll see."

"They are simply young," Hans says, echoing Eileen's thought. The others nod as well.

"That's right," Roger says. "And it's a short-term problem."

That gives them pause.

After a silence Stephan says, "What about you, Arnold? What would you do?"

"What, me? I have no idea. It's not for me to say, anyway. You know me. I don't like telling people what to do."

They wait in silence, sipping their hot chocolate.

"But you know, if you did just direct a couple of little comets right *into* the ocean...."

Old friends, laughing at old friends just for being themselves. Eileen leans in against Roger, feeling better.

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Next morning with a whoosh they are off east again, and in a few hours' sailing are out on the ice with no land visible, skating on the gusty wind with runners clattering or shussing or whining or blasting, depending on wind and ice consistencies. The day passes, and it begins to seem as if they are on an all-ice world, like Callisto or Europa. As the day ends they slide around into the wind and come to a halt, then get out and drive in some ice screws around the boat and tie it into the center of a web of lines. By sunset they are belayed, and Roger and Eileen go for a walk over the ice.

"A beautiful day's sail, wasn't it?" Roger asks.

"Yes, it was," Eileen says. But she cannot help thinking that they are out there walking on the surface of their ocean. "What did you think about what Hans was saying last night, about taking another bash at it?"

"You hear a lot of people talking that way."

"But you?"

"Well, I don't know. I don't like a lot of the methods they talk about. But—" He shrugs. "What I like or don't like doesn't matter."

"Hmm." Underfoot the ice is white, with tiny broken air bubbles marring the surface, like minuscule crater rings. "And you say the youngsters aren't much interested either. But I can't see why not. You'd think they'd want terraforming to be working more than anyone."

"They think they have lots of time."

Eileen smiles at this. "They may be right."

"That's true, they may. But not us. I sometimes think we're sad not so much because of the crash as the quick decline." He looks at her, then down at the ice again. "We're two hundred and fifty years old, Eileen."

"Two hundred forty."

"Yeah yeah. But there's no one alive older than two-sixty."

"I know." Eileen remembers a time when a group of old ones were sitting around a big hotel restaurant table building card-houses, as there was no other card game all of them knew; they collaborated on one house of cards four stories high, and the structure was getting shaky indeed when someone said, "It's like my longevity treatments." And though they laughed, no one had the steadiness of hand to set the next card.

"Well. There you have it. If I were twenty I wouldn't worry about the crash either. Whereas for us it's very likely the last Mars we'll know. But, you know. In the end it doesn't matter what kind of Mars you like best. They're all better than nothing." He smiles crookedly at her, puts an arm around her shoulders and squeezes.

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The next morning they wake in a fog, but there is a steady breeze as well, so after breakfast they unmoor and slide east with a light, slick sliding sound. Ice dust, pulverized snow, frozen mist—all flash past them.

Almost immediately after taking off, however, a call comes in on the radio phone. Roger picks up the handset, and Freya's voice comes in. "You left us behind"

"What? Shit! What the hell were you doing out of the boat?"

"We were down on the ice, fooling around."

"For Christ's sake, you two." Roger grins despite himself as he shakes his head. "And what, you're done now?"

"None of your business," Jean-Claude calls happily in the background.

"But you're ready to be picked up," Roger says.

"Yes, we are ready."

"Okay, well, shit. Just hold put there. It'll take a while to beat back up to you in this wind."

"That's all right. We have our warm clothes on, and a ground pad. We will wait for you."

"As if you have any choice!" Roger says, and puts the handset down.

He starts sailing in earnest. First he turns across the wind, then tacks up into it, and the boat suddenly shrieks like a banshee. The sail-mast is cupped tight. Roger shakes his head, impressed. You would have to shout to be heard over the wind now, but no one is saying anything; they're letting Roger concentrate on the sailing. The whiteness they are flying through is lit the same everywhere, they see nothing but the ice right under the cockpit, flying by. It is not the purest whiteout Eileen has ever been in, because of the wind and the ice under the lee rail, but it is pretty close; and after a while even the ends of the iceboat, even the ice under the lee rail, disappear into the cloud. They fly, vibrating with their flight, through a roaring white void; a strange kinetic experience, and Eileen finds herself trying to open her eyes farther, as if there might be another kind of sight inside her, waiting for moments like this to come into play.

Nothing doing. They are in a moving whiteout, that's all there is to it. Roger doesn't look pleased. He's staring down at their radar, and the rest of the instru-mentation. In the old days pressure ridges would have made this kind of blind sailing very dangerous. Now there is nothing out there to run into

Suddenly they are shoved forward, the roar gets louder, there is darkness below them. They are skating over a sandy patch. Then out of it and off again, shooting through bright whiteness. "Coming about," Roger says.

Eileen braces herself for the impact of their first tack, but then Roger says, "I'm going to wear about, folks." He brings the tiller in toward his knees and they career off downwind, turn, turn, then catch the wind on their opposite beam, the boat's hull tipping alarmingly to the other side. Booms below as the ballast weight shifts up to the windward rail, and then they are howling as before, but on the opposite tack. The whole operation has been felt and heard rather than seen; Roger even has his eyes closed for a while. Then a moment of relative calm, until the next wearing about. A backward loop at the end of each tack,

Roger points at the radar screen. "There they are, see?"

Arnold peers at the screen. "Sitting down, I take it."

Roger shakes his head. "They're still mostly over the horizon. That's their heads."

"You hope."

Roger is looking at the APS screen and frowning. He wears away again. "We'll have to come up on them slow. The radar only sees to the horizon, and even standing up it won't catch them farther than six k away, and we're going about a hundred fifty k an hour. So we'll have to do it by our APS positions."

Arnold whistles. Satellite navigation, to make a rendezvous in a whiteout. . . . "You could always," Arnold begins, then claps his hand over his mouth.

Roger grins at him. "It should be doable."

For a non-sailor like Eileen, it is a bit hard to believe. In fact all the blind vibration and rocking side to side have her feeling a bit dizzy, and Hans and Stephan and Frances look positively queasy. All five of them regard Roger, who looks at the APS screen and shifts the tiller minutely, then all of a sudden draws it in to his knees again. On the radar screen Freya and Jean-Claude appear as two glowing green columns. "Hey you guys," Roger says into the radio handset, "I'm closing on you, I'll come up from downwind, wave your arms and keep an eye out, I'll try to come up on your left side as slow as I can."

He pulls the tiller gently back and forth, watching the screens intently. They come so far up into the wind that the sail-mast spreads into a very taut French curve, and they lose way. Roger glances ahead of the boat, but still nothing there, just the pure white void, and he squints unhappily and tugs the tiller another centimeter closer to him. The sail is feathering now and has lost almost all its curve; it feels to Eileen as if they are barely making headway, and will soon stall and be thrown backward; and still no sight of them.

Then there they are just off the port bow, two angels floating through whiteness toward the still boat—or so for one illusory moment it appears. They leap over the rail onto the foredeck, and Roger uses the last momentum of the iceboat to wear away again, and in a matter of seconds they are flying east with the wind again, the howl greatly reduced.

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By that sunset they are merely in a light mist. Next morning it is gone entirely, and the world has returned. The iceboat lies moored in the long shadow of Olym-pus Mons, hulking over the horizon to the east. A continent of a mountain, stretch-ing as far as they can see to north and south; another world, another life.

They sail in toward the eastern shore of the Amazonian Sea, famous before the crash for its wild coastline. Now it shoots up from the ice white and bare, like a winter fairy tale: Gordii Waterfall, which fell a vertical kilometer off the coastal plateau directly into the sea, is now a great pillared icefall, with a huge pile of ice shatter at its foot.

Past this landmark they skate into Lycus Sulci Bay, south of Acheron, where the land rises less precipitously, gentle hills above low sea bluffs, looking down on the ice bay. In the bay they slowly tack against the morning offshore breeze, until they come to rest against a floating dock, now somewhat askew in the press of ice, just off a beach. Roger ties off on this, and they gear up for a hike on the land. Freya and Jean-Claude carry their backpacks with them.

Out of the boat and onto the ice. *Scritch-scritch* over the ice to shore, everything strangely still; then across the frosty beach, and up a trail that leads to the top of the bluff. After that a gentler trail up the vast tilt of the coastal plateau. Here the trailmakers have laid flagstones that run sometimes ten in a row before the next low step up. In steeper sections it becomes more like a staircase, a great endless staircase, each flag fitted perfectly under the next one. Even rime-crusted as it is, Eileen finds the lapidary work extraordinarily beautiful. The quartzite flags are placed as tightly as Orkney drywall, and their surfaces are a mix of pale yellow and red, silver and gold, all in differing proportions for each flag, and alternating by dominant color as they rise. In short, a work of art.

Eileen follows the trail looking down at these flagstones, up and up, up and up, up some more. Above them the rising slope is white to the distant high ho-rizon, beyond which black Olympus bulks like a massive world of its own.

The sun emerges over the volcano. Light blazes on the snow. As they hike farther up the quartzite trail it enters a forest. Or rather, the skeleton of a forest. Eileen hurries to catch up with Roger, feeling oppressed, even frightened. Freya and Jean-Claude are up ahead; their other companions far behind.

Roger leads her off the trail, through the trees. They are all dead. It

was a forest of foxtail pine and bristlecone pine; but treeline has fallen to sea level at this latitude, and all these big old gnarled trees have perished. After that a sandstorm, or a series of sandstorms, sandblasted away all the trees' needles, the small branches, and the bark itself, leaving behind only the bleached tree trunks and the biggest lower branches, twisting up like broken arms from writhing bodies. Wind has polished the spiraling grain of the trunks until it gleams in the morning light. Ice packs the cracks into the heartwood.

The trees are well-spaced, and they stroll between' them, regarding some more closely, then moving on. Scattered here and there are little frozen ponds and tarns. It seems to Eileen like a great sculpture garden or workshop, in which some mighty Rodin has left scattered a thousand trails at a single idea, all beautiful, altogether forming a park of surreal majesty. And yet awful too; she feels it as a kind of stabbing pain in the chest; this is a cemetery. Dead trees flayed by the sandy wind; dead Mars, their hopes flensed by cold Red Mars, Mars the god of war, taking back its land with a frigid boreal blast. The sun glares off the icy ground, smeary light glazing the world. The bare wood glows orange.

"Beautiful, isn't it?" Roger says.

Eileen shakes her head, looking down. She is bitterly cold, and the wind whistles through the broken branches and the grain of the wood. "It's dead, Roger."

"What's that?"

"'The darkness grew apace," she mutters, looking away from him. "
'A cold wind began to blow in freshening gusts from the east.'

"What's that you say?"

"The Time Machine," she explains. "The end of the world. 'It would be hard to convey the stillness of it.' "

"Ah," Roger says, and puts his arm around her shoulders. "Still the English major." He smiles. "All these years pass and we're still just what we always were. You're an English major from the University of Mars."

"Yes." A gust seems to blow through her chest, as if the wind had suddenly struck her from an unexpected quarter. "But it's all over now, don't you see? It's all dead" —she gestures — "everything we tried to do!" A desolate plateau over an ice sea, a forest of dead trees; all their efforts

gone to waste.

"Not so," Roger says, and points up the hill. Freya and Jean-Claude are wan-dering down through the dead forest, stopping to inspect certain trees, running their hands over the icy spiral grain of the wood, moving on to the next magnif-icent corpse.

Roger calls to them, and they approach together. Roger says under his breath to Eileen, "Now listen, Eileen, listen to what they say. Just watch them and listen."

The youngsters join them, shaking their heads and babbling at the sight of the broken-limbed forest. "It's so beautiful!" Freya says. "So pure!"

"Look," Roger interrupts, "don't you worry everything will all go away, just like this forest here? Mars become unlivable? Don't you believe in the crash?"

Startled, the two stare at him. Freya shakes her head like a dog shedding water. Jean-Claude points west, to the vast sheet of ice sea spread below them. "It never goes backward," he says, halting for words. "You see all that water out there, and the sun in the sky. And Mars, the most beautiful planet in the world."

"But the crash, Jean-Claude. The crash."

"We don't call it that. It is a long winter only. Things are living under the snow, waiting for the next spring."

"There hasn't been a spring in thirty years! You've never seen a spring in your life!"

"Spring is L-s zero, yes? Every year spring comes."

"Colder and colder."

"We will warm things up again."

"But it could take thousands of years!" Roger exclaims, enjoying the act of provocation. He sounds like all the people in Burroughs, Eileen thinks, like Eileen herself when she is feeling the despair of the crash.

"I don't care," Freya says.

"But that means you'll never see any change at all. Even with really long lives you'll never see it."

Jean-Claude shrugs. "It's the work that matters, not the end of work. Why be so focused on the end? All it means is you are over. Better to be in the middle of things, or at the beginning, when all the work remains to be done, and it could turn out any way."

"It could fail," Roger insists. "It could get colder, the atmosphere could freeze out, everything in the world could die like these trees here. Nothing left alive at all."

Freya turns her head away, put off by this. Jean-Claude sees her and for the first time he seems annoyed. They don't understand what Roger has been doing, and now they are tired of it. Jean-Claude gestures at the stark landscape: "Say what you like," he says. "Say it will all go crash, say everything alive now will die, say the planet will stay frozen for thousands of years — say the stars will fall from the sky! But there will be life on Mars."

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